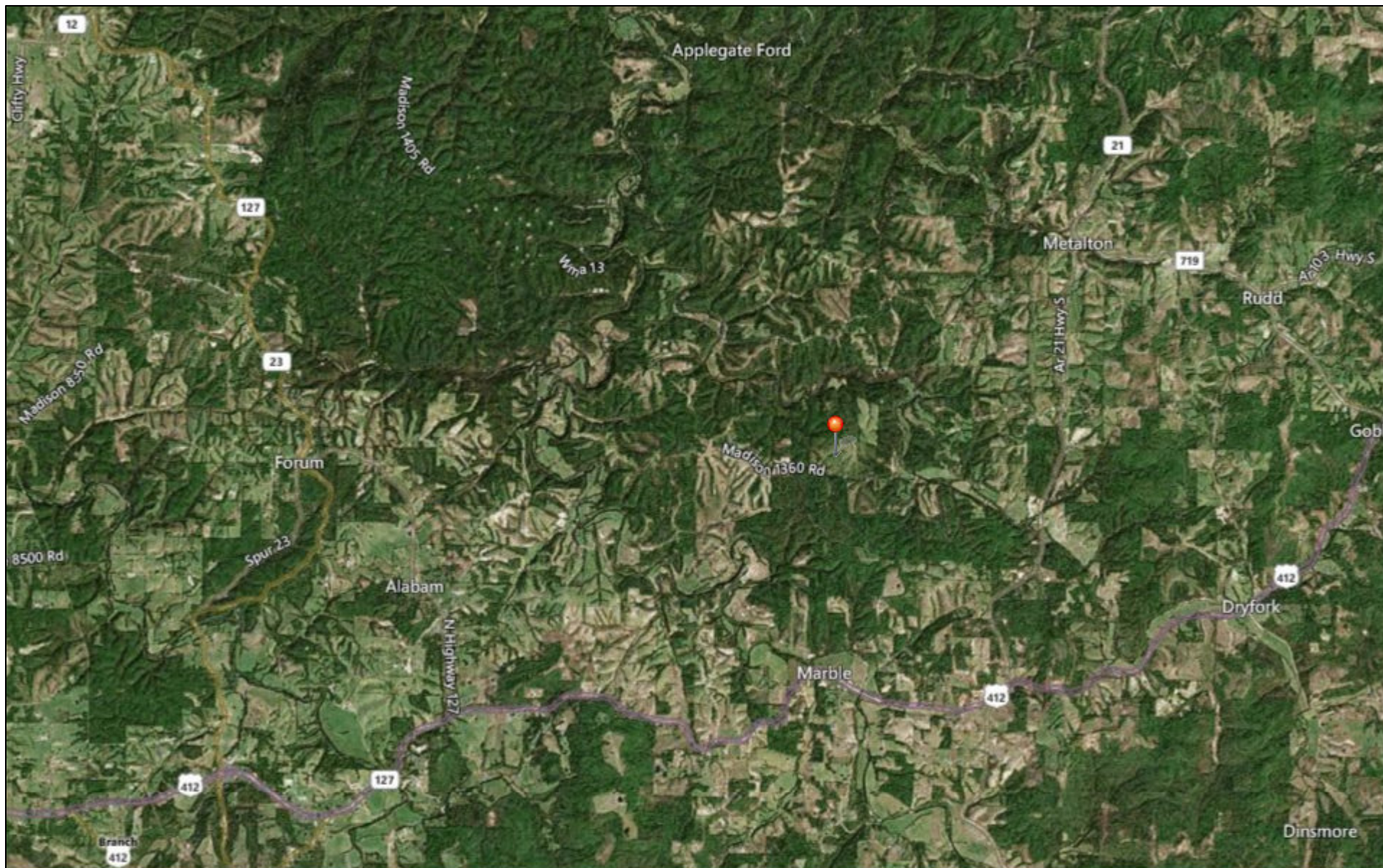
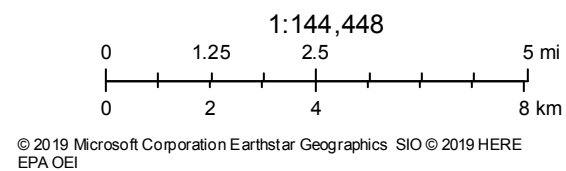




November 6, 2019

 Project 2

A-1

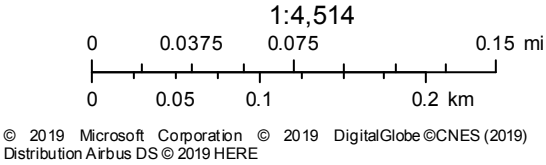


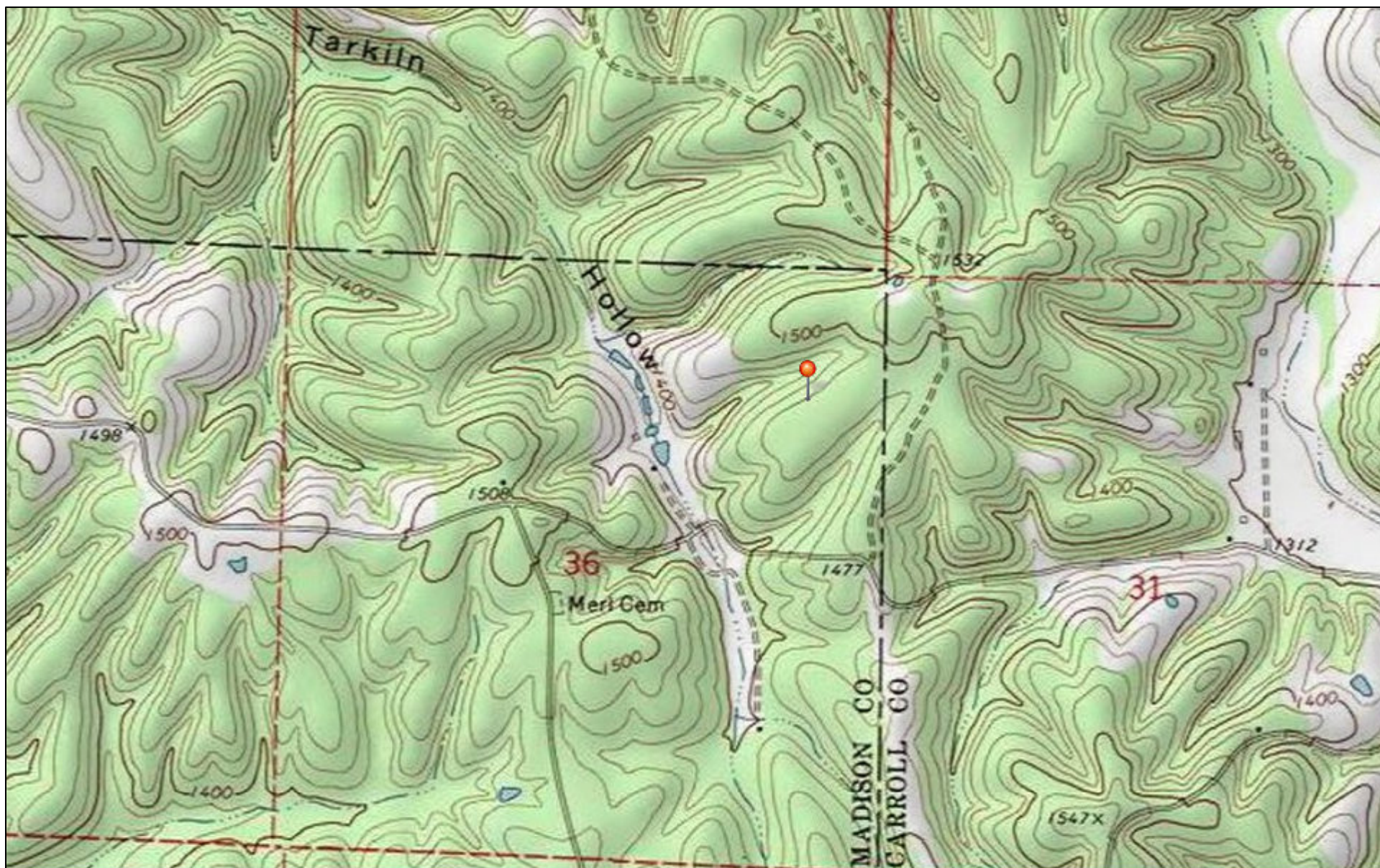


November 6, 2019

 Project 2

A-2

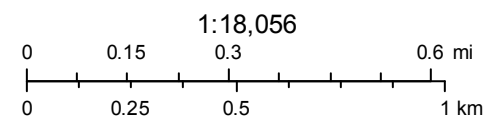




November 6, 2019

 Project 2

A-3



Copyright:© 2013 National Geographic Society, i-cubed
EPA OEI

Site MAP



United States
Department of
Agriculture

Carroll County, Arkansas



Common Land Unit Tract Boundary
Non-Cropland
Cropland
PLSS

Imagery Year: 2017

2020 Program Year
Map Created March 05, 2019

Wetland Determination Identifiers

- Restricted Use
- Limited Restrictions
- Exempt from Conservation
- Compliance Provisions

Tract Cropland Total: 129.68 acres

Farm 4042
Tract 3170

United States Department of Agriculture (USDA) Farm Service Agency (FSA) maps are for FSA Program administration only. This map does not represent a legal survey or reflect actual ownership. Rather, it depicts the information provided directly from the producer and/or National Agricultural Imagery Program (NAIP) imagery. The producer accepts the data 'as is' and assumes all risks associated with its use. USDA-FSA assumes no responsibility for actual or consequential damage incurred as a result of any user's reliance on this data outside FSA Programs. Wetland identifiers do not represent the size, shape, or specific determination of the area. Refer to your original determination (CPA-025 and attached maps) for exact boundaries and determinations or contact USDA Natural Resources Conservation Service (NRCS).



EXISTING vegetation

Revised Sediment Basin (Location)

$200' \times 100' \times 2'd: 40,000 \text{ ft}^3$ (548)

Latitude N-36°-11'-0.96"
Longitude W-93°-35'-21.12"

Sediment Basin

Volume Required for Sediment Basin

$10.6 \text{ Ac.} \times 3600 \text{ ft}^3/\text{Ac.} = 38,160 \text{ ft}^3$

Volume $187' \text{ wide} \times 800' \text{ Long} \times .25' \text{ deep} = 37,400 \text{ ft}^3$

Sediment Basin requires No Surface disturbance

Filter strip of undisturbed vegetation

Sediment trap

Concrete washout

Rain Gauge Posting

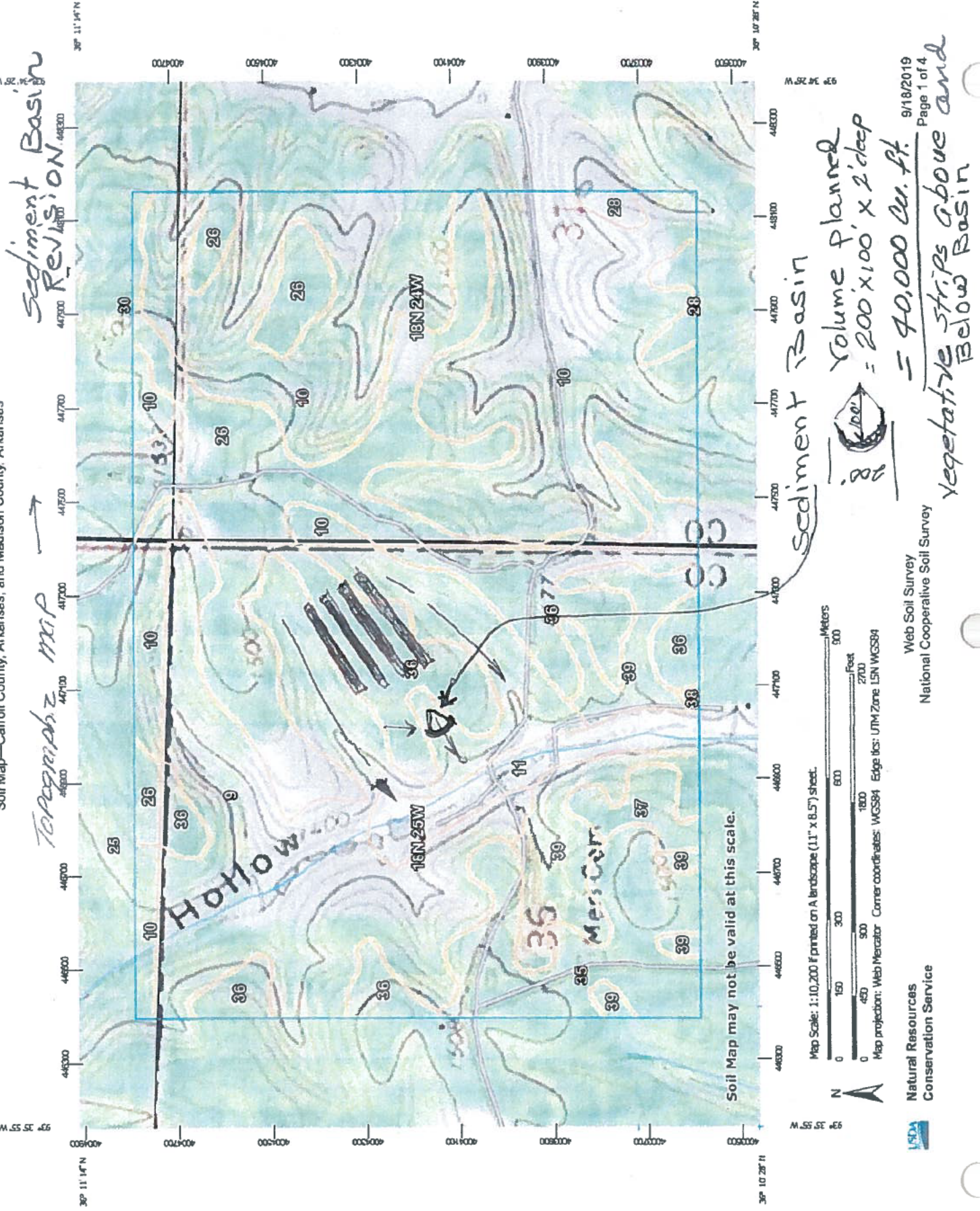
SNPPP NOI Letter of Authorization Posting

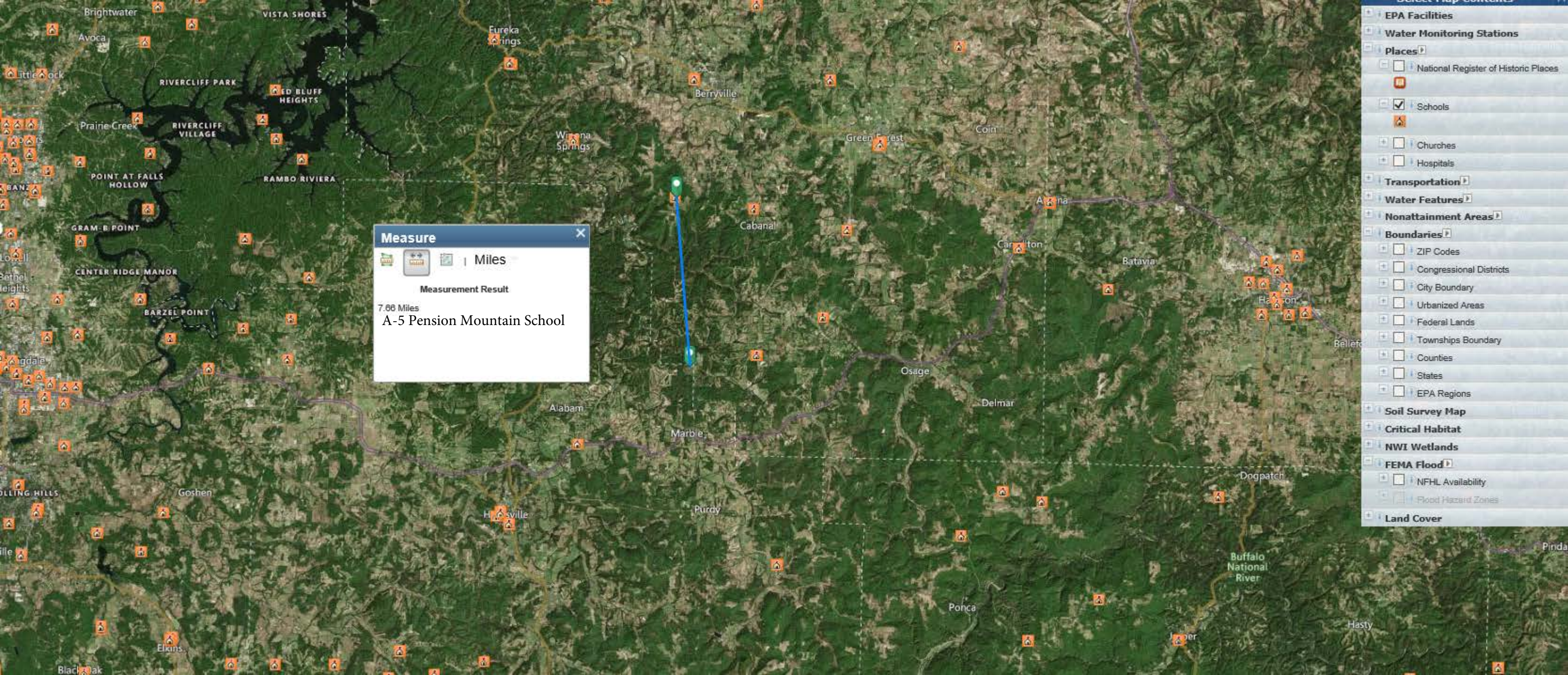
Legal disc. Pt. of Sec. 36-TWP 18N-RNG 25E

Disturbed area = $568 \text{ ft wide} \times 820' \text{ Long} = 10.6 \text{ Acres}$

DIRECTION OF Storm Water Flow

Soil Map—Carroll County, Arkansas, and Madison County, Arkansas





Measure



Miles

Measurement Result

7.66 Miles

A-5 Pension Mountain School

- Select Map Contents
- EPA Facilities

Water Monitoring Stations

Places

☐ National Register of Historic Places

☒ Schools

☐ Churches

☐ Hospitals

Transportation

Water Features

Nonattainment Areas

Boundaries

☐ ZIP Codes

☐ Congressional Districts

☐ City Boundary

☐ Urbanized Areas

☐ Federal Lands

☐ Townships Boundary

☐ Counties

☐ States

☐ EPA Regions

Soil Survey Map

Critical Habitat

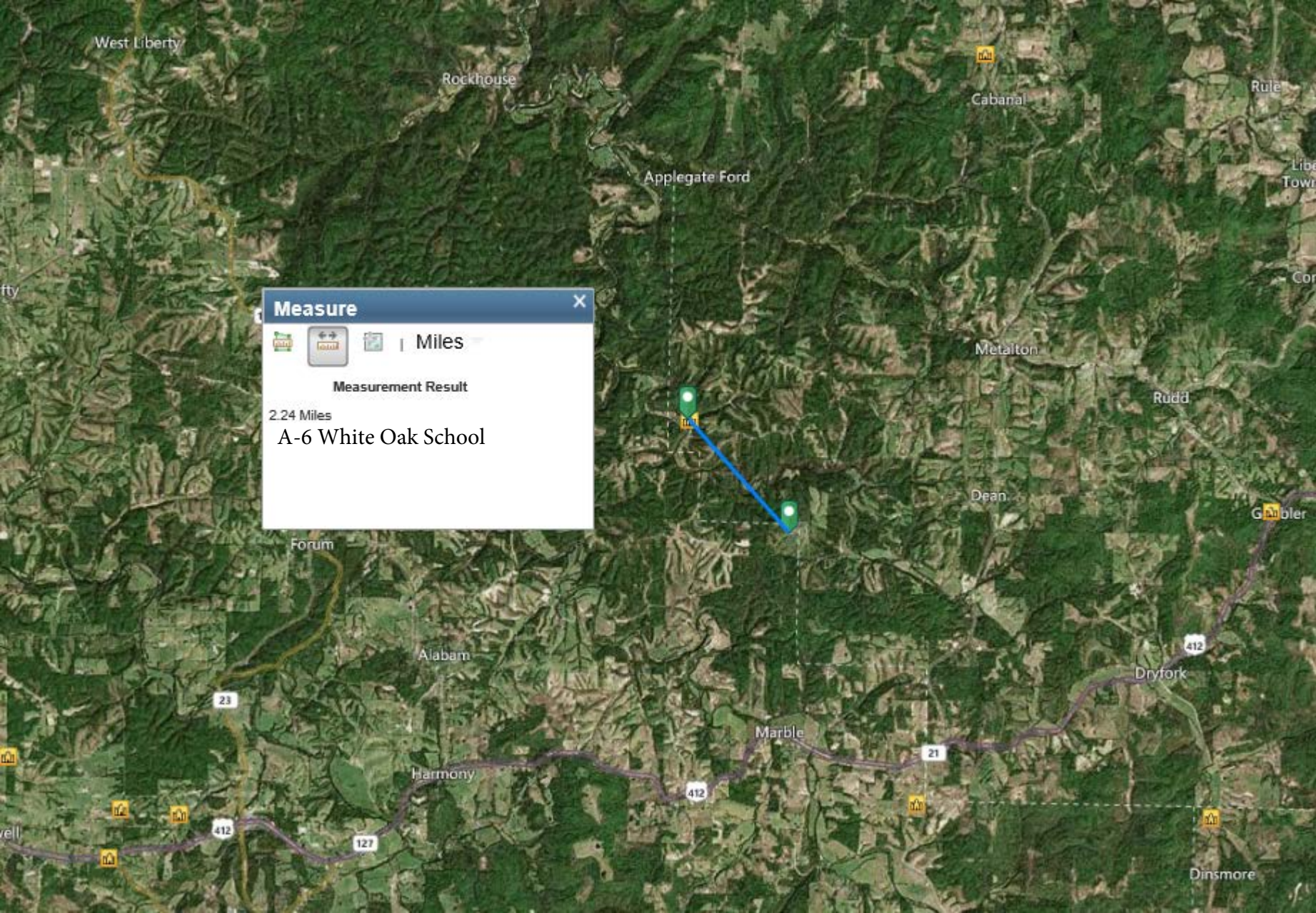
NWI Wetlands

FEMA Flood

☐ NFHL Availability

☐ Flood Hazard Zones

Land Cover



Measure ✕

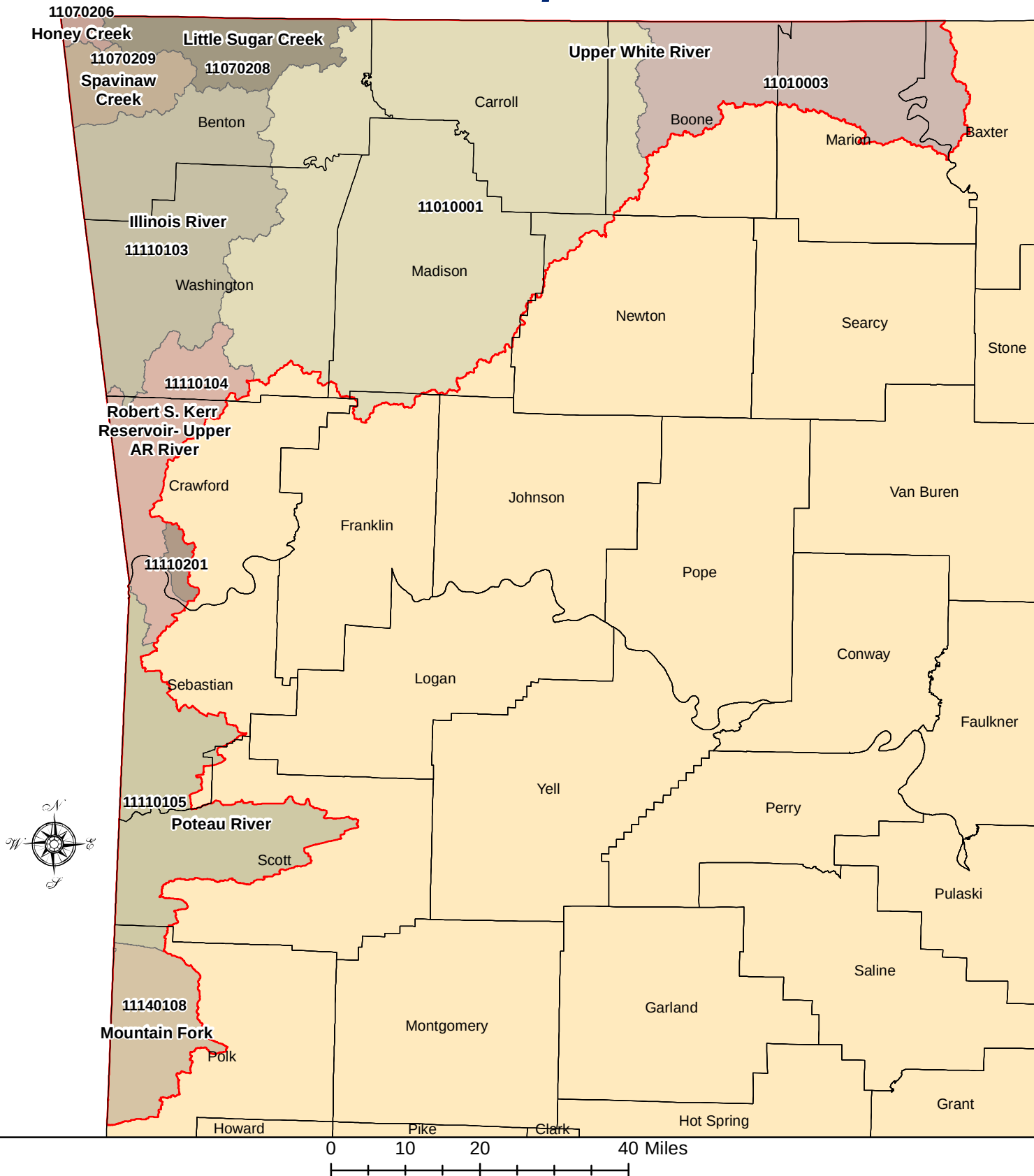
   | Miles

Measurement Result

2.24 Miles

A-6 White Oak School

Nutrient Surplus Area



Legend

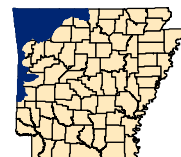
 Nutrient Surplus Area



A-7

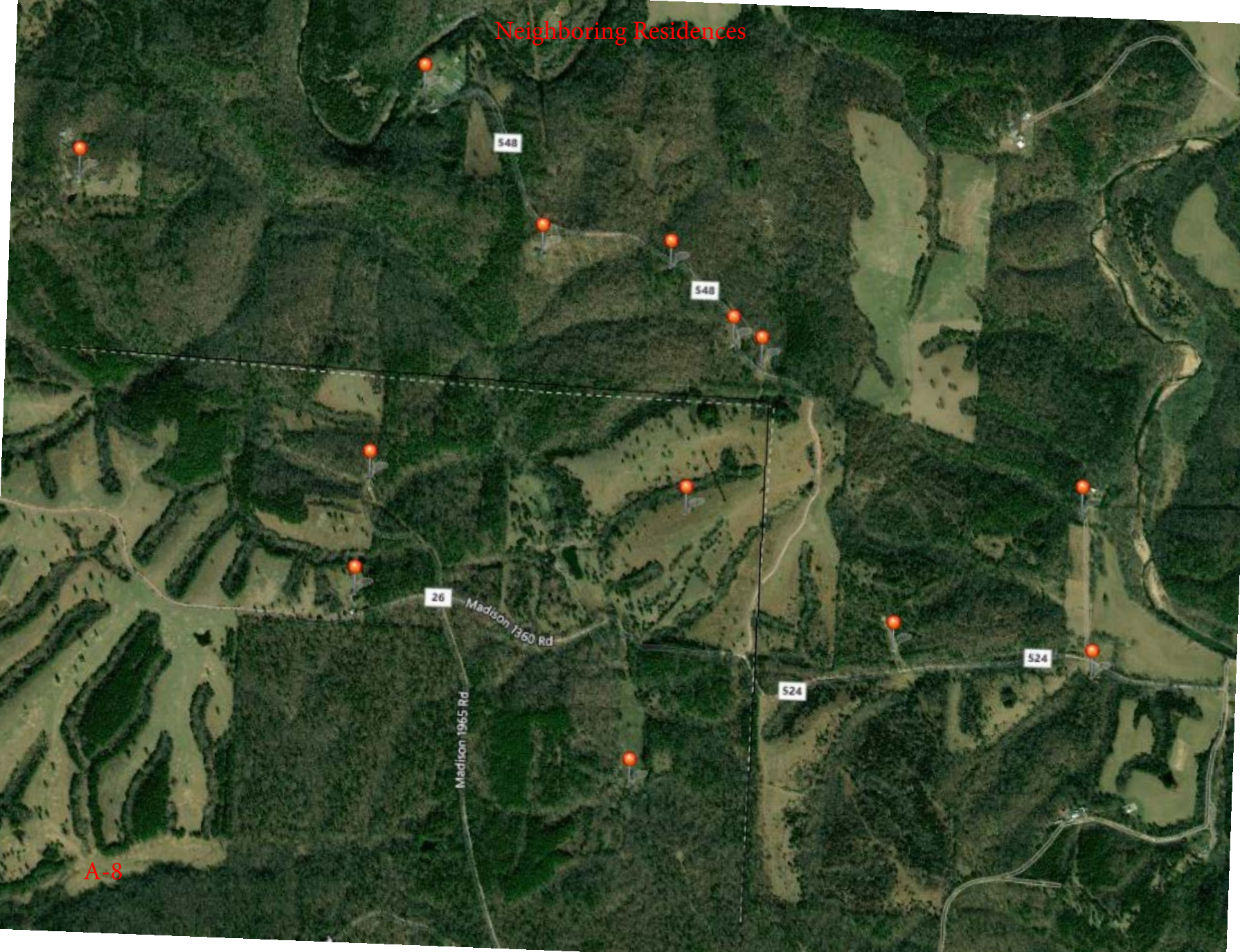
County Boundary

*Shaded areas represent
8 Digit Hydrologic Unit Codes



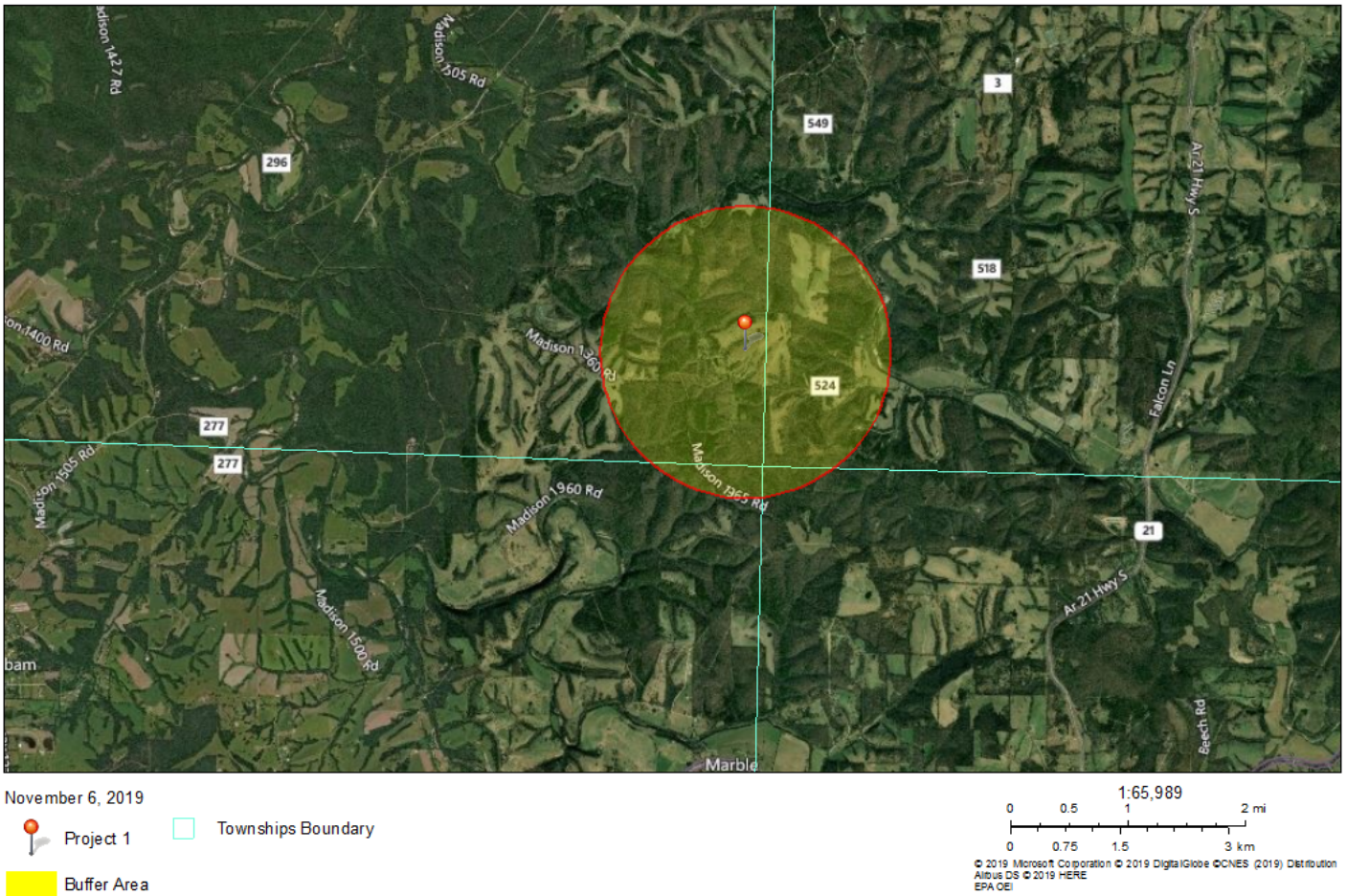
Appendix A

Neighboring Residences



NEPAssist Report

Madison Turkey Houses



Project Location	36.182125,-93.587876
Within 1 mile of an Ozone 8-hr (1997 standard) Non-Attainment/Maintenance Area?	no
Within 1 mile of an Ozone 8-hr (2008 standard) Non-Attainment/Maintenance Area?	no
Within 1 mile of a Lead (2008 standard) Non-Attainment/Maintenance Area?	no
Within 1 mile of a SO2 1-hr (2010 standard) Non-Attainment/Maintenance Area?	no
Within 1 mile of a PM2.5 24hr (2006 standard) Non-Attainment/Maintenance Area?	no
Within 1 mile of a PM2.5 Annual (1997 standard) Non-Attainment/Maintenance Area?	no
Within 1 mile of a PM2.5 Annual (2012 standard) Non-Attainment/Maintenance Area?	no
Within 1 mile of a PM10 (1987 standard) Non-Attainment/Maintenance Area?	no
Within 1 mile of a Federal Land?	no
Within 1 mile of an impaired stream?	no
Within 1 mile of an impaired waterbody?	no
Within 1 mile of a waterbody?	no
Within 1 mile of a stream?	yes
Within 1 mile of an NWI wetland?	Available Online
Within 1 mile of a Brownfields site?	no
Within 1 mile of a Superfund site?	no
Within 1 mile of a Toxic Release Inventory (TRI) site?	no
Within 1 mile of a water discharger (NPDES)?	no
Within 1 mile of a hazardous waste (RCRA) facility?	no
Within 1 mile of an air emission facility?	no

Within 1 mile of a school?	no
Within 1 mile of an airport?	no
Within 1 mile of a hospital?	no
Within 1 mile of a designated sole source aquifer?	no
Within 1 mile of a historic property on the National Register of Historic Places?	no
Within 1 mile of a Toxic Substances Control Act (TSCA) site?	no
Within 1 mile of a Land Cession Boundary?	yes
Within 1 mile of a tribal area (lower 48 states)?	no

Created on: 11/6/2019 9:16:42 AM

FSA Site Visit Report

INSTRUCTIONS: Complete this report *while on location* to document the findings of site visits required for Supported CatExs and Environmental Assessments. The site to be assess is limited to the Area of Potential Effect as provided by 1-EQ Exhibit 2 to be: the specific geographic area(s) within which a proposed project will actually takes place and/or those where an environmental resource is influenced as a result of the project. That is causes changes in use or character. *It does not necessarily include all farm or related tracts owned or operated by the applicant.*

Project Name _____

Location (county, street address, lat/long,) Madison/Carroll County, CR 548, S 36, T 18 N, R 25 W 36.195611.-93.576347 (proposed turkey houses site)

Elevation of project site: 1480'

Watershed of project site: _____ HUC 12 ID: 110100010907

Name: Lower Dry Fork

States: AR

HUC_8: 11010001

HUC_10: 1101000109

ACRES: 15865

The following information has been collected and recorded in the field by FSA employees who have completed related FSA training and been assigned responsibility for completing physical site visits to collect information for completion of environmental assessments.

This site visit was completed by:

Preparer Name (printed) Charlene Holt _____ Title: Farm Loan Officer _____

Signature _____

Duty Station: Madison County FSA, Huntsville, AR Phone: 479 738-2196

E-Mail: charlene.holt@usda.gov _____

Date 09/11/2019 _____ Time 10:00am _____ Weather Conditions : Sunny, 75 degrees _____

Physical Description

Description of Project Area (include all of the area that would be disturbed)

Estimated number of acres comprising the APE 10.6 acres

Estimated number of acres to be disturbed 10.6 acres

APE located in a previous disturbed area: No ☒ Yes _____

If "yes," estimated size of previously disturbed area _____

Estimated size of new disturbance _____ acres.

Slope of APE 3-8% _____

Current land use: Proposed turkey houses site is currently established grasslands used to graze beef cattle.

Describe the following, including any variation across the area:

Vegetative cover (If poor soil conditions may preclude revegetation success, describe soils) Proposed site for turkey houses is covered in fescue and native grasses. _____

SEE Web Soil Survey soil report and soils map for soils information. Vegetation is uniform across the APE. Re-vegetation should not be an issue.

Topography: Consists of gently rolling hills. _____

Waterways/wetlands: See FSA 858. No wetlands or wetland indicators on APE. The nearest stream in relation to the proposal is the GNIS ID: 48660 Name: Dry Fork located .69 Miles north of the proposed site of the turkey houses.

Prominent geological features, areas of bare soil or rock, etc.: None noted on APE

Sketch notes on a project area map including any variances and attach

Additional comments and observations

N/A

Description of surrounding area:

Review and attach a NEPAAssist report with analysis based on a 1 mile radius of the project site

Land use: Grasslands and timberlands account for the majority of the land uses in Madison County. See attached NEPASSIT Report

Nearby agriculture: Cattle and hay production, and integrated poultry are very common in this area.

Roads, homes, structures or public facilities: No structures located on the proposed site of turkey houses.

The proposed turkey houses would be accessed via a county gravel road (CR 548). This farm is located approximately 8.5 miles northeast of Huntsville, AR. Directions to the proposed site from Huntsville: Highway 412 B East; Highway 412 East; Madison 1965; Madison 1360; CR 524; CR 548 to proposed site located on the west side of CR 548. A gravel road would be extended to access the proposed site from CR 548.

Vegetative cover: Surrounding properties have similar vegetative cover, such as fescue, Bermuda grass and native grasses used for hay production and beef cattle grazing. Also, the surrounding properties have large tracts of woodland (primarily hardwoods) used for timber production and recreational purposes.

Topography: Gently rolling hills to steeper slopes

Waterways/wetlands: See attached FSA 858.

Prominent geological features, areas of bare soil or rock, etc. None noted during site visit.

Sketch notes on a project area map including any variances and attach

Additional comments and observations

N/A

Biological Description

Describe the type of vegetation and how it varies across APE. Include known species and indicators of the age, height and size of trees. Note areas of bare soils. Estimate the area of various vegetation types. Sketch vegetation on a project area map and attach.

The proposed site of the turkey houses consists of grasslands and is utilized as pasture to graze beef cattle. The APE is established in fescue and native grasses, with scattered sapplings in an area between the proposed turkey houses. No marketable timber in the proposed site of the turkey houses.

Approximate number of trees that would be removed by proposed action: 25-30 sapplings. No marketable timber.

Estimated size/age and species of trees that would be removed: Cherry, Pine and Mixed Oak Sapplings 1-3 years old.

Noxious Weeds: ☐ No ☐ Yes X Species Observed Thistles

Consult Ipac listings of Federal Threatened and Endangered Species or Habitat in the area. List any potential sightings or indicators of their presence and include GPS location and attach photographs.

See attached IPAC list. No wildlife noted during the site visit. No animals noted during the site visit/.

Plants Observed in Project Area:

Grasses	Forbs	Shrubs	Trees
Fescuse			Pine, Oak, Cherries,
Native Grass			

Animals and Animal Signs Observed in Project Area:

N/A

Other Observations

Describe any buildings, remains of buildings, or other man-made structures found on or in the immediate vicinity of the APE. Note the location on project area map, include GPS location and attach photographs.

No structures are located on the proposed site for the turkey houses.

Describe any unusual ground features found on or in the immediate vicinity of the Project Site. For example, stone fence lines, soil mounds, odd depressions, etc. Note the location on project area map, include GPS location and attach photographs.

None noted during site visit.

Photographs

At a minimum attach photographs of the following:

- Site of every proposed structure that would be built
- Any potential threatened and endangered species habitat
- Any building, remains of buildings or other man-made structures (from all sides)
- Unusual ground features
- Existing disturbance including evidence of fires, roads
- Waterways, wetlands, prominent geologic/topographic features
- All areas where vegetation will be removed

The location of each photograph must be noted in relation to the APE and the direction from which each photograph is taken. Include GPS location when possible and record in the table below by downloading photographs and name them using the project name, date and description of the area photographed and direction taken (Examples: "XYZ Farm_Chicken House 1_looking WNW_20170425" or "XYZ Farm_unnamed creek south of disturbance_looking NW_20170425" or "XYZ Farm_rock outcrop located E of project site_looking E_20140425").

Photo number	Description of Location	Lat/Long	Direction
	SEE ENCLOSED PHOTOS		



Proposed turkey house site (2 houses) viewed from northeast to southwest



Proposed turkey house site (2 houses) viewed from northeast to southwest



View from planned access road to proposed turkey facility viewed from northeast to southwest. Power pole located near proposed site of turkey houses.



Proposed access road from Carroll County 548 to turkey facility.

Stormwater Pollution Prevention Plan (SWPPP) Completeness Checklist

Permittee: [REDACTED]
 Project Name: [REDACTED]

Tracking Number: ARR15 6462
 Location of SWPPP on-site: at the construction entrance
 unnamed trib. -> Dry Fork -> Kings

Project City (MS4): Huntsville
 Description: an agricultural enterprise (4 pads for turkey production)

Discharges to: River ->> White River
 HUC: 1101001

Stream Segment 4K

Yes	No		Stream Review	Notes
x			Located within a losing stream area (include NOC language)	
	x		Located on geological fractures/karst features (red or dark orange karst vulnerability)?	
	x		Located within one (1) mile of an ESW, ERW, NSW, 303 (d) list, TMDL for turbidity?	
Yes	No	N/A	Application Review	
		x	Does the permittee legal name match the Sec. of State and do you have a certification of good standing from state of org.	
x			Does the application include the permit fee?	
		x	Does the applicant have the proper STAA/401 Certification?	

Yes = Complete

No = Incomplete/Deficient

N/A = Not applicable to project

Yes	No	N/A	A. A site description, including:	Permit Section Citation	Notes
x			1. Project description, intended use after NOI is filed	Part II.A.4.A.1	
x			2. Sequence of major activities	Part II.A.4.A.2	
x			3. Total & disturbed acreage	Part II.A.4.A.3	
x			4. Pre- and post-construction runoff coefficient OR soil/discharge data	Part II.A.4.A.4	
x			B. Responsible Parties: All parties dealing with the SWPPP and the areas they are	Part II.A.4.B	
			C. Receiving Water.	Part II.A.4.C	
		x	-MS4 Name	Part II.A.4.C	
x			-Ultimate Receiving Water	Part II.A.4.C	
			D. Documentation of permit eligibility related to Impaired Water Bodies and Total Maximum Daily Loads (TMDLs).		
		x	1. Identify pollutant on 303(d) list or TMDL	Part II.A.4.D.1	
		x	2. Is construction activity or the specific site listed as cause?	Part II.A.4.D.2	
		x	3. Measures taken to reduce pollutants from the site.	Part II.A.4.D.3	
x			E. Attainment of Water Quality Standards After Authorization.	Part II.A.4.E	
x			F. Site Map --- See End of Evaluation Form	Part II.A.4.F	
			G. Description of Controls:		
			1. Erosion and sediment controls, including:		
x			a. Initial site stabilization	Part II.A.4.G.1.a	
x			b. Erosion and sediment controls	Part II.A.4.G.1.b	
x			c. Replacement of inadequate controls	Part II.A.4.G.1.c	
x			d. Removal of off-site accumulations	Part II.A.4.G.1.d	
x			e. Maintenance of sediment traps/basins @ 50% capacity	Part II.A.4.G.1.e	
x			f. Litter, construction debris and chemicals properly handled	Part II.A.4.G.1.f	
		x	g. Off-site storage areas and controls	Part II.A.4.G.1.g	
			2. Stabilization practices:		
x			a. Description and schedule for stabilization	Part II.A.4.G.2.a	
x			b. Description of buffer areas	Part II.A.4.G.2.b	
x			c. Records of stabilization	Part II.A.4.G.2.c	
x			d. Deadlines for stabilization	Part II.A.4.G.2.d	
			3. Structural Practices:		
x			-Describe structural practices to divert flows, store flows, or otherwise limit runoff	Part II.A.4.G.3	
			a. Sediment basins	Part II.A.4.G.3.a.1	
x			-Are more than 10 acres draining to a common point? If so, are sediment basins included?	Part II.A.4.G.3.a.1	
		x	-Sediment basin dimensions and capacity description and calculations	Part II.A.4.G.3.a.1	
x			-If a basin wasn't practicable, are other controls sufficient?	Part II.A.4.G.3.a.1	
x			b. Velocity dissipation devices concentrated flow from 2 or more acres	Part II.A.4.G.3.b	
			H. Other controls including:		
x			1. Solid waste control measures	Part II.A.4.H.1	
x			2. Vehicle off-site tracking controls	Part II.A.4.H.2	

Stormwater Pollution Prevention Plan (SWPPP) Completeness Checklist

Permittee: [REDACTED]
Project Name: [REDACTED]

Tracking Number: ARR15 6462
Location of SWPPP on-site: at the construction entrance
unnamed trib. -> Dry Fork -> Kings

Project City (MS4): Huntsville
Description: an agricultural enterprise (4 pads for turkey production)

Discharges to: River ->> White River
HUC: 1101001

Stream Segment 4K

Yes	No		Stream Review	Notes
x			Located within a losing stream area (include NOC language)	
	x		Located on geological fractures/karst features (red or dark orange karst vulnerability)?	
	x		Located within one (1) mile of an ESW, ERW, NSW, 303 (d) list, TMDL for turbidity?	
Yes	No	N/A	Application Review	
		x	Does the permittee legal name match the Sec. of State and do you have a certification of good standing from state of org.	
x			Does the application include the permit fee?	
		x	Does the applicant have the proper STAA/401 Certification?	

Yes = Complete

No = Incomplete/Deficient

N/A = Not applicable to project

x			3. Compliance with sanitary waste disposal	Part II.A.4.H.4
x			4. Does the site have a concrete washout area controls?	Part II.A.4.H.5
x			5. Does the site have fuel storage areas, hazardous waste storage and/or truck wash areas controls?	Part II.A.4.H.6

		x	I. Identification of allowable non-storm water discharges	Permit Section Citation
		x	-Appropriate controls for dewatering, if present	Part II.A.4.I Part I.B 12.C

x			J. Post construction stormwater management.	Part II.A.4.J
---	--	--	--	---------------

x			K. State or local requirements incorporated into the plan.	Part II.A.4.K
---	--	--	---	---------------

			L. Inspections	
x			1. Inspection frequency listed?	Part II.A.4.L.1
			2. Inspection form	Part II.A.4.L.2
x			Ours.	
			If not ours, does it contain the following items:	
		x	a. Inspector name and title	Part II.A.4.L.2.a
		x	b. Date of inspection.	Part II.A.4.L.2.b
		x	c. Amount of rainfall and days since last rain event (14 day only)	Part II.A.4.L.2.c
		x	d. Approx beginning and duration of storm event	Part II.A.4.L.2.d
		x	e. Description of any discharges during inspection	Part II.A.4.L.2.e
		x	f. Locations of discharges of sediment/other pollutants	Part II.A.4.L.2.f
		x	g. BMPs in need of maintenance	Part II.A.4.L.2.g
		x	h. BMPs in working order, if maintenance needed (scheduled and completed)	Part II.A.4.L.2.h
		x	i. Locations that are in need of additional controls	Part II.A.4.L.2.i
		x	j. Location and dates when major construction activities begin, occur or cease	Part II.A.4.L.2.j
		x	k. Signature of responsible/cognizant official	Part II.A.4.L.2.k
x			3. Inspection Records	Part II.A.4.L.3
x			4. Winter Conditions	Part II.A.4.L.4
x			5. Adverse Weather Conditions	Part II.A.4.L.5

x			M. Maintenance Procedures	Part II.A.4.M
---	--	--	----------------------------------	---------------

x			N. Employee Training	Part II.A.4.N
---	--	--	-----------------------------	---------------

x			Signed Plan Certification	Part II.A.7. and Part II B 10
---	--	--	----------------------------------	-------------------------------

			F. Site Map showing:	
x			1. Pre-construction topographic view	Part II.A.4.F.1
x			2. Drainage flow	Part II.A.4.F.2
x			3. Approximate slopes after grading activities	Part II.A.4.F.2
x			4. Areas of soil disturbance and areas not disturbed	Part II.A.4.F.3
x			5. Location of major structural and non-structural controls.	Part II.A.4.F.4
x			6. Location of main construction entrance and exit.	Part II.A.4.F.5
x			7. Areas where stabilization practices are expected to occur.	Part II.A.4.F.6
		x	8. Locations of off-site materials, waste, borrow area or storage area.	Part II.A.4.F.7
x			9. Locations of areas used for concrete wash-out.	Part II.A.4.F.8
x			10. Locations of surface waters on site.	Part II.A.4.F.9
x			11. Locations where water is discharged to a surface water or MS4.	Part II.A.4.F.10

Stormwater Pollution Prevention Plan (SWPPP) Completeness Checklist

Permittee: [REDACTED]
Project Name: [REDACTED]

Tracking Number: ARR15 6462
Location of SWPPP on-site: at the construction entrance

Project City (MS4): Huntsville
Description: an agricultural enterprise (4 pads for turkey production)

Discharges to: River ->> White River

HUC: 1101001

Stream Segment 4K

Yes	No		Stream Review	Notes
x			Located withn a losing stream area (include NOC language)	
	x		Located on geological fractures/karts features (red or dark orange karst vulnerability)?	
	x		Located within one (1) mile of an ESW, ERW, NSW, 303 (d) list, TMDL for turbidity?	
Yes	No	N/A	Application Review	
		x	Does the permittee legal name match the Sec. of State and do you have a certification of good standing from state of org.	
x			Does the application include the permit fee?	
		x	Does the applicant have the proper STAA/401 Certification?	

Yes = Complete

No = Incomplete/Deficient

N/A = Not applicable to project

x			12. Storm water discharge locations.
x			13. Areas where final stabilization has been accomplished.

Part II.A.4.F.11
Part II.A.4.F.12

Arkansas Department of Environmental Quality
Permits Branch, Office of Water Quality
5301 Northshore Drive
North Little Rock, AR 72118
(501) 682-0623

NOTICE OF INTENT
FOR DISCHARGERS OF STORMWATER RUNOFF
ASSOCIATED WITH LARGE CONSTRUCTION ACTIVITY
AUTHORIZED UNDER NPDES GENERAL PERMIT ARR150000

Application Type: New ☒ Renewal ☐ (Permit Tracking Number ARR())

I. PERMITTEE/OPERATOR INFORMATION

Permittee (Legal Name): [REDACTED]
Permittee Mailing Address: [REDACTED]
Permittee City: [REDACTED]
Permittee State: [REDACTED]
Permittee Telephone Number: [REDACTED]
Permittee Fax Number: [REDACTED]
Permittee E-mail Address: [REDACTED]
Operator Type:
☐ STATE ☐ PARTNERSHIP
☐ FEDERAL ☐ CORPORATION*
☒ SOLE PROPRIETORSHIP
☐ PUBLIC ☐ OTHER
*State of Incorporation: [REDACTED]

* The legal name of the Permittee must be identical to the name listed with the Arkansas Secretary of State.

II. INVOICE MAILING INFORMATION

Invoice Contact Person: [REDACTED]
Invoice Mailing Company: [REDACTED]
Invoice Mailing Address: [REDACTED]
City: [REDACTED]
State: [REDACTED]
Telephone: [REDACTED]

III. FACILITY/PROJECT CONSTRUCTION SITE INFORMATION

1 acre = 43,560 square feet

Project Name: [REDACTED]
Project County: Carroll
Directions to the Project: from Marble on Hwy 412 west to Hwy 21, north 2 mi to co road 524, west 1.5 mi to Co Rd 524 west 1 mi to site
Contact Person: [REDACTED]
Project Physical Address: [REDACTED]
Project City: [REDACTED]
Telephone Number: [REDACTED]
Project Estimated Start Date: 10/01/2019
Project Estimated End Date: 10/01/21020
Total amount of soil to be disturbed (estimate to nearest 1/2 acre): 10.6
Total Project Acreage (Estimate to nearest 1/2 acre): 20 acres dedicated
Project Latitude: N-36 degrees 11 minutes 0.96" seconds
Project Longitude: W-93 degrees 35' minutes 21.13" seconds
Type of Project: Subdivision ☐ School ☒ Other: Agricultural enterprise 4 pads for turkey production
Facility SIC Code(s): [REDACTED] NAICS Code (s): [REDACTED]
Is the Project part of a larger common plan of development or sale? Yes ☐ No ☒
Linear Project Starting Coordinates (if applicable): Latitude: [REDACTED] Longitude: [REDACTED]
Linear Project Ending Coordinates (if applicable): Latitude: [REDACTED] Longitude: [REDACTED]

OFFICE OF WATER QUALITY
5301 NORTHSORE DRIVE / NORTH LITTLE ROCK, ARKANSAS 72118 / PHONE 501-682-0623 / FAX 501-682-0910
www.adeq.state.ar.us
Large Construction NOI / Revision date 09/2014

Arkansas Department of Environmental Quality
Permits Branch, Office of Water Quality
5301 Northshore Drive
North Little Rock, AR 72118
(501) 682-0623

IV. DISCHARGE INFORMATION

Name of Receiving Stream (i.e. an unnamed tributary of Mill Creek, thence into Mill Creek; thence into Arkansas River):

Overland flow to west to unnamed intermittent trib of Dry Fork to Kings River to White River

Choose Your Ultimate Receiving Stream: Red River ☐ Ouachita River ☐ Arkansas River ☐
White River ☒ St. Francis River ☐ Mississippi River ☐

Name of Receiving Municipal Storm Sewer System (If applicable): N/A

Will you be conducting any in-stream or wetted area activities (i.e. re-routing, trenching, stabilizing, sloping, etc.)? Yes ☒ No

If yes, have you obtained an approval for a Short Term Activity Authorization (STAA) from the Department? Yes ☒ No

Is the stream or wetted area considered "Waters of the United States"? Yes ☒ No

If yes, have you obtained a 404 permit from the U.S. Army Corps of Engineers? Yes ☒ No

For information regarding what constitutes "Waters of the United States" please contact the U.S. Army Corps of Engineers, Regulatory Division in the District in which the activity is to take place. Below is the contact information for the three U.S. Army Corps of Engineers Districts in the State:

Little Rock District Ph: (501) 324-5295, CESWL-Regulatory@usace.army.mil
Vicksburg District: Ph: (601) 631-7071, regulatory@usace.army.mil
Memphis District: Ph: (901) 544-3471, MemphisPAO@usace.army.mil

V. FACILITY/SITE PERMIT INFORMATION

NPDES Individual Permit Number (If Applicable): AR00

NPDES General Permit Number (If Applicable): ARG15000

NPDES General Industrial Stormwater Permit Number (If Applicable): ARR00

NPDES General Construction Stormwater Permit Number (If Applicable): ARR15

VI. OTHER INFORMATION:

Location of SWPPP on the
Construction Site:

At construction entrance

Consultant Company:

n/a

Consultant Contact Name:

Frank Walker

Consultant Email Address:

Consultant Address:

City: Rogers

State: AR

Zip: 72756

Consultant Fax

Consultant Phone Number:

Number: _____

Arkansas Department of Environmental Quality
Permits Branch, Office of Water Quality
5301 Northshore Drive
North Little Rock, AR 72118
(501) 682-0623

VII. CERTIFICATION OF OPERATOR

"I certify that, if this facility is a corporation, it is registered with the Secretary of State of Arkansas. Please provide the full name of corporation if different than that listed in Section I above."

"I certify that as a whole the stormwater discharge(s), and the construction and implementation of Best Management Practices (BMP's) to control stormwater runoff, are not likely to adversely affect species of critical habitat for a listed species."

"I certify that a stormwater pollution prevention plan has been prepared for this facility in accordance with Part II.A of this permit, which provides for, or will provide for, compliance with local sediment and erosion plans, local stormwater permits or stormwater management plans, in accordance with Part II.A.4.c of this permit."

"I certify that the cognizant official designated in Part VIII of this Notice of Intent is qualified to act as a duly authorized representative under the provisions of 40 CFR 122.22(b). If no cognizant official has been designated, I understand that the Department will accept reports signed by the applicant"

"I certify under penalty of law that this document and all attachments such as Inspection Form were prepared under my direction or supervision in accordance with a system designed to ensure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

Responsible Official Printed Name

Responsible Official Signature

Title: Owner

Date: 9/25/19

VIII. COGNIZANT OFFICIAL

Cognizant Official Printed Name: _____

Title: _____

Cognizant Official Signature: _____

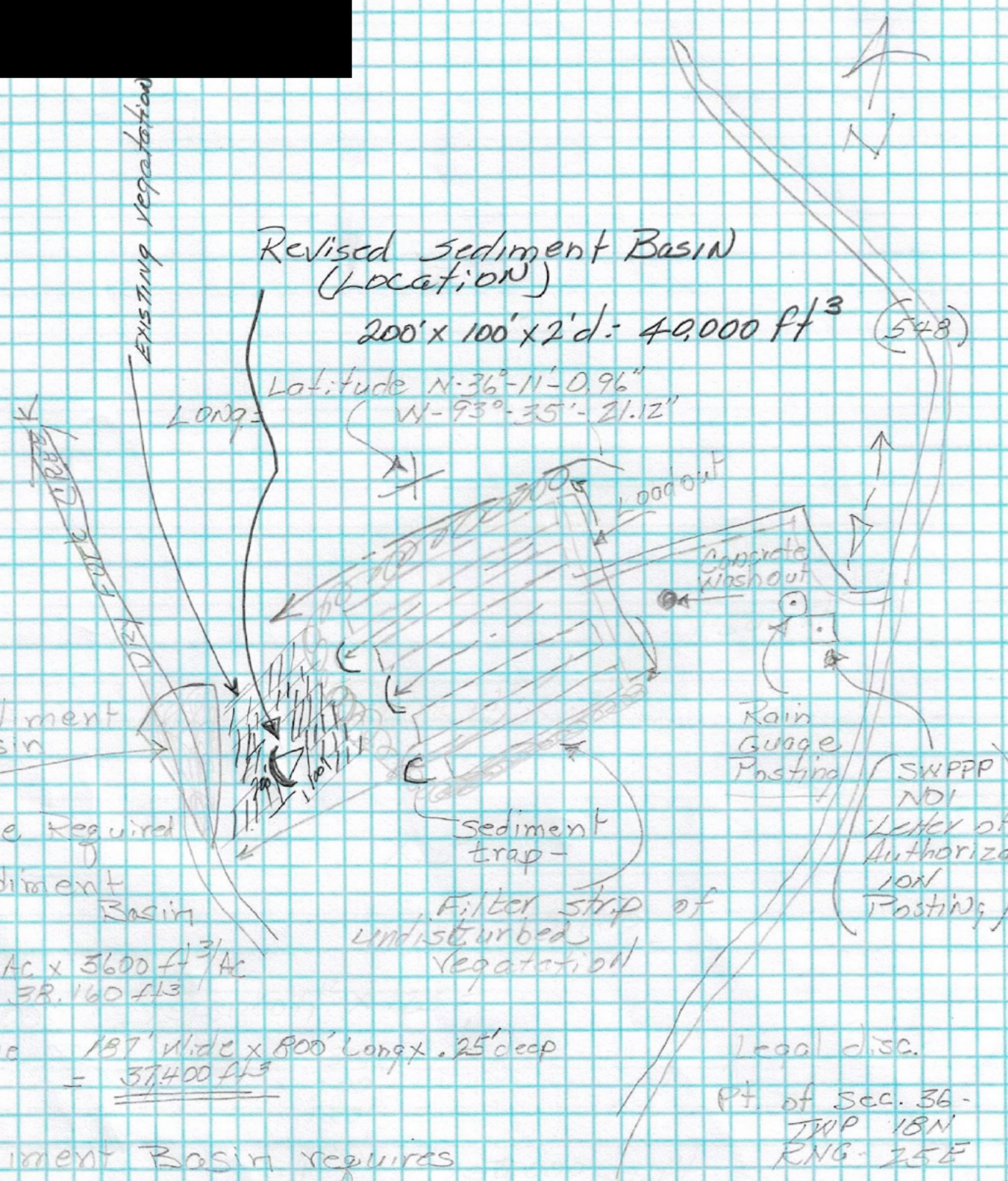
Telephone: _____

IX. PERMIT REQUIREMENT VERIFICATION

Please check the following to verify completion of permit requirements.

	Yes	No*
Submittal of Complete NOI?	☒	☐
Submittal of Required Permit Fee?	☒	☐
Check Number: _____		
Complete SWPPP?	☒	☐

* If you answer No to any of the above questions, then a permit can not be issued!



Revised Sediment Basin (Location)

$$200' \times 100' \times 2' d = 40,000 \text{ ft}^3 \quad (548)$$

Latitude N-36°-11'-0.96"
Longitude W-93°-35'-21.12"

Sediment Basin

Volume Required for Sediment Basin

$$10.6 \text{ Ac} \times 3600 \text{ ft}^3/\text{Ac} = 38,160 \text{ ft}^3$$

$$\text{Volume } 187' \text{ wide} \times 800' \text{ Long} \times .25' \text{ deep} = 37,400 \text{ ft}^3$$

Sediment Basin requires
No Surface disturbance

Legal disc.

Pt. of Sec. 36 -
TWP 18N
RNG 25E

$$\text{Disturbed area} = 568' \text{ wide} \times 820' \text{ Long} = 10.6 \text{ Acres}$$

DIRECTION OF Storm Water Flow

Soil Map—Carroll County, Arkansas, and Madison County, Arkansas

Topographic map

Sediment Basin
Revision



Soil Map may not be valid at this scale.

Map Scale: 1:10,200 if printed on A landscape (11" x 8.5") sheet.

0 150 300 600 900 Meters

0 450 900 1800 2700 Feet

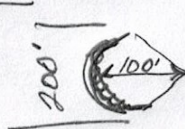
Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 15N WGS84



Natural Resources
Conservation Service

Web Soil Survey
National Cooperative Soil Survey

Sediment Basin



Volume planned
= 200' x 100' x 2' deep
= 40,000 Cu. Ft.

Vegetative strips above and
Below Basin

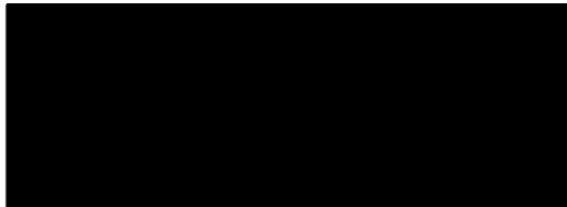
9/18/2019
Page 1 of 4

Stormwater Pollution Prevention Plan (SWPPP) for Construction Activity

National Pollutant Discharge Elimination System (NPDES)

General Permit # ARR150000

Prepared for:

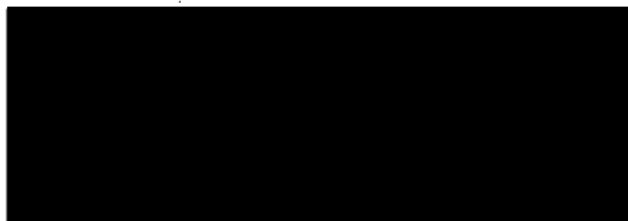


Date:

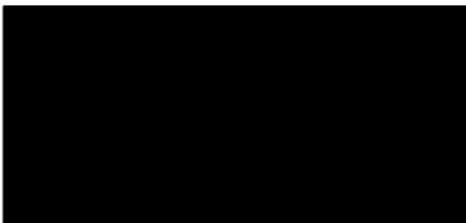
09/18/19

Prepared by:

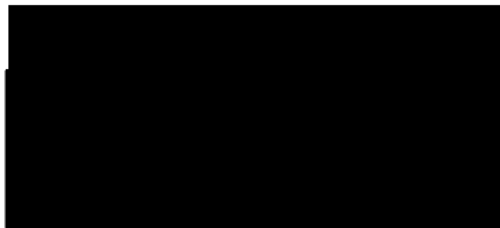
Frank Walker



Project Name and Location



Plan Prepared by:



- Site Description: **Site is located in Section 36; Twn-18N;; Rng 25W**
 - The site is located in Nixa Very Gravelly silt loam 3-8% slope.**
 - Project description, intended use after NOI is filed: **After letter of Authorization and Permit is secured, plans are to construct 4 earth pads that are 72 feet wide by 720 feet long.**
 - Drains between the pads will be constructed with slopes of 0.05%. : Strip top soil and vegetation from the pad area and stockpile in such a manner that runoff from the pads do not cause sediment to leave the site. Construct brush dams at west corner of site to act as sediment trap**
 - Grade the pads and drains to the per-determined elevation and slopes.**
 - When grading is complete and buried utilities area in place then seed the drains and slopes to adapted grasses (Bermuda and Ryegrass) at the rate of one pound per 1000 square feet.**
 - Area: dedicated to project 20 acres **Disturbed Area: 10.6 Acres**
 - Soils Information:
 - Runoff Coefficient Pr-Construction **0.20** (See Appendix A):
 - Runoff Coefficient Post-Construction **0.49**(See Appendix A):
 - At present the discharge from the site is entirely storm water that travels overland thru established pasture and woodland
 - After grading the discharge will be entirely storm water that has passed thru sediment controls before leaving the site.
- Responsible Parties

			Owner/operator/Inspector
--	--	--	--------------------------

- There is one water bodies on site which is a livestock watering facility and is down slope from the**
 - disturbed area. The Waterbody can act as a Sediment Basin for the disturbed area.**
 - The project is not located within the jurisdiction of an MS4**
 - Ultimate Receiving Water:

White River
- Documentation of Permit Eligibility Related to the 303(d) list and Total Maximum Daily Loads (TMDL) (http://www.adeq.state.ar.us/water/branch_planning/default.htm)

- **The Storm flows overland by an intermittent, unnamed tributary to Dry Fork Creek to the Kings River to Table Rock Lake then to the White River.**

- **The construction activity will not cause discharge of phosphorus or other nutrients.**

- **Attainment of Water Quality Standards After Authorization**

- The permitted must select, install, implement, and maintain BMPs at the construction site that minimize pollutants in the discharge as necessary to meet applicable water quality standards.
- In general, except in situations explained below, the SWPPP developed, implemented, and updated to be considered as stringent as necessary to ensure that the discharges do not cause or contribute to an excursion above any applicable water quality standard.
- At any time after authorization, the Department may determine that the storm water discharges may cause, have reasonable potential to cause, or contribute to an excursion above any applicable water quality standard.
- If such a determination is made, the Department will require the permitted to:
 - Develop a supplemental BMP action plan describing SWPPP modifications to address adequately the identified water quality concerns and submit valid and verifiable data and information
 - that are representative of ambient conditions and indicate that the receiving water is attaining water quality standards; or
 - Cease discharges of pollutants from construction activity and submit an individual permit application.

Site Map Requirements (Attach Site Map):

- Pre-construction topographic view;
- Direction of storm water flow (i.e., use arrows to show which direction storm water will flow) and approximate slopes anticipated after grading activities;
- Delineate on the site map areas of soil disturbance and areas that will not be disturbed under the coverage of this permit;
- Location of major structural and nonstructural controls identified in the plan;
- Location of main construction entrance and exit;
- Location where stabilization practices are expected to occur;
- Locations of off-site materials, waste, borrow area, or equipment storage area;
- Location of areas used for concrete wash-out;
- Location of all surface water bodies (including wetlands);
- Locations where storm water is discharged to a surface water and/or municipal separate storm sewer system if applicable,
- Locations where storm water is discharged off-site (should be continuously updated);
- Areas where final stabilization has been accomplished and no further construction phase permit requirements apply.
- Storm water Controls
 - Initial Site Stabilization, Erosion and Sediment Controls, and Best Management Practices:
- **Initial Site Stabilization: Leave in place all vegetation outside the immediate area where grading is taking place. Construct sediment traps between the ends of pads.**
- **Filter strip will begin at the end of the drains.**
 - **Preserve the existing vegetation outside the disturbed area**
 - **Erosion and Sediment Controls: Sediment traps; Filter Strips and undisturbed vegetation.**
 - If periodic inspections or other information indicates a control has been used inappropriately or incorrectly, the operator will replace or modify the control for site situations:
 - Off-site accumulations of sediment will be removed at a frequency sufficient to minimize off-site impacts:
 - Sediment will be removed from sediment traps or sedimentation ponds when design capacity has been reduced by 50%:

- Litter, construction debris, and construction chemicals exposed to storm water shall be prevented from becoming a pollutant source for storm water discharges:
- Off-site material storage areas used solely by the permitted project are **NOT** being covered by this SWPPP:
- Stabilization Practices
- Description and Schedule: **Drains will have gentle slopes <0.05%, sediment traps; are to be left in place during grading, Seeding after grading is complete.**

- **Buffer areas are required to be used around the entire disturbed area.**

**Buffer areas consist of the existing established pasture plants.
And is to remain undisturbed during the grading process.**

- A record of the dates when grading activities occur, when construction activities temporarily or permanently cease on a portion of the site, and when stabilization measures are initiated shall be included with the plan.
- Deadlines for stabilization: **Stabilization procedures will be initiated 14 days after construction activity temporarily ceases on a portion of the site.**
- Structural Practices
 - Describe any structural practices to divert flows from exposed soils, store flows, or otherwise limit runoff and the discharge of pollutants from exposed areas of the site:
 - **All storm water leaving the exposed area's will pass through the sediment traps and filter strips before leaving the property.**

A Sediment Basin is required, site is more than 10 acres. (10.06acres)

Therefore a sediment basin is required. **Filter Strip is to consist of the existing vegetation.**

- Describe Velocity Dissipation Devices: **Straw Waddles and Sand bag barriers across drains.**
- Other Controls
- No solid materials, including building materials, shall be discharged to Waters of the State:
- Off-site vehicle tracking of sediments and the generation of dust shall be minimized through the use of:

A stabilized construction entrance and exit

- Temporary Sanitary Facilities: **Porti Potties installed and serviced by the sanitation company.**
- Concrete Waste Area Provided: Location **shown on site map and consist of a small constucted depression with controls to keep stormwater from entering or leaving the depression.**

- Fuel Storage Areas, Hazardous Waste Storage, and Truck Wash Areas: **Fuel will be stored on site in an enclosed locked trailer with approximately 1000 gallon capacity.**
- **The trailer will be located in a small depression to catch any fuel accidentally spilled. No Hazardous Waste Storage will be at the site. There will be no truck wash areas.**
- Non-Storm water Discharges
 - The following allowable non-storm water discharges comingled with storm water are Not present or anticipated at the site:
 - Fire-fighting activities;
 - Fire hydrant flushing;
 - Water used to wash vehicles (where detergents or other chemicals are not used) or control dust in accordance with Part II.A.4.H.2;
 - Potable water sources including uncontaminated waterline flushing;
 - Landscape Irrigation;
 - Routine external building wash down which does not use detergents or other chemicals;
 - Pavement wash waters where spills or leaks of toxic or hazardous materials have not occurred (unless all spilled materials have been removed) and where detergents or other chemicals are not used;
 - Uncontaminated air conditioning, compressor condensate (See Part I.B.12.C of the permit);,
 - Uncontaminated springs, excavation dewatering and groundwater (See Part I.B.12.C of the permit);
 - Foundation or footing drains where flows are not contaminated with process materials such as solvents (See Part I.B.12.C of the permit);
 - Describe any controls associated with non-storm water discharges present at the site:
- Post-Construction Storm water Management:

Measures installed during the construction process to control pollutants in storm water discharges that will occur after construction operations have been completed:

Sediment traps will be left in place when construction is completed, and all buffer zones and filter strips will be left in place.

- Applicable State or Local Programs: The SWPPP will be updated as necessary to reflect any revisions to applicable federal, state, or local requirements that affect the storm water controls implemented at the site.
-
- Inspections
 - Inspection frequency:

At least once every 14 calendar days and within 24 hours of the end of a storm event 0.25 inches or greater (a rain gauge must be maintained on-site)
 - Inspections:

Completed inspection forms will be kept with the SWPPP.

ADEQ's inspection form will be used (See Appendix B)
 - Inspection records will be retained as part of the SWPPP for at least 3 years from the date of termination.
 - It is understood that the following sections describe waivers of site inspection requirements. All applicable documentation requirements will be followed in accordance with the referenced sections.

- Winter Conditions (Part II.A.4.L.3)
- Adverse Weather Conditions (Part II.A.4.L.4)

- Maintenance:

The following procedures to maintain vegetation, erosion and sediment control measures and other protective measures in good, effective operating condition will be followed:

Earth moving equipment will avoid all areas used for buffers and filters strips and in the event that vegetation is destroyed outside the site then reestablishment will take place.

Any necessary repairs will be completed, when practicable, before the next storm event, but not to exceed a period of 3 business days of discovery, or as otherwise directed by state or local officials.

- Employee Training:

The following is a description of the training plan for personnel (including contractors and subcontractors) on this project:

****Note, Formal training classes given by Universities or other third-party organizations are not required, but recommended for qualified trainers;**

the permitted is responsible for the content of the training being adequate for personnel to implement the requirements of the permit.

The permitted will have a meeting with the contractor and his operators prior to the start of construction to assure that all employees, contractors operators are aware of all aspects of the storm water plan.

Certification

"I certify under penalty of law that this document and all attachments such as Inspection Form were prepared under my direction or supervision in accordance with a system designed to ensure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

Printed name of Owner

Signature of Owner

Date

8/9/25/19

Computation Sheet for Determining Runoff CoefficientsTotal Site Area 10.6 Acres (A)

Existing Site Conditions

Impervious Site Area 0 Acres (B)Impervious Site Area Runoff Coefficient 0.90 (C)Pervious Site Area 10.6 Acres (D)Pervious Site Area Runoff Coefficient 0.20 (E)**Pre-Construction Runoff Coefficient**

$$\frac{[B \times C] + [D \times E]}{[A]} = 0.20$$

Proposed Site Conditions (after construction)Impervious Site Area 4.5 Acres (F) *under Roof*Impervious Site Runoff Coefficient 0.90 (G)Pervious Site Area 6.1 Acres (H)Pervious Site Area Runoff Coefficient 0.20 (I)**Post-Construction Runoff Coefficient**

$$\frac{[F \times G] + [H \times I]}{[A]} = \frac{4.05 + 1.22}{10.6} = \frac{5.27}{10.6} = 0.49$$

ARR150000 Inspection Form – Stormwater Pollution Prevention Plan

Inspector Name: _____

Date of Inspection: _____

Inspector Title: _____

Days Since Last Rain Event: _____ days

Rainfall Since Last Rain Event: _____ inches

Description of any Discharges During Inspection: _____

Location of Discharges of Sediment/Other Pollutant (specify pollutant & location): _____

Locations in Need of Additional BMPs: _____

Information on Location of Construction Activities

Location	Activity Begin Date	Activity Occuring Now (y/n)?	Activity Ceased Date	Stabilization Initiated Date	Stabilization Complete Date

Information on BMPs in Need of Maintenance

Location	In Working Order?	Maintenance Scheduled Date	Maintenance Completed Date	Maintenance to be Performed By

Changes required to the SWPPP: _____

Reasons for changes: _____

SWPPP changes completed (date): _____

"I certify under penalty of law that this document and all attachments such as Inspection Form were prepared under my direction or supervision in accordance with a system designed to ensure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

Signature of Responsible or Cognizant Official: _____ Date: _____

Title: _____



3°35'47.04"

N36°11'0.96"
W 93°35'21.12"

W 93°34'

26

548

Medison 1600

Google Earth

© 2018 Google



1000 ft

Site MAP



United States
Department of
Agriculture

Carroll County, Arkansas



Common Land Unit Tract Boundary
Non-Cropland
Cropland

Imagery Year: 2017

2020 Program Year
Map Created March 05, 2019

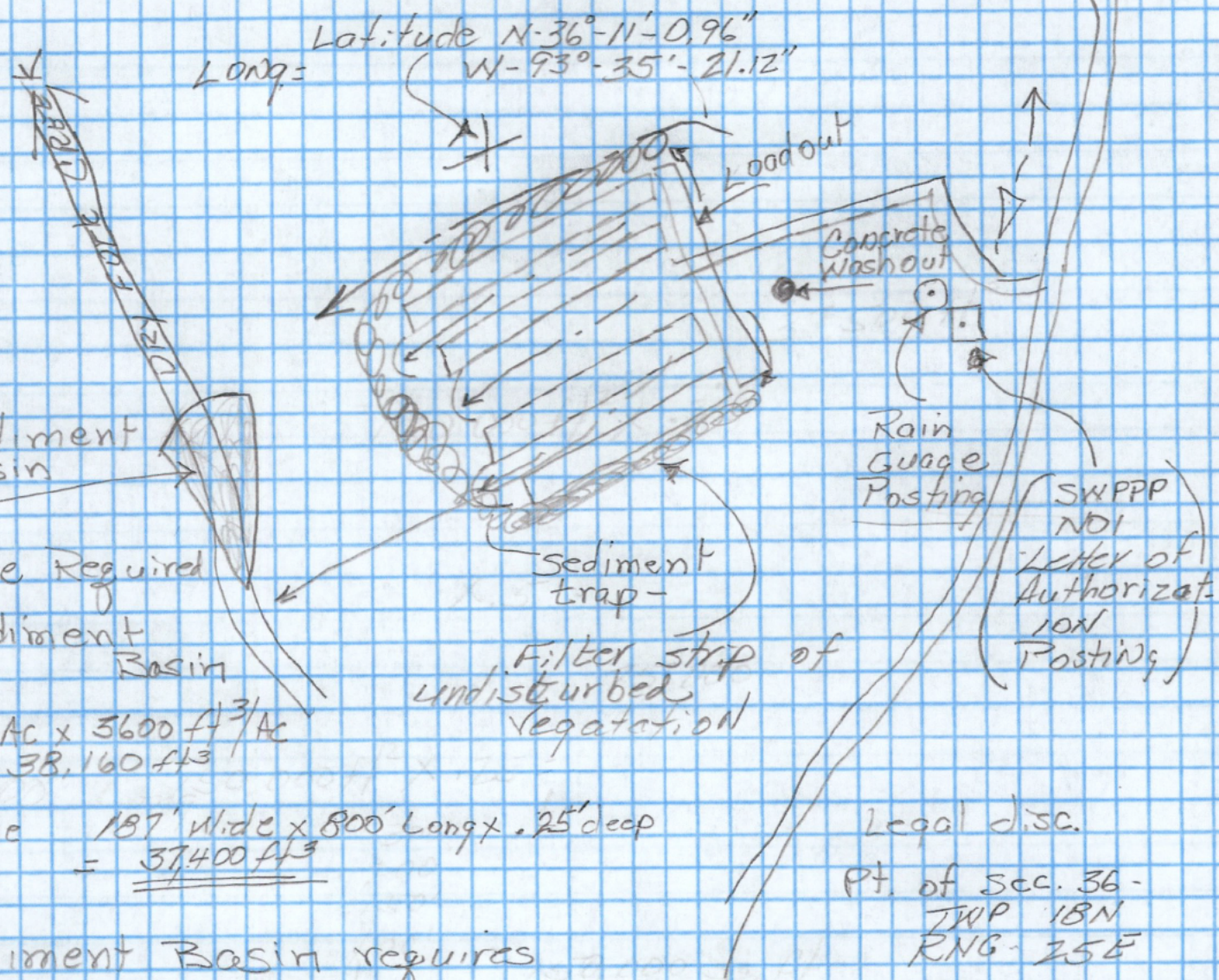
Wetland Determination Identifiers

- Restricted Use
- Limited Restrictions
- Exempt from Conservation Compliance Provisions

Tract Cropland Total: 129.68 acres

Farm 4042
Tract 3170

United States Department of Agriculture (USDA) Farm Service Agency (FSA) maps are for FSA Program administration only. This map does not represent a legal survey or reflect actual ownership, rather it depicts the information provided directly from the producer and/or National Agricultural Imagery Program (NAIP) imagery. The producer accepts the data 'as is' and assumes all risks associated with its use. USDA-FSA assumes no responsibility for actual or consequential damage incurred as a result of any user's reliance on this data outside FSA Programs. Wetland identifiers do not represent the size, shape, or specific determination of the area. Refer to your original determination (CPA-026 and attached maps) for exact boundaries and determinations or contact USDA Natural Resources Conservation Service (NRCS).



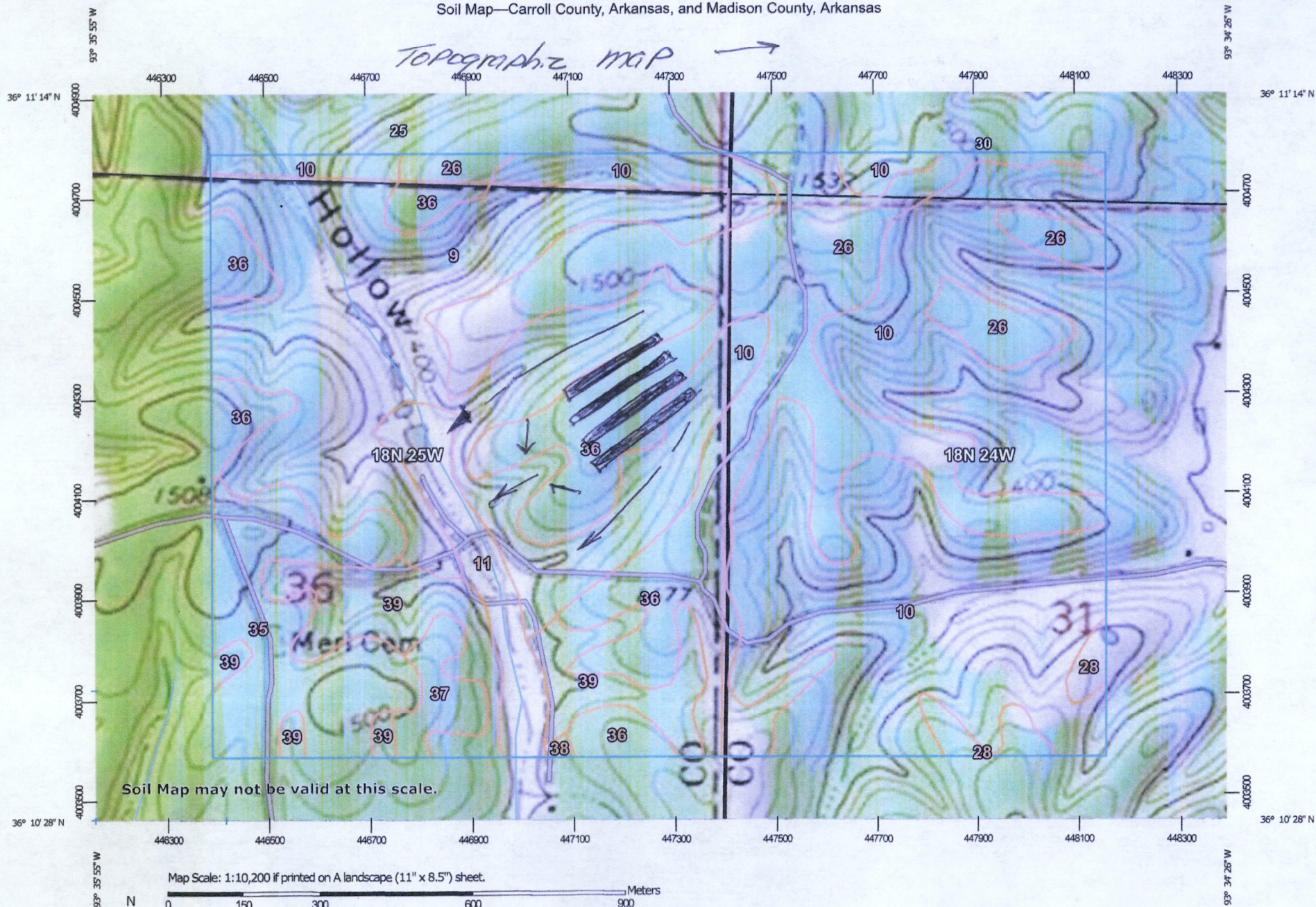
Sediment Basin requires
 No surface disturbance

Disturbed area =
 568 ft wide x 820 ft Long -
10.6 Acres

DIRECTION of Storm Water Flow

Soil Map—Carroll County, Arkansas, and Madison County, Arkansas

Topographic map →



Soil Map may not be valid at this scale.

Map Scale: 1:10,200 if printed on A landscape (11" x 8.5") sheet.

0 150 300 600 900 Meters

0 450 900 1800 2700 Feet

Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 15N WGS84

C-1

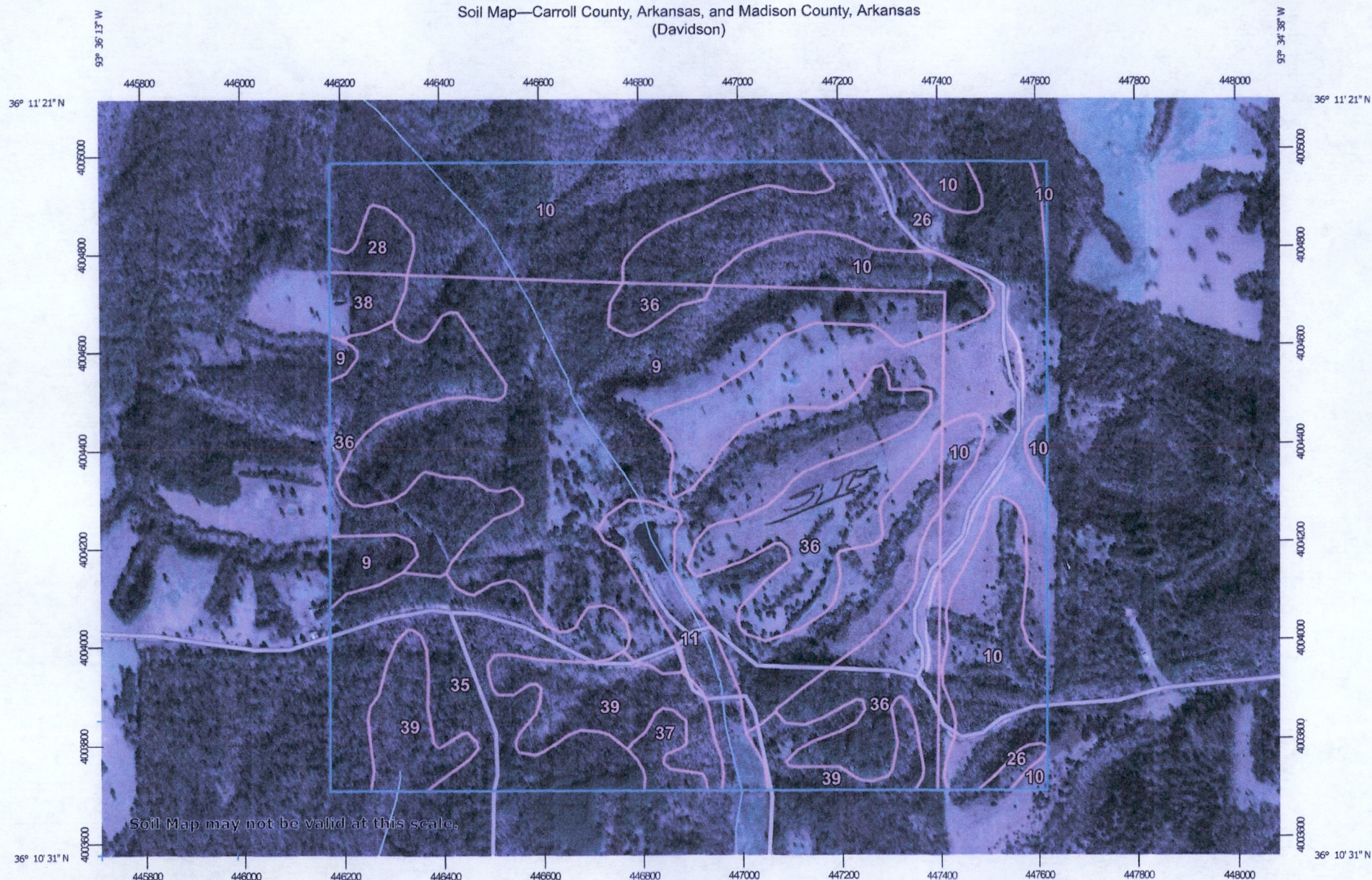
Natural Resources
Conservation Service

Web Soil Survey
National Cooperative Soil Survey

9/18/2019
Page 1 of 4

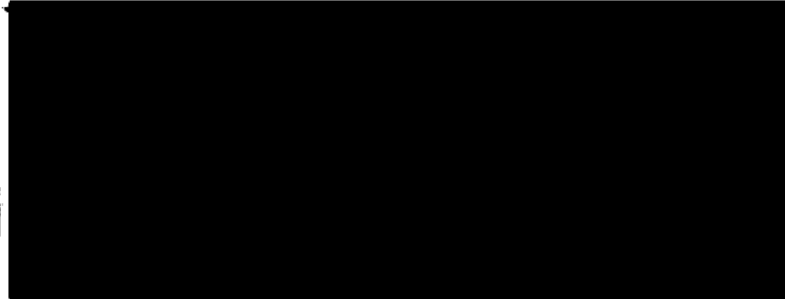
SOILS

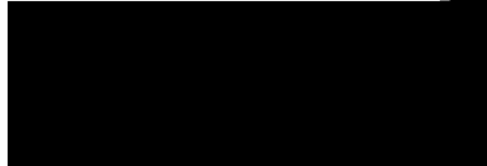
Soil Map—Carroll County, Arkansas, and Madison County, Arkansas
(Davidson)



Soil Map may not be valid at this scale.

Map Scale: 1:10,900 if printed on A landscape (11" x 8.5") sheet.
0 150 300 600 900 Meters
0 500 1000 2000 3000 Feet
Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 15N WGS84



 UNITED STATES POSTAL SERVICE.		Retail
P		
PRIORITY MAIL 2-DAY®		
		0 Lb 3.70 Oz 1006
EXPECTED DELIVERY DAY: 10/12/19		
SHIP TO: 5301 NORTSHORE DR NORTH LITTLE ROCK AR 72118-5328		R015
USPS TRACKING NUMBER		
		
9505 5102 6503 9283 1980 38		

A. D. E. Q.
Permits Branch
Office of Water Quality
5301 NORTSHORE Drive
North Little Rock, AR 72118

SWPPP
NOI



NOTICE OF COVERAGE (NOC)

FOR NPDES STORMWATER CONSTRUCTION GENERAL PERMIT NUMBER ARR150000



The Notice of Intent (NOI) and Stormwater Pollution Prevention Plan (SWPPP) for coverage under the ARR150000 Stormwater Construction General Permit were received on November 04, 2019 and have been reviewed. The facility has been assigned Permit Tracking Number **ARR156462** and AFIN **08-00539**. Any permit-related correspondence must include this Permit Tracking Number and AFIN. This NOC is issued to [REDACTED] in reliance upon the statements and representations made in the submittal for the following project located in Carroll County:



This coverage is for the disturbance of 10.60 acres for the construction of **an agricultural enterprise** only. In accordance with the NOI there will be 10.60 acres disturbed out of 20.00 total acres. The Project Contact Person for this construction site is [REDACTED].

The permittee is responsible for compliance with all applicable terms and conditions of this NOC and the enclosed General Permit ARR150000. Receipt of this NOC does not relieve any permittee of the responsibility to comply with any other applicable federal, state, and local statute, ordinance, policy, or regulation which includes but is not limited to Short Term Activity Authorizations (STAA) or 404 permits.

During the review of your NOI and SWPPP, the Department determined that this project discharges to areas of the state which include potential losing stream segments, karst geology, and/or sensitive aquatic species native to these areas. As discussed in Part I.B.3, it is the responsibility of the permittee to prevent activity which may take or otherwise risk harm to endangered species. The Department provides the following link as an example of recommended best management practices for similar losing stream areas. The practices should be considered during the progression of site activities and updates to the facility SWPPP for continued protection of underground water resources.

<https://www.fws.gov/arkansas-es/docs/General%20Karst%20big%20BMP%20packet.pdf>

The SWPPP will be located at the construction entrance.

This authorization must be **posted** at the construction site in a prominent place per the general permit.

Expiration Date: 10/31/2021

A handwritten signature in cursive script that reads "Bryan Leamons".

Bryan Leamons, P.E.
Senior Operations Manager, Office of Water Quality

11/5/2019
Coverage Date

**AUTHORIZATION TO DISCHARGE STORMWATER UNDER
THE NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM AND THE
ARKANSAS WATER AND AIR POLLUTION CONTROL ACT**

In accordance with the provisions of the Arkansas Water and Air Pollution Control Act (Ark. Code Ann. 8-4-101 et seq.), and the Clean Water Act (33 U.S.C. 1251 et seq.), an

Operator of Facilities with Stormwater Discharges Associated with Construction Activity

is authorized to discharge to all receiving waters except as stated in Part I.B.11 (Exclusions).

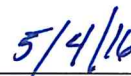
For facilities that are eligible for coverage under this General Permit (GP), the Department sends a cover letter (Notice of Coverage with tracking permit number which starts with ARR15) and a copy of the permit to the facility. The cover letter includes the Department's determination that a facility is covered under the GP and may specify alternate requirements outlined in the permit.

Effective Date: November 1, 2016

Expiration Date: October 31, 2021



Caleb J. Osborne
Associate Director, Office of Water Quality
Arkansas Department of Environmental Quality



Issue Date

PART I

PERMIT REQUIREMENTS

Information in **Part I** is organized as follows:

Section A: Definitions with Included Commentary

Section B: Coverage Under this Permit:

1. Permitted Area
2. Eligibility
3. Responsibilities of the Operator
4. Where to Submit
5. Requirements for Qualifying Local Program (QLP)
6. Requirements for Coverage
7. Notice of Intent (NOI) Requirements
8. Posting Notice of Coverage (NOC)
9. Applicable Federal, State or Local Requirements
10. Allowable Non-Stormwater Discharges
11. Limitations on Coverage (Exclusions)
12. Short Term Activity Authorization (STAA)
13. Effluent Limitation Guidelines (ELG)
14. Natural Buffer Zones
15. Waivers from Permit Coverage
16. Notice of Termination (NOT)
17. Responsibilities of the Operator of a Larger Common Plan of Development for a Subdivision
18. Change in Operator
19. Late Notifications
20. Failure to Notify
21. Maintenance
22. Releases in Excess of Reportable Quantities
23. Attainment of Water Quality Standards
24. Requiring an Individual Permit

SECTION A: DEFINITIONS WITH INCLUDED COMMENTARY

1. "**ADEQ**" or "**Department**" is referencing the Arkansas Department of Environmental Quality. The Department is the governing authority for the National Pollutant Discharge Elimination System program in the state of Arkansas.
2. "**Arkansas Pollution Control and Ecology Commission**" shall be referred to as APCEC throughout this permit.
3. "**Automatic Coverage**" is for those sites that are defined as a small construction site.
4. "**Best Management Practices (BMPs)**" schedules of activities, prohibitions of practices, maintenance procedures, and other management practices to prevent or reduce the discharge of pollutants to Waters of the State. BMPs also include treatment requirements, operating procedures, and practices to control construction site runoff, spillage or leaks, sludge or waste disposal, or drainage from raw material storage. According to the EPA BMP manual, the use of hay-bales in concentrated flow areas is not recommended as a best management practice.
5. "**Cognizant Official**" a duly authorized representative, as defined in Part II.B.9.B.
6. "**Commencement of Construction**" the initial disturbance of soils associated with clearing, grading, or excavating activities or other construction-related activities.
7. "**Contaminated**" means a substance the entry of which into the MS4, Waters of the State, or Waters of the United States may cause or contribute to a violation of Arkansas water quality standards.
8. "**Control Measure**" as used in this permit, refers to any Best Management Practice or other method used to prevent or reduce the discharge of pollutants to Waters of the State.
9. "**Construction Site**" an area upon which one or more land disturbing construction activities occur that in total will disturb one acre or more of land, including areas that are part of a larger common plan of development or sale where multiple separate and distinct land disturbing construction activities may be taking place at different times on different schedules but under one plan such that the total disturbed area is one acre or more.
10. "**CWA**" the Clean Water Act or the Federal Water Pollution Control Act.
11. "**Dedicated Portable Asphalt Plant**" a portable asphalt plant that is located on or contiguous to a construction site that provides asphalt only to the construction site on which the plant is located or adjacent to. The term does not include facilities that are subject to the asphalt emulsion effluent guideline limitations at 40 CFR Part 443.
12. "**Dedicated Portable Concrete Plant**" a portable concrete plant that is located on or contiguous to a construction site and that provides concrete only to the construction site on which the plant is located on or adjacent to.
13. "**Detention Basin**" a detention basin is an area where excess stormwater is stored or held temporarily and then slowly drains when water levels in the receiving channel recede. In essence, the water in a detention basin is temporarily detained until additional room becomes available in the receiving channel.
14. "**Director**" the Director, Arkansas Department of Environmental Quality, or a designated representative.
15. "**Discharge**" when used without qualification means the "discharge of a pollutant".

16. "**Discharge of Stormwater Associated with Construction Activity**" as used in this permit, refers to a discharge of pollutants in stormwater runoff from areas where soil disturbing activities (e.g., clearing, grading, or excavation), construction materials or equipment storage or maintenance (e.g., fill piles, borrow area, concrete truck washout, fueling), or other industrial stormwater directly related to the construction process (e.g., concrete or asphalt batch plants) are located.

17. "**Discharge-Related Activities**" as used in this permit, include: activities that cause, contribute to, or result in stormwater point source pollutant discharges, including but not limited to: excavation, site development, grading and other surface disturbance activities; management of solid waste and debris; and measures to control stormwater including the construction and operation of BMPs to control, reduce or prevent stormwater pollution.

18. "**Disturbed area**" the total area of the site where any construction activity is expected to disturb the ground surface. This includes any activity that could increase the rate of erosion, including, but not limited to, clearing, grubbing, grading, excavation, demolition activities, haul roads, and areas used for staging. Also included are stockpiles of topsoil, fill material and any other stockpiles with a potential to create additional runoff.

19. "**Drainageway**" an open linear depression, whether constructed or natural, that functions for the collection and drainage of surface water.

20. "**Duly Authorized Representative**" a representative of the Responsible Official meeting the requirements specified in Part II.B.9.B.

21. "**Eligible**" qualified for authorization to discharge stormwater under this general permit.

22. "**Erosion**" the process by which the land's surface is worn away by the action of wind, water, ice or gravity.

23. "**ERW**" Extraordinary Resource Water, in accordance with Regulation 2.

24. "**ESW**" Ecologically Sensitive Waterbodies, in accordance with Regulation 2.

25. "**Facility**" or "**Activity**" any NPDES "point source" or any other facility or activity (including land or appurtenances thereto) that is subject to regulation under the NPDES program.

26. "**Final Stabilization**":

A. All soil disturbing activities at the site have been completed and either of the two following criteria are met:

- 1) A uniform (e.g., evenly distributed, without large bare areas) perennial vegetative cover with a density of 80% of the native background vegetative cover for the area has been established on all unpaved areas and areas not covered by permanent structures, or
- 2) Equivalent permanent stabilization measures (such as the use of riprap, gabions, or geotextiles) have been employed.

B. When background native vegetation will cover less than 100% of the ground (e.g., arid areas, beaches), the 80% coverage criteria is adjusted as follows: if the native vegetation covers 50% of the ground, 80% of 50% ($0.80 \times 0.50 = 0.40$) would require 40% total cover for final stabilization. On a beach with no natural vegetation, no stabilization is required.

C. For individual lots in residential construction, final stabilization means that either:

- 1) The homebuilder has completed final stabilization as specified above, or
- 2) The homebuilder has established temporary stabilization including perimeter controls for an individual lot prior to occupation of the home by the homeowner and informing the homeowner of the need for, and benefits of, final stabilization.

D. For construction projects on land used for agricultural purposes (e.g., pipelines across crop or range land, staging areas for highway construction, etc.), final stabilization may be accomplished by returning the disturbed land to its pre-construction agricultural use. Areas disturbed that were not previously used for agricultural activities, such as buffer strips immediately adjacent to "Waters of the State", and areas which are not being returned to their pre-construction agricultural use shall meet the final stabilization criteria in A, B, or C above.

27. "**Grading Activities**" as used in this permit are those actions that disturb the surface layer of the ground to change the contouring, surface drainage pattern, or any other slope characteristics of the land without significantly adding or removing on-site rock, soil, and other materials. This can include demolition, excavation, and filling.

28. "**Infrastructure**" streets, drainage, curbs, utilities, etc.

29. "**Impaired Water**" a waterbody listed in the current, approved Arkansas 303(d) list.

30. "**Landscaping**" improving the natural beauty of a piece of land (i.e. entrance of subdivision) through plantings or altering the contours of the ground.

31. "**Large and Medium Municipal Separate Storm Sewer System**" all municipal separate storm sewer systems that are either:

- A. Located in an incorporated place with a population of 100,000 or more as determined by the latest Decennial Census by the Bureau of Census: or
- B. Located in the counties with unincorporated urbanized populations of 100,000 or more, except municipal, separate storm sewers that are located in the incorporated places, townships or towns within such counties; or
- C. Owned or operated by a municipality other than those described in paragraphs A or B and that are designated by the Director as part of the large or medium municipal separate storm sewer system.

32. "**Large Construction Site**" construction activity including clearing, grading and excavation, **except** operations that result in the disturbance of less than five acres of total land area. Construction activity also includes the disturbance of less than five acres of total land area that is a part of a larger common plan of development or sale if the larger common plan will ultimately disturb five acres. (Please see Part I.B.15 for partial waivers.)

33. "**Larger Common Plan of Development**" a contiguous (sharing a boundary or edge; adjacent; touching) area where multiple and distinct construction activities may be taking place at different times on different schedules under one plan. Such a plan might consist of many small projects (e.g. a common plan of development for a residential subdivision might lay out the streets, house lots, and areas for parks, schools and commercial development that the developer plans to build or sell to others for development). All these areas would remain part of the common plan of development or sale. The following items can be used as guidance for deciding what might or might not be considered a "Common Plan of Development or Sale." The "plan" in a common plan of development or sale is broadly defined as any announcement or piece of documentation (including a sign, public notice or hearing, sales pitch, advertisement, drawing, permit application, zoning request, computer design, etc.) or physical demarcation (including boundary signs, lot stakes, surveyor markings, etc.) indicating construction activities may occur on a specific plot. The applicant shall still meet the definition of operator in order to be required to get permit coverage,

regardless of the acreage that is personally disturbed.

If a smaller project (i.e., less than 1 acre) is part of a large common plan of development or sale (e.g., you are building a residential home on a ½ acre lot in a 40 acre subdivision or are putting in a fast food restaurant on a ¾ acre pad that is part of a 20 acre retail center), permit coverage is required. Under 40 CFR 122.26(b)(2)(vi), smaller parts of a larger common plan of development are automatically authorized under this general permit and should follow the conditions of a site with automatic coverage set forth in this permit (see Part I.B.6.A).

34. "Natural Buffer" for purposes of this permit, an area of undisturbed natural cover surrounding surface waters. Natural cover includes vegetation, exposed rock, or barren ground that exists prior to commencement of construction activities at the site.

35. "NOC" Notice of Coverage.

36. "NOI" Notice of Intent to be covered by this permit.

37. "NOT" Notice of Termination.

38. "NSW" Natural and Scenic Waterways, in accordance with Regulation 2.

39. "Operator"/ "Permittee" for the purpose of this permit and in the context of stormwater associated with construction activity, means any person (an individual, association, partnership, corporation, municipality, state or federal agency) who has the primary management and ultimate decision-making responsibility over the operation of a facility or activity. The operator is responsible for ensuring compliance with all applicable environmental regulations and conditions.

In addition, for purposes of this permit and determining who is an operator, "owner" refers to the party that owns the structure being built. Ownership of the land where construction is occurring does not necessarily imply the property owner is an operator (e.g., a landowner whose property is being disturbed by construction of a gas pipeline or a landowner who allows a mining company to remove dirt, shale, clay, sand, gravel, etc. from a portion of his property). Likewise, if the erection of a structure has been contracted for, but possession of the title or lease to the land or structure is not to occur until after construction, the would-be owner may not be considered an operator (e.g., having a house built by a residential homebuilder).

40. "Outfall" a point source where stormwater leaves the construction site.

41. "Owner" the owner or operator of any "facility or activity" subject to regulation under the NPDES program. In addition, for purposes of this permit and determining who is an operator, "owner" refers to the party that owns the structure being built. Ownership of the land where construction is occurring does not necessarily imply the property owner is an operator (e.g., a landowner whose property is being disturbed by construction of a gas pipeline). Likewise, if the erection of a structure has been contracted for, but possession of the title or lease to the land or structure is not to occur until after construction, the would-be owner may not be considered an operator (e.g. having a house built by a residential homebuilder).

42. "Physically Interconnected" means that one municipal separate storm sewer system is connected to a second municipal separate storm sewer system in such a way that it allows for direct discharges into the second system.

43. "Point Source" any discernible, confined, and discrete conveyance, including but not limited to, any pipe, ditch, channel, tunnel, conduit, well, discrete fissure, container, rolling stock, concentrated animal feeding operation, landfill leachate collection system, vessel or other floating craft from which pollutants are or may be discharged. This term does not include return flows from irrigated agriculture or agricultural stormwater runoff.

44. "**Qualified Local Program**" is a municipal program for stormwater discharges associated with construction sites that has been formally approved by the Department.

45. "**Qualified personnel**" a person knowledgeable in the principles and practice of erosion and sediment controls who possesses the skills to assess conditions at the construction site that could impact stormwater quality and to assess the effectiveness of any sediment and erosion control measures selected to control the quality of stormwater discharges from the construction activity.

46. "**Regulated Small Municipal Separate Storm Sewer System**" all municipal separate storm sewer systems that are either:

- A. Located within the boundaries of an "urbanized area" with a population of 50,000 or more as determined by the latest Decennial Census by the Bureau of Census; or
- B. Owned or operated by a municipality other than those described in paragraph A and that serve a jurisdiction with a population of at least 10,000 and a population density of at least 1,000 people per square mile; or
- C. Owned or operated by a municipality other than those described in paragraphs A and B and that contributes substantially to the pollutant loadings of a "physically interconnected" municipal separate storm sewer system.

47. "**Retention Basin**" a basin that is designed to hold the stormwater from a rain event and allow the water to infiltrate through the bottom of the basin. A retention basin also stores stormwater, but the storage of the stormwater would be on a more permanent basis. In fact, water often remains in a retention basin indefinitely, with the exception of the volume lost to evaporation and the volume absorbed into the soils. This differs greatly from a detention basin, which typically drains after the peak of the storm flow has passed, sometimes while it is still raining.

48. "**Runoff Coefficient**" the fraction of total rainfall that will appear at the conveyance as runoff.

49. "**Sediment**" material that settles to the bottom of a liquid.

50. "**Sediment Basin**" a basin that is designed to maintain a 10 year-24 hour storm event for a minimum of 24-hours in order to allow sediment to settle out of the water.

51. "**Small Construction Site**" construction activities including clearing, grading, and excavating that result in land disturbance of equal to or greater than one acre and less than five acres. Small construction activity also includes the disturbance of less than one acre of total land area that is part of a larger common plan of development or sale if the larger common plan will ultimately disturb equal to or greater than one and less than five acres. Small construction activity does not include routine maintenance.

52. "**Stormwater**" stormwater runoff from rainfall, snow melt runoff, and surface runoff and drainage.

53. "**Stormwater Associated with Construction Activity**" the discharge from any conveyance which is used for collecting and conveying stormwater and which is directly related to construction activity.

54. "**Stormwater Pollution Prevention Plan (SWPPP or SWP3)**" a plan that includes site map(s), an identification of construction/contractor, activities that could cause pollutants in the stormwater, and a description of measures or practices to control these pollutants (BMPs).

55. "**Temporary Sediment Controls**" controls that are installed to control sediment runoff from the site. These could be silt fencing, rock check dams, etc.

56. "**Total Maximum Daily Load**" or "**TMDL**" the sum of the individual wasteload allocations (WLAs) for point sources and load allocations (LAs) for non-point sources and natural background. If the receiving water has only one point source discharger, the TMDL is the sum of that point source WLA plus the LAs for any non-point sources of pollution and natural background sources, tributaries, or adjacent segments. TMDLs can be expressed in terms of mass per time, toxicity, or other appropriate measure.

57. "**Uncontaminated**" cannot exceed the water quality standards as set forth in APCEC Regulation 2.

58. "**Urbanized Area**" the areas of urban population density delineated by the Bureau of the Census for statistical purposes and generally consisting of the land area comprising one or more central place(s) and the adjacent densely settled surrounding area that together have a residential population of at least 50,000 and an overall population density of at least 1,000 people per square mile as determined by the latest Decennial Census by the Bureau of Census.

59. "**Waters of the State**" Waters of the State means all streams, lakes, marshes, ponds, watercourses, waterways, wells, springs, irrigation systems, drainage systems, and all other bodies or accumulations of water, surface and underground, natural or artificial, public or private, which are contained within, flow through, or border upon this state or any portion of the state.

SECTION B: COVERAGE UNDER THIS PERMIT

Introduction

This Construction General Permit (CGP) authorizes stormwater discharges from large and small construction activities that result in a total land disturbance of equal to or greater than one acre. This GP also authorizes discharges from construction activities that result in a total land disturbance of less than five acres where the construction activity is included in a larger common plan, where those discharges enter surface Waters of the State or a Municipal Separate Storm Sewer System (MS4) leading to surface Waters of the State subject to the conditions set forth in this permit. This permit also authorizes stormwater discharges from any other construction activity designated by ADEQ where ADEQ makes that designation based on the potential for contribution to an excursion of a water quality standard or for significant contribution of pollutants to Waters of the State. This permit replaces the permit issued in 2011. The goal of this permit is to minimize the discharge of stormwater pollutants from construction activity. The Operator should make sure to read and understand the conditions of the permit. A copy of the General Stormwater Construction Permit is available on the ADEQ web site at <https://www.adeq.state.ar.us/water/permits/npdes/stormwater/>. You may also obtain a hard copy by contacting the ADEQ's General Permits Section at (501) 682-0623.

1. **Permitted Area.** If a large or small construction activity is located within the State of Arkansas, the operator may be eligible to obtain coverage under this permit.
2. **Eligibility.** Permit eligibility is limited to discharges from “large” and “small” construction activity, or as otherwise designated by ADEQ. This general permit contains eligibility restrictions, as well as permit conditions and requirements. Operators may have to take certain actions to be eligible for coverage under this permit. In such cases, operators shall continue to satisfy those eligibility provisions to maintain permit authorization. If operators do not meet the requirements that are a pre-condition to eligibility, then resulting discharges constitute unpermitted discharges. By contrast, if operators are eligible for coverage under this permit and do not comply with the requirements of the general permit, they may be in violation of the general permit for otherwise eligible discharges.
 - A. This general permit authorizes discharges from construction activities as defined in 40 CFR 122.26(a), 40 CFR 122.26(b)(14)(x), 40 CFR 122.26(b)(15)(i) and 40 CFR Part 450.
 - B. This permit also authorizes stormwater discharges from support activities (e.g., concrete or asphalt batch plants, equipment staging yards, materials storage areas, excavated material disposal areas, borrow areas) provided:
 - 1) The support activity is directly related to a specific construction site that is required to have NPDES permit coverage for discharges of stormwater associated with the construction activity;
 - 2) The support activity is not a commercial operation serving multiple unrelated construction projects by different operators, and does not operate beyond the completion of the construction activity at the last construction project it supports;
 - 3) Pollutant discharges from support activity areas are minimized in compliance with conditions of this permit; and
 - 4) Discharges from the support activity areas shall be identified in a Stormwater Pollution Prevention Plan (SWPPP) stating appropriate controls and measures for the area.
 - C. Other activities may be considered for this permit at the discretion of the Director as defined in 40 CFR 122.26(b)(15)(ii).
3. **Responsibilities of the Operator.** Permittees with operational control are responsible for compliance with all applicable

terms and conditions of this permit as it relates to their activities on the construction site, including protection of endangered species and implementation of BMPs and other controls required by the SWPPP. Receipt of this general permit does not relieve any operator of the responsibility to comply with any other applicable federal, state or local statute, ordinance or regulation.

4. **Where to Submit.** The operator shall submit a complete and signed Notice of Intent (NOI), Stormwater Pollution Prevention Plan (SWPPP), and application fee to the Department at the following address:

Arkansas Department of Environmental Quality
Discharge Permits Section
5301 Northshore Drive
North Little Rock, AR 72118-5317

Or by electronic mail (Complete documents (NOI and SWPPP) must be submitted in PDF format) to:

Water-permit-application@adeq.state.ar.us ;

Or through the ADEQ ePortal site which can be found at the following link:

<https://eportal.adeq.state.ar.us/>

NOTE: Notice of Coverage (NOC) will **NOT** be issued until payment has been received by ADEQ.

5. **Requirements for Qualifying Local Program (QLP).** The Department reviews and approves the QLPs to ensure that they meet or supersede both state and federal requirements outlined in this permit and 40 CFR 122.44(s). ADEQ will review the QLP at least every 5 years for recertification. If the Department approves a QLP, then the QLP requirements shall at the minimum meet the Department's requirements. This would include all templates and forms. This permit may be modified to add new QLPs or modify existing QLPs at the Department's discretion. All public notice and other applicable costs incurred by the modification of the permit for the addition or modification of a QLP will be paid by the QLP.

If a small construction site is within the jurisdiction of a QLP, the operator of the small construction site is authorized to discharge stormwater associated with construction activity under QLP permit requirements only.

At the time of issuance of this permit, only the City of Hot Springs is meeting the ADEQ minimum requirements.

6. **Requirements for Coverage.**

- A. **Small Construction Sites.** An operator of a small construction site will be considered to have automatic coverage under this general permit and may discharge without submitting to the Department a Notice of Intent (NOI), Stormwater Pollution Prevention Plan (SWPPP) or fee if the following conditions are met:

- 1) A completed Notice of Coverage (NOC) must be posted at the site prior to commencing construction;
- 2) A Stormwater Pollution Prevention Plan must be prepared in accordance with good engineering practice as described in Reg.6.203(B), and a copy must be maintained at the construction site;
- 3) All permit conditions set forth in this general permit must be followed; and
- 4) The operator is responsible for ensuring that the site is in compliance with any changes or updates of this general permit, by either contacting ADEQ or reviewing the ADEQ website:

<https://www.adeq.state.ar.us/water/permits/npdes/stormwater/>

- B. Large Construction Sites. An operator of a large construction site discharging under this general permit shall submit the following items at least 10 business days prior to the commencement of construction:
- 1) An NOI in accordance with the requirements of Part I.B.7 of this permit.
 - 2) A complete SWPPP in accordance with the requirements of Part II.A of this permit.
 - 3) An initial permit fee shall accompany the NOI under the provisions of APCEC Regulation No. 9. Subsequent annual fees will be billed by the Department until the operator has requested a termination of coverage by submitting a Notice of Termination (NOT). Failure to remit the required initial permit fee shall be grounds for the Director to deny coverage under this general permit. Failure to remit the required annual fees shall be grounds for the Director to revoke coverage under this permit.
- C. Modification of Permit Coverage to Include Additional Acreage. Any request to increase the total acreage of a construction site shall be accompanied by a \$200 permit modification fee and an updated SWPPP. Any request to only increase the disturbed acreage without changing the total acreage shall be accompanied by an updated SWPPP. A \$200 permit modification fee is not required with an increase in disturbed acreage. The Additional Acreage Request Form can be found at the following link:

<https://www.adeq.state.ar.us/water/permits/npdes/stormwater/>

7. Notice of Intent (NOI) Requirements.

- A. NOI Form. Large construction site operators who intend to seek coverage for a stormwater discharge under this general permit shall submit a complete and accurate ADEQ NOI form to the Department (through hard copy, electronic mail at Water-permit-application@adeq.state.ar.us, or the ADEQ ePortal system at <https://eportal.adeq.state.ar.us/>) at least 10 business days prior to the date coverage under this permit is desired. The NOI form **must** be the current version obtained from the stormwater webpage indicated above in Part I.B.

If the NOI is deemed incomplete, the Department will notify the applicant with regard to the deficiencies by a letter, email, or phone within ten (10) business days of the receipt of the NOI. If the operator does not receive a notification of deficiencies from ADEQ's receipt of the NOI, the NOI is deemed complete. If the applicant does not provide the Department with the requested deficiencies within the deadline set by the Department, then the Department will return the NOI, fee and SWPPP back to the applicant.

- B. Contents of the NOI. The NOI form contains, at a minimum, the following information:

- 1) Operator (Permittee) information (name, address, telephone and fax numbers, E-mail address)
- 2) Whether the operator is a federal, state, private, public, corporation, or other entity
- 3) Application Type: New or renewal
- 4) Invoice mailing information (name, address, and telephone and fax numbers)
- 5) Project Construction site information (name, county, address, contact person, directions to the site, latitude and longitude for the entrance of the site or the endpoints for linear project (in degrees, minutes, and seconds), estimated construction start date and completion date through site final stabilization, estimate of the total project acreage and the acreage to be disturbed by the operator submitting the NOI, type of the project (subdivision, school, etc), whether the project is part of a larger common plan of development.)

- 6) Discharge information (name of the receiving stream, ultimate receiving stream, name of municipal storm sewer system)
- 7) List of current permits
- 8) The Certification statement and signature of a qualified signatory person in accordance with 40 CFR 122.22, as adopted by reference in APCEC Regulation No. 6
- 9) The certification of the facility corporation
- 10) Other information (location of the SWPPP)
- 11) And the SIC Code.

C. Notice of Coverage (NOC). Unless notified by the Director to the contrary, dischargers who submit a complete NOI and SWPPP in accordance with the requirements of this permit are authorized to discharge stormwater from construction sites under the terms and conditions of this permit 10 business days after the date the NOI is deemed complete (which may not be the original submission date if revisions or additions were necessary) by ADEQ. If the NOC has not been received by the permittee 10 business days after the date the NOI is deemed complete by ADEQ, the NOI should be posted until the NOC is received. Upon review of the NOI and other available information, the Director may deny coverage under this permit and require submittal of an application for an individual NPDES permit.

8. Posting Notice of Coverage (NOC).

A. Automatic Coverage Sites. The NOC for small sites, as defined in Part I.A.51, can be obtained from the Water Division's Stormwater webpage at:

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

The NOC must be posted at the site prior to commencing construction. In addition, a copy of the SWPPP must be available at the construction site in accordance with Part II.A.2.B and D prior to commencing construction.

B. Large Sites: NOC Posting for Large Construction Sites. The posting for large construction sites shall be obtained from the Department only after the permittee has submitted the required NOI, permit fee and complete SWPPP to the Department for the coverage.

C. Linear Projects. If the construction project is a linear construction project (e.g., pipeline, highway, etc.), the notice shall be placed in a publicly accessible location near where construction is actively underway and moved as necessary.

Please note, this permit does not provide the public with any right to trespass on a construction site for any reason, including inspection of a site; nor does this permit require that the permittee allow members of the public access to a construction site.

9. Applicable Federal, State or Local Requirements. The operator shall ensure that the stormwater controls implemented at the site are consistent with all applicable federal, state, or local requirements. Additionally, an operator who is operating under approved local erosion and sediment plans, grading plans, local stormwater permits, or stormwater management plans shall submit signed copies of the Notice of Intent (NOI) to the local agency (or authority) upon the local agency's request.

10. Allowable Non-Stormwater Discharges.

A. The following non-stormwater discharges as part of the construction permit activity may be authorized by this permit through appropriate controls. Non-stormwater discharges shall be addressed in the stormwater pollution prevention plan and measures to minimize or eliminate non-stormwater discharge should be taken if reasonably possible.

- 1) Fire fighting activities;
- 2) Fire hydrant flushings;

- 3) Water used to wash vehicles (where detergents or other chemicals are not used) or to control dust in accordance with Part II.A.4.H.2;
- 4) Potable water sources including uncontaminated waterline flushings;
- 5) Landscape Irrigation;
- 6) Routine external building wash down which does not use detergents or other chemicals;
- 7) Pavement washwaters where spills or leaks of toxic or hazardous materials have not occurred (unless all spilled materials have been removed) and where detergents or other chemicals are not used;
- 8) Uncontaminated air conditioning compressor condensate (See Part I.B.13.C of this permit);
- 9) Uncontaminated springs, excavation dewatering and groundwater (See Part I.B.13.C of this permit);
- 10) Foundation or footing drains where flows are not contaminated with process materials such as solvents (See Part I.B.13.C of this permit).

11. Limitations on Coverage (Exclusions). The following stormwater discharges associated with construction activity are not covered by this permit:

- A. Post Construction Discharge. Stormwater discharges associated with construction activities that originate from the site after construction activities have been completed, the site has undergone final stabilization, and the permit has been terminated.
- B. Discharges Mixed with Non-Stormwater. Stormwater discharges that are mixed with sources of non-stormwater other than those identified in Part I.B.10.
- C. Discharges Covered by another Permit. Stormwater discharges associated with construction activity that are covered under an individual or an alternative general permit may be authorized by this permit after an existing permit expires, provided the expired permit did not establish numeric effluent limitations for such discharges.
- D. Discharges into Receiving Waters with an Approved TMDL. Discharges from a site into receiving waters for which there is an established total maximum daily load (TMDL) allocation (<https://www.adeg.state.ar.us/water/planning/integrated/tmdl/>) are not eligible for coverage under this permit unless the permittee develops and certifies a stormwater pollution prevention plan (SWPPP) that is consistent with the assumptions and requirements in the approved TMDL. To be eligible for coverage under this general permit, operators shall incorporate into their SWPPP any conditions applicable to their discharges necessary for consistency with the assumptions and requirements of the TMDL within any timeframes established in the TMDL. If a specific numeric allocation has been established that would apply to the project's discharges, the operator shall incorporate that allocation into its SWPPP and implement necessary steps to meet that allocation. If a numeric limit has been assigned to the facility, quarterly monitoring shall be submitted to the Department demonstrating compliance with the assigned Waste Load Allocation established in the TMDL. Please note that the Department will be reviewing this information. If it is determined that the project will discharge into a receiving stream with a TMDL, then the Department may require additional BMPs.
- E. Discharges into Impaired Receiving Waters (303(d) List). If stormwater discharges from a site enter a receiving water listed as impaired under Section 303(d) of the Clean Water Act (<https://www.adeg.state.ar.us/water/planning/integrated/>), the permittee shall incorporate into the SWPPP any additional BMPs needed to sufficiently protect water quality. Please note that the Department will be reviewing this information. If it is determined that the project will discharge to an impaired water body, then the Department may require additional BMPs.
- F. Discharges into an Extraordinary Resource Water (ERW), Natural and Scenic Waterway (NSW), or Ecologically Sensitive Waterbody (ESW). Discharges from a construction site located within the watershed of any water body or

waterway designated as an Outstanding Resource Water as defined in the APC&EC Regulation No. 2.203, including ERWs, NSWs, or ESWs are not eligible for coverage under this permit unless the permittee develops and certifies a SWPPP that includes additional BMPs needed to prevent to the maximum extent possible exposure to stormwater of pollutants that could potentially impact water quality. For the purposes of this permit, the watershed of an Outstanding Resource Water will be identified by the United States Geological Survey's twelve (12) digit Hydrological Unit Code (HUC). Please note that the Department will be reviewing this information. If the site will discharge to an ERW, NSW, or ESW, then the Department may determine that additional requirements are necessary.

- 12. Short Term Activity Authorization (STAA).** Any work being conducted in Waters of the State will require a Short Term Activity Authorization (STAA) from ADEQ in accordance with Regulation 2.305. An STAA is necessary for any in-stream activity that has the potential to exceed the water quality standards, including, but not limited to: gravel removal, bridge or crossing repair/maintenance, bank stabilization, debris removal, culvert replacement, flood control projects, and stream relocation. Any work being conducted in Waters of the United States may require a Section 404 permit from the U.S. Army Corps of Engineers. This permit does not authorize any activity under an STAA or Section 404 permit. The necessary forms to apply for coverage under an STAA can be found at the following link:

<https://www.adeq.state.ar.us/water/planning/instream/>

The SWPPP shall be updated to include a copy of the Short Term Activity Authorization letter upon receipt. Re-submittal of the SWPPP is not required unless specifically requested by the Department.

- 13. Effluent Limitation Guidelines (ELG).** All permittees shall comply with the following effluent limits:

- A. Erosion and Sediment Controls. Design, install, and maintain effective erosion controls and sediment controls to minimize the discharge of pollutants. At a minimum, such controls shall be designed, installed and maintained to:
- 1) Control stormwater volume and velocity to minimize soil erosion in order to minimize pollutant discharges;
 - 2) Control stormwater discharges, including both peak flowrates and total stormwater volume, to minimize channel and streambank erosion and scour in the immediate vicinity of discharge points;
 - 3) Minimize the amount of soil exposed during construction activity;
 - 4) Minimize the disturbance of steep slopes;
 - 5) Minimize sediment discharges from the site. The design, installation and maintenance of erosion and sediment controls shall address factors such as the amount, frequency, intensity and duration of precipitation, the nature of resulting stormwater runoff, and soil characteristics, including the range of soil particle sizes expected to be present on the site;
 - 6) Provide and maintain natural buffers around Waters of the State, direct stormwater to vegetated areas and maximize stormwater infiltration to reduce pollutant discharges, unless infeasible;
 - 7) Minimize soil compaction. Minimizing soil compaction is not required where the intended function of a specific area of the site dictates that it be compacted; and
 - 8) Unless infeasible, preserve topsoil. Preserving topsoil is not required where the intended function of a specific area of the site dictates that the topsoil be disturbed or removed.
- B. Soil Stabilization. Stabilization of disturbed areas must, at a minimum, be initiated immediately (unless weather conditions do not allow immediate initiation) whenever any clearing, grading, excavating or other earth disturbing activities have permanently ceased on any portion of the site, or temporarily ceased on any portion of the site and will not resume for a period exceeding 14 calendar days. In arid, semiarid, and drought-stricken areas where initiating vegetative stabilization measures immediately is infeasible, alternative stabilization measures must be employed as specified by the permitting authority. Stabilization must be completed within a period of time determined by the

permitting authority. In limited circumstances, stabilization may not be required if the intended function of a specific area of the site necessitates that it remain disturbed.

- C. Dewatering. Discharges from dewatering activities, including discharges from dewatering of trenches and excavations, are prohibited unless managed by appropriate controls. There shall be no turbid discharges to Waters of the State resulting from dewatering activities. If trench or ground waters contain sediment, it shall pass through a sediment settling pond or other equally effective sediment control device, prior to being discharged from the construction site. Alternatively, sediment may be removed by settling in place or by dewatering into a sump pit, filter bag, or comparable practice. Ground water dewatering which does not contain sediment or other pollutants is not required to be treated prior to discharge. However, care shall be taken when discharging ground water to ensure that it does not become pollutant-laden by traversing over disturbed soils or other pollutant sources.
- D. Pollution Prevention Measures. Design, install, implement, and maintain effective pollution prevention measures to minimize the discharge of pollutants. At a minimum, such measures shall be designed, installed, implemented and maintained to:
- 1) Minimize the discharge of pollutants from equipment and vehicle washing, wheel wash water, and other wash waters. Wash waters shall be treated in a sediment basin or BMP control that provides equivalent or better treatment prior to discharge;
 - 2) Minimize the exposure of building materials, building products, construction wastes, trash, landscape materials, fertilizers, pesticides, herbicides, detergents, sanitary waste and other materials present on the site to precipitation and to stormwater. Minimization of exposure is not required in cases where the exposure to precipitation and to stormwater will not result in a discharge of pollutants, or where exposure of a specific material or product poses little risk of stormwater contamination (such as final products and materials intended for outdoor use); and
 - 3) Minimize the discharge of pollutants from spills and leaks and implement chemical spill and leak prevention and response procedures.
- E. Prohibited discharges. The following discharges are prohibited:
- 1) Wastewater from washout of concrete, unless managed by an appropriate control;
 - 2) Wastewater from washout and cleanout of stucco, paint, form release oils, curing compounds and other construction materials;
 - 3) Fuels, oils, or other pollutants used in vehicle and equipment operation and maintenance; and
 - 4) Soaps or solvents used in vehicle and equipment washing.
- F. Surface Outlets. When discharging from basins and impoundments, utilize outlet structures that withdraw water from the surface, unless infeasible.

14. Natural Buffer Zones. A natural buffer zone as stated below shall be maintained at all times. Exceptions from this requirement for areas such as water crossings, limited water access, and restoration of the buffer are allowed if the permittee fully documents in the SWPPP the circumstances and reasons for the buffer zone encroachment. Additionally, this requirement is not intended to interfere with any other ordinance, rule or regulation, statute or other provision of law.

- A. For construction projects where clearing and grading activities will occur, the SWPPP shall provide at least twenty-five (25) feet of natural buffer zone, as measured horizontally from the top of the bank to the disturbed area, from any Waters of the State.
- B. The Department may also require up to fifty (50) feet of natural buffer zone, as measured from the top of the bank to the disturbed area, from established TMDL water bodies, streams listed on the 303(d) list, an Extraordinary Resource

Water (ERW), Ecologically Sensitive Waterbody (ESW), Natural and Scenic Waterway (NSW), or any other uses at the discretion of the Director.

C. Linear projects will be evaluated individually by the Department to determine natural buffer zone setbacks.

15. Waivers from Permit Coverage. The Director may waive the otherwise applicable requirements of this general permit for stormwater discharges from construction activities under the terms and conditions described in this section.

A. Waiver Applicability and Coverage. Based upon 40 CFR 122.26.b.15.i.A, operators of small construction activities may apply for and receive a waiver from the requirements to obtain this permit.

B. No Stormwater Leaving the Site. If all of the stormwater from the construction activity is captured on-site under any size storm event and allowed to evaporate, soak into the ground on-site, or is used for irrigation, a permit is not needed.

C. TMDL Waivers. This waiver is available for sites with automatic coverage if the ADEQ has established or approved a TMDL that addresses the pollutant(s) of concern and has determined that controls on stormwater discharges from small construction activity are not needed to protect water quality. The pollutant(s) of concern include sediment (such as total suspended solids, turbidity or siltation) and any other pollutant that has been identified as a cause of impairment of any water body that will receive a discharge from the construction activity. Information on TMDLs that have been established or approved by ADEQ is available from ADEQ online at

<https://www.adeq.state.ar.us/water/planning/integrated/tmdl/>.

16. Notice of Termination (NOT). When all construction activities that disturbed soil are complete, the site has reached final stabilization (100% stabilization with 80% density, or as defined in Part I.A.26.B for sites where background native vegetation will cover less than 100% of the ground), all stormwater discharges from construction activities authorized by this permit are eliminated and all temporary sediment controls are removed and properly disposed, the operator of the facility may submit a complete Notice of Termination (NOT) to the Director. Along with the NOT, pictures that represent the entire site should be submitted for review. Final stabilization is not required if the land is returned to its pre-construction agriculture use. Operators of small construction sites are not required to submit NOTs for their construction sites. However, final stabilization is required on all sites. If a Notice of Termination is not submitted when the project is completed, the operator will be responsible for annual fees.

17. Responsibilities of the Operator of a Larger Common Plan of Development for a Subdivision.

A. The operator is ultimately responsible for the runoff from the perimeter of the entire development. Regardless of the reason for the runoff, the operator is responsible for ensuring sufficient overall controls of the development.

B. The operator shall not terminate the permit coverage until the following conditions have been met:

- 1) After all construction including landscaping and lot development has been completed; and
- 2) All lots are sold and developed.

The following exceptions to this requirement can apply:

- a. less than 100% sold and developed at the discretion of the Director, or
- b. Separation of the larger common plan if twenty-four (24) months have passed with no construction activity, or
- c. All lots are developed and there are no temporary common controls for subdivision outfalls, i.e. sediment

basins, large sediment traps, check dams, etc.

- 3) If lots are sold and then re-sold to a third party, permit coverage should be obtained by each of the operators while they have ownership of the lots. The second owner is responsible for obtaining the same certification from the third owner, i.e. the certification shall pass from owner to owner.
- C. The operator shall not terminate permit coverage until the operators of all of the individual lots within the larger common plan are notified of their permitting requirements under this general permit. In this case, the signed certification statements from each operator of individual lots shall be maintained in the stormwater pollution prevention plan for the large common plan. A copy of the signed certifications shall be submitted to ADEQ with the NOT. The certification shall be as follows:

“I, _____, operator of an individual lot #_____, block #_____ of _____ subdivision, certify under penalty of law that I was notified by the operator of the larger common plan of the stormwater permitting requirements for my construction site(s). I understand prior to commencement of any construction activity I have to prepare and comply with a SWPPP and post the Construction Site Notice. I understand that prior to the sale of this lot to another party; I must notify the new owner of ADEQ requirements and obtain this certification from the new owner.”

Signature _____

- D. The following examples are provided as clarification:

- 1) If a small portion of the original common plan of development remains undeveloped and there has been a period of time (i.e., more than 24 months) where there are no ongoing construction activities (i.e., all areas are either undisturbed or have been finally stabilized), operators may re-evaluate the original project based on the acreage remaining from the original “common plan.” If less than five but more than one acre remains to build out the original “common plan”, coverage under the large permit may not be required. However, operators will need to comply with the terms and conditions for Small Construction Sites in the Construction General Permit. If less than one acre remains of the original common plan, the individual project may be treated as a part of a less than one acre development and no permit would be required.
- 2) If operators have a long-range master plan of development where some portions of the master plan are conceptual rather than a specific plan of future development and the future construction activities would, if they occur at all, happen over an extended period of time (i.e., more than 24 months), operators may consider the “conceptual” phases of development to be separate “common plans” provided the periods of construction for the physically interconnected phases will not overlap.
- 3) Where discrete construction projects within a larger common plan of development or sale are located ¼ mile or more apart and the area between the projects is not being disturbed, each individual project can be treated as a separate plan of development or sale provided any interconnecting road, pipeline or utility project that is part of the same “common plan” is not concurrently being disturbed. For example, an interconnecting access road or pipeline were under construction at the same time, they would generally be considered as a part of a single “common plan” for permitting purposes.
- 4) If the operator sells all the lots in the subdivision to one or more multi-lot homebuilder(s), provisions shall be made to obtain stormwater permit coverage by one of the following options:
 - a. The permit may be transferred from the first “operator” to the new/second “operator”.
 - b. A new, separate permit may be obtained by the second “operator”.NOTE: If a new permit is to be obtained, then it shall be obtained before the first/original permit is terminated.
- 5) If the operator retains ownership of any lots in the subdivision, the operator shall maintain permit coverage for those lots under the original permit. The operator shall modify the Stormwater Pollution Prevention Plan (SWPPP)

by stating which lots are owned and marking the lots on the site map. If there are one (1) or two (2) lots remaining and the total acreage is less than five (5) acres, the original permit could be terminated and those lots could be covered as a small site.

- 18. Change in Operator.** For stormwater discharges from large construction sites where the operator changes, including instances where an operator is added after the initial NOI has been submitted, the new operator shall ensure that a permit transfer form is received by the Department at least two (2) weeks prior to the operator beginning work at the site.
- 19. Late Notifications.** A discharger is not precluded from submitting an NOI in accordance with the requirements of this part after the dates provided in Part I.B.7 of this permit. In such instances, the Director may bring an enforcement action for failure to submit an NOI in a timely manner or for any unauthorized discharges of stormwater associated with construction activity that have occurred on or after the dates specified in this permit.
- 20. Failure to Notify.** The operator of a construction site who fails to notify the Director of their intent to be covered under this permit, and who potentially discharges pollutants (sediment, debris, etc.) to Waters of the State without an NPDES permit, is in violation of the Arkansas Water and Air Pollution Control Act.
- 21. Maintenance.** Determination of the acreage of disturbance does not typically include disturbance for routine maintenance activities on existing roads where the line and grade of the road is not being altered, nor does it include the paving of existing roads. Maintenance activities (returning to original conditions) are not regulated under this permit unless one or more acres of underlying or surrounding soil are cleared, graded, or excavated as part of the operation.
- 22. Releases in Excess of Reportable Quantities.**
- A. The discharge of hazardous substances or oil in the stormwater discharge(s) from a facility shall be prevented or minimized in accordance with the applicable stormwater pollution prevention plan for the facility. This permit does not relieve the operator of the reporting requirements of 40 CFR Parts 110, 117 and 302. Where a release containing a hazardous substance or oil in an amount equal to or in excess of a reporting quantity established under either 40 CFR 110, 40 CFR 117, or 40 CFR 302, occurs during a 24-hour period, the following action shall be taken:
- 1) Any person in charge of the facility is required to notify the National Response Center (NRC) (800-424-8802) in accordance with the requirements of 40 CFR 110, 40 CFR 117, or 40 CFR 302 as soon as he/she has knowledge of the discharge;
 - 2) The operator shall submit within five (5) calendar days of knowledge of the release a written description of the release (including the type and estimate of the amount of material released), the date that such release occurred, and the circumstances leading to the release, and steps to be taken in accordance with Part II.B.13 of this permit to the ADEQ.
 - 3) The Stormwater Pollution Prevention Plan (SWPPP) described in Part II.A of this permit shall be modified within fourteen (14) calendar days of knowledge of the release to:
 - a. Provide a description of the release and the circumstances leading to the release; and
 - b. The date of the release;
 - 4) Additionally, the SWPPP shall be reviewed to identify measures to prevent the reoccurrence of such releases and to respond to such releases, and the plan shall be modified where appropriate.
- B. Spills. This permit does not authorize the discharge of hazardous substances or oil resulting from an on-site spill.

23. Attainment of Water Quality Standards.

The operator shall select, install, implement and maintain control measures at the construction site that minimize the discharge of pollutants for which a stream is impaired at the discretion of the Director as necessary to protect water quality. In general, except in situations explained in below, the stormwater controls developed, implemented, and updated to be considered stringent enough to ensure that discharges do not cause or contribute to an excursion above any applicable water quality standard.

At any time after authorization, the ADEQ may determine that the stormwater discharges may cause, have reasonable potential to cause, or contribute to an excursion above any applicable water quality standard. If such a determination is made, ADEQ will require the permittee to:

- A. Develop a supplemental BMP action plan describing SWPPP modifications to address adequately the identified water quality concerns and submit valid and verifiable data and information that are representative of ambient conditions and indicate that the receiving water is attaining water quality standards; or
- B. Cease discharges of pollutants from construction activity and submit an individual permit application.

All written responses required under this part shall include a signed certification consistent with Part II.B.9.

24. Requiring an Individual Permit

The Director may require any person eligible for coverage under the general permit to apply for and obtain an individual permit. In addition, any interested person(s) may submit an application for an individual permit. The Director may consider the issuance of individual permits according to the criteria in 40 CFR 122.28(b)(3).

Coverage of the facility under this general permit is automatically terminated when: (1) the operator fails to submit the required individual NPDES permit application within the defined time frame; or (2) the individual NPDES permit is issued by ADEQ and effective.

Any operator covered under this general permit may request to be excluded from the coverage of this permit by applying for an APC&EC Regulation 6 individual permit. The operator shall submit an application for an individual permit with the reasons supporting the application to ADEQ. If a final, individual NPDES permit is issued to an operator otherwise subject to this general permit, the applicability of this general permit to the facility is automatically terminated on the effective date of the individual NPDES permit. Otherwise, the applicability of this general permit to the facility remains in full force and effect.

PART II

STANDARD CONDITIONS

Information in **Part II** is organized as follows:

Section A: Stormwater Pollution Prevention Plans (SWPPP):

1. Deadlines for Plan Preparation and Compliance
2. Signature, SWPPP, Inspection Reports, and Notice of Coverage (NOC)
3. Keeping SWPPP Current
4. Contents of the Stormwater Pollution Prevention Plan
5. Plan Certification

Section B: Standard Permit Conditions:

1. Retention of Records
2. Duty to Comply
3. Penalties for Violations of Permit Conditions
4. Continuance of the General Permit
5. Need to Halt or Reduce Activity Not a Defense
6. Duty to Mitigate
7. Duty to Provide Information
8. Other Information
9. Signatory Requirements
10. Certification
11. Penalties for Falsification of Reports
12. Penalties for Tampering
13. Oil and Hazardous Substance Liability
14. Property Rights
15. Severability
16. Transfers
17. Proper Operation and Maintenance
18. Inspection and Entry
19. Permit Actions
20. Re-Opener Clause
21. Local Requirements
22. Applicable Federal, State Requirements

SECTION A: STORMWATER POLLUTION PREVENTION PLANS (SWPPP)

The operator shall prepare a Stormwater Pollution Prevention Plan (the plan/SWPPP) before permit coverage. At least one SWPPP shall be developed for each construction project or site covered by this permit. The SWPPP shall follow the order outlined in Part II.A.4 & 5 below. This basic ADEQ format is available through the Department's website <https://www.adeq.state.ar.us/water/permits/npdes/stormwater/>. Other formats may be used at the discretion of the Director **if** the format has been approved by the Department prior to use. The operator shall implement the SWPPP as written from initial commencement of construction activity until final stabilization is complete, with changes being made as deemed necessary by the permittee, local, state or federal officials. The plan shall be prepared in accordance with good engineering practices, by qualified personnel and shall:

- Identify potential sources of pollution which may reasonably be expected to affect the quality of stormwater discharges from the construction;
- Identify, describe and ensure the implementation of Best Management Practices (BMPs), with emphasis on initial site stabilization, which are to be used to reduce pollutants in stormwater discharges from the construction site;
- Be site specific to what is taking place on a particular construction site;
- Ensure compliance with the terms and conditions of this permit; and
- Identify the responsible party for on-site SWPPP implementation.

1. Deadlines for Plan Preparation and Compliance.

A. Automatic Coverage Sites.

The plan shall be completed prior to the commencement of construction activities and updated as appropriate. Submittal of the NOI, permit fee and SWPPP is not required. All conditions set forth in Part II.A must be followed, and the NOC must be posted at the site prior to commencing construction. In addition, a copy of the SWPPP must be available at the construction site in accordance with Part II.2.B and D prior to commencing construction.

B. Large Construction Sites.

The plan shall be completed and submitted for review, along with an NOI and initial permit fee 14 business days prior to the commencement of construction activities. Submittals of updates to the plan during the construction process are required only if requested by the Director.

C. Existing Permittees.

Existing permittees that were permitted prior to the issuance of this renewal permit are required to update their plan as appropriate to come into compliance with the requirements contained in Part II.A.4 by the effective date of this permit.

2. Signature, Stormwater Pollution Prevention Plan (SWPPP), Inspection Reports and Notice of Coverage (NOC).

- A. The SWPPP and inspection reports shall be signed by the operator (or cognizant official) in accordance with Part II.B.9 and be retained at the construction site during normal business hours (8:00 A.M. – 5:00 P.M.).
- B. The operator shall make SWPPP and inspection reports available, upon request, to the Director, the EPA, or a State or local agency reviewing sediment and erosion plans, grading plans, or stormwater management plans, or, in the case of a stormwater discharge associated with construction activity which discharges through a municipal separate storm sewer system with an NPDES permit, to the municipal operator of the system.
- C. The Director, or authorized representative, may notify the operator at any time that the plan does not meet one or more of the minimum requirements of this Part. Within seven (7) business days of such notification from the Director (or as otherwise provided by the Director) or authorized representative, the operator shall make the required changes to the

plan and submit to the Director a written certification that the requested changes have been made. The Department may request re-submittal of the SWPPP to confirm that all deficiencies have been adequately addressed. The Department may also take appropriate enforcement action for the period of time the operator was operating under SWPPP that did not meet the minimum requirements of this permit.

- D. The operator shall post the NOC near the main entrance of the construction site and visible to the public. The NOC will indicate the location of the SWPPP. If the SWPPP location is changed from the initial location, the NOC shall be updated to reflect the correct location of the SWPPP.

3. **Keeping SWPPP Current.** The operator shall amend the SWPPP within seven (7) business days or whenever there is a change in design, construction, operation, or maintenance at the construction site which has or could have a significant effect on the potential for the discharge of pollutants to the Waters of the State that has not been previously addressed in the SWPPP. The SWPPP should also be modified if a determination has been made through inspections, monitoring (if required), **or** investigation by the operator, local, state, or federal officials that the discharges are causing or contributing to water quality violation or the plan proves to be ineffective in eliminating or significantly minimizing pollutants from sources identified in stormwater discharges from the construction site.

4. **Contents of the Stormwater Pollution Prevention Plan (SWPPP).** The SWPPP shall include the following items:

- A. **Site Description.** SWPPP shall provide a description of the following:

- 1) A description of the nature of the construction activity and its intended use after the Notice of Intent (NOI) is filed (i.e., residential subdivision, shopping mall, etc.);
- 2) A description of the intended sequence of major activities which disturb soils for major portions of the site (e.g. grubbing, excavation, grading, infrastructure installation, etc.);
- 3) Estimates of the total area of the site (including off-site borrow and fill areas) and the total area of the site that is expected to be disturbed by excavation, grading or other activities; and
- 4) An estimate of the runoff coefficient of the site for pre- and post-construction activities and existing data describing the soil or the quality of any discharge from the site.

- B. **Responsible Parties.** The SWPPP shall identify (as soon as this information is known) all parties (i.e., General Contractors, Landscapers, Project Designers, and Inspectors) responsible for particular services they provide to the operator to comply with the requirements of the SWPPP for the project site, and areas over which each party has control. If these parties change over the life of the permit, or new parties are added, the SWPPP should be updated to reflect these changes.

- C. **Receiving Waters.** The SWPPP shall include a clear description of the nearest receiving water(s), or if the discharge is to a municipal separate storm sewer, the name of the operator of the municipal system, and the ultimate receiving water(s).

- D. **Documentation of Permit Eligibility Related to the 303(d) list and Total Maximum Daily Loads (TMDL).** The SWPPP should include information on whether or not the stormwater discharges from the site enter a water body that is on the most recent 303(d) list or with an approved TMDL. If the stormwater discharge does enter a water body that is on the most recent 303(d) list or with an approved TMDL, then the SWPPP should address the following items:

- 1) Identification of the pollutants that the 303(d) list or TMDL addresses, specifically whether the 303(d) list or TMDL addresses sediment or a parameter that addresses sediment (such as total suspended solids, turbidity, or siltation);
- 2) Identification of whether the operator's discharge is identified, either specifically or generally, on the 303(d) list or any associated assumptions and allocations identified in the TMDL for the discharge; and
- 3) Measures taken by the operator to ensure that its discharge of pollutants from the site is consistent with the assumptions and allocations of the TMDL.

If the Department determines during the review process that the proposed project will be discharging to a receiving water that is on the most recent 303(d) list or with an approved TMDL, then the Department will notify the applicant to include additional Best Management Practices in the SWPPP.

E. Attainment of Water Quality Standards After Authorization.

- 1) The permittee shall select, install, implement, and maintain BMPs at the construction site that minimize pollutants in the discharge as necessary to meet applicable water quality standards. In general, except in situations explained below, the SWPPP shall be developed, implemented, and updated to be considered as stringent as necessary to ensure that the discharges do not cause or contribute to an excursion above any applicable water quality standard.
- 2) At any time after authorization, the Department may determine that the stormwater discharges may cause, have reasonable potential to cause, or contribute to an excursion above any applicable water quality standard. If such a determination is made, the Department will require the permittee to:
 - a. Develop a supplemental BMP action plan describing SWPPP modifications to adequately address the identified water quality concerns and submit valid and verifiable data and information that are representative of ambient conditions and indicate that the receiving water is attaining water quality standards; or
 - b. Cease discharges of pollutants from construction activity and submit an individual permit application.
- 3) All written responses required under this part shall include a signed certification (Part II.B.9)

F. Site Map. The SWPPP shall contain a legible site map (or multiple maps, if necessary) complete to scale, showing the entire site, that identifies, at a minimum, the following:

- 1) Pre-construction topographic view;
- 2) Direction of stormwater flow (i.e., use arrows to show which direction stormwater will flow) and approximate slopes anticipated after grading activities;
- 3) Delineate on the site map areas of soil disturbance and areas that will not be disturbed under the coverage of this permit;
- 4) Location of major structural and nonstructural controls identified in the plan;
- 5) Location of main construction entrance and exit;
- 6) Location where stabilization practices are expected to occur;
- 7) Locations of off-site materials, waste, borrow area, or equipment storage area;
- 8) Location of areas used for concrete wash-out;
- 9) Location of all Waters of the State with associated natural buffer boundary lines. Identify floodplain and floodway boundaries, if available;
- 10) Locations where stormwater is discharged to Waters of the State or a municipal separate storm sewer system if applicable,
- 11) Locations where stormwater is discharged off-site (should be continuously updated);
- 12) Areas where final stabilization has been accomplished and no further construction phase permit requirements apply;
- 13) A legend that clearly specifies any erosion and sediment control measure symbols/labels used in the site map and/or detail sheet; and
- 14) Locations of any storm drain inlets on the site and in the immediate vicinity of the site.

G. Stormwater Controls. Each plan shall include a description of appropriate controls and measures that will be implemented at the construction site. The plan will clearly describe for each activity identified in the project description control measures associated with the activity and the schedule during the construction process that the measures will be implemented. Perimeter controls for the site shall be installed after the clearing and grubbing necessary for installation of the measure, but before the clearing and grubbing for the remaining portions of the site. Perimeter controls shall be actively maintained until final stabilization of those portions of the site upward of the

perimeter control. Temporary controls shall be removed after final stabilization and properly disposed. The description and implementation of controls shall address the following minimum components:

- 1) Initial Site Stabilization, Erosion, and Sediment Controls and Best Management Practices. Design, install, implement and maintain effective erosion and sediment controls to minimize the discharge of pollutants. At a minimum the following controls and Best Management Practices (BMPs) shall be designed, installed, implemented and maintained. Therefore, the SWPPP shall address, at a minimum, the following:
 - a. For larger common plans, only streets, drainage, utility areas, areas needed for initial construction of streets (e.g., borrow pits, parking areas, etc.) and areas needed for stormwater structures may be disturbed initially. Upon stabilization of the initial areas, additional areas may be disturbed.
 - b. The construction-phase erosion (such as site stabilization) and sediment controls (such as check dams) should be designed to retain sediment on-site to the extent practicable.
 - c. All control measures shall be properly selected, installed, and maintained in accordance with the manufacturer's specifications, good engineering, and construction practices. If periodic inspections or other information indicates a control has been used inappropriately or incorrectly, the permittee shall replace or modify the control for site situations.
 - d. If sediment escapes the construction site, off-site accumulations of sediment shall be removed at a frequency sufficient to minimize off-site impacts (e.g., fugitive sediment in a street could be washed into storm sewers by the next rain or pose a safety hazard to users of public streets). This permit does not give the authority to trespass onto other property; therefore this condition should be carried out along with the permission of neighboring land owners to remove sediment.
 - e. Sediment shall be removed from sediment traps (if used, please specify what type) or sedimentation ponds when design capacity has been reduced by 50%.
 - f. Litter, construction debris, and construction chemicals exposed to stormwater shall be prevented from becoming a pollutant source for stormwater discharges (e.g., screening outfalls picked up daily).
 - g. Off-site material storage areas (also including overburden and stockpiles of dirt, borrow areas, etc.) used solely by the permitted project are considered a part of the project and shall be addressed in the SWPPP.
- 2) Stabilization practices. The SWPPP shall include, at a minimum, the following information:
 - a. Description and Schedule: A description of initial, interim, and permanent stabilization practices, including site-specific scheduling of the implementation of the practices. Site plans should ensure that existing vegetation is preserved where attainable and that disturbed areas are stabilized. Stabilization practices may include: mulching, temporary seeding, permanent seeding, geotextiles, sod stabilization, natural buffer strips, protection of trees, and preservation of mature vegetation and other appropriate measures.
 - b. Description of natural buffer areas: The Department requires that a natural buffer zone be established between the top of stream bank and the disturbed area. The SWPPP shall contain a description of how the site will maintain natural buffer zones. For construction projects where clearing and grading activities will occur, SWPPP shall provide at least twenty-five (25) feet of natural buffer zone from any named or unnamed streams, creeks, rivers, lakes or other water bodies. The plan shall also provide at least fifty (50) feet of natural buffer zone from established TMDL water bodies, streams listed on the 303(d) list, an Extraordinary Resource Water (ERW), Ecologically Sensitive Waterbody (ESW), Natural and Scenic Waterway (NSW), or other uses at the discretion of the Director. If the site will be disturbed within the recommended buffer zone, then the buffer zone area shall be stabilized as soon as possible. Exceptions from this requirement for areas such as water crossings, limited water access, and restoration of the buffer are allowed if the permittee fully documents in the SWPPP the circumstances and reasons for the buffer zone encroachment. Additionally, this requirement is not intended to interfere with any other ordinance, rule or regulation, statute or other provision of law. Please note that above-grade clearing that does not disturb the soil in the buffer zone area does not have to comply with buffer zone requirements.
 - c. Records of Stabilization: A record of the dates when grading activities occur, when construction activities

temporarily or permanently cease on a portion of the site, and when stabilization measures are initiated shall be included in the plan.

- d. **Deadlines for Stabilization After Construction Activity Temporarily Ceases:** Stabilization measures shall be initiated as soon as practicable in portions of the site where construction activities have temporarily ceased, but in no case more than fourteen (14) days after the construction activity in that portion of the site has temporarily ceased, except:
 - (1) Where the initiation of stabilization measures by the fourteenth (14th) day after construction activity temporarily ceases is precluded by snow cover, stabilization measures shall be initiated as soon as practicable.
 - (2) In arid, semiarid, and drought-stricken areas where initiating vegetative stabilization measures immediately is infeasible, alternative stabilization measures shall be employed as specified by the permitting authority.
- e. **Deadline for Stabilization After Construction Activity Permanently Ceases:** Stabilization measures shall be initiated immediately in portions of the site where construction activities have permanently ceased, except:
 - (1) Where the initiation of stabilization measures immediately after construction activity permanently ceases is precluded by snow cover, stabilization measures shall be initiated as soon as practicable.
 - (2) In arid, semiarid, and drought-stricken areas where initiating vegetative stabilization measures immediately is infeasible, alternative stabilization measures shall be employed as specified by the permitting authority.
- 3) **Structural Practices.** A description of structural practices to divert flows from exposed soils, store flows, or otherwise limit runoff and the discharge of pollutants from exposed areas of the site to the degree attainable. Structural practices should be placed on upland soils to the degree attainable. The installation of these devices may be subject to Section 404 of the Clean Water Act. Such practices may include but are not limited to:
 - silt fences (installed and maintained)
 - earthen dikes to prevent run-on
 - drainage swales to prevent run-on
 - check dams
 - subsurface drains
 - pipe slope drains
 - storm drain inlet protection
 - rock outlet protection
 - sediment traps
 - reinforced soil retaining systems
 - gabions
 - temporary or permanent sediment basins.

A combination of erosion and sediment control measures is encouraged to achieve maximum pollutant removal. Adequate spillway cross-sectional area and re-enforcement shall be provided for check dams, sediment traps, and sediment basins.

a. **Sediment Basins:**

- (1) For common drainage locations that serve an area with ten (10) or more acres (including run-on from other areas) draining to a common point, a temporary or permanent sediment basin that provides storage based on either the smaller of 3600 cubic feet per acre, or a size based on the runoff volume of a 10 year, 24 hour storm, shall be provided where attainable (so as not to adversely impact water quality) until final stabilization of the site. In determining whether installing a sediment basin is attainable, the operator may

consider factors such as site soils, slope, available area on site, etc. Proper hydraulic design of the outlet is critical to achieving the desired performance of the basin. The outlet should be designed to drain the basin within twenty-four (24) to seventy-two (72) hours. (A rule of thumb is one square foot per acre for a spillway design.) The 24-hour limit is specified to provide adequate settling time; the seventy-two (72) hour limit is specified to mitigate vector control concerns. If a pipe outlet design is chosen for the outfall, then an emergency spillway is required. If “non-attainability” is claimed, then an explanation of non-attainability shall be included in the SWPPP. Where a sediment basin is not attainable, smaller sediment basins or sediment traps shall be used. Where a sediment basin is un-attainable, natural buffer strips or other suitable controls which are effective are required for all side slopes and down slope boundaries of the construction area. The plans for removal of the sediment basin should also be included with the description of the basin in the SWPPP.

- (2) For drainage locations serving an area less than ten (10) acres, sediment traps, silt fences, or equivalent sediment controls are required for all side slope and down slope boundaries of the construction area unless a sediment basin providing storage based on either the smaller of 3600 cubic feet per acre, or a size based on the run off volume of a 10 year, 24 hour storm is provided. (A rule of thumb is one square foot per acre for a spillway.) However, in order to protect the Waters of the State, the Director, at their discretion, may require a sediment basin for any drainage areas draining to a common point.

b. Velocity Dissipation Devices:

Velocity dissipation devices shall be placed at discharge locations, within concentrated flow areas serving two or more acres, and along the length of any outfall channel to provide a non-erosive flow velocity from the structure to a water course so that the natural physical and biological characteristics and functions are maintained and protected (i.e., no significant changes in the hydrological regime of the receiving water). Please note that the use of hay-bales is not recommended in areas of concentrated flow.

H. Other Controls.

- 1) No solid materials, including building materials, shall be discharged to Waters of the State or offsite.
 - 2) Off-site vehicle tracking of sediments and the generation of dust shall be minimized through the use of a stabilized construction entrance and exit or vehicle tire washing.
 - 3) For lots that are less than one (1) acre in size an alternative method may be used in addition to a stabilized construction entrance. An example of an alternative method could be daily street sweeping. This could allow for the shortening of the construction entrance.
 - 4) The plan shall ensure and demonstrate compliance with applicable State or local waste disposal, temporary and permanent sanitary sewer or septic system regulations.
 - 5) No liquid concrete waste shall be discharged to Waters of the State. Appropriate controls to prevent the discharge of concrete washout waters shall be implemented if concrete washout will occur on-site.
 - 6) No contaminants from fuel storage areas, hazardous waste storage and truck wash areas shall be discharged to waters of the State or offsite. Methods for protecting these areas shall be identified and implemented. These areas should not be located near a water body, if there is a water body on or near the project.
- I. Non-stormwater discharges. Sources of non-stormwater listed in Part I.B.10 of this permit that are combined with stormwater discharges associated with construction activity shall be identified in the plan. This list should be site specific non-stormwater discharges.
- J. Post-Construction Stormwater Management. The operator is required to provide a description of measures that will be installed during the construction process to control pollutants in stormwater discharges that will occur after construction operations have been completed. Structural measures should be placed on upland soils to the degree attainable. The installation of these devices may be subject to Section 404 (Corps of Engineers) of the Clean Water Act. This permit only addresses the installation of stormwater management measures, and not the ultimate operation and maintenance of such structures after the construction activities have been completed and the site has undergone final stabilization.

However, post-construction stormwater BMPs that discharge pollutants from a point source once construction is completed may need authorization under a separate ADEQ NPDES permit. Such practices may include but are not limited to:

- infiltration of runoff onsite
- flow attenuation by use of open vegetated swales and natural depressions
- stormwater retention structures
- stormwater detention structures (including wet ponds)
- sequential systems, which combine several practices

A goal of at least 80 % removal of total suspended solids from these flows which exceed predevelopment levels should be used in designing and installing stormwater management controls (where practicable). Where this goal is not met, the operator shall provide justification for rejecting each practice listed above based on site conditions.

- K. Applicable State or Local Programs. The SWPPP shall be updated as necessary to reflect any revisions to applicable federal, state, or local requirements that affect the stormwater controls implemented at the site.
- L. Inspections. Inspections should be conducted by qualified personnel (provided by the operator). Inspections shall include all areas of the site disturbed by construction activity and areas used for storage of materials that are exposed to precipitation. Inspectors shall look for evidence of, or the potential for, pollutants entering the stormwater conveyance system. Erosion and sedimentation control measures shall be observed to ensure proper operation. Discharge locations shall be inspected to determine whether erosion control measures are effective in preventing significant impacts to Waters of the State or offsite, where accessible. Where discharge locations are inaccessible, nearby downstream locations shall be inspected to the extent that such inspections are practicable. Locations where vehicles enter or exit the site shall be inspected for evidence of off-site sediment tracking. Inspections may not be required if the lot(s) within a larger common plan is/are sufficiently stabilized. In addition, inspections may not be required on a completed section of a linear project if that section has been sufficiently stabilized. Stabilized areas of the project should be indicated in the SWPPP and site map and show what date they were stabilized. The operator shall ensure that no sediment will leave the lot(s) that are stabilized. These lots shall be identified within the SWPPP and show what date they were stabilized. If the operator is unable to ensure this, then inspections shall continue.
- 1) Inspection Frequency. Inspections shall be conducted in accordance with one of the following schedules listed below. The schedule **must be specified** in the Stormwater Pollution Prevention Plan (SWPPP).
- a. At least once every 7 calendar days, or
 - b. At least once every 14 calendar days and within 24 hours of the end of a storm event of 0.25 inches or greater (a rain gauge must be maintained on-site).
- 2) Inspection Form. The ADEQ inspection form should be used for all inspections. The inspection form should include any erosion/sediment controls that are being used on the site. The form is available on the Department's website www.adeq.state.ar.us. If a different form is used, it shall at a minimum contain the following information:
- a. Inspector Name and Title
 - b. Date of Inspection
 - c. Amount of Rainfall and Days Since Last Rain Event (only applicable to Part II.A.4.L.1.b)
 - d. Approximate beginning and duration of the storm event
 - e. Description of any discharges during inspection
 - f. Locations of discharges of sediment/other pollutants
 - g. Locations of BMPs in need of maintenance or where maintenance was performed
 - h. If the BMPs are in working order and if maintenance is required (including when scheduled and completed)
 - i. Locations that are in need of additional controls
 - j. Location and Dates When Major Construction Activities Begin, Occur or Cease
 - k. Signature of qualified signatory official, in accordance with Part II.B.9

Additional information may be added to the inspection report at the permittee's discretion.

- 3) Inspection Records. The report shall be retained as part of the SWPPP for at least three (3) years from the date the site is finally stabilized. The report shall be signed and have a certification statement in accordance with the requirements of this permit.
 - 4) Winter Conditions. Inspections will not be required at construction sites where snow cover exists over the entire site for an extended period, and melting conditions do not exist. If there is any runoff from the site at any time during snow cover, melting conditions would be considered to be existent at the site and this inspection waiver would not apply. Regular inspections, as required by this permit, are required at all other times as specified in this permit. If winter conditions prevent compliance with the permit, documentation of the beginning and ending date of winter conditions should be included in the SWPPP.
 - 5) Adverse Weather Conditions. Adverse conditions are those that are dangerous or create inaccessibility for personnel, such as local flooding, high winds, or electrical storms, or situations that otherwise make inspections impractical, such as extended frozen conditions. When adverse weather conditions prevent the inspection of the site, an inspection should be completed as soon as is safe and feasible. If adverse weather conditions prevent compliance with the permit, documentation of the beginning and ending date of adverse weather conditions should be included in the SWPPP.
- M. Maintenance. A description of procedures to maintain vegetation, erosion and sediment control measures and other protective measures in good, effective operating condition shall be outlined in the plan. Any repairs that are needed based on an inspection shall be completed, when practicable, before the next storm event, but not to exceed a period of three (3) business days of discovery, or as otherwise directed by state or local officials. However, if conditions do not permit large equipment to be used, a longer time frame is allowed if the condition is thoroughly documented on the inspection form. Maintenance for manufactured controls shall be done at a minimum of the manufacturer's specifications. Maintenance for non-manufactured controls, i.e. check dams and sediment traps, shall be done upon 50% capacity.
- N. Employee Training. The permittee/operator is responsible for training personnel who are responsible for implementing activities identified in the SWPPP on the components and goals of the SWPPP and the requirements of the general permit. This includes contractors and subcontractors. Training should be given by a knowledgeable and qualified trainer. The SWPPP shall identify periodic dates for such training and records of training shall be maintained with the SWPPP. Training records that are maintained electronically (i.e. database, etc.) do not need to be maintained with the SWPPP, but shall be accessible upon request. Formal training classes given by Universities or other third-party organizations are not required but recommended for qualified trainers; the permittee is responsible for the content of the training being adequate for personnel to implement the requirements of the permit.
5. Plan Certification. The SWPPP Certification shall be signed by either the operator or the cognizant official identified on the Notice of Intent. All documents required by the permit and other information requested by the Director shall be signed by operator or by a duly authorized representative of the operator (Please see Part II.B.10 below for certification).

SECTION B: STANDARD PERMIT CONDITIONS

1. **Retention of Records.**

- A. The operator shall retain records of all Stormwater Pollution Prevention Plans, all inspection reports required by this permit, and records of all data used to complete the Notice of Intent (NOI) to be covered by this permit for a period of at least three years from the date the Notice of Termination letter is signed by the Department. This period may be extended by request of the Director at any time.
- B. The operator shall retain a signed copy of the Stormwater Pollution Prevention Plan (SWPPP) and inspection reports required by this permit at the construction site from the date of project initiation to the date of final stabilization.

2. **Duty to Comply.** The operator shall comply with all conditions of this permit. Any permit noncompliance constitutes a violation of the federal Clean Water Act and the Arkansas Water and Air Pollution Control Act and is grounds for: enforcement action; permit termination, revocation and re-issuance, or modification; or denial of a permit renewal application.

3. **Penalties for Violations of Permit Conditions.** The Arkansas Water and Air Pollution Control Act (Ark. Code Ann. 8-4-101 et seq.) provides that any person who violates any provisions of a permit issued under the Act shall be guilty of a misdemeanor and upon conviction thereof shall be subject to imprisonment for not more than one (1) year, or a criminal penalty of not more than twenty five thousand dollars (\$25,000) or by both such fine and imprisonment for each day of such violation. Any person who violates any provision of a permit issued under the Act may also be subject to civil penalty in such amount as the court shall find appropriate, not to exceed ten thousand dollars (\$10,000) for each day of such violation. The fact that any such violation may constitute a misdemeanor shall not be a bar to the maintenance of such civil action.

4. **Continuance of the General Permit.** Permittees wishing to continue coverage under this general permit shall submit a Renewal NOI (see Part I.B.4 for where to submit documentation) up to 180 days prior to the expiration date, but no later than 30 days prior to the expiration date. No additional fee is required to be submitted along with the Renewal NOI.

An expired general permit continues in force and effect until a new general permit is issued. If this permit is not re-issued or replaced prior to the expiration date, it will be administratively continued in accordance with Ark. Code Ann. § 8-4-203(m) and remain in force and effect. If a permittee was granted permit coverage prior to the expiration date, the permittee will automatically remain covered by the continued permit until the earliest of:

- A. The effective date of the re-issuance or replacement of this permit and a timely submittal of a renewal NOI by the operator; or
- B. The operator's submittal of a Notice of Termination (NOT); or
- C. Issuance of an individual permit for the project's discharges (see Part I.B.24); or
- D. A formal permit decision by the ADEQ to not re-issue this general permit, at which time operators must seek coverage under an alternative permit (see Part I.B.24).

Small site operators are responsible for ensuring that the site is in compliance with any changes or updates of this general permit by reviewing the ADEQ website at:

<https://www.adeq.state.ar.us/water/permits/npdes/stormwater/>

5. **Need to Halt or Reduce Activity Not a Defense.** It shall not be a defense for an operator in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.
6. **Duty to Mitigate.** The operator shall take all reasonable steps to minimize or prevent any discharge or sludge use or disposal in violation of this permit which has reasonable likelihood of adversely affecting human health or the environment.
7. **Duty to Provide Information.** The operator shall furnish to the Director, an authorized representative of the Director, the EPA, a State or local agency reviewing sediment and erosion plans, grading plans, or stormwater management plans, or in the case of a stormwater discharge associated with industrial activity which discharges through a Municipal Separate Storm Sewer System (MS4) with an NPDES permit, to the municipal operator of the system, within a reasonable time, any information which is requested to determine compliance with this permit.
8. **Other Information.** When the operator becomes aware that he or she failed to submit any relevant facts or submitted incorrect information in the Notice of Intent or in any other report to the Director, he or she shall promptly submit such facts or information.
9. **Signatory Requirements.** All Notices of Intent (NOIs), reports, or information submitted to the Director shall be signed and certified by the operator.

A. All Notices of Intent shall be signed as follows:

- 1) **For a corporation:** by a responsible corporate officer. For purposes of this section, a responsible corporate officer means:
 - a. A president, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy or decision-making functions for the corporation; or
 - b. The manager of one or more manufacturing, production, or operating facilities, provided, the manager is authorized to make management decisions which govern the operation of the regulated facility including having the explicit or implicit duty of making major capital investment recommendations, and initiating and directing other comprehensive measures to ensure long term environmental compliance with environmental laws and regulations; the manager can ensure that the necessary systems are established or actions taken to gather complete and accurate information for permit application requirements; and where authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures.
- 2) **For a partnership or sole proprietorship:** by a general partner or the proprietor, respectively;
- 3) **For a municipality, State, Federal or other public agency:** By either a principal executive or ranking elected official. For purposes of this section, a principal executive officer of a Federal agency includes:
 - a. The chief executive officer of the agency; or
 - b. A senior executive officer having responsibility for the overall operations of a principal geographic unit of the agency.

B. All reports required by the permit and other information requested by the Director shall be signed by a person described above or by a **duly authorized** representative of that person. A person is a duly authorized representative only if:

- 1) The authorization is made in writing by a person described above and submitted to the Director;
- 2) The authorization specifies either an individual or a person having responsibility for the overall operation of the

regulated facility or activity, such as the position of plant manager, operator of a well or a well field, superintendent, or position of equivalent responsibility, or position of equivalent responsibility for environmental matters for the company. (A duly authorized representative may thus be either a named individual or any individual occupying a named position); and

- 3) Changes to authorization. If an authorization under this Part is no longer accurate because a different individual or position has responsibility for the overall operation of the facility, a new authorization satisfying the above requirements shall be submitted to the Director prior to or together with any reports, information, or applications to be signed by an authorized representative.

10. Certification. Any person signing a document under this section shall make the following certification:

"I certify under penalty of law that this document and all attachments such as Inspection Form were prepared under my direction or supervision in accordance with a system designed to ensure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

Note: For this permit only, "this document" refers to the Stormwater Pollution Prevention Plan, "attachments" refers to the site map and inspection forms, and "system" is referencing the project site.

- 11. Penalties for Falsification of Reports.** The Arkansas Water and Air Pollution Control Act provides that any person who knowingly makes any false statement, representation, or certification in any application, record, report, plan or other document filed or required to be maintained under this permit shall be subject to civil penalties specified in Part II.B.3 of this permit and/or criminal penalties under the authority of the Arkansas Water and Air Pollution Control Act (Ark. Code Ann. 8-4-101 et seq.).
- 12. Penalties for Tampering.** The Arkansas Water and Air Pollution Control act provides that any person who falsifies, tampers with, or knowingly renders inaccurate any monitoring device or method required to be maintained under the Act shall be guilty of a misdemeanor and upon conviction thereof shall be subject to imprisonment for not more than one (1) year or a fine of not more than twenty five thousand dollars (\$25,000) or by both such fine and imprisonment.
- 13. Oil and Hazardous Substance Liability.** Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the operator from any responsibilities, liabilities, or penalties to which the operator is or may be subject under Section 311 of the Clean Water Act or Section 106 of CERCLA.
- 14. Property Rights.** The issuance of this permit does not convey any property rights of any sort or any exclusive privileges, nor does it authorize any injury to private property, any invasion of personal rights, or any infringement of Federal, State, or local laws or regulations.
- 15. Severability.** The provisions of this permit are severable. If any provisions of this permit or the application of any provision of this permit to any circumstance is held invalid, the application of such provisions to other circumstances and the remainder of this permit shall not be affected thereby.
- 16. Transfers.** This permit is not transferable to any person except after notice to the Director. A transfer form shall be submitted to the ADEQ as required by this permit.
- 17. Proper Operation and Maintenance.** The operator shall at all times:
 - A. Properly operate and maintain all systems of treatment and control (and related appurtenances) which are installed or used by the operator to achieve compliance with the conditions of this permit. This provision requires the operation of

backup or auxiliary facilities or similar systems which are installed by an operator only when the operation is necessary to achieve compliance with the conditions of the permit.

- B. Provide an adequate operating staff which is duly qualified to carry out operation, inspection, maintenance, and testing functions required to ensure compliance with the conditions of this permit.

18. Inspection and Entry. The operator shall allow the Director, the EPA, or an authorized representative, or, in the case of a construction site which discharges to a municipal separate storm sewer, an authorized representative of the municipal operator of the separate sewer system receiving the discharge, upon the presentation of credentials and other documents as may be required by law, to:

- A. Enter upon the operator's premises where a regulated facility or activity is located or conducted, or where records shall be kept under the conditions of this permit;
- B. Have access to and copy, at reasonable times, any records that shall be kept under the conditions of this permit;
- C. Inspect at reasonable times any facilities or equipment, including monitoring and control equipment and practices or operations regulated or required by the permit;
- D. Sample or monitor at reasonable times, for the purposes of assuring permit compliance or as otherwise authorized by the CWA, any substances or parameters at any location on the permitted property.

19. Permit Actions. This permit may be modified, revoked and reissued, or terminated for any cause including, but not limited to, the following;

- A. Violation of any terms or conditions of this permit;
- B. Obtaining this permit by misrepresentation or failure to fully disclose all relevant facts;
- C. A change in any conditions that requires either a temporary or permanent reduction or elimination of the authorized discharge;
- D. A determination that the permitted activity endangers human health or the environment and can only be regulated to acceptable levels by permit modification or termination; or
- E. Failure of the operator to comply with the provisions of ADEQ Regulation No. 9 (Fee Regulation). Failure to promptly remit all required fees shall be grounds for the Director to initiate action to terminate this permit under the provisions of 40 CFR 122.64 and 124.5(d), as adopted by reference in ADEQ Regulation No. 6, and the provisions of ADEQ Regulation No. 8.

20. Re-Opener Clause.

- A. If there is evidence indicating potential or realized impacts on water quality due to any stormwater discharge associated with industrial activity covered by this permit, the operator of such discharge may be required to obtain an individual permit or an alternative general permit in accordance with Part I.B.23 of this permit, or the permit may be modified to include different limitations and/or requirements.
- B. Permit modification or revocation will be conducted in accordance with the provisions of 40 CFR 122.62, 122.63, 122.64 and 124.5, as adopted by reference in ADEQ Regulation No. 6.

21. Local Requirements. All dischargers shall comply with the lawful requirements of municipalities, counties, drainage districts, and other local agencies regarding any discharges of stormwater to storm drain systems or other water sources under their jurisdiction, including applicable requirements in municipal stormwater management programs developed to comply with the ADEQ permits. Dischargers shall comply with local stormwater management requirements, policies, or guidelines including erosion and sediment control.

22. Applicable Federal, State Requirements. Permittees are responsible for compliance with all applicable terms and conditions of this permit. Receipt of this permit does not relieve any operator of the responsibility to comply with any other applicable federal, state or local statute, ordinance policy, or regulation.

MADISON COUNTY

Conservation District

9-12-19

To whom it may concern:

This is to inform you that [REDACTED] has contacted our office to request assistance in the development of a nutrient management plan for their farm.

We have talked with [REDACTED] and will complete a plan as soon as technical assistance is available.

If you have any questions regarding this matter, please feel free to call our office at (479) 738-6321 ext.109.

Sincerely,



Denton Fancher - Water Quality Technician

C-3

479 North Patriot Room 8, Huntsville, AL 35894

479-738-6321 ext. 109

C-3

Nutrient Management Plan

Owner/Operator



Planner

Denton Fancher

Planner Certification No.

10591004-0031

Plan Effective Dates

November 18, 2019 – November 18, 2024

Section 1

Description of Operation

- Title Page
- Signature Page
- Location and Contact Information
- Operation Description

Section 2

Summary of Management Actions

Section 3

Legal and Compliance Requirements

Section 4

Collected Information

- Aerial Photographs
- Soils Maps
- Topographical Maps
- Soil Test
- Litter Analysis

Section 5

Nutrient Application Calculations and Analysis

Section 6

Field Management Recommendations

Section 7

Record Keeping

Section 1
Description of Operation

Section 1

Description of Operation

Section Contents:

Title Page

Signature Page

Location and Contact Information

Operation Description

Section 1

Description of Operation

Litter Management Plan

Owner/Operator



This Nutrient Management Plan is applicable to this operation from

November 18, 2019 – November 18, 2024

Purpose of Plan

- To lawfully apply nutrients within a designated nutrient surplus area in compliance with Title XXII of the State of Arkansas' Nutrient Management laws as administered by the Arkansas Natural Resources Commission.
- To encourage prudent practices regarding the application and management of soil nutrients and poultry litter to protect and enhance the state's surface water quality while allowing for optimum soil fertility and proper plant growth.

Planner

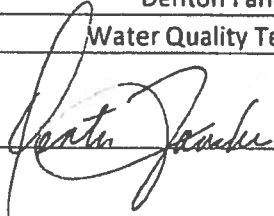
Denton Fancher – Water Quality Technician
Madison County Conservation District
Huntsville, AR 72740
(479) 738-6321 ext.109
Denton.Fancher@ar.nacdnet.net

Section 1
Description of Operation

NMP Signature Page

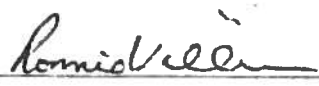
The following individuals have assisted in the development of this NMP and certify their elements meet the nutrient management planning requirements for the State of Arkansas as well as local, state, and federal standards.

Nutrient Management Planner:

Name: Denton Fancher Certification No.: 10591004-0031
Title: Water Quality Technician
Signature:  Date: 12/3/19

Approved Conservation District Board Representative:

I certify that I have reviewed and approve of the contents of this NMP

Name: Ronnie Villines
Title: Conservation District Representative
Signature:  Date: 12/3/19

Farm Owner/Operator:

A representative of the Madison County Conservation District has discussed the contents of this plan with me. I understand that I am required by law to operate my farm in compliance to the guidelines presented in this plan within the Nutrient Surplus Area.

Signature
Name:



Date: 12/3/19

Section 1

Description of Operation

Farm Location and Contact Information

Owner/Operator

[REDACTED]

Mailing Address

[REDACTED]

Phone

[REDACTED]

General Farm Location: The farm is in the northeastern portion of Madison County.

Driving Directions to Farm: Traveling from Marble, Arkansas; take highway 412 east to Madison county road 1965; turn left; travel to Madison county road 1360; turn right; travel ½ mile to farm on both sides of the road.

Geographic Locations:

Description	Latitude, Longitude	Public Land Survey System (PLSS)
Poultry Houses	N36.18283°, W93.58624°	Sec(s). 31 & 36, T15N, R24W & 25W

Watershed: The Farm is located within the Dry Fork/Kings River Watershed (HUC1010001100000) which is a designated Nutrient Surplus Area.

Section 1

Description of Operation

Operation Description

Potentially Environmentally Sensitive Areas Identified

The farm is in a region of the state where karst related topographic features are generally considered a potential concern. The water bodies are small farm stock watering ponds located on the property. No indication of routine surface drainage from these ponds was observed. Currently there is no indication of localized erosion concerns.

Poultry Population and Litter Production information

Poultry Production Information

Target bird market weight	15 lbs.
Number of 66 ft X 700 ft houses	4
Bird capacity per house	26,750
Maximum flocks per year	3
Annual cleanout of litter	100%

Based on the information above, the farm estimated 2,427 tons of litter produced.

A portion of the annual clean out of approximately 2,427 tons of litter could be used on the farm. The remaining annual clean out of litter will be transferred off the farm. A field by field litter recommendation is as follows:

Field JDNF 1 – .5-1.0 ton/acre

Field JDNF 2 – 1 ton/acre

Field JDNF 3 – .5-1 ton/acre

Cattle Management

The stocking rate should be less than 750 lbs. of grazing animals per acre (0.75 animal units/ac). Grazing and hay management coupled with appropriate insect and weed control measures should be utilized to maintain vegetation to utilize the applied litter nutrients.

Routine Poultry Mortality Management

Normal animal mortality is managed daily by collection of the bird carcasses and disposal in a composter. Other acceptable options for disposal of mortality include freezing, incineration, and hauling to rendering plant. Poultry mortality management practices should be implemented and maintained in a manner that addresses water quality and bio-security concerns. If the byproduct of the disposal method such as composted litter is not transported off farm, it should be included with the litter that is land applied.

Section 1

Description of Operation

Catastrophic poultry mortality management:

For catastrophic loss situations the Arkansas Livestock and Poultry Commission should be contacted by phone (State veterinarian 501-823-1733, or Division Manager 501-823-1712, <http://www.aad.arkansas.gov/arkansas-livestock-and-poultry-commission>). They authorize hauling the carcasses to a rendering plant unless the mortality was caused by disease. When hauling is not feasible, or if disease caused the loss, burial in designated locations with specific guidelines may be required. Since all the soils on the farm have a very limited rating for mortality burial, as documented in Section 4 of this plan, NRCS or a professional soil classifier will need to perform a site visit to identify an acceptable burial site.

Litter Storage

When land application or off farm sale of poultry litter cannot occur immediately upon cleanout, litter should be stored to prevent water from entering or leaving the litter. The litter should be piled and tarped in an elevated location so that neither rainfall or surface runoff enters the pile. The pile should be removed as soon as possible. This storage method should be implemented as infrequently and for as short a duration as possible. For more frequent and longer duration storage, assistance should be sought for acceptable design and implementation.

Land Application

Lands with acceptable PI values can receive litter upon its removal from the poultry houses or storage units. Litter should be uniformly applied at rates not to exceed the acceptable PI allowable rates documented in this plan. Methods such as truck mounted box spreader are acceptable, provided rate and uniformity goals are met. Litter should be applied within the time frames documented within this plan.

If desired, commercial inorganic fertilizer can be applied to meet the forage nutrient needs not met by poultry litter applications. However, if an individual nutrient need has been met, or exceeded, by the poultry litter application, no addition application of that nutrient should be made. Section 2 nutrient budget tables provides information pertaining to the optional application of inorganic fertilizers. Assistance in determining the appropriate inorganic fertilizer rate to apply based on the information in Section 2 nutrient budget tables and the inorganic fertilizer nutrient concentration is available from your planner, county agent, or possibly your fertilizer supplier.

Do not make litter applications within the non-application buffers which are designed to protect environmentally sensitive features such as rock outcrops, streams, ponds, lakes, springs, sinkholes, wells, and any other water resources.

Applications of litter are not to be made when the soil is saturated, frozen, or covered with ice or snow. Litter should not be applied in any manner that will allow excessive nutrients to enter receiving water bodies or run onto adjacent property.

In addition, the nutrient application time, place, and manner restrictions specified by Section 2202.4.A-D of Arkansas Natural Resources Commission's Title 22 (https://static.ark.org/eeuploads/anrc/title_22-rules.pdf) as detailed in Section 6 of this plan should be followed.

Section 1

Description of Operation

Application Equipment Calibration

Proper calibration of spreader equipment is essential to ensure the application rate and uniformity requirements of this plan are met. The individual making the litter applications should either be a certified nutrient applicator as specified by The Arkansas Natural Resources Commission's Rules Governing the Arkansas Nutrient Management Applicator Certification Program (Title 21) or working under the direction of a certified applicator.

Soil and Litter Sampling

For use in the five- year review process of this plan, soil and litter samples are to be collected at least once so that results not more than five years old are available for the review process. If desired, to gather additional information to guide planning and management decisions, more frequent sampling is an available option for the owner/operators.

Informational and Technical Assistance

Questions related to this plan or its implementation should be directed to the plan writer or other technically qualified individuals such as NRCS and U of A. Division of Agriculture Extension Service employees. Pertinent details of the plan will help ensure recommendations and assistance in compliance with the plan.

Section 2

Summary of Management Actions

Section 2

Summary of Management Actions

Section Contents:

Field Summary Maps
Annual Litter Production and Use
Planned Litter Applications
Planned Annual Nutrient Budget

Section 2

Summary of Management Actions

Summary of Litter and Nutrient Application Information from Section 5

Annual Litter Production and Use

Description	Estimated Amount (tons/year)
Total Average Annual Litter Production	2,427
Planned Litter Land Applied on Farm	70
Planned Litter Exported off Farm	2,357
Notes: Includes 2,427 tons of clean out litter. All litter not applied on farm will be exported. The planned farm application is less than the maximum possible application deemed acceptable by P Index risk calculations.	

Planned Litter Applications

Field	Application Date(s)	Litter Source	Application		Field Acres		
			tons/ac	tons/field	Total	Application	Buffer
JDNF 1	March-June	Turkey	.5	46	92	92	2
JDNF 2	March-June	Turkey	1	15	15	15	1
JDNF 3	March-June	Turkey	.5	9	18	18	0
Notes: PI risk calculations were based on the March-June application timing. As the July-October application timing has a lower PI risk factor, the acceptable application timing can be extended to March-October. <i>Due to higher associated PI risk factor, November to February applications cannot be made unless the plan is rewritten.</i>							

Section 2

Summary of Management Actions

Summary of Planned Annual Nutrient Budget from Litter

On a Per Acre Basis									
Field	Nutrient Recommendation (lbs./ac)			Nutrients Applied (lbs./ac)			Surpluses / Deficits (lbs./ac)		
	N	P ₂ O ₅	K ₂ O	N	P ₂ O ₅	K ₂ O	N	P ₂ O ₅	K ₂ O
JDNF 1	60	0	50	26	34	27	-34	34	-23
JDNF 2	60	0	50	52	67	54	-8	67	4
JDNF 3	60	0	50	26	34	27	-34	34	-23

Notes:
Mixed Cool and Warm-Season Grasses for Pasture (212) standard Inorganic fertilizer recommendation: 60 lbs. N/ac, 0 lbs. P₂O₅/ac, 0 lb. K₂O/ac. To favor cool-season grasses, apply N in late winter. To favor warm-season grasses, do not apply N until May 1. For higher production, top dress 50 lbs. N/ac after every 4-6 weeks of grazing or as needed. The 110 lbs. N/ac value includes the base recommendation plus a single top dress of 50 lbs. N/ac. Due to practical and slow release of poultry litter a single application can be made.

On a Per Field Basis									
Field	Nutrient Recommendation (lbs.)			Nutrients Applied (lbs.)			Surpluses / Deficits (lbs.)		
	N	P ₂ O ₅	K ₂ O	N	P ₂ O ₅	K ₂ O	N	P ₂ O ₅	K ₂ O
JDNF 1	5,520	0	4,600	2,381	3,096	2,484	-3,140	3,096	-2,116
JDNF 2	900	0	750	776	1,010	810	-124	1,010	60
JDNF 3	1,080	0	900	466	606	486	-614	606	-414
Farm Totals	7,500	0	6,250	3,623	4,711	3,780	-3,878	4,711	-2,470

Section 3

Legal and Compliance Requirements

Section 3

Legal and Compliance Requirements

Section 3

Legal and Compliance Requirements

Legal & Compliance Requirements

This plan meets the following legal and compliance requirements:

- ☒ Complies with the requirements of the "Arkansas Natural Resources Commission Rules Governing the Arkansas Soil Nutrient and Poultry Litter Application and Management Program Title 22." https://static.ark.org/eeuploads/anrc/title_22-rules.pdf
- ☒ Honors the contractual agreement(s) with the USDA Natural Resources Conservation Service related to financial assistance programs.
- ☒ Honors the contractual agreement with Integrator to obtain a nutrient management plan.
- ☒ Provides a plan voluntarily requested by owner/operator.
- ☐ Other (please describe):

Section 4

Collected Information

Section 4

Collected Information

Section Contents:

Aerial Photos

Soils Maps and Information

Topographical Maps

Mortality Burial Information

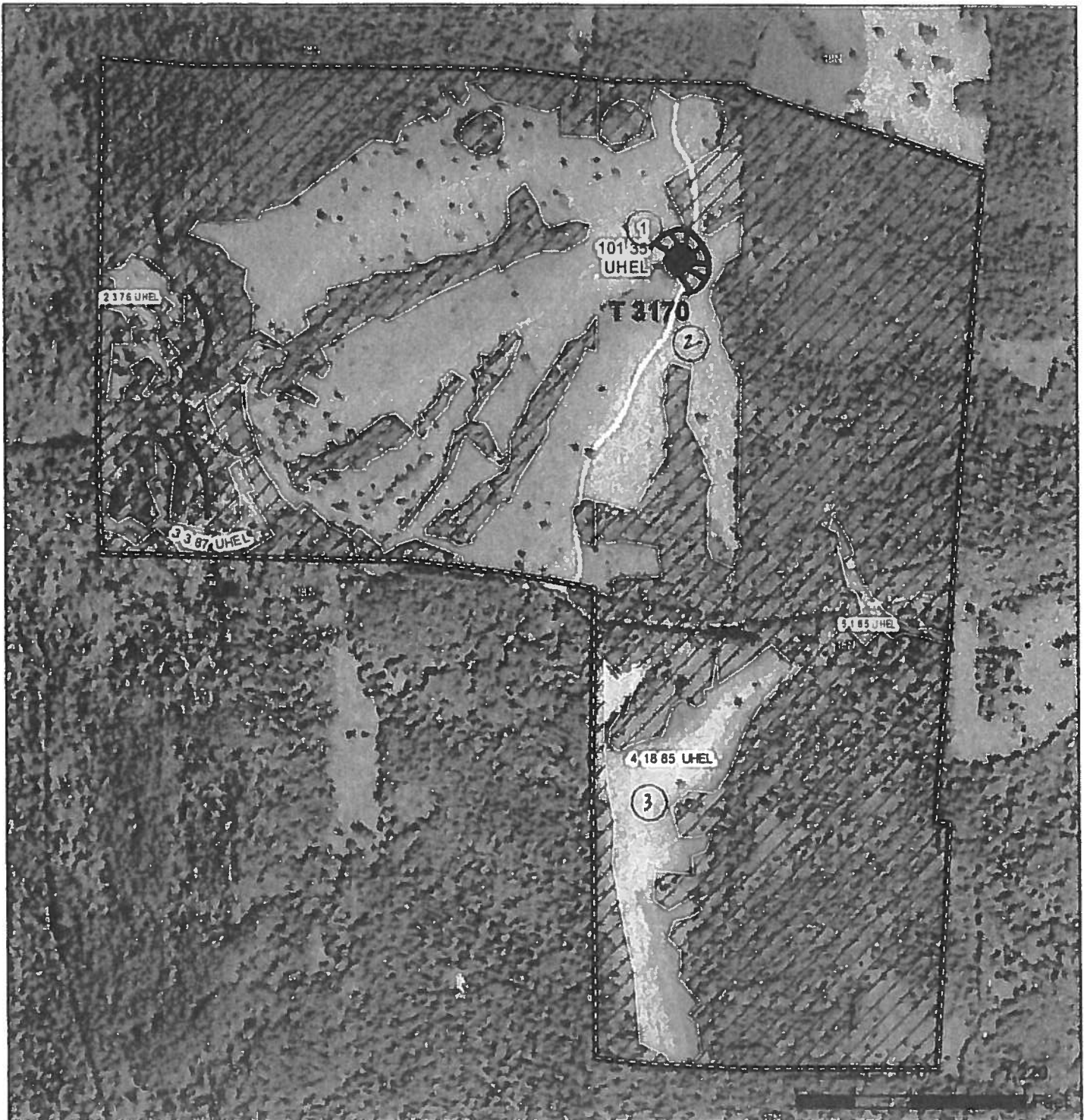
Soil Test Results

Litter Test Results



United States
Department of
Agriculture

Carroll County, Arkansas



Common Land Unit  Tract Boundary
 Non-Cropland
 Cropland
PLSS

Wetland Determination Identifiers

-  Restricted Use
-  Limited Restrictions
-  Exempt from Conservation Compliance Provisions

Imagery Year: 2017

2020 Program Year

Map Created March 05, 2019

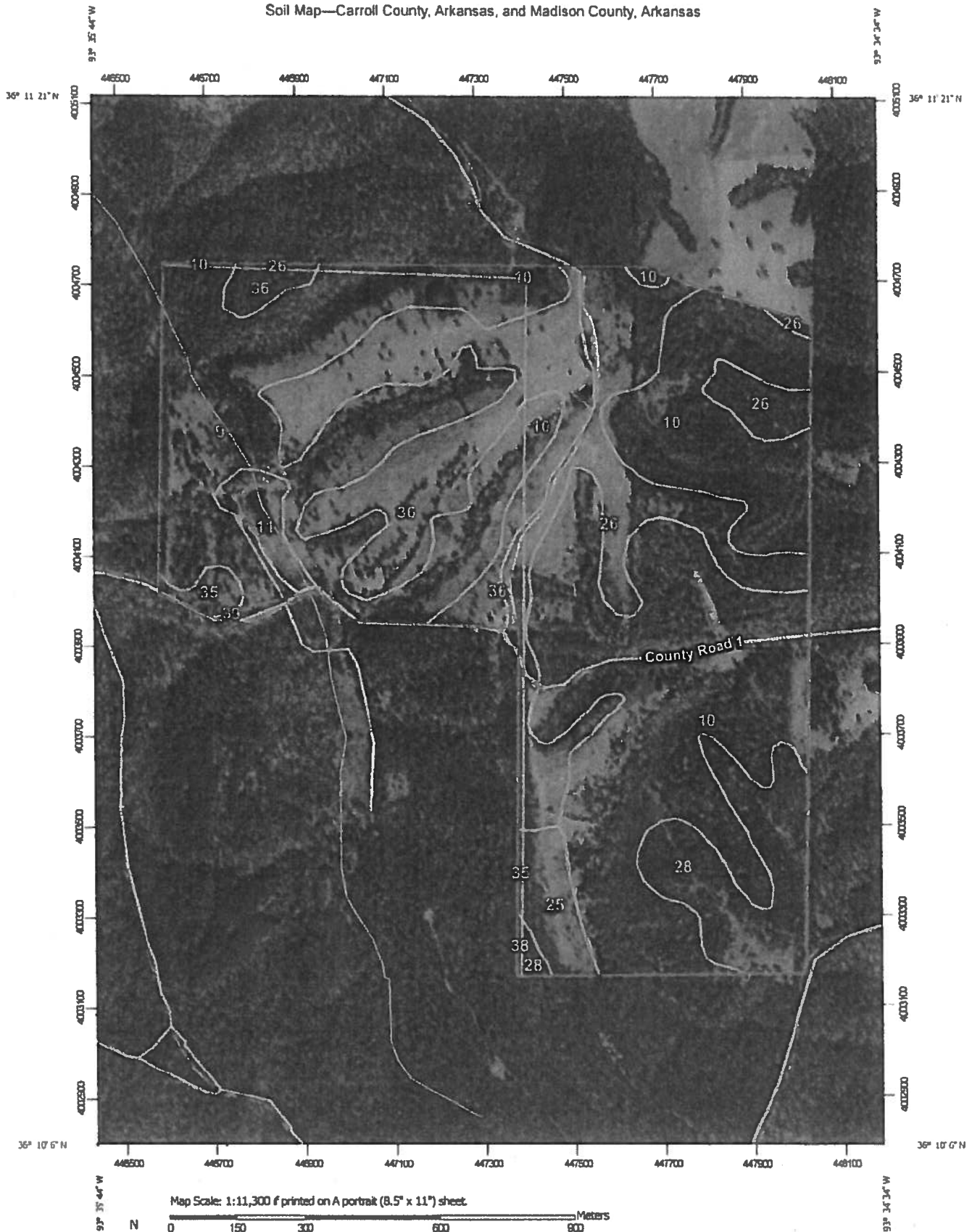
Farm 4042

Tract 3170

Tract Cropland Total: 129.68 acres

United States Department of Agriculture (USDA) Farm Service Agency (FSA) maps are for FSA Program administration only. This map does not represent a legal survey or reflect actual ownership rather it depicts the information provided directly from the producer and/or National Agricultural Imagery Program (NAIP) imagery. The producer accepts the data as is and assumes all risks associated with its use. USDA-FSA assumes no responsibility for actual or consequential damage incurred as a result of any user's reliance on this data outside FSA Programs. Wetland identifiers do not represent the size, shape, or specific determination of the area. Refer to your original determination (CPA-026 and attached maps) for exact boundaries and determinations or contact USDA Natural Resources Conservation Service (NRCS).

Soil Map—Carroll County, Arkansas, and Madison County, Arkansas



Map Scale: 1:11,300 if printed on A portrait (8.5" x 11") sheet.

0 150 300 600 900 Meters

0 500 1000 2000 3000 Feet

Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 15N WGS84



Natural Resources
Conservation Service

Web Soil Survey
National Cooperative Soil Survey

11/18/2019
Page 1 of 3

MAP LEGEND

	Area of Interest (AOI)		Soil Map Unit Polygons
	Soils		Soil Map Unit Lines
	Special Point Features		Soil Map Unit Points
	Blowout		Water Features
	Borrow Pit		Streams and Canals
	Clay Spot		Transportation
	Closed Depression		Rails
	Gravel Pit		Interstate Highways
	Gravelly Spot		US Routes
	Landfill		Major Roads
	Lava Flow		Local Roads
	Marsh or swamp		Background
	Mine or Quarry		Aerial Photography
	Miscellaneous Water		
	Perennial Water		
	Rock Outcrop		
	Saline Spot		
	Sandy Spot		
	Severely Eroded Spot		
	Sinkhole		
	Slide or Slip		
	Sodic Spot		

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:20,000.

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

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL:
Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

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

Soil Survey Area: Carroll County, Arkansas
Survey Area Date: Version 18, Sep 16, 2019

Soil Survey Area: Madison County, Arkansas
Survey Area Date: Version 16, Sep 16, 2019

Your area of interest (AOI) includes more than one soil survey area. These survey areas may have been mapped at different scales, with a different land use in mind, at different times, or at different levels of detail. This may result in map unit symbols, soil properties, and interpretations that do not completely agree across soil survey area boundaries.

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

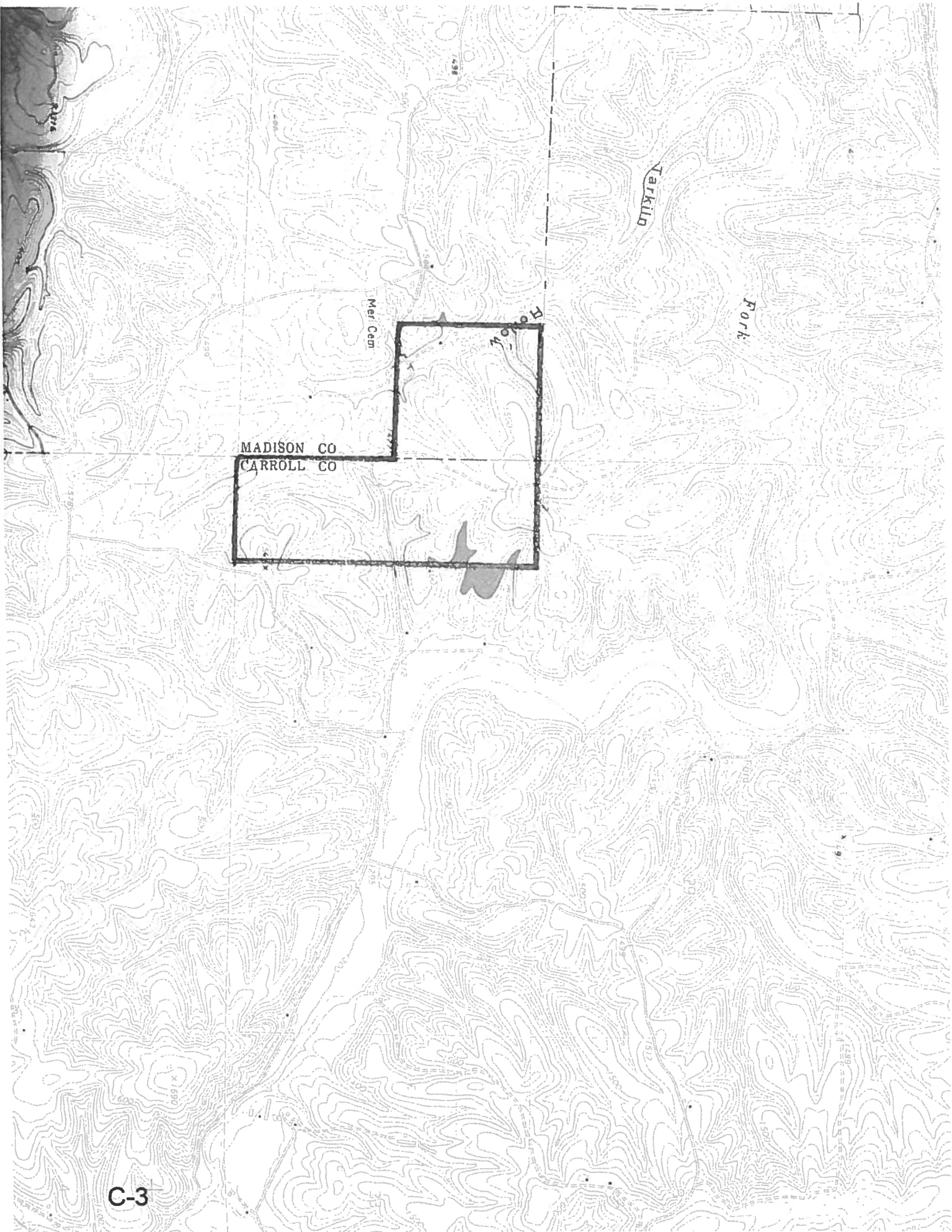
Date(s) aerial images were photographed: Sep 16, 2015—Oct 30, 2017

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

Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
10	Clarksville very gravelly silt loam, 20 to 50 percent slopes	149.3	37.5%
25	Nixa very gravelly silt loam, 3 to 8 percent slopes	8.8	2.2%
26	Nixa very gravelly silt loam, 8 to 12 percent slopes	57.8	14.5%
28	Noark very gravelly silt loam, 8 to 20 percent slopes	28.7	7.2%
Subtotals for Soil Survey Area		244.5	61.3%
Totals for Area of Interest		398.6	100.0%

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
9	Clarksville very gravelly silt loam, 20 to 50 percent slopes	91.3	22.9%
11	Elsah very cherty silt loam, occasionally flooded	7.0	1.8%
35	Nixa very gravelly silt loam, 3 to 8 percent slopes	3.6	0.9%
36	Nixa very gravelly silt loam, 8 to 12 percent slopes	51.7	13.0%
38	Noark very cherty silt loam, 12 to 20 percent slopes	0.3	0.1%
39	Noark very gravelly silt loam, 20 to 40 percent slopes	0.1	0.0%
Subtotals for Soil Survey Area		154.1	38.7%
Totals for Area of Interest		398.6	100.0%



Copyright © 2015 Nappaug Software



SEE PAGE 43



Marianna Soil Test & Research Laboratory

008 Lee 214

Marianna, AR 72360

(870) 295-2851

soiltest@uark.edu ~ https://soiltest2.uaex.edu/Default.aspx

Sample ID 00159948
Lab ID 93458
Date Processed 9/27/2019
Field ID 1

The University of Arkansas is an equal opportunity/affirmative action institution

Previous Crop: Pasture (203)	Acres: 92
Field Levelled in last 4 years:	Irrigation Water Source:
Lime Applied in last 4 years: No	Nutrient Management Plan:

Soil pH & Nutrient Availability Index			4.0 - 5.0	5.1 - 6.0	6.1 - 7.0	7.1 - 8.0	8.1 - 9.0
			Strongly Acidic	Medium Acidic	Slightly Acidic	Slightly Alkaline	Strongly Alkaline
Soil pH	5.4						
Mehlich III Nutrient	Units		Soil Test Level				
	ppm	lbs/acre	Very Low	Low	Medium	Optimum	Above Optimum
Phosphorus (P)	75	150	< 16 ppm	16 - 25 ppm	26 - 35 ppm	36 - 50 ppm	> 50 ppm
Potassium (K)	103	206	< 61	61 - 90	91 - 130	131 - 175	> 175
Zinc (Zn)	7.7	15.4	< 1.6	1.6 - 2.5	2.6 - 4.0	4.1 - 8.0	> 8.0

Mehlich III Nutrient	ppm	lbs/acre	Other Soil Properties				Units
Sulfate-S (SO ₄ -S)	14	28	Electrical Conductivity (EC)				µmhos/cm
Calcium (Ca)	711	1422	Estimated CEC (ECEC)				9 cmolc/kg
Magnesium (Mg)	137	274	Organic Matter				%
Iron (Fe)	116	232	Estimated Soil Texture				Silt Loam
Manganese (Mn)	116	232	Base Saturation				53
Copper (Cu)	1.9	3.8	Ca				37.4 % of ECEC
Boron (B)	0.4	0.8	Mg				12.0 % of ECEC
Nitrate (NO ₃ -N)			K				2.8 % of ECEC
			Na				0.4 % of ECEC

Methods: Soil pH and EC in 1:2 soil-water volume mixture; nutrients other than NO₃-N extracted with Mehlich-3 determined by ICAP; Nitrate extracted with Al₂(SO₄)₃ and determined by electrode; ECEC by cation summation; organic matter by weight loss on ignition.

Comments: Unit of lbs/acre assumes the sample depth represents a plow layer weighing 2 million pounds.

Code	Name	N	P ₂ O ₅	K ₂ O	SO ₄ -S	Zn	B	Lime	lb/acre
203	Pasture Cool-Season (MNT)	60	0	50	0	0	0	5000	

Crop 1 Notes:

Apply the recommended rate of N, P, and K in late winter. For higher production apply an additional 50 lb N/Acre after every 4 to 6 weeks of grazing. For fall/winter grazing, apply 50 lbs N/Acre in late summer.

Crop 2 Notes:

Crop 3 Notes:


Darrin Henderson
County Extension Agent -
Staff Chair

Marianna Soil Test & Research Laboratory

008 Lee 214

Marianna, AR 72360

(870) 295-2851

soiltest@uark.edu ~~~ https://soiltest2.uaex.edu/Default.aspx

Madison
Sample ID 00159947
Lab ID 93459
Date Processed 9/27/2019
Field ID 2

The University of Arkansas is an equal opportunity/affirmative action institution

Previous Crop: Pasture (203)	Acres: 15
Field Levelled in last 4 years:	Irrigation Water Source:
Lime Applied in last 4 years: No	Nutrient Management Plan:

Soil pH & Nutrient Availability Index	4.0 - 5.0	5.1 - 6.0	6.1 - 7.0	7.1 - 8.0	8.1 - 9.0
	Strongly Acidic	Medium Acidic	Slightly Acidic	Slightly Alkaline	Strongly Alkaline
Soil pH	5.5				

Mehlich III Nutrient	Units		Soil Test Level				
	ppm	lbs/acre	Very Low	Low	Medium	Optimum	Above Optimum
Phosphorus (P)	72	144	< 16 ppm	16 - 25 ppm	26 - 35 ppm	36 - 50 ppm	> 50 ppm
Potassium (K)	102	204	< 61	61 - 90	91 - 130	131 - 175	> 175
Zinc (Zn)	7.4	14.8	< 1.6	1.6 - 2.5	2.6 - 4.0	4.1 - 8.0	> 8.0

Mehlich III Nutrient	ppm	lbs/acre	Other Soil Properties				Units
Sulfate-S (SO ₄ -S)	14	28	Electrical Conductivity (EC)				µmhos/cm
Calcium (Ca)	699	1398	Estimated CEC (ECEC)				9 cmolc/kg
Magnesium (Mg)	135	270	Organic Matter				%
Iron (Fe)	119	238	Estimated Soil Texture				Silt Loam
Manganese (Mn)	110	220	Base Saturation	52	Ca	37.1	% of ECEC
Copper (Cu)	1.9	3.8			Mg	12.0	% of ECEC
Boron (B)	0.4	0.8			K	2.8	% of ECEC
Nitrate (NO ₃ -N)					Na	0.3	% of ECEC

Methods: Soil pH and EC in 1:2 soil-water volume mixture; nutrients other than NO₃-N extracted with Mehlich-3 determined by ICAP; Nitrate extracted with Al₂(SO₄)₃ and determined by electrode; ECEC by cation summation; organic matter by weight loss on ignition.

Comments: Unit of lbs/acre assumes the sample depth represents a plow layer weighing 2 million pounds.

Code	Name	N	P ₂ O ₅	K ₂ O	SO ₄ -S	Zn	B	Lime	lb/acre
203	Pasture Cool-Season (MNT)	60	0	50	0	0	0	4000	

Crop 1 Notes:

Apply the recommended rate of N, P, and K in late winter. For higher production apply an additional 50 lb N/Acre after every 4 to 6 weeks of grazing. For fall/winter grazing, apply 50 lbs N/Acre in late summer.

Crop 2 Notes:

Crop 3 Notes:



Darrin Henderson
County Extension Agent -
Staff Chair

Marianna Soil Test & Research Laboratory

008 Lee 214

Marianna, AR 72360

(870) 295-2851

soiltest@uark.edu ~~~ <https://soiltest2.uaex.edu/Default.aspx>

Madison
Sample ID 00159946
Lab ID 93460
Date Processed 9/27/2019
Field ID 3

The University of Arkansas is an equal opportunity/affirmative action institution

Previous Crop: Pasture (203)	Acres: 18
Field Levelled in last 4 years:	Irrigation Water Source:
Lime Applied in last 4 years: No	Nutrient Management Plan:

Soil pH & Nutrient Availability Index		4.0 - 5.0	5.1 - 6.0	6.1 - 7.0	7.1 - 8.0	8.1 - 9.0
		Strongly Acidic	Medium Acidic	Slightly Acidic	Slightly Alkaline	Strongly Alkaline
Soil pH	5.4					

Mehlich III Nutrient	Units		Soil Test Level				
	ppm	lbs/acre	Very Low	Low	Medium	Optimum	Above Optimum
Phosphorus (P)	65	130	< 16 ppm	16 - 25 ppm	26 - 35 ppm	36 - 50 ppm	> 50 ppm
Potassium (K)	96	192	< 61	61 - 90	91 - 130	131 - 175	> 175
Zinc (Zn)	6.8	13.6	< 1.6	1.6 - 2.5	2.6 - 4.0	4.1 - 8.0	> 8.0

Mehlich III Nutrient	ppm	lbs/acre	Other Soil Properties				Units
Sulfate-S (SO ₄ -S)	12	24	Electrical Conductivity (EC)				µmhos/cm
Calcium (Ca)	649	1298	Estimated CEC (ECEC)				9 cmolc/kg
Magnesium (Mg)	128	256	Organic Matter				%
Iron (Fe)	108	216	Estimated Soil Texture				Silt Loam
Manganese (Mn)	109	218	Base Saturation				51
Copper (Cu)	1.7	3.4	Ca				35.7 % of ECEC
Boron (B)	0.4	0.8	Mg				11.7 % of ECEC
Nitrate (NO ₃ -N)			K				2.7 % of ECEC
			Na				0.4 % of ECEC

Methods: Soil pH and EC in 1:2 soil-water volume mixture; nutrients other than NO₃-N extracted with Mehlich-3 determined by ICAP; Nitrate extracted with Al₂(SO₄)₃ and determined by electrode; ECEC by cation summation; organic matter by weight loss on ignition.

Comments: Unit of lbs/acre assumes the sample depth represents a plow layer weighing 2 million pounds.

Code	Name	N	P ₂ O ₅	K ₂ O	SO ₄ -S	Zn	B	Lime	lb/acre
203	Pasture Cool-Season (MNT)	60	0	50	0	0	0	5000	

Crop 1 Notes:

Apply the recommended rate of N, P, and K in late winter. For higher production apply an additional 50 lb N/Acre after every 4 to 6 weeks of grazing. For fall/winter grazing, apply 50 lbs N/Acre in late summer.

Crop 2 Notes:

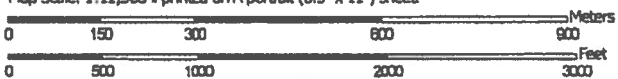
Crop 3 Notes:


Darrin Henderson
County Extension Agent -
Staff Chair

Catastrophic Mortality, Large Animal Disposal, Trench—Carroll County, Arkansas, and Madison County, ...



Map Scale: 1:11,300 if printed on A portrait (8.5" x 11") sheet.



Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 15N WGS84

C-3

MAP LEGEND

 Area of Interest (AOI)	 Background
 Area of Interest (AOI)	 Aerial Photography
Soils	
 Soil Rating Polygons	
 Very limited	
 Somewhat limited	
 Not limited	
 Not rated or not available	
Soil Rating Lines	
 Very limited	
 Somewhat limited	
 Not limited	
 Not rated or not available	
Soil Rating Points	
 Very limited	
 Somewhat limited	
 Not limited	
 Not rated or not available	
Water Features	
 Streams and Canals	
Transportation	
 Rails	
 Interstate Highways	
 US Routes	
 Major Roads	
 Local Roads	

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:20,000.

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

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL:

Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

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

Soil Survey Area: Carroll County, Arkansas

Survey Area Data: Version 18, Sep 16, 2019

Soil Survey Area: Madison County, Arkansas

Survey Area Data: Version 16, Sep 16, 2019

Your area of interest (AOI) includes more than one soil survey area. These survey areas may have been mapped at different scales, with a different land use in mind, at different times, or at different levels of detail. This may result in map unit symbols, soil properties, and interpretations that do not completely agree across soil survey area boundaries.

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Sep 16, 2015—Oct 30, 2017

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

Catastrophic Mortality, Large Animal Disposal, Trench

Map unit symbol	Map unit name	Rating	Component name (percent)	Rating reasons (numeric values)	Acres in AOI	Percent of AOI
10	Clarksville very gravelly silt loam, 20 to 50 percent slopes	Very limited	Clarksville (90%)	Slope (1.00) Clay content (0.17) Seepage, porous bedrock (0.10)	149.3	37.5%
			Bendavis (10%)	Slope (1.00) Wetness (1.00) Depth to bedrock (1.00)		
25	Nixa very gravelly silt loam, 3 to 8 percent slopes	Very limited	Nixa (90%)	Wetness (1.00) Clay content (0.34)	8.8	2.2%
			Bendavis (10%)	Wetness (1.00) Depth to bedrock (1.00)		
26	Nixa very gravelly silt loam, 8 to 12 percent slopes	Very limited	Nixa (90%)	Wetness (1.00) Clay content (0.34) Slope (0.16)	57.8	14.5%
			Bendavis (5%)	Wetness (1.00) Depth to bedrock (1.00) Slope (0.16)		
28	Noark very gravelly silt loam, 8 to 20 percent slopes	Very limited	Noark (85%)	Slope (1.00) Clay content (0.34)	28.7	7.2%
			Nixa (10%)	Wetness (1.00) Slope (1.00) Seepage, porous bedrock (0.50) Clay content (0.34)		
			Bendavis (5%)	Wetness (1.00) Depth to bedrock (1.00) Slope (1.00) Water gathering surface (0.40)		

Map unit symbol	Map unit name	Rating	Component name (percent)	Rating reasons (numeric values)	Acres in AOI	Percent of AOI
-----------------	---------------	--------	--------------------------	---------------------------------	--------------	----------------

Subtotals for Soil Survey Area 244.5 61.3%

Totals for Area of Interest 398.6 100.0%

Map unit symbol	Map unit name	Rating	Component name (percent)	Rating reasons (numeric values)	Acres in AOI	Percent of AOI
-----------------	---------------	--------	--------------------------	---------------------------------	--------------	----------------

9	Clarksville very gravelly silt loam, 20 to 50 percent slopes	Very limited	Clarksville (90%)	Slope (1.00) Clay content (0.17) Seepage, porous bedrock (0.10)	91.3	22.9%
			Bendavis (10%)	Slope (1.00) Wetness (1.00) Depth to bedrock (1.00)		
11	Elsah very cherty silt loam, occasionally flooded	Very limited	Elsah (95%)	Flooding (1.00) Seepage (1.00) Large stones (0.05)	7.0	1.8%
35	Nixa very gravelly silt loam, 3 to 8 percent slopes	Very limited	Nixa (90%)	Wetness (1.00) Clay content (0.34)	3.6	0.9%
			Bendavis (10%)	Wetness (1.00) Depth to bedrock (1.00)		
36	Nixa very gravelly silt loam, 8 to 12 percent slopes	Very limited	Nixa (90%)	Wetness (1.00) Clay content (0.34) Slope (0.16)	51.7	13.0%
			Bendavis (5%)	Wetness (1.00) Depth to bedrock (1.00) Slope (0.16)		
38	Noark very cherty silt loam, 12 to 20 percent slopes	Very limited	Noark (100%)	Slope (1.00) Clay content (0.34) Seepage, porous bedrock (0.10)	0.3	0.1%
39	Noark very gravelly silt loam, 20 to 40 percent slopes	Very limited	Noark (90%)	Slope (1.00) Clay content (0.34)	0.1	0.0%
			Bendavis (10%)	Slope (1.00)		

Map unit symbol	Map unit name	Rating	Component name (percent)	Rating reasons (numeric values)	Acres in AOI	Percent of AOI
--------------------	---------------	--------	-----------------------------	---------------------------------------	--------------	----------------

Wetness (1.00)

Depth to bedrock
(1.00)

Subtotals for Soil Survey Area 154.1 38.7%

Totals for Area of Interest 398.6 100.0%

Rating	Acres in AOI	Percent of AOI
--------	--------------	----------------

Very limited 398.6 100.0%

Totals for Area of Interest 398.6 100.0%

Description

"Catastrophic mortality, large animal disposal, trench," is a method of disposing of animals that died from disease by placing the carcasses in successive layers in an excavated trench. The carcasses are spread, compacted, and covered daily with a thin layer of soil that is excavated from the trench. When the trench is full, a final cover of soil material at least 2 feet thick is placed over the filled trench area. This interpretation is meant for instances where environmental isolation of pathogens is a primary concern. The criteria are specifically developed to prevent groundwater contamination.

The interpretation is applicable to both heavily populated and sparsely populated areas. While some general observations may be made, onsite evaluation is required before the final site is selected. Improper site selection, design, or installation may cause contamination of ground water, seepage, and contamination of stream systems from surface drainage or floodwater. The risk of contamination can be reduced or eliminated by installing systems designed to eliminate or reduce the adverse effects of limiting soil properties. Ratings are for soils in their present condition. The present land use is not considered in the ratings.

Ratings are based on properties and qualities to the depth normally observed during soil mapping (approximately 6 or 7 feet). Because trenches may be as deep as 15 feet or more, however, geologic investigations are needed to determine the potential for pollution of ground water and to determine the design needed. These investigations, which are generally arranged by the trench developer, include examination of stratification, rock formations, and geologic conditions that might lead to the conducting of leachates to aquifers, wells, watercourses, and other water sources. The presence of hard, nonrippable bedrock, bedrock crevices, or highly permeable strata at or directly below the proposed trench bottom is undesirable because of the difficulty in excavation and the potential pollution of underground water.

Properties that influence the risk of pollution, ease of excavation, trafficability, and revegetation are major considerations. Soils that are flooded or have a water table within the depth of excavation present a potential pollution hazard and are difficult to excavate. Slope is an important consideration because it affects the work involved in road construction, the performance of the roads, and the control of surface water around the trench. It may also cause difficulty in constructing trenches in which the trench bottom must be kept level and oriented to follow the contour of the land.

The ease with which the trench is dug and with which a soil can be used as daily and final cover is based largely on soil texture and consistence, which determine workability when the soil is dry and when it is wet. Soils that are plastic and sticky when wet are difficult to excavate, grade, or compact and difficult to place as a uniformly thick cover over a layer of carcasses. The uppermost part of the final cover should be soil material that favors the growth of plants. It should not contain excess sodium or salts and should not be too acid. In comparison with other horizons, the surface layer in most soils has the best workability and the

highest content of organic matter. Thus, it may be desirable to stockpile the surface layer for use in the final blanketing of the fill.

The ratings are both verbal and numerical. Rating class terms indicate the extent to which the soils are limited by all of the soil features that affect these uses. "Not limited" indicates that the soil has features that are very favorable for the specified use. Good performance and very low maintenance can be expected of a properly designed and installed system. "Somewhat limited" indicates that the soil has features that are moderately favorable for the specified use. The limitations can be overcome or minimized by special planning, design, or installation. Fair performance and moderate maintenance can be expected. "Very limited" indicates that the soil has one or more features that are unfavorable for the specified use. The limitations generally cannot be overcome without major soil reclamation, special design, or expensive installation procedures. Poor performance and high maintenance can be expected.

Numerical ratings indicate the severity of the individual limitations. The ratings are shown in decimal fractions ranging from 0.01 to 1.00. They indicate gradations between the point at which a soil feature has the greatest negative impact on the use (1.00) and the point at which the soil feature is not a limitation (0.00).

The map unit components listed for each map unit in the accompanying Summary by Map Unit table in Web Soil Survey or the Aggregation Report in Soil Data Viewer are determined by the aggregation method chosen. An aggregated rating class is shown for each map unit. The components listed for each map unit are only those that have the same rating class as listed for the map unit. The percent composition of each component in a particular map unit is presented to help the user better understand the percentage of each map unit that has the rating presented.

Other components with different ratings may be present in each map unit. The ratings for all components, regardless of the map unit aggregated rating, can be viewed by generating the equivalent report from the Soil Reports tab in Web Soil Survey or from the Soil Data Mart site. Onsite investigation may be needed to validate these interpretations and to confirm the identity of the soil on a given site.

Rating Options

Aggregation Method: Dominant Condition

Component Percent Cutoff: None Specified

Tie-break Rule: Higher



Arkansas Natural Resources Commission



Bruce Holland
Executive Director

101 East Capitol, Suite 350
Little Rock, Arkansas 72201
<http://www.anrc.arkansas.gov/>

Phone: (501) 682-1611
Fax: (501) 682-3991
E-mail: anrc@arkansas.gov

Asa Hutchinson
Governor

MEMORANDUM

TO: Conservation District Chairman

FROM: Bruce Holland

RE: Revised Phosphorus Index

Date: November 1, 2016

With the recent revision of the Arkansas Phosphorus Index, it has come to my attention that requiring manure or litter samples that provide water extractable phosphorus (WEP) analysis needed to calculate the new Index may cause a hardship for producers who purchase manure or poultry litter for land application. Therefore, in collaboration with the University of Arkansas we have developed recommended WEP values to be used in absence of a litter analysis.

There are four values represented in the manure summary information. Only the Median value may be used to calculate application rates in Nutrient Management Plans. These values should only be used in the absence of the actual manure or litter analysis.

Poultry Litter Management Plans written for poultry feeding operations will continue to be based on litter analysis from those operations.

We recommended WEP values are used in absence of a litter analysis to develop a plan, a copy of this memorandum shall be included in the plan.

Sincerely;

Bruce Holland
Executive Director

An Equal Opportunity Employer

Broiler All				lb/ton as is				%
	pH	Ec	% H ₂ O	N	P ₂ O ₅	K ₂ O	WEP	WEP/TP
Count	536	536	536	536	536	536	8	8
Min	5.6	3145	9.1	20.6	24.7	25.4	4.3	15.2
Max	9.4	21100	67.2	88.2	116.8	89.8	8	29.9
Mean	8.3	11360	30.1	61.8	65.4	60.1	6	23.3
Median(P ₅₀)	8.4	11400	28.2	61.9	64.6	61	6.1	22.6
Skew	-1.54	-6	1.16	-0.37	0.25	-0.4	0.25	-0.31
2ses	0.21	0.21	0.21	0.21	0.21	0.21	1.73	1.73
Kurt	5.35	0.8	1.59	0.9	0.46	0.51	0.44	0.35
2sek	0.42	0.42	0.42	0.42	0.42	0.42	3.46	3.46
P ₅₅	8.4	11685	28.9	63	66.4	62.2	6.2	23.1
P ₆₀	8.5	12000	29.9	64.2	68.2	63.2	6.2	23.8
P ₆₅	8.5	12300	31	65.8	70.1	64.3	6.2	24.6
P ₇₀	8.6	12510	32.4	67.2	72.1	65.3	6.3	25.5
P ₇₅	8.6	12900	33.9	68.2	74.2	67	6.4	26.3

Broiler Cake				lb/ton as is				%
	pH	Ec	% H ₂ O	N	P ₂ O ₅	K ₂ O	WEP	WEP/TP
Count	90	90	90	90	90	90	2	2
Min	7.7	5640	13	30.8	24.7	27.8	4.3	15.2
Max	9.3	21100	61.5	76.4	107.6	89.8	5.6	21.1
Mean	8.6	11007	37.1	55.6	61.6	59.5	4.9	18.1
Median(P ₅₀)	8.6	11110	37.3	55.7	61.1	60.1	4.9	18.1
Skew	-0.42	0.64	-0.1	-0.16	0.28	-0.11		
2ses	0.52	0.52	0.52	0.52	0.52	0.52	3.46	3.46
Kurt	0.44	1.96	-0.17	-0.11	0.99	0.13		
2sek	1.03	1.03	1.03	1.03	1.03	1.03	6.93	6.93
P ₅₅	8.7	11297	37.8	56.8	62.7	61.2	5	18.4
P ₆₀	8.7	11608	39.6	58.2	65.2	62	5.1	18.7
P ₆₅	8.7	11955	40.5	59.4	66.9	64.1	5.1	19
P ₇₀	8.7	12130	42.7	6	68.4	66	5.2	19.3
P ₇₅	8.8	12500	44.2	61	69.6	67.8	5.3	19.6

An Equal Opportunity Employer

An Equal Opportunity Employer

Hen All

				lb/ton as is				%
	pH	Ec	% H2O	N	P ₂ O ₅	K ₂ O	WEP	WEP/TP
Count	212	212	212	212	212	212	3	3
Min	8.0	2480	10.2	1.6	33.4	22.7	3.6	11.8
Max	9.8	16200	72.7	119.6	213.4	89.1	7.4	27.1
Mean	8.7	7720	39.6	41.2	66.8	46.4	5.4	19.0
Median(P ₅₀)	8.8	7300	38.8	37.3	66.2	46.5	5.1	18.1
Skew	-1.25	0.57	0.15	1.29	2.43	0.51	0.68	0.54
2ses	0.34	0.34	0.34	0.34	0.34	0.34	2.83	2.83
Kurt	2.94	0.20	-1.15	2.52	16.48	0.71		
2sek	0.67	0.67	0.67	0.67	0.67	0.67	5.66	5.66
P ₅₅	8.9	7572	40.5	40.2	67.3	47.9	5.3	19.0
P ₆₀	9.0	8124	44.6	42.2	69.4	49.5	5.6	19.9
P ₆₅	9.0	8500	47.6	45.0	71.0	50.6	5.8	20.8
P ₇₀	9.1	8928	50.1	47.7	72.8	51.8	6.0	21.7
P ₇₅	9.1	9300	52.8	49.8	75.7	52.8	6.3	22.6

Pullet All

				lb/ton as is				%
	pH	Ec	% H2O	N	P ₂ O ₅	K ₂ O	WEP	WEP/TP
Count	85	85	85	85	85	85	1	1
Min	7.5	2400	16.0	17.0	21.5	18.6	11.9	25.5
Max	9.9	16100	66.8	70.4	106.7	64.6	11.9	25.5
Mean	8.8	7018	30.5	42.5	62.9	44.0	11.9	25.5
Median(P ₅₀)	8.8	6770	30.2	41.8	61.8	43.8	11.9	25.5
Skew	-7	0.61	1.23	0.10	0.22	-5		
2ses	0.53	0.53	0.53	0.53	0.53	0.53	4.90	4.90
Kurt	0.11	2	3.04	0.74	0.48	-0.29		
2sek	1.06	1.06	1.06	1.06	1.06	1.06	9.80	9.80
P ₅₅	8.8	7352	30.9	43.0	62.8	45.5	11.9	25.5
P ₆₀	8.8	7750	31.1	44.8	64.6	46.4	11.9	25.5
P ₆₅	8.9	8352	32.3	45.5	66.9	48.2	11.9	25.5
P ₇₀	9.0	8980	33.5	47.9	68.8	49.3	11.9	25.5
P ₇₅	9.0	9200	34.2	48.6	71.9	50.3	11.9	25.5

Turkey All

				lb/ton as is				%
	pH	Ec	% H2O	N	P ₂ O ₅	K ₂ O	WEP	WEP/TP
Count	43	43	43	43	43	43	5	5
Min	6.5	4210	13.0	39.6	45.6	41.4	5.1	21.7
Max	9.2	12320	47.8	127.0	87.0	66.1	13.2	51.4
Mean	8.3	8545	29.3	69.6	66.0	53.3	9.0	32.2
Median(P ₅₀)	8.3	8570	26.8	69.0	67.3	54.0	6.8	24.0
Skew	-1.33	3	0.43	1.79	0.12	-3	0.46	0.64
2ses	0.75	0.75	0.75	0.75	0.75	0.75	2.19	2.19
Kurt	3.65	0.12	-0.25	6.17	-0.96	-1.23	-3.07	-1.84
2sek	1.49	1.49	1.49	1.49	1.49	1.49	4.38	4.38
P ₅₅	8.4	8708	28.9	69.7	70.1	55.0	8.1	27.6
P ₆₀	8.5	8852	30.3	70.4	71.1	56.2	9.4	31.2
P ₆₅	8.5	8900	31.2	71.2	71.6	57.1	10.6	34.8
P ₇₀	8.5	8944	32.3	71.8	72.4	58.2	11.9	38.4
P ₇₅	8.6	9290	35.4	73.3	72.8	59.3	13.1	42.1

Section 5

Nutrient Application Calculations and Analysis

Section 5

Nutrient Application Calculations and Analysis

Section Contents:

- P Index Range Values and Interpretations
- Poultry Litter Production Calculations
- Phosphorus Index and Nutrient Budgeting Calculations
- Optional Application of Inorganic Fertilizers

Planner:	Denton Facher	Date:	11/18/2019
Plan Descrip			

The calculations below are based on the formulas used by ANRC in the annual Poultry Feeding Operation Registration process. Any discrepancies should be brought to the attention of Karl VanDevender at kvandevender@uaex.edu.

Litter Production Information

Poultry Type	Broiler under 4 lbs	Broiler 4 lbs and over	Pullet	Breeder	Turkey	
Total Number of Birds per Flock					107,000	lb/bird
Target Bird Weight at Market					15	
Flocks per Year					3	
Number of Days					84	
Est. Farm Litter Production:					2,427	Ton/Year
Historical Litter Production:						Ton/Year
Litter Production Value to Use:					Estimated	
Total Litter Production Used:					2,427	Ton/Year
Est. % of Total Litter is Cake						% (0 - 100)
Est. Cake						
Historical Cake Production:						Ton/Year
Cake Production Value to Use:						
Cake Production Used:					0	Ton/Year

Numbers to Use In Planning Sheet

Annual Cake Production:					0	Ton/Year
Annual Total Clean Out Production:					2,427	Ton/Year
Annual Combined Litter Production:					2,427	Ton/Year

Comments

Arkansas Nutrient Management Planner with 2010 PI and Oct 2016 Soils Information (ver11/07/2017)

Planner: Debra Fender Date: 11/18/2019
 Plan Description:

This worksheet is intended to assist in the writing of Nutrient Management Plans for the application of manure to pasture and hay land. To do this, the worksheet estimates the available nutrients for land application, estimates the P index risk value for the defined conditions of each field, assists with the allocation of nutrients to the various receiving fields, and estimates litter and nutrient surpluses and deficits for the farm. This worksheet is the result of an effort to develop a reliable training/planning tool faithful to the 2010 Arkansas P Index. However, no guarantees are made, and any observed problems or suggestions for improvement should be directed to Karl VanDevender at kvandevender@uax.edu

County Information

Farm county	Madison
R	297
10-Yr Ei	110
KI adjusted for frost?	Yes

Nutrient Source and Description Information

Manure Source	Source Type	Amount Available		N Concentration		P2O5 Concentration		K2O Concentration		Water Extractable P		Alum Used?
Turkey	Dry Litter	2,427	ton	66	lb/ton	67.3	lb/ton	64	lb/ton	6.8	lb/ton	No

Nutrient Loss and Mineralization Factors

Nutrient Source Description	N		P2O5		K2O	
	Storage Losses (%)	Appl. Losses (%)	Storage Losses (%)	Appl. Losses (%)	Storage Losses (%)	Appl. Losses (%)
Turkey		25%				

Estimated Plant Available Nutrients

Company Plant Average Nutrients												
Nutrient Source Description	N			P2O5			K2O			Water Extractable P		
	Concentration		Total (lb)	Concentration		Total (lb)	Concentration		Total (lb)	Concentration	Total (lb)	
Turkey	51.75	lb/ton	125,597	67.30	lb/ton	163,337	54.00	lb/ton	131,058	6.80	lb/ton	16,503.6
Totals			125,597			163,337			131,058			16,504

Field P Index Calculations

Fields Shown	Soil Test P		Soil Map Unit	Slope Gradient (%)				Slope Length (ft)				Flooding Frequency
	ppm	lb/ac		Min	Max	Rep	Used	Min	Max	Rep	Used	
JDNF 1	75	100	36	8	12	10	10	30	39	36	36	None
JDNF 2	72	96	20	3	12	8	8	5	30	15	15	None
JDNF 3	65	86	36	8	12	10	10	30	39	36	36	None

Field	Field Area (ac)	Buffer Length (ft)	Buffer Width (ft)	Appl Area (ac)	Predominant Vegetation	Percent Ground Cover	Conservation Support Practices (P)	RUSLE 1 (ton/ac)	RUSLE 2 (ton/ac)
JDNF 1	92.00			92.00	Grass	95-100	None in place	0.25	0.28
JDNF 2	15.00			15.00	Grass	95-100	None in place	0.17	0.17
JDNF 3	18.00			18.00	Grass	95-100	None in place	0.25	0.25
	125.00			125.00					

Field	Pasture Use	Application Method	Application Timing	Nutrient Source	Appl. Rate	Pre BMP P Value	P Index Range	Target Post BMPs PI Values
JDNF 1	Hayland	Surface Applied	March-June	Turkey	0.50	ton/ac	45	Medium
JDNF 2	Hayland	Surface Applied	March-June	Turkey	1.00	ton/ac	40	Medium
JDNF 3	Rotational Grazing	Surface Applied	March-June	Turkey	0.50	ton/ac	43	Medium

Best Management Practices

Field	Diversion	Terrace	Pond	Filter Strip	Grassed Waterway	Fencing	Riparian Forest Buffer	Riparian Herbaceous Cover	Field Borders	Post BMP PI Value	P Index Range
JDNF 1										45	Medium
JDNF 2										49	Medium
JDNF 3										43	Medium

Field Nutrient Application Planning Per Acre Basis

Per Acre Basis													
Field	Nutrient Source	Application			Nutrient Recommendation (lb/ac)			Nutrients Applied (lb/ac)			Surpluses / Deficits (lb/ac)		
		PI Max	Planned		N	P2O5	K2O	N	P2O5	K2O	N	P2O5	K2O
JDNF 1	Turkey	0.50	0.50	ton/ac	60	0	50	26	34	27	-34	34	-23
JDNF 2	Turkey	1.00	1.00	ton/ac	60	0	50	52	67	54	-8	67	4
JDNF 3	Turkey	0.50	0.50	ton/ac	60	0	50	26	34	27	-34	34	-23

Per Field Basis

Comments

Arkansas Nutrient Management Planner with 2010 PI and Oct 2016 Soils Information (ver11/07/2017)

Planner: **Dan R. Encher** Date: **11/18/2019**
 Plan Description: **[REDACTED]**

Field	Nutrient Source	Application			Nutrient Recommendation (lbs)			Nutrients Applied (lbs)			Surpluses / Deficits (lb)		
		PI Max	Planned		N	P2O5	K2O	N	P2O5	K2O	N	P2O5	K2O
JDNF 1	Turkey	46.00	46.00	ton	5,520	0	4,600	2,381	3,096	2,484	-3,140	3,096	-2,116
JDNF 2	Turkey	15.00	15.00	ton	900	0	750	776	1,010	810	-124	1,010	60
JDNF 3	Turkey	9.00	9.00	ton	1,080	0	900	468	606	486	-614	606	-414
Totals					7,500		6,250	3,623	4,711	3,780	-3,878	4,711	-2,470

Manure Distribution Summary

Units Applied by Field and Source

Field	Source				
	Turkey (ton)				
JDNF 1	46.00				
JDNF 2	15.00				
JDNF 3	9.00				
Total Applied	70				
Available	2,427				
Deficit/Surplus (-/+)	2357				

Section 5

Nutrient Application Calculations and Analysis

Interpretation and Recommendations for the Arkansas P Index

P Index Range Values	Interpretations and Recommendations
Low < 33	Caution against long-term buildup of P in the soil.
Medium 33 - 66	Evaluate the Index and determine any field areas that could cause long-term concerns. Consider adding BMPs.
High 67 - 100	Evaluate the Index and determine elevation cause. Add appropriate BMPs and/or reduce P application. The immediate planning target is an API value in the Medium class or lower. If this cannot be achieved with realistic BMPs and/or reduced P rates in the short term, then a conservation plan needs to be developed with a long-term goal of an API value in the Medium class or lower.
Very High >100	No P application. Add BMPs to decrease this value below the Very High class in the short term and develop a conservation plan that would reduce the API value to a lower risk category, with long-term goal of a value in the Medium class or lower.

Section 5

Nutrient Application Calculations and Analysis

Optional Application of Inorganic Fertilizers.

If desired, commercial inorganic fertilizer can be applied to meet the forage nutrient needs not met by poultry litter applications. However, if a particular nutrient need has been met, or exceeded, by the poultry litter application, no additional application of that particular nutrient should be made. Section 2 nutrient budget tables provides information pertaining to the optional application of inorganic fertilizers. Assistance in determining the appropriate inorganic fertilizer rate to apply based on the information in Section 2 nutrient budget tables and the inorganic fertilizer nutrient concentration is available from your planner, county agent, or possibly your fertilizer supplier.

Section 6

Field Management Recommendations

Section 6

Field Management Recommendations

Section Contents:

Referral To Sections 1 & 2 Of The Plan
Field Factors Used In P Index Calculation
Litter Related Factors Used In P Index Calculations

Section 6

Field Management Recommendations

Field Management Recommendations

Refer to the Operation Description portion of Section 1 for management recommendations.

Section 2 provides details on where litter is to be land applied as well as the litter and nutrient application rates. The rates in Section 2 are the planned litter application amounts that can be applied on each field annually for the life of this plan. Single or multiple applications can be made as long as the total annual application in tons per acre and tons per field basis is not exceeded. Lower litter application rates are acceptable. However, the planned nutrient applications will be reduced, resulting in the possibility that the nutrient recommendations for the forage may not be met.

Below are field and litter application related factors used in the P Index calculations to determine acceptable litter and nutrient application rates. If changes in these management practices occur, contact a certified nutrient plan writer to determine the need for revising this plan.

Field Factors Used In P Index Calculations

Field	Soil Map Unit	Predominate Vegetation	Percent Ground Cover	Pasture Use
JDNF 1	36 Nixa	Grass	95-100	Hay Land
JDNF 2	26 Nixa	Grass	95-100	Hay Land
JDNF 3	36 Nixa	Grass	95-100	Rotational Grazing

Litter Related Factors Used In P Index Calculations

Field	Application Method	Application Timing	Nutrient Source	Conservation Practices
JDNF 1	Surface Applied	March-June	Turkey	None credited
JDNF 2	Surface Applied	March-June	Turkey	None credited
JDNF 3	Surface Applied	March-June	Turkey	None credited

Notes:

PI risk calculations were based on the March-June application timing. As the July-October application timing has a lower PI risk factor the acceptable application timing can be extended to March-October. Due to higher associated PI risk factor, November to February applications cannot be made unless the plan is rewritten.

Section 6

Field Management Recommendations

Title 22 Time, Place, And Manner Application Restrictions

The time, place, and manner restrictions specified by Section 2202.4.A-D of Arkansas Natural Resources Commission's Title 22 (https://static.ark.org/eeuploads/anrc/title_22-rules.pdf) as repeated below should be followed.

Title 22, Section 2202.4 Time, place, and manner restrictions.

- A. The time, place, and manner restrictions in this Section apply to all nutrient applications within a nutrient surplus area.
- B. Nutrients shall be evenly distributed over application sites. Application of nutrients from poultry litter shall be made only at the rates and in the manner specified in a nutrient management plan. If the owner or operator does not have a nutrient management plan for commercial fertilizers, then nutrient application of commercial fertilizers shall not exceed the protective rate.
- C. Nutrient application shall not be undertaken when soil is saturated, frozen, or covered with ice or snow.
- D. Nutrients shall not be applied in any manner that will allow excessive nutrients to enter waters within the state or to run onto adjacent property."

Section 7

Record Keeping

Section 7

Record Keeping

Section Contents:

General Requirements

Sample Forms

Section 7

Record Keeping

Record Keeping

General Requirements

Arkansas Title 22 requires that records utilized in the development and implementation of this nutrient management plan be kept for a minimum of 5 years. The contents of this plan constitute many of the required records. The additional activity to be kept are listed below. Upon a reasonable request, Records are to be available for inspection by ANRC or conservation district employee. These documents will not be public records. If desired, land managers can rely on records maintained by commercial fertilizer distributors and applicators to meet these requirements.

Activity records required by Arkansas Title 22 section 2203.3.6:

- a) Soil test – not more than five years old
- b) Litter test results – not more than five years old
- c) Planned and applied rates, methods of application, and timing (month and year) of all sources of nutrients applied
- d) Current and planned crop rotation
- e) Actual crop yield and harvest from land application sites
- f) Records of internal inspections for litter storage, handling, and application system components
- g) Records of any spill events
- h) Records of all land applications, both within and outside of nutrient surplus areas
- i) For any litter not land applied, records demonstrating that the litter was converted to a non-nutrient use or other use acceptable to the commission

Some of the records listed above have been used in the development and documentation of this plan and are already included in various sections of this plan. **It is recommended that additional records that document activity after the completion of this plan be added to the end of this section.** Included in this section are example forms that can be utilized to record a portion of the required information. The owner/operator preferences can dictate the format of the required records, however, formats that facilitate reviewer understanding is recommended.

Nutrient Application Record

Farm: _____

Address: _____

[illegible]

Litter Transfer and Activity Records:

Based on form supplied during annual Poultry Registration.

Name of Facility and or Operator _____

1. ☐ Cake out or ☐ clean out

Date _____ Tons _____ ☐ applied ☐ transferred ☐ stored ☐ other _____

Name of person you sold or transferred the litter to: _____

Address _____ Phone (____) _____

Name of Town or community where the litter was applied: _____

2. ☐ Cake out or ☐ clean out

Date _____ Tons _____ ☐ applied ☐ transferred ☐ stored ☐ other _____

Name of person you sold or transferred the litter to: _____

Address _____ Phone (____) _____

Name of Town or community where the litter was applied: _____

3. ☐ Cake out or ☐ clean out

Date _____ Tons _____ ☐ applied ☐ transferred ☐ stored ☐ other _____

Name of person you sold or transferred the litter to: _____

Address _____ Phone (____) _____

Name of Town or community where the litter was applied: _____

4. ☐ Cake out or ☐ clean out

Date _____ Tons _____ ☐ applied ☐ transferred ☐ stored ☐ other _____

Name of person you sold or transferred the litter to: _____

Address _____ Phone (____) _____

Name of Town or community where the litter was applied: _____

5. ☐ Cake out or ☐ clean out

Date _____ Tons _____ ☐ applied ☐ transferred ☐ stored ☐ other _____

Name of person you sold or transferred the litter to: _____

Address _____ Phone (____) _____

Name of Town or community where the litter was applied: _____

6. ☐ Cake out or ☐ clean out

Date _____ Tons _____ ☐ applied ☐ transferred ☐ stored ☐ other _____

Name of person you sold or transferred the litter to: _____

Address _____ Phone (____) _____

Name of Town or community where the litter was applied: _____



United States Department of the Interior



FISH AND WILDLIFE SERVICE
Arkansas Ecological Services Field Office
110 South Amity Suite 300
Conway, AR 72032-8975
Phone: (501) 513-4470 Fax: (501) 513-4480
<http://www.fws.gov/arkansas-es>

In Reply Refer To:
Consultation Code: 04ER1000-2020-SLI-0164
Event Code: 04ER1000-2020-E-00354
Project Name: [REDACTED]

November 06, 2019

Subject: List of threatened and endangered species that may occur in your proposed project location, and/or may be affected by your proposed project

To Whom It May Concern:

The enclosed species list identifies endangered, threatened, proposed, and candidate species, as well as proposed and final designated critical habitat, that may occur within the boundary of your proposed project and/or may be affected by your proposed project. The species list fulfills the requirements of the U.S. Fish and Wildlife Service (Service) under section 7(c) of the Endangered Species Act (Act) of 1973, as amended (16 U.S.C. 1531 *et seq.*). **This letter only provides an official species list and technical assistance; if you determine that listed species and/or designated critical habitat may be affected in any way by the proposed project, even if the effect is wholly beneficial, consultation with the Service will be necessary.**

If you determine that this project will have no effect on listed species and their habitat in any way, then you have completed Section 7 consultation with the Service and may use this letter in your project file or application.

The purpose of the Act is to provide a means whereby threatened and endangered species and the ecosystems upon which they depend may be conserved. Under sections 7(a)(1) and 7(a)(2) of the Act and its implementing regulations (50 CFR 402 *et seq.*), federal agencies are required to utilize their authorities to carry out programs for the conservation of threatened and endangered species and to determine whether projects may affect threatened and endangered species and/or designated critical habitat. More information on the regulations and procedures for section 7 consultation, including the role of permit or license applicants, can be found on our website.

Please visit our website at <http://www.fws.gov/arkansas-es/IPaC/home.html> for species-specific guidance to avoid and minimize adverse effects to federally endangered,

threatened, proposed, and candidate species. Our web site also contains additional information on species life history and habitat requirements that may be useful in project planning.

If your project involves in-stream construction activities, oil and natural gas infrastructure, road construction, transmission lines, or communication towers, please review our project specific guidance at <http://www.fws.gov/arkansas-es/IPaC/ProjSpec.html>.

The karst region of Arkansas is a unique region that covers the **northern third of Arkansas** and we have specific guidance to conserve sensitive cave-obligate and bat species. **Please visit <http://www.fws.gov/arkansas-es/IPaC/Karst.html> to determine if your project occurs in the karst region and to view karst specific-guidance.** Proper implementation and maintenance of best management practices specified in these guidance documents is necessary to avoid adverse effects to federally protected species and often avoids the more lengthy formal consultation process.

If your species list includes any mussels, Northern Long-eared Bat, Indiana Bat, Yellowcheek Darter, Red-cockaded Woodpecker, or American Burying Beetle, your project may require a presence/absence and/or habitat survey prior to commencing project activities. Please check the appropriate species-specific guidance on our website to determine if your project requires a survey. We strongly recommend that you contact the appropriate staff species lead biologist (see office directory or species page) prior to conducting presence/absence surveys to ensure the appropriate level of effort and methodology.

Under the ESA, it is the responsibility of the Federal action agency or its designated representative to determine if a proposed action "may affect" endangered, threatened, or proposed species, or designated critical habitat, and if so, to consult with the Service further. Similarly, it is the responsibility of the Federal action agency or project proponent, not the Service, to make "no effect" determinations. If you determine that your proposed action will have "no effect" on threatened or endangered species or their respective critical habitat, you do not need to seek concurrence with the Service. Nevertheless, it is a violation of Federal law to harm or harass any federally-listed threatened or endangered fish or wildlife species without the appropriate permit.

Through the consultation process, we will analyze information contained in a biological assessment that you provide. If your proposed action is associated with Federal funding or permitting, consultation will occur with the Federal agency under section 7(a)(2) of the ESA. Otherwise, an incidental take permit pursuant to section 10(a)(1)(B) of the ESA (also known as a habitat conservation plan) is necessary to harm or harass federally listed threatened or endangered fish or wildlife species. In either case, there is no mechanism for authorizing incidental take "after-the-fact." For more information regarding formal consultation and HCPs, please see the Service's Consultation Handbook and Habitat Conservation Plans at www.fws.gov/endangered/esa-library/index.html#consultations.

New information based on updated surveys, changes in the abundance and distribution of species, changed habitat conditions, or other factors could change this list. Please feel free to contact us if you need more current information or assistance regarding the potential impacts to

federally proposed, listed, and candidate species and federally designated and proposed critical habitat. Please note that under 50 CFR 402.12(e) of the regulations implementing section 7 of the Act, **the accuracy of this species list should be verified after 90 days.** This verification can be completed formally or informally as desired. The Service recommends that verification be completed by visiting the ECOS-IPaC website at regular intervals during project planning and implementation for updates to species lists and information. An updated list may be requested through the ECOS-IPaC system by completing the same process used to receive the enclosed list.

We appreciate your concern for threatened and endangered species. The Service encourages Federal agencies to include conservation of threatened and endangered species into their project planning to further the purposes of the Act. **Please include the Consultation Tracking Number in the header of this letter with any request for consultation or correspondence about your project that you submit to our office.**

Attachment(s):

- Official Species List

Official Species List

This list is provided pursuant to Section 7 of the Endangered Species Act, and fulfills the requirement for Federal agencies to "request of the Secretary of the Interior information whether any species which is listed or proposed to be listed may be present in the area of a proposed action".

This species list is provided by:

Arkansas Ecological Services Field Office

110 South Amity Suite 300

Conway, AR 72032-8975

(501) 513-4470

Project Summary

Consultation Code: 04ER1000-2020-SLI-0164

Event Code: 04ER1000-2020-E-00354

Project Name:

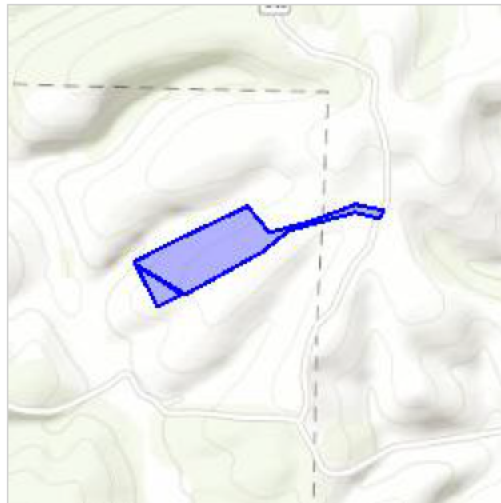


Project Type: AGRICULTURE

Project Description: Proposal would take place at 36.182515,-93.587286 in Madison County and would involve the construction of (4) 66' x 700' turkey houses and related infrastructure. Proposal would involve approximately 10.6 acres of ground disturbance to implement. If approved, proposal would begin implementation in the winter months of 2019, or early 2020.

Project Location:

Approximate location of the project can be viewed in Google Maps: <https://www.google.com/maps/place/36.18228126300008N93.5877970931464W>



Counties: Carroll, AR | Madison, AR

Endangered Species Act Species

There is a total of 5 threatened, endangered, or candidate species on this species list.

Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species.

IPaC does not display listed species or critical habitats under the sole jurisdiction of NOAA Fisheries¹, as USFWS does not have the authority to speak on behalf of NOAA and the Department of Commerce.

See the "Critical habitats" section below for those critical habitats that lie wholly or partially within your project area under this office's jurisdiction. Please contact the designated FWS office if you have questions.

-
1. [NOAA Fisheries](#), also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

Mammals

NAME	STATUS
Gray Bat <i>Myotis grisescens</i> No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/6329	Endangered
Indiana Bat <i>Myotis sodalis</i> There is final critical habitat for this species. Your location is outside the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/5949	Endangered
Northern Long-eared Bat <i>Myotis septentrionalis</i> No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/9045	Threatened
Ozark Big-eared Bat <i>Corynorhinus (=Plecotus) townsendii ingens</i> No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/7245	Endangered

Flowering Plants

NAME	STATUS
Missouri Bladderpod <i>Physaria filiformis</i> No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/5361	Threatened

Critical habitats

THERE ARE NO CRITICAL HABITATS WITHIN YOUR PROJECT AREA UNDER THIS OFFICE'S JURISDICTION.



Adam
Kroftman 11/6/2019

Farm Service Agency Programmatic Decision Key

Although designed primarily for use by loan officers, project proponents may find this key and its supporting documents useful in identifying potential project impacts to listed species and planning how best to avoid or minimize any identified adverse effects. Each numbered step should be answered for every project. You may jump to the Quick Start Guide for additional instructions.

- 1) Project will occur in a previously developed area (e.g., within the footprint of existing structures, barren or severely compacted ground, etc.):
a) No.....go to 2
b) Yes.....No Effect¹
- 2) Project would occur within a karst recharge area:
a) No.....~ 3.6 miles East of nearest Karst Recharge Area.....go to 3
b) Yes.....go to cave obligate decision key
- 3) Project will involve 3.0 acres or more of ground-disturbing activities (e.g., grubbing, clearing, grading, smoothing, disking) in the American Burying Beetle (ABB) area in Arkansas:
a) No.....NLAA² for ABB; go to 4
b) Yes.....go to ABB decision key
- 4) Project will occur within the Red-cockaded Woodpecker area **and** will include removal of mature pine trees (>30 years old or ≥10 inches dbh):
a) No.....NLAA² for RCW; go to 5
b) Yes.....go to RCW decision key
- 5) Project will occur within the buffered stream reaches (map provided):
a) No.....→ See Email to USFWS dated 11/6/2019.....NLAA² for aquatics; go to 6
b) Yes.....go to aquatic decision key
- 6) Project will affect a cave or karst feature in the Gray bat or Ozark Big-eared bat consultation area:
a) No.....no caves or karst features were noted during site visit.....NLAA² for Gray and OBEB; go to 7
b) Yes.....go to bat decision key
- 7) Project will involve tree removal between March 15 and November 14 in the Indiana and/or Northern Long-eared bat consultation areas:
a) No.....NLAA² for Indiana Bat and NLEB; go to 8
b) Yes.....go to bat decision key
- 8) Project involves instream work or activities that would substantially alter the quantity and quality of water and/or habitat in designated critical habitat:
a) No.....NLAM³ for critical habitat; go to 9
b) Yes.....contact ARFO
- 9) Project will alter a sand or gravel shoreline, bar, or island in a larger river (Red, Arkansas, Mississippi)
a) No.....NLAA² for Interior Least Tern and Piping Plover; go to 10
b) Yes.....contact ARFO
- 10) Project will occur in counties and habitats with listed plants

Mo Bladderpod

a) No ☒ NONE Noted during Site Visit - Habitat doesn't seem to be suitable on proposed site No Effect¹

b) Yes ☐ go to plant decision key

¹The proposed project will result in no effect to federally listed species or designated critical habitat. Further consultation with the Arkansas Ecological Services Office is not necessary for the project as described.

²The proposed project may affect, but is not likely to adversely affect threatened or endangered species in Arkansas. Document this determination for each of the listed species in the project area by name (from IPaC list). No further consultation with the Arkansas Ecological Services Field Office would be necessary for the project as described.

³The proposed project is not likely to adversely modify designated critical habitat for leopard darter, yellowcheek darter, Neosho mucket, or rabbitsfoot. Document this determination for the appropriate listed species in the project area by name (from IPaC list).

TAXA KEYS

Cave Obligate Species Decision Key

- 1) Project is partially within or abuts the area of concern for cave obligates and involves the manufacturing, storage, or disposal of chemicals, hazardous materials, waste products, or other pollutants that may adversely affect water quality.
 - a) Yes.....contact ARFO³
 - b) No..... go to 2
- 2) Project is partially within or abuts the area of concern for cave obligates and is a road, airport, or other large project that may have indirect² effects to listed species
 - a) Yes.....contact ARFO³
 - b) No.....go to 3
- 3) Project area has potential karst features (sinkhole, springs, losing stream, cave) noted on a karst feature survey or project site survey:
 - a) Yes.....go to 4
 - b) No..... *NLAA*¹; return to main decision key
- 4) Project proponents can follow Species Protective Measures for cave obligate species, excluding bats, in Arkansas:
 - a) Yes..... *NLAA*¹; return to main decision key
 - b) No.....contact ARFO³

Return to the main decision key to complete effects determinations and consultation.

¹The proposed project “may affect, but is not likely to adversely affect” cave obligate species. No further consultation with the Arkansas Ecological Services Field Office would be necessary for the project as described

²Indirect effects are effects caused by the action and reasonably certain to occur, but may occur later in time as a result of the project. Effects may occur at the site of the project, or off-site.

³The proposed project may affect listed cave obligate species, however, it cannot be determined at this time whether those impacts would result in a “likely to adversely affect” or “not likely to adversely affect” effects determination. Further consultation with the Arkansas Ecological Services Office is necessary.

SPECIES PROTECTIVE MEASURES for Benton County Cave Crayfish, Hell Creek Cave Crayfish, and Ozark Cavefish

Construction in Sensitive Areas

To avoid or minimize potential negative effects to listed species that inhabit karst features, project proponents should implement the following:

1. Survey project area for karst features such as caves, sinkholes, losing streams and springs.
2. Establish a 300-foot buffer around all caves, sinkholes, losing streams, and springs and adequately mark the area so that construction personnel are aware of the buffer boundaries. Buffer width extends outward from the edge of the feature.
 - No construction, staging, and storage should occur within the buffer area.
 - Avoid applying pesticides, herbicides, and fertilizers within the buffer area.
 - If stream crossings are unavoidable, follow the guidelines outlined in the Stream Crossings section of this document.
 - Redundant perimeter controls may be necessary to ensure sediment does not enter karst features.
3. Upon identification of caves or sinkholes, notify the Arkansas Ecological Services Field Office of their presence and the project details. Do not place fill in an opening without consulting with the Arkansas Ecological Services field office. The Field Office can be reached at (501) 513-4470.
4. If water is unintentionally rerouted into a karst feature, cease all activities and contact the Arkansas Ecological Service Field Office.
5. Consult with the Arkansas Ecological Services Field Office prior to blasting near any known karst feature.
6. If closing water wells contact the Arkansas Ecological Services Field Office prior to closure.

Erosion and Sediment Control

Stabilizing soil immediately after completing earth work is critical. Protect all streams, wetlands, and karst features adjacent to disturbed areas with erosion and sediment controls. Constructed wetlands, retention ponds, detention ponds, sediment basins, embedded silt fences, straw bales, interceptor dikes, sediment traps, check dams/ditch checks, temporary diversions, mats, netting, mulching, seeding, and/or tree planting are recommended types of controls/best management practices (BMPs). Size erosion and sediment controls to handle at least the 25-year flood and 24-hour storm event. Monitor BMPs and clean, repair, and replace infrastructure as necessary.

Stream Crossings

Use elevated pipelines or directional drilling methods for proposed pipeline crossings of losing streams, perennial streams, and wetlands.

Directional Drilling

Prior to directional drilling, conduct a geotechnical investigation using the least intrusive means possible (e.g. ground penetrating radar, minimal exploratory bore hole drilling, seismic refraction and reflections, cave radio, resistivity, magnetometry, etc.) This will assist in determining subsurface/geologic conditions and ensure that a directional drill pipeline at the location is feasible and to avoid unnecessary damage to a sensitive area, such as a karst void. Capture and account for all drilling fluids during drilling activities.

Directional drilling greatly reduces stream channel disturbance compared to trenching. To prevent sediment reaching the stream, construct secondary containment structures (i.e. berms and filter fences) along with runoff dispersion and sediment traps around staging areas on either side of the stream. Additionally, do not operate equipment in stream channels.

If elevated pipelines or directional drilling cannot be used, the following stream crossing guidelines

apply:

- Construct stream crossings during a period of low stream flow (July to October during most years).
- Maintain natural stream features such as riffles or pools.
- Limit operation of construction equipment in streams to only what is necessary to complete construction.
- Place unused trench 300 feet away from the stream and ensure spoils will not wash into the stream.
- Limit the removal of riparian vegetation to the minimum necessary to complete the project.
- Plant only native riparian plants.
- On approaches to stream crossings, drainage control structures should be placed at appropriate intervals along slope to disperse water velocity and volume to minimize erosion, including at the base – but do not direct runoff at the base into the stream.

Post Construction Stormwater Management

Stormwater runoff contains sediment, fuel/oil/grease, brake dust, herbicide, pesticide, and other contaminants. Utilize the following techniques to reduce potential contaminants contained in stormwater.

- Establish constructed wetlands capable of capturing the first 1-inch of a climatic event from the entire developed site.
- After capture of the first 1 inch of a precipitation event, direct additional flow to a 50-100 foot bioretention treatment area.
- Monitor sediment in the constructed wetland to document the filling rate and to determine when excess sediment should be removed.

Accepted alternatives for treatment of stormwater are separation systems, rain gardens, or an established community stormwater collection system.

Reclamation of construction sites

Restore and stabilize all work areas immediately following construction activities. Use native plants, mats, netting, and other BMPs to stabilize banks and return the area to pre-project conditions. Use instream deflectors and anchored logs in high velocity streams to protect vulnerable banks and allow for reestablishment of vegetation. Riprap may also be necessary. When possible, use rock typical of the local geology. Routinely monitor and document performance of BMPs and implement additional BMPs or other improvements as necessary to minimize impacts.

- Revegetate all disturbed areas immediately following or concurrent with project implementation. Plant native trees, shrubs and grasses to ensure long-term stability in areas where the soil erosion threat is not critical. Plant annual non-native cover crops (e.g., grasses such as rye or wheat) in conjunction with native species to provide short-term erosion control. Plant non-native mixtures or use erosion control materials, such as fabric, tubes, scour boards, or adhesive mixed with seed in areas judged to be subject to immediate soil loss due to steep slopes or other factors causing critical erosion conditions. However, final revegetation of disturbed areas should use native plant species.
- Include a reclamation monitoring program in the project proposal to ensure successful revegetation efforts.
- Remove and dispose of temporary sediment and erosion controls within 30 days after final site

stabilization is achieved or after temporary practices are no longer needed.

- Biodegradable stabilization measures may remain in place if they will assist in long-term soil stabilization.
- Remove and properly dispose of all debris and excess materials that do not help stabilize soil or are not natural upon completion of the project.

Staging, Vehicle Maintenance, Petroleum, and Chemicals

- Establish all staging/storage areas at least 300 feet away from streams, wetlands, and karst features
 - Install and maintain erosion and sediment controls to prevent or minimize discharge from staging/storage sites.
- Dispose of excess concrete and wash water from trucks and other concrete mixing equipment in an area well away from karst features, streams and wetlands and in accordance with local regulations.
- Properly maintain construction equipment and vehicles to prevent leakage of petroleum products.
- Use drip pans and tarps or other containment systems when changing oil or other vehicle/equipment fluids.
- Dispose of contaminated soils or materials off-site in proper receptacles at an approved disposal facility.
- Attend vehicle and equipment fueling at all times. Store spill cleanup materials on site and train employees in spill control procedures.
- Wash vehicles offsite at a washing area with appropriate facilities to manage contaminated wash water. Wash water should never be discharged directly into water bodies or karst features.

Return to the main decision key to complete effects determinations and consultation.

American Burying Beetle Decision Key

- 1) Ground-disturbing activities will occur entirely in **unfavorable** habitat¹:
 - a) Yes..... NLAA² ; return to main decision key
 - b) No.....go to 2

- 2) A presence/absence survey has been conducted by a permitted biologist following the most recent ABB Survey Guidelines (available at <https://www.fws.gov/arkansas-es/>) with valid negative survey results:
 - a) Yes..... NLAA² ; return to main decision key
 - b) No (no survey or positive survey).....contact ARFO

Return to the main decision key to complete effects determinations and consultation.

¹ While ABB uses a wide variety of habitats, the Service currently believes that areas exhibiting the following characteristics are *unfavorable* for use by ABB based on disturbance regime, vegetation structure, unsuitable soil conditions and carrion availability:

1. Land that is tilled on a regular basis, planted in monoculture, and does not contain native vegetation.
2. Pasture or grassland that has been continually maintained through frequent mowing, grazing, or herbicide application at a height of 20 cm (8 inches) or less.
3. Land that has already been developed and no longer exhibits surficial topsoil, leaf litter, or vegetation.
4. Urban areas with maintained lawns, paved surfaces, or roadways.
5. Stockpiled soil without vegetation.
6. Wetlands with standing water or saturated soils (defined as sites exhibiting hydric-soils, and vegetation typical of saturated soils, and/or wetland hydrology).

NOTE: Areas adjacent to wetlands and/or riparian areas may be used by the ABB (and are therefore not considered unfavorable habitat). These areas may be important for ABB seeking moist soils during dry conditions.

²The proposed project may affect, but is not likely to adversely affect American Burying Beetle. No further consultation with the Arkansas Ecological Services Field Office would be necessary for the project as described.

Return to the main decision key to complete effects determinations and consultation.

Red-cockaded Woodpecker Decision Key

Although designed primarily for use by loan officers, applicants may find this key and its supporting documents useful in identifying potential adverse project effects to RCW and in planning how best to avoid or minimize any identified adverse effects.

- 1) Project includes tree removal within or adjacent to suitable *foraging*¹ or *nesting*² habitat:
 - a) Yes.....go to 2
 - b) No..... NLAA³; return to main decision key

- 2) An experienced RCW biologist has conducted a cavity tree survey in suitable nesting habitat¹ within 0.5 mi of suitable foraging habitat¹ affected by the project (adhere to Recovery Plan Appendix 4 Survey Protocol) with no active clusters located
 - a) Yes.....NLAA³; return to main decision key
 - b) No, no survey performed.....contact ARFO
 - c) No, active clusters were locatedgo to 3

- 3) Non-federal applicants can follow special conditions for avoidance and minimization measures for occupied RCW foraging habitat:
 - a) Yes..... NLAA³; return to main decision key
 - b) No.....contact ARFO

Return to the main decision key to complete effects determinations and consultation.

¹As described in Appendix 4 (Recovery Plan

https://www.fws.gov/rcwrecovery/files/RecoveryPlan/survey_protocol.pdf), potentially suitable *foraging* habitat consists of a pine or pine/hardwood stand of forest, woodland or savannah in which 50 percent or more of the dominant trees are pines and the dominant pine trees are generally 30 years in age or older. This foraging habitat is not an isolated stand, but occurs within a landscape matrix of other suitable habitat. Contact ARFO for assistance in determining suitable habitat, if needed.

² As described in Appendix 4 (Recovery Plan

https://www.fws.gov/rcwrecovery/files/RecoveryPlan/survey_protocol.pdf), potentially suitable *nesting* habitat consists of pine, pine/hardwood, and hardwood/pine stands that contain pines 60 years in age or older and that are within 0.5 mi of the suitable foraging habitat to be affected at the project site. Nesting or foraging habitat is not an isolated stand, but occur within a landscape matrix of other suitable habitat. Contact ARFO for assistance in determining suitable habitat, if needed.

³The proposed project may affect, but is not likely to adversely affect RCW. No further consultation with the Arkansas Ecological Services Field Office will be necessary for RCW for the project as described.

**SPECIES PROTECTIVE MEASURES
to be provided to applicants for incorporation in the proposed project**

Red-cockaded Woodpecker

Projects on privately owned land occupied by RCW must adhere to the Service's Private Lands Guidelines standard for managed stability located in Appendix 5 of the *Red-Cockaded Woodpecker Recovery Plan*, second revision:

1. Provide each group of RCW with a minimum of 689 m² (3000 ft²) of pine basal area (BA), including only pines ≥ 25.4 cm (10 in) diameter at breast height.
2. Provide the above pine BA on a minimum of 30.4 ha (75 ac).
3. Count only those pine stands in suitable habitat that, for this standard only, has each of the following characteristics:
 - a. Stands that are ≥ 30 years old.
 - b. An average pine BA of pines ≥ 25.4 cm (10 in) between 9.2 and 16.1 m²/ha (40 and 70 ft²/ac).
 - c. An average pine BA of pines < 25.4 cm (10 in) less than 4.6 m²/ha (20 ft²/ac).
 - d. No hardwood midstory or if a hardwood midstory is present, it is sparse and less than 2.1 m (7 ft) in height.
 - e. Total stand BA, including overstory hardwoods, less than 23.0 m²/ha (80 ft²/ac).
 - f. We recommend that all land counted as foraging habitat be within 0.4 km (0.25 mi) of the cluster and that any stand counted as foraging habitat be within 61 m (200 ft) of another foraging stand or the cluster itself.
 - g. Frequent prescribed burning of foraging habitat, especially during the growing season, is strongly recommended. Development and protection of herbaceous groundcovers facilitates prescribed burning and benefits RCWs.

The full text of RCW Recovery Plan including Appendix 4 Survey Protocol and Appendix 5 Private Lands Guidelines is available here <https://www.fws.gov/rcwrecovery/files/RecoveryPlan/finalrecoveryplan.pdf>

Return to the main decision key to complete effects determinations and consultation.

Aquatic Species Decision Key

This species key should be used if the proposed project involves activities that may affect waters with federally listed species and tributaries of those waters represented on the associated map (USFWS provided map "Buffered Stream Reach" layer).

- 1) The project involves instream work in Survey Coordination stream reaches (map provided).
 - a) No.....go to 2
 - b) Yes..... contact ARFO

- 2) The attached applicable avoidance and minimization measures for specified activities will be included in the proposed project.
 - c) No..... contact ARFO
 - d) Yes.....NLAA¹

Return to the main decision key to complete effects determinations and consultation.

¹ The proposed project "may affect, but is not likely to adversely affect" aquatic non-cave obligate species. No further consultation with the Arkansas Ecological Services Field Office would be necessary for the project as described.

SPECIES PROTECTIVE MEASURES to be provided to the applicant for incorporation in the proposed project

FSA ground-disturbing practices with potential to affect aquatic species:

Instream: livestock crossing facilities, grade stabilization structures, conservation structure restoration, pond construction

Near stream: wetland restoration, riparian buffer establishment, construction or expansion of structures, fencing, road construction, sediment retention basin, drop pipe/spillway

Activity: livestock crossing facilities

1. Underlay crossing with geotextile filter fabric, gravel filter blanket, or equivalent best available technology.
2. Stabilize approaches and adjacent streambanks
3. Restore damaged areas, particularly bare erodible soils, to pre-work conditions.
4. Employ sediment and erosion controls during and post-construction until site is revegetated.

Activity: grade stabilization structures, conservation structure restoration (dam and pond), pond construction with dam

1. Divert flow around the construction area by constructing a temporary structure (dam) upstream and downstream of the project area.

2. Restore embankments and approaches with seed, mulch, fertilizer, and implementing erosion control measures such as silt fences, straw bales, matting, and sediment traps. Soil stabilization immediately after earth work is complete is critical.

Activity: construction or expansion of poultry houses, dwellings, barns, shop buildings, disposal facilities, stacking sheds

1. Incorporate properly installed and maintained erosion and sediment best management practices until all exposed soils are permanently stabilized.
 - a. Ensure proper use, installation, and maintenance of energy dissipaters (e.g., hay bales, etc.) and silt fence. Silt fence should be installed around the project area perimeter. Install as specified by manufacturer. Maximum length of slope draining to any point along the silt fence should not exceed 100 feet. Do not place silt fence in areas with concentrated flow. A 15 foot gap in the silt fence to accommodate traffic is permissible. Silt fence should be inspected and repaired if necessary following 0.5 inch rainfall/48 hour period or 0.25 inch rainfall/one hour. Remove sediment when buildup against silt fence is at or near 40 percent capacity.
 - b. Sediment traps should be constructed with adequate capacity for storm events and accumulated sediment, with 75 percent removal efficiency. Traps should have both inflow and outflow.
 - c. For commercial construction, install detention basin(s) sized to capture first one inch of a rainfall event. Constructing detention basins in a stream is not permissible. Line bottom of detention basin with a textile or bentonite type material to capture rain and not allow infiltration. This material should be covered by one to two feet of gravel. At least once every 5 years, the basin should be drained and if necessary dredged to its original depth. After capture of first 1 inch of rainfall, flow should be directed to 50 – 100 foot bioretention treatment area consisting of a vegetated strip, sand bed, organic or mulch layer, planting soil, or hydrophilic plants.
 - d. Within 24 hours following precipitation events at project site, all erosion and sediment control measures must be maintained and either repaired or replaced.
 - e. Revegetate site within 30 days following construction completion.

Activity: Sediment retention

- a. Sediment traps or basins should be constructed with adequate capacity for storm events and accumulated sediment, with 75 percent removal efficiency. Traps should have both inflow and outflow.
- b. Detention basins should not be constructed in a stream. Line bottom of detention basin with a textile or bentonite type material to capture rain and not allow infiltration. This material should be covered by one to two feet of gravel. At least once every 5 years, the basin should be drained and if necessary dredged to its original depth. After capture of first 1 inch of rainfall, flow should be directed to 50 – 100 foot bio-retention treatment area consisting of a vegetated strip, sand bed, organic or mulch layer, planting soil, or hydrophilic plants.

Activity: Fencing

1. Fencing should limit livestock access to streams to designated crossings when possible.
2. Fencing should allow a riparian buffer based on slope. Maintain riparian habitat within 100 to 150 feet of perennial and intermittent stream banks (areas with 0 to 15 percent slope = 100 feet; 16 to 35 percent slope

= 125 feet, greater than 35 percent = 150 feet), including backwater sloughs, springs, and seeps. Maintain riparian habitat within 30 feet of ephemeral drainages.

Activity: Wetland restoration

1. Wetland restoration sites with hydrologic connectivity to riverine systems should employ erosion and sediment reduction measures during construction.
2. Wetland restoration plans should be reviewed by an experienced professional.

Activity: Riparian buffers

1. Vegetation native to the ecoregion should be used in the establishment or enhancement of riparian buffers.
2. Riparian buffers should be established on stable streambanks.
3. Mulch and prompt revegetation should be used to minimize erosion of exposed soils.
4. Erosion and sediment control measures (e.g., silt fences, straw bales, matting) should be implemented.
5. Maintain riparian habitat within 100 to 150 feet of perennial and intermittent stream banks (areas with 0 to 15 percent slope = 100 feet; 16 to 35 percent slope = 125 feet, greater than 35 percent = 150 feet), including backwater sloughs, springs, and seeps. Maintain riparian habitat within 30 feet of ephemeral drainages.

Activity: Road construction

1. In areas with higher levels of traffic expected or on roads crossing slopes, proper crown and cross-slope should be part of the design.
2. If culverts are placed as part of the road construction, installation considerations include inlet elevation, outlet elevation, grade, adequate compacted cover, and inlet/outlet protection.
3. Roads on a slope should use drainage control measures such as grade breaks or other appropriate water dissipation measures to prevent loss of road material by erosion of the road surfaces and prevent sediment from entering waterbodies.

Please note that these avoidance and minimization measures for road construction adhere to applicable best management practices described in the Arkansas Unpaved Roads Program administered by the Arkansas Department of Rural Service.

Return to the main decision key to complete effects determinations and consultation.

Bat Decision Key

- 1) Project is within consultation area for Gray and/or Ozark Big-eared Bat
 - a) Yes.....go to 2
 - b) No..... go to 4

- 2) Activity is of a type that may affect the roosting environment of a known or discovered cave- or karst feature (e.g., prescribed fire where smoke may enter hibernacula, filling of karst feature with material, change in structure or opening of cave) and/or affect water quality to decrease the insect prey base in the waterbody (e.g., expected permanent increase in sediment or nutrient input, vegetation removal with no revegetation efforts).
 - a) Yes..... go to 3
 - b) No..... NE for Gray and OBEB, go to 4

- 3) Project proponents can incorporate conservation measures for avoidance and minimization measures for Gray and OBEB
 - a) Yes..... NLAA¹ for Gray and OBEB, go to 4
 - b) No.....contact ARFO, go to 4

- 4) Project is within consultation area for Indiana bat and/or NLEB
AND project involves removal of trees >3" diameter breast height (dbh) occurring within suitable habitat ³ (e.g., forestry management practices, timber stand improvement, wildlife stand improvement, prescribed fire, midstory removal, or thinning) or activities that may affect hibernacula (as described in statement 2)
 - a) Yes.....go to 5
 - b) No.....NE for Indiana and NLEB; return to main decision key

- 5) Tree removal associated with the project will take place during the summer active season (March 16-November 14)
 - a) Yes.....contact ARFO² for Indiana Bat, then go to 6
 - b) No.....NLAA¹ for Indiana and NLEB

- 6) For NLEB Only: Project involves forest management, maintenance and expansion of existing rights-of-way (ROW) and transmission corridors, or prairie management
 - a) Yes..... then go to 7
 - b) No..... contact ARFO²

- 7) The proposed project will adhere to **ALL** of the following conservation measures:
 - I. Project occurs more than 0.25 mile from a known, occupied hibernacula;
 - II. Project avoids cutting or destroying known, occupied roost trees during the pup season (June 1 - July 31); **and**
 - III. Project avoids clear-cuts (and similar harvest methods, e.g., seed tree, shelterwood, and coppice) within 150 feet of known, occupied roost trees during the pup season (June 1 - July 31).
 - a) Yes..... This project complies with the final 4(d) rule with incidental take covered by PBO⁴
 - b) No.....contact ARFO²

Return to the main decision key to complete effects determinations and consultation.

¹The proposed project may affect, but is not likely to adversely affect Indiana, Gray, Ozark Big-eared, and Northern Long-eared bat. No further consultation with the Arkansas Ecological Services Field Office would be necessary for the project as described.

²The proposed project may affect listed bats, however, it cannot be determined at this time whether those impacts would result in a “likely” or “not likely to adversely affect” situation. Further consultation with the Arkansas Ecological Services Office is, therefore, necessary.

³ Suitable habitat for Indiana and/or Northern Long-eared bats consists of the variety of forested/wooded habitats where they roost, forage, and travel. This includes forested blocks as well as linear features such as fencerows, riparian forests, and other wooded corridors. These wooded areas may be dense or loose aggregates of trees with variable amounts of canopy closure. Isolated trees are considered suitable habitat for Indiana and/or Northern Long-eared bats when they exhibit the characteristics of a suitable roost tree and are located within 1,000 feet of other suitable habitat. Suitable roost tree refers to a tree (live or dead) that exhibits any of the following characteristics: exfoliating bark, crevices or cracks. Indiana and/or northern long-eared bats typically roost under exfoliating bark, in cavities of dead, dying, and live trees, and in snags (i.e., dead trees or dead portions of live trees). For Indiana bats, suitable roost trees will have a diameter at breast height of 5 inches or greater; for Northern Long-eared bats, the minimum diameter at breast height is 3 inches and includes trees with cavities in addition to the above-mentioned characteristics attributable to Indiana bat roosts.

⁴ The U.S. Fish and Wildlife Service’s January 5, 2016, intra-Service Programmatic Biological Opinion (PBO) on the final 4(d) rule for the NLEB addresses “Activities Excepted from Take Prohibitions”

**SPECIES PROTECTIVE MEASURES
to be incorporated in the proposed project**

Ozark Big-eared Bats

Ozark Big-eared bats (OBEB) are known to roost in caves, sandstone cracks, and talus in the karst region of Arkansas. The following avoidance and minimization measures should be implemented to protect the cave and microclimate (temperature, humidity, and air flow) to decrease the adverse effects of the project to OBEB.

- The true extent of the underground environment is difficult to clearly delineate and undiscovered karst features such as cave openings, sinkholes, and underground passages may occur on or near a project site, even in previously developed areas. The project area should be surveyed for these features prior to construction and coordination with the Service should occur if any potential roost sites are noted.
- Smoke from prescribed fire should not enter hibernacula
- Cave entrance and structure should not be obstructed or modified
- If caves or other openings are known encountered during construction, the Service requests that work efforts cease within 300 feet of the opening. The opening should be adequately marked and protected from work activities, and the Service should be contacted immediately. No fill materials should be placed into the opening until Service or Service approved personnel have the opportunity to inventory the site. Establish a natural area of 300 feet or greater around any cave, sinkhole, losing stream, or spring in the project area.
- No blasting should be permitted in the vicinity of any known karst feature.

- If a cave or fracture is breached or surface water is rerouted into a karst feature, all activities should cease and the Service should be contacted to assess the situation and provide further consultation before proceeding.
- Staging areas should be at least 300 feet away from karst features.

Gray Bats

Gray bats roost in caves in large numbers and forage along streams and in riparian areas. Special conditions for Ozark Big-eared Bats should be applied to this species *in addition* to the following measures.

- Construction and tree clearing in riparian areas should be conducted during the day at least 30 minutes to 1 hour after sunrise to 30 minutes to 1 hour before sunset. When possible, riparian zone work should be conducted outside of the summer foraging season for Gray Bat.
- To minimize the temporary effect of sediment and erosion on the waterbodies in which the gray bat forages, the Service recommends BMPs for all construction projects within these landscapes. BMPs should include filter fences, straw bales, interceptor dikes and swales, sediment traps, ditch checks, detention basins, mulching, seeding, and/or revegetation as appropriate. Mats or netting should be applied on steep slopes and stream banks. Erosion and sediment control measures should be sized to handle at least the 25 year flood and 24-hour storm event. Erosion and sediment control BMPs should be implemented to prevent sediment and contaminants from entering groundwater.

Indiana Bats and Northern Long-eared Bats

Indiana and NLEB bats are present on the landscape as individuals, male groups, and maternity roosts from spring staging to fall swarming near hibernacula. Tree removal should not take place from March 15 to Nov 14 to avoid adverse effects to bats on the landscape. Large diameter snags should be maintained whenever possible to provide roosting habitat.

Return to the main decision key to complete effects determinations and consultation.

Plant Decision Key

- 1) Project would occur within counties and habitat (shale, limestone, or dolomite glade) for Missouri Bladderpod
 - c) Yes.....go to 2
 - d) No.....No effect¹

- 2) Project would occur within counties and habitat (slicks or barrens) for Geocarpon
 - e) Yes.....go to 3
 - f) No.....No effect¹

- 3) Project would occur within counties and habitat (bottomland hardwood) for Pondberry
 - g) Yes.....go to 4
 - h) No.....No effect¹

- 4) Project site has been surveyed for listed plants and listed plants are present
 - a) Yes, listed plants are present.....MA,LAA²
 - b) No listed plants present No effect¹

Return to the main decision key to complete effects determinations and consultation.

¹The proposed project will result in no effect to Geocarpon, Missouri Bladderpod, and Pondberry. Further consultation with the Arkansas Ecological Services Office would not be necessary for the project as described.

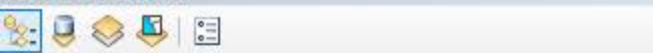
²The project will likely result in take of listed plant species. Incidental take of listed plant species on private property is not prohibited by the ESA.

Quick Start Guide

- Go to the USFWS Information for Planning and Consultation site - IPaC (<https://ecos.fws.gov/ipac/>)
- Follow the Request Species List option in IPaC to obtain the list (SLI) of threatened and endangered species for the project
- Go to the Programmatic Decision Key
 - Answer the first 9 questions and follow to species-specific questions as directed
 - Ensure Species Protective Measures are included in the project, as applicable
 - For each species on the SLI, you should reach an NLAA determination or “Contact ARFO”
- Note “no effect” or “may affect, not likely to adversely affect” determination for each species
- If “Contact ARFO” is reached, email the project description, map, and latitude/longitude (not STR) to Melissa_lombardi@fws.gov and arkansas_es_clearance@fws.gov
- If more information or project site photos are needed for concurrence, they will be requested by FWS



Table Of Contents



- ☒ Buffered stream reaches
- ☐ Birds
- ☒ Red-cockaded woodpecker counties
- ☐ Plants
- ☐ Geocarpon counties
- ☒ Missouri bladderpod counties
- ☐ Pondberry counties
- ☒ Cave obligate
- ☒ Karst Recharge Area
- ☐ Critical Habitat
 - ☒ Neosho mucket CH
 - ☒ Rabbitsfoot CH
 - ☒ Yellowcheek darter CH
 - ☒ Leopard darter CH
- ☒ COUNTIES
- ☒ ImageServices\IMAGERY_1FT_2017
 - RGB
 - Red: Band_1
 - Green: Band_2
 - Blue: Band_3
- ☐ NAIP\USDA_CONUS_PRIME
 - RGB
 - Red: Band_1
 - Green: Band_2
 - Blue: Band_3

Measure

Line measurement (Planar)
Segment: 3.665413 Miles
Length: 3.665413 Miles



Buffered Stream Reaches
Reach Code:
11010001001449

Carroll

Madison

D-2

Kaufman, Adam - FSA, Monticello, AR

From: Lombardi, Melissa <melissa_lombardi@fws.gov>
Sent: Wednesday, November 6, 2019 11:12 AM
To: Kaufman, Adam - FSA, Monticello, AR
Subject: Re: [EXTERNAL] [REDACTED]

Adam,
Thanks for double checking. IPaC can be odd sometimes, especially when we've uploaded new shapefiles recently or they've done a system update.
The Service has reviewed the proposed project and has no concerns related to listed species.
Regards,
Melissa

Melissa Lombardi, DVM, MS
TDY: Section 6 Regional Coordinator
Atlanta, GA
Duty Station: Arkansas Ecological Services Field Office
Conway, AR 72032
C:501-733-2056

NOTE: This email correspondence and any attachments to and from this sender is subject to the Freedom of Information Act (FOIA) and may be disclosed to third parties.

On Wed, Nov 6, 2019 at 11:12 AM Kaufman, Adam - FSA, Monticello, AR <adam.kaufman@usda.gov> wrote:

Good morning Melissa,

Consultation Code: 04ER1000-2020-SLI-0164

Event Code: 04ER1000-2020-E-00354

Project Name: [REDACTED]

This one has no aquatic species listed on our IPaC list, however the proposed site would be in close proximity to one of our stream reaches which appears to be an unnamed tributary (Reach Code: 11010001001449) to Dry Fork to the north (Reach Code: 11010001000450). Based on the plans that were submitted, the western ends of these proposed turkey houses would lie ~500' to the east of this stream reach.

This proposal would involve more than 10 acres of ground disturbance, therefore ADEQ requires a sediment basin. The sediment basin would lie approximately 350' east of this stream reach. I believe the original SWPPP had all the stormwater flow directed to an existing pond on this property that is fed by the unnamed tributary, although ADEQ

had them implement a new basin to the previously described location on the east side of the stream. No other ground disturbing activities would be necessary on the west side of the new basin. The applicant has submitted their SWPPP to ADEQ, and have been permitted for this proposal.

I just want to make sure our IPaC list is accurate as far as the aquatic species are concerned and that the proximity of the stream reach to the west of this proposal is not going to be an issue. Let me know what you think when you get the chance.

Thanks,

Adam Kaufman

USDA, Farm Service Agency

Farm Loan Specialist

State Environmental Coordinator

419 West Gaines Suite 2

Monticello, Arkansas 71655

870-224-7330

This electronic message contains information generated by the USDA solely for the intended recipients. Any unauthorized interception of this message or the use or disclosure of the information it contains may violate the law and subject the violator to civil or criminal penalties. If you believe you have received this message in error, please notify the sender and delete the email immediately.



Tribal Directory Assessment Information



Contact Information for Tribes with Interests in Madison County, Arkansas

Tribal Name					County Name		
— Apache Tribe of Oklahoma					Madison		
Contact Name	Title	Mailing Address	Work Phone	Fax Number	Cell Phone	Email Address	URL
Lyman Guy	Chairman	PO Box 1330 Anadarko, OK 73005	(405) 247-9493	(405) 247-2763		lguy93@hotmail.com	http://www.apachetribe.org/
— Caddo Nation of Oklahoma					Madison		
Contact Name	Title	Mailing Address	Work Phone	Fax Number	Cell Phone	Email Address	URL
Tamara Francis Fourkiller	Chairperson	PO Box 487 Binger, OK 73009	(405) 656-2344	(405) 656-2892		tffourkiller.cn@gmail.com	
Phil Cross	THPO	PO Box 487 Binger, OK 73009	(405) 656-2344	(405) 656-2892		pcross@caddoanation.org	
— Osage Nation					Madison		
Contact Name	Title	Mailing Address	Work Phone	Fax Number	Cell Phone	Email Address	URL
Geoffrey Standing Bear	Principal Chief	PO Box 779 Pawhuska, OK 74056	(918) 287-5555	(918) 287-5562		sdecker@osagenation-nsn.gov	https://www.osagenation-nsn.gov/
Dr. Andrea Hunter	THPO	627 Grandview Avenue Pawhuska, OK 74056	(918) 287-5328	(918) 287-5376		ahunter@osagenation-nsn.gov	https://www.osagenation-nsn.gov/
— Quapaw Tribe of Indians					Madison		

Contact Name	Title	Mailing Address	Work Phone	Fax Number	Cell Phone	Email Address	URL
Everett Bandy	THPO	PO Box 765 Quapaw, OK 74363- 0765	(888)642- 4724	(918) 542- 4694		ebandy@qu apawtribe.co m.com	http://www.q uapawtribe.c om
John Berrey	Chairperson	PO Box 765 Quapaw, OK 74363	(918) 542- 1853	(918) 542- 4694		jberrey@og ahpah.com	http://www.q uapawtribe.c om

1 - 4 of 4 results

« < 1 > » 10 ▾

Madison County

Tribes that have expressed an interest in the area include the Cherokee Nation (Ms. Elizabeth Toombs), the Osage Nation (Dr. Andrea Hunter), and the Shawnee Tribe of Oklahoma (Ms. Tonya Tipton). We recommend that they be consulted in accordance with 36 CFR § 800.2 (c) (2).

CC

Ms. Elizabeth Toombs, Cherokee Nation

Dr. Andrea Hunter, Osage Nation

Ms. Tonya Tipton, Shawnee Tribe of Oklahoma



Farm and Foreign
Agricultural
Services

Farm
Service
Agency

479 N Parrott Drive
Room 2
Huntsville, AR 72740
479 738-2196

September 27, 2019

Apache Tribe of Oklahoma
Chairman Bob Komardley
P.O. Box 1330
Anadarko, OK 73005

RE: [REDACTED]
Section 106 Consultation

Farm Service Agency is in the process of conducting an environmental review for a proposal that would establish a turkey facility in northeast Madison County, Arkansas. The proposed turkey facility would be constructed on a gently sloping site located on the west side of Carroll County 548 approximately 8.5 miles northeast of Huntsville, Arkansas in Section 36, Township 18 N, Range 25 West (36.195611.-93.576347) at CR 548, Berryville, AR 72716. The proposal includes the construction of (4) 66' x 700' turkey houses, compost-stacking shed, water and generator shop, 4-5000 gallons water storage tanks, the turkey house pads, turn around areas, service roads from gravel road CR 548 to and around the proposed facility, and utility services (well water and electric) on a 10.6 acres site. Water for the facility would be from a well located southwest of the proposed site. Electrical service for the proposed facility would be underground from a utility pole northeast of the proposed turkey houses.

Enclosed is a topo map, aerial maps, location maps, and photos of the proposed turkey facility. The proposal would take place on ground that has historically been utilized for pasture. The applicants are proposing to construct the breeder hen facility on the 409 acres to be purchased, where the current owners/operators have a beef cattle operation. The owner is unaware of any cultural resources on their farm. The entire field where the proposal would take place is cleared land with a permanent ground cover of fescue and mixed grasses, used for grazing.

FSA has conducted a site visit on September 11, 2019. Photographs from the site visit have been attached. The nearest structures listed on the National Register of Historic Places, the War Eagle Bridge, is located 7.43 miles southwest, the White Oak Church is located 2.36 miles northwest, and the Dean School is located 3.03 miles east of the proposal. FSA anticipates the proposal would have no affect on these historic structures.

To the best of our knowledge there is no indication of the presence, or the probability of a cultural resource/historic property at the site. As such, FSA makes a finding of no cultural/historical resources affected by this project. Please advise of any historical resources of religious or cultural significance that will be impacted by this project within 30 days of delivery of this letter based on standard United States Post Office delivery schedules not to exceed 5 days from the related post mark. If we do not hear from you within the specified period, it will be assumed that you are in agreement and concur with the FSA finding, and have no further interest in this matter. Please feel free to contact me at Charlene.holt@ar.usda.gov or 479 738-2196 should you have any questions or need further information. Correspondence may be sent to me at the address above. Your assistance in this matter is appreciated. If you have any questions, please contact this office.

Sincerely,

Charlene Holt
USDA, Farm Service Agency, Farm Loan Officer



Farm and Foreign
Agricultural
Services

Farm
Service
Agency

479 N Parrott Drive
Room 2
Huntsville, AR 72740
479 738-2196

September 27, 2019

Caddo Nation of Oklahoma
Derek Hill, Section 106 Specialist
P.O. Box 487
Binger, OK 73009

RE: [REDACTED]
Section 106 Consultation

Farm Service Agency is in the process of conducting an environmental review for a proposal that would establish a turkey facility in northeast Madison County, Arkansas. The proposed turkey facility would be constructed on a gently sloping site located on the west side of Carroll County 548 approximately 8.5 miles northeast of Huntsville, Arkansas in Section 36, Township 18 N, Range 25 West (36.195611.-93.576347) at CR 548, Berryville, AR 72716. The proposal includes the construction of (4) 66' x 700' turkey houses, compost-stacking shed, water and generator shop, 4-5000 gallons water storage tanks, the turkey house pads, turn around areas, service roads from gravel road CR 548 to and around the proposed facility, and utility services (well water and electric) on a 10.6 acres site. Water for the facility would be from a well located southwest of the proposed site. Electrical service for the proposed facility would be underground from a utility pole northeast of the proposed turkey houses.

Enclosed is a topo map, aerial maps, location maps, and photos of the proposed turkey facility. The proposal would take place on ground that has historically been utilized for pasture. The applicants are proposing to construct the breeder hen facility on the 409 acres to be purchased, where the current owners/operators have a beef cattle operation. The owner is unaware of any cultural resources on their farm. The entire field where the proposal would take place is cleared land with a permanent ground cover of fescue and mixed grasses, used for grazing.

FSA has conducted a site visit on September 11, 2019. Photographs from the site visit have been attached. The nearest structures listed on the National Register of Historic Places, the War Eagle Bridge, is located 7.43 miles southwest, the White Oak Church is located 2.36 miles northwest, and the Dean School is located 3.03 miles east of the proposal. FSA anticipates the proposal would have no affect on these historic structures.

To the best of our knowledge there is no indication of the presence, or the probability of a cultural resource/historic property at the site. As such, FSA makes a finding of no cultural/historical resources affected by this project. Please advise of any historical resources of religious or cultural significance that will be impacted by this project within 30 days of delivery of this letter based on standard United States Post Office delivery schedules not to exceed 5 days from the related post mark. If we do not hear from you within the specified period, it will be assumed that you are in agreement and concur with the FSA finding, and have no further interest in this matter. Please feel free to contact me at Charlene.holt@ar.usda.gov or 479 738-2196 should you have any questions or need further information. Correspondence may be sent to me at the address above. Your assistance in this matter is appreciated. If you have any questions, please contact this office.

Sincerely,

Charlene Holt
USDA, Farm Service Agency, Farm Loan Officer



USDA is an equal opportunity, provider, and employer.



Farm and Foreign
Agricultural
Services

Farm
Service
Agency

479 N Parrott Drive
Room 2
Huntsville, AR 72740
479 738-2196

September 27, 2019

Cherokee Nation
Ms. Elizabeth Toombs, Tribal Historic Preservation Officer
Tribal Historic Preservation Office
P.O. Box 948
Tahlequah, OK 74465

RE [REDACTED]
Section 106 Consultation

Farm Service Agency is in the process of conducting an environmental review for a proposal that would establish a turkey facility in northeast Madison County, Arkansas. The proposed turkey facility would be constructed on a gently sloping site located on the west side of Carroll County 548 approximately 8.5 miles northeast of Huntsville, Arkansas in Section 36, Township 18 N, Range 25 West (36.195611.-93.576347) at CR 548, Berryville, AR 72716. The proposal includes the construction of (4) 66' x 700' turkey houses, compost-stacking shed, water and generator shop, 4-5000 gallons water storage tanks, the turkey house pads, turn around areas, service roads from gravel road CR 548 to and around the proposed facility, and utility services (well water and electric) on a 10.6 acres site. Water for the facility would be from a well located southwest of the proposed site. Electrical service for the proposed facility would be underground from a utility pole northeast of the proposed turkey houses.

Enclosed is a topo map, aerial maps, location maps, and photos of the proposed turkey facility. The proposal would take place on ground that has historically been utilized for pasture. The applicants are proposing to construct the breeder hen facility on the 409 acres to be purchased, where the current owners/operators have a beef cattle operation. The owner is unaware of any cultural resources on their farm. The entire field where the proposal would take place is cleared land with a permanent ground cover of fescue and mixed grasses, used for grazing.

FSA has conducted a site visit on September 11, 2019. Photographs from the site visit have been attached. The nearest structures listed on the National Register of Historic Places, the War Eagle Bridge, is located 7.43 miles southwest, the White Oak Church is located 2.36 miles northwest, and the Dean School is located 3.03 miles east of the proposal. FSA anticipates the proposal would have no affect on these historic structures.

To the best of our knowledge there is no indication of the presence, or the probability of a cultural resource/historic property at the site. As such, FSA makes a finding of no cultural/historical resources affected by this project. Please advise of any historical resources of religious or cultural significance that will be impacted by this project within 30 days of delivery of this letter based on standard United States Post Office delivery schedules not to exceed 5 days from the related post mark. If we do not hear from you within the specified period, it will be assumed that you are in agreement and concur with the FSA finding, and have no further interest in this matter. Please feel free to contact me at Charlene.holt@ar.usda.gov or 479 738-2196 should you have any questions or need further information. Correspondence may be sent to me at the address above. Your assistance in this matter is appreciated. If you have any questions, please contact this office.

Sincerely,

Charlene Holt
USDA, Farm Service Agency, Farm Loan Officer



USDA is an equal opportunity, provider, and employer.



Farm and Foreign
Agricultural
Services

Farm
Service
Agency

479 N Parrott Drive
Room 2
Huntsville, AR 72740
479 738-2196

September 27, 2019

Quapaw Tribe of Oklahoma
Everett Bandy
P.O. Box 765
Quapaw, OK 74363

RE: [REDACTED]
Section 106 Consultation

Farm Service Agency is in the process of conducting an environmental review for a proposal that would establish a turkey facility in northeast Madison County, Arkansas. The proposed breeder hen facility would be constructed on a gently sloping site located on the west side of Carroll County 548 approximately 8.5 miles northeast of Huntsville, Arkansas in Section 36, Township 18 N, Range 25 West (36.195611.-93.576347) at CR 548, Berryville, AR 72716. The proposal includes the construction of (4) 66' x 700' turkey houses, compost-stacking shed, water and generator shop, 4-5000 gallons water storage tanks, the turkey house pads, turn around areas, service roads from gravel road CR 548 to and around the proposed facility, and utility services (well water and electric) on a 10.6 acres site. Water for the facility would be from a well located southwest of the proposed site. Electrical service for the proposed facility would be underground from a utility pole northeast of the proposed turkey houses.

Enclosed is a topo map, aerial maps, location maps, and photos of the proposed turkey facility. The proposal would take place on ground that has historically been utilized for pasture. The applicants are proposing to construct the breeder hen facility on the 409 acres to be purchased, where the current owners/operators have a beef cattle operation. The owner is unaware of any cultural resources on their farm. The entire field where the proposal would take place is cleared land with a permanent ground cover of fescue and mixed grasses, used for grazing.

FSA has conducted a site visit on September 11, 2019. Photographs from the site visit have been attached. The nearest structures listed on the National Register of Historic Places, the War Eagle Bridge, is located 7.43 miles southwest, the White Oak Church is located 2.36 miles northwest, and the Dean School is located 3.03 miles east of the proposal. FSA anticipates the proposal would have no affect on these historic structures.

To the best of our knowledge there is no indication of the presence, or the probability of a cultural resource/historic property at the site. As such, FSA makes a finding of no cultural/historical resources affected by this project. Please advise of any historical resources of religious or cultural significance that will be impacted by this project within 30 days of delivery of this letter based on standard United States Post Office delivery schedules not to exceed 5 days from the related post mark. If we do not hear from you within the specified period, it will be assumed that you are in agreement and concur with the FSA finding, and have no further interest in this matter. Please feel free to contact me at Charlene.holt@ar.usda.gov or 479 738-2196 should you have any questions or need further information. Correspondence may be sent to me at the address above. Your assistance in this matter is appreciated. If you have any questions, please contact this office.

Sincerely,

Charlene Holt
USDA, Farm Service Agency, Farm Loan Officer



USDA is an equal opportunity, provider, and employer.



Farm and Foreign
Agricultural
Services

Farm
Service
Agency

479 N Parrott Drive
Room 2
Huntsville, AR 72740
479 738-2196

September 27, 2019

Osage Nation
Dr. Andrea Hunter
627 Grandview Avenue
Pawhuska, OK 74056

RE: [REDACTED]
Section 106 Consultation

Farm Service Agency is in the process of conducting an environmental review for a proposal that would establish a turkey facility in northeast Madison County, Arkansas. The proposed breeder hen facility would be constructed on a gently sloping site located on the west side of Carroll County 548 approximately 8.5 miles northeast of Huntsville, Arkansas in Section 36, Township 18 N, Range 25 West (36.195611.-93.576347) at CR 548, Berryville, AR 72716. The proposal includes the construction of (4) 66' x 700' turkey houses, compost-stacking shed, water and generator shop, 4-5000 gallons water storage tanks, the turkey house pads, turn around areas, service roads from gravel road CR 548 to and around the proposed facility, and utility services (well water and electric) on a 10.6 acres site. Water for the facility would be from a well located southwest of the proposed site. Electrical service for the proposed facility would be underground from a utility pole northeast of the proposed turkey houses.

Enclosed is a topo map, aerial maps, location maps, and photos of the proposed turkey facility. The proposal would take place on ground that has historically been utilized for pasture. The applicants are proposing to construct the breeder hen facility on the 409 acres to be purchased, where the current owners/operators have a beef cattle operation. The owner is unaware of any cultural resources on their farm. The entire field where the proposal would take place is cleared land with a permanent ground cover of fescue and mixed grasses, used for grazing.

FSA has conducted a site visit on September 11, 2019. Photographs from the site visit have been attached. The nearest structures listed on the National Register of Historic Places, the War Eagle Bridge, is located 7.43 miles southwest, the White Oak Church is located 2.36 miles northwest, and the Dean School is located 3.03 miles east of the proposal. FSA anticipates the proposal would have no affect on these historic structures.

To the best of our knowledge there is no indication of the presence, or the probability of a cultural resource/historic property at the site. As such, FSA makes a finding of no cultural/historical resources affected by this project. Please advise of any historical resources of religious or cultural significance that will be impacted by this project within 30 days of delivery of this letter based on standard United States Post Office delivery schedules not to exceed 5 days from the related post mark. If we do not hear from you within the specified period, it will be assumed that you are in agreement and concur with the FSA finding, and have no further interest in this matter. Please feel free to contact me at Charlene.holt@ar.usda.gov or 479 738-2196 should you have any questions or need further information. Correspondence may be sent to me at the address above. Your assistance in this matter is appreciated. If you have any questions, please contact this office.

Sincerely,

Charlene Holt
USDA, Farm Service Agency, Farm Loan Officer



USDA is an equal opportunity, provider, and employer.



Farm and Foreign
Agricultural
Services

Farm
Service
Agency

479 N Parrott Drive
Room 2
Huntsville, AR 72740
479 738-2196

September 27, 2019

Shawnee Tribe of Oklahoma
Tonya Tipton
29 South Highway 69A
Miami, OK 74355

RE: [REDACTED]
Section 106 Consultation

Farm Service Agency is in the process of conducting an environmental review for a proposal that would establish a turkey facility in northeast Madison County, Arkansas. The proposed turkey facility would be constructed on a gently sloping site located on the west side of Carroll County 548 approximately 8.5 miles northeast of Huntsville, Arkansas in Section 36, Township 18 N, Range 25 West (36.195611.-93.576347) at CR 548, Berryville, AR 72716. The proposal includes the construction of (4) 66' x 700' turkey houses, compost-stacking shed, water and generator shop, 4-5000 gallons water storage tanks, the turkey house pads, turn around areas, service roads from gravel road CR 548 to and around the proposed facility, and utility services (well water and electric) on a 10.6 acres site. Water for the facility would be from a well located southwest of the proposed site. Electrical service for the proposed facility would be underground from a utility pole northeast of the proposed turkey houses.

Enclosed is a topo map, aerial maps, location maps, and photos of the proposed turkey facility. The proposal would take place on ground that has historically been utilized for pasture. The applicants are proposing to construct the breeder hen facility on the 409 acres to be purchased, where the current owners/operators have a beef cattle operation. The owner is unaware of any cultural resources on their farm. The entire field where the proposal would take place is cleared land with a permanent ground cover of fescue and mixed grasses, used for grazing.

FSA has conducted a site visit on September 11, 2019. Photographs from the site visit have been attached. The nearest structures listed on the National Register of Historic Places, the War Eagle Bridge, is located 7.43 miles southwest, the White Oak Church is located 2.36 miles northwest, and the Dean School is located 3.03 miles east of the proposal. FSA anticipates the proposal would have no affect on these historic structures.

To the best of our knowledge there is no indication of the presence, or the probability of a cultural resource/historic property at the site. As such, FSA makes a finding of no cultural/historical resources affected by this project. Please advise of any historical resources of religious or cultural significance that will be impacted by this project within 30 days of delivery of this letter based on standard United States Post Office delivery schedules not to exceed 5 days from the related post mark. If we do not hear from you within the specified period, it will be assumed that you are in agreement and concur with the FSA finding, and have no further interest in this matter. Please feel free to contact me at Charlene.holt@ar.usda.gov or 479 738-2196 should you have any questions or need further information. Correspondence may be sent to me at the address above. Your assistance in this matter is appreciated. If you have any questions, please contact this office.

Sincerely,

Charlene Holt
USDA, Farm Service Agency, Farm Loan Officer



USDA is an equal opportunity, provider, and employer.



Farm and Foreign
Agricultural
Services

Farm
Service
Agency

479 N Parrott Drive
Room 2
Huntsville, AR 72740
479 738-2196

104770
FSA

September 27, 2019

AHPP

SEP 30 2019

State Historic Preservation Officer
Stacy Hurst
1100 North Street
Little Rock, AR 72201

RE: [REDACTED]
Section 106 Consultation

Date 10-30-19
No known historic properties will be
affected by this undertaking. This
effect determination could change
should new information come to light.
[Signature]
Arkansas State Historic Preservation Officer

Farm Service Agency is in the process of conducting an environmental review for a proposal that would establish a turkey facility in northeast Madison County, Arkansas. The proposed turkey facility would be constructed on a gently sloping site located on the west side of Carroll County 548 approximately 8.5 miles northeast of Huntsville, Arkansas in Section 36, Township 18 N, Range 25 West (36.195611.-93.576347) at CR 548, Berryville, AR 72716. The proposal includes the construction of (4) 66' x 700' turkey houses, compost-stacking shed, water and generator shop, 4-5000 gallons water storage tanks, the turkey house pads, turn around areas, service roads from gravel road CR 548 to and around the proposed facility, and utility services (well water and electric) on a 10.6 acres site. Water for the facility would be from a well located southwest of the proposed site. Electrical service for the proposed facility would be underground from a utility pole northeast of the proposed turkey houses.

Enclosed is a topo map, aerial maps, location maps, and photos of the proposed turkey facility. The proposal would take place on ground that has historically been utilized for pasture. The applicants are proposing to construct the breeder hen facility on the 409 acres to be purchased, where the current owners/operators have a beef cattle operation. The owner is unaware of any cultural resources on their farm. The entire field where the proposal would take place is cleared land with a permanent ground cover of fescue and mixed grasses, used for grazing.

FSA has conducted a site visit on September 11, 2019. Photographs from the site visit have been attached. The nearest structures listed on the National Register of Historic Places, the War Eagle Bridge, is located 7.43 miles southwest, the White Oak Church is located 2.36 miles northwest, and the Dean School is located 3.03 miles east of the proposal. FSA anticipates the proposal would have no affect on these historic structures.

To the best of our knowledge there is no indication of the presence, or the probability of a cultural resource/historic property at the site. As such, FSA makes a finding of no cultural/historical resources affected by this project. Please advise of any historical resources of religious or cultural significance that will be impacted by this project within 30 days of delivery of this letter based on standard United States Post Office delivery schedules not to exceed 5 days from the related post mark. If we do not hear from you within the specified period, it will be assumed that you are in agreement and concur with the FSA finding, and have no further interest in this matter. Please feel free to contact me at Charlene.holt@ar.usda.gov or 479 738-2196 should you have any questions or need further information. Correspondence may be sent to me at the address above. Your assistance in this matter is appreciated. If you have any questions, please contact this office.

Sincerely,

Charlene Holt
USDA, Farm Service Agency, Farm Loan Officer



USDA is an equal opportunity, provider, and employer.

Holt, Charlene - FSA, Huntsville, AR

From: Elizabeth Toombs <elizabeth-toombs@cherokee.org>
Sent: Monday, October 21, 2019 1:50 PM
To: Holt, Charlene - FSA, Huntsville, AR
Subject: [REDACTED]
Attachments: [REDACTED]

Good Afternoon, Ms. Holt:

Attached is Cherokee Nation's response to the proposed undertaking. Please let me know if there are any questions or concerns.

Wado,

Elizabeth Toombs, Tribal Historic Preservation Officer
Cherokee Nation
Tribal Historic Preservation Office
PO Box 948
Tahlequah, OK 74465-0948
918.453.5389



GWYB DBF
CHEROKEE NATION®
P.O. Box 948 • Tahlequah, OK 74465-0948
918-453-5000 • www.cherokee.org

Office of the Chief

Chuck Hoskin Jr.
Principal Chief

Bryan Warner
Deputy Principal Chief

October 21, 2019

Charlene Holt
United States Department of Agriculture
Farm Service Agency
79 North Parrott Drive, Room 2
Huntsville, AR 72740

Re: [REDACTED]

Ms. Charlene Holt:

The Cherokee Nation (Nation) is in receipt of your correspondence about [REDACTED] and appreciates the opportunity to provide comment upon this project. Please allow this letter to serve as the Nation's interest in acting as a consulting party to this proposed project.

The Nation maintains databases and records of cultural, historic, and pre-historic resources in this area. Our Historic Preservation Office reviewed this project, cross referenced the project's legal description against our information, and found no instances where this project intersects or adjoins such resources. Thus, the Nation does not foresee this project imparting impacts to Cherokee cultural resources at this time.

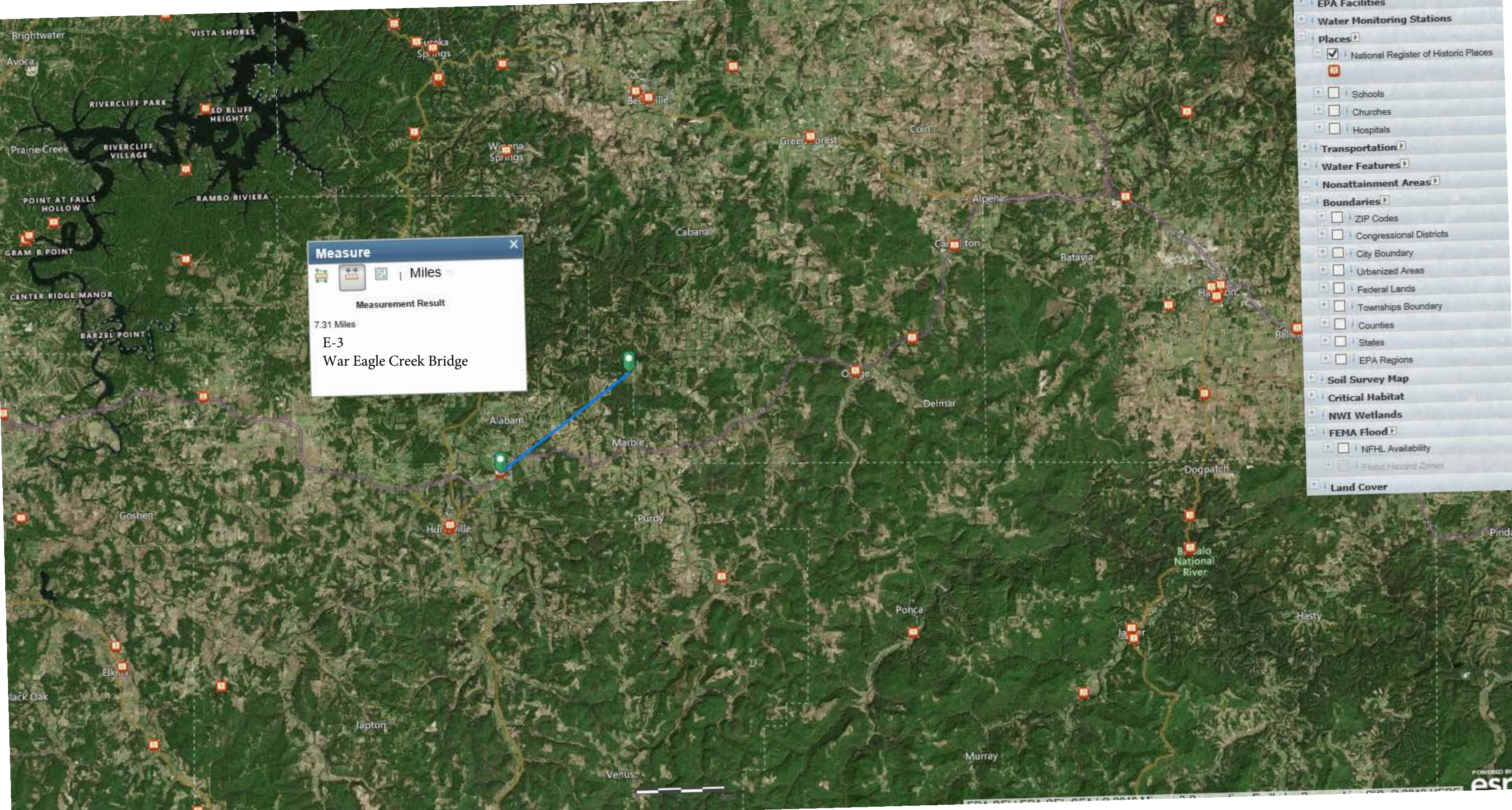
However, the Nation requests that the United States Department of Agriculture (USDA) halt all project activities immediately and re-contact our Offices for further consultation if items of cultural significance are discovered during the course of this project.

Additionally, the Nation requests that the USDA conduct appropriate inquiries with other pertinent Tribal and Historic Preservation Offices regarding historic and prehistoric resources not included in the Nation's databases or records.

If you require additional information or have any questions, please contact me at your convenience. Thank you for your time and attention to this matter.

Wado,

Elizabeth Toombs, Tribal Historic Preservation Officer
Cherokee Nation Tribal Historic Preservation Office
elizabeth-toombs@cherokee.org
918.453.5389



Measure

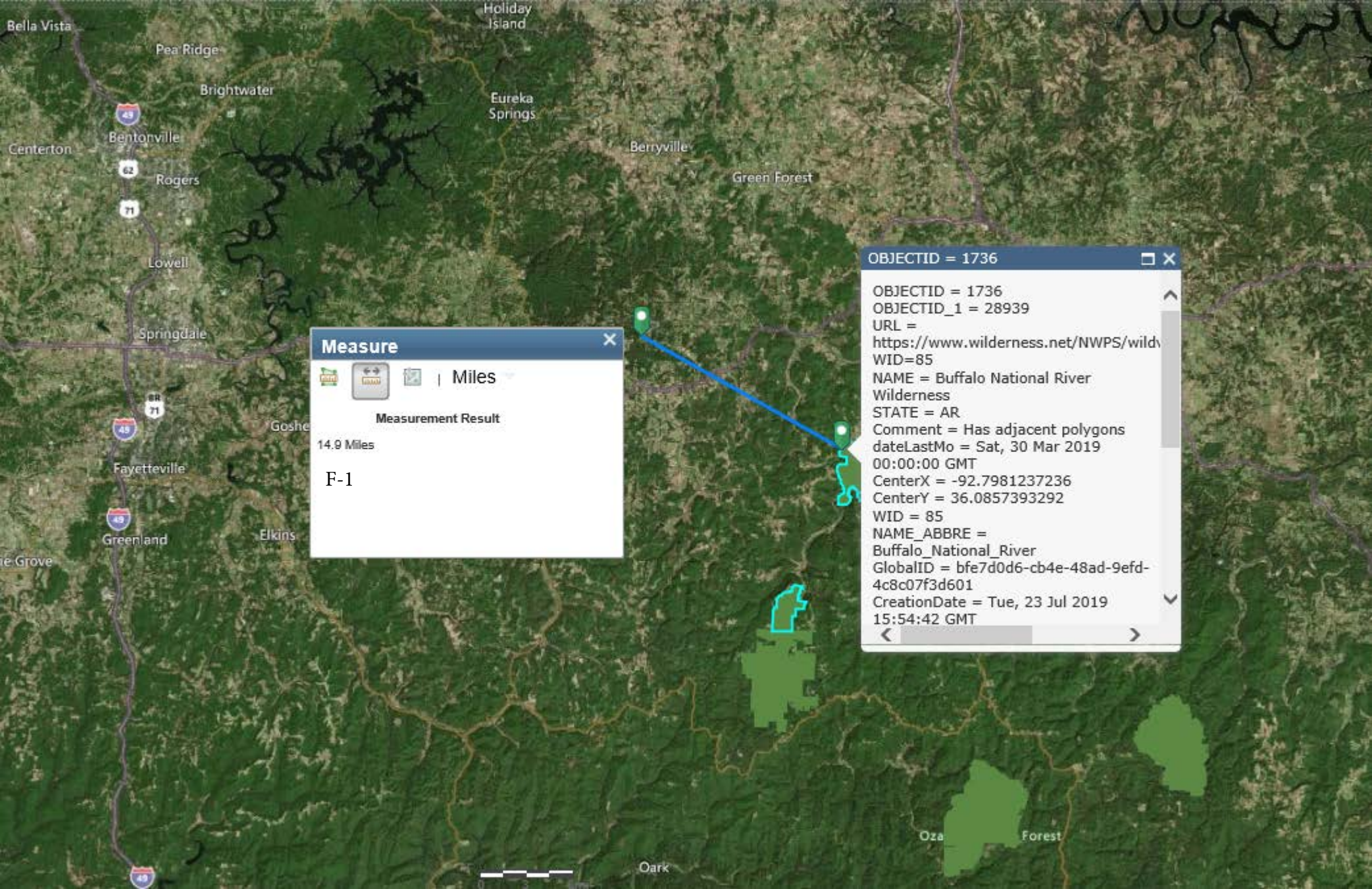
Miles

Measurement Result

7.31 Miles

E-3
War Eagle Creek Bridge

- EPA Facilities
- Water Monitoring Stations
- Places
 - ☒ National Register of Historic Places
 - ☐ Schools
 - ☐ Churches
 - ☐ Hospitals
- Transportation
- Water Features
- Nonattainment Areas
- Boundaries
 - ☐ ZIP Codes
 - ☐ Congressional Districts
 - ☐ City Boundary
 - ☐ Urbanized Areas
 - ☐ Federal Lands
 - ☐ Townships Boundary
 - ☐ Counties
 - ☐ States
 - ☐ EPA Regions
- Soil Survey Map
- Critical Habitat
- NWI Wetlands
- FEMA Flood
 - ☐ NFHL Availability
 - ☐ Flood Hazard Zones
- Land Cover



Measure

 | Miles

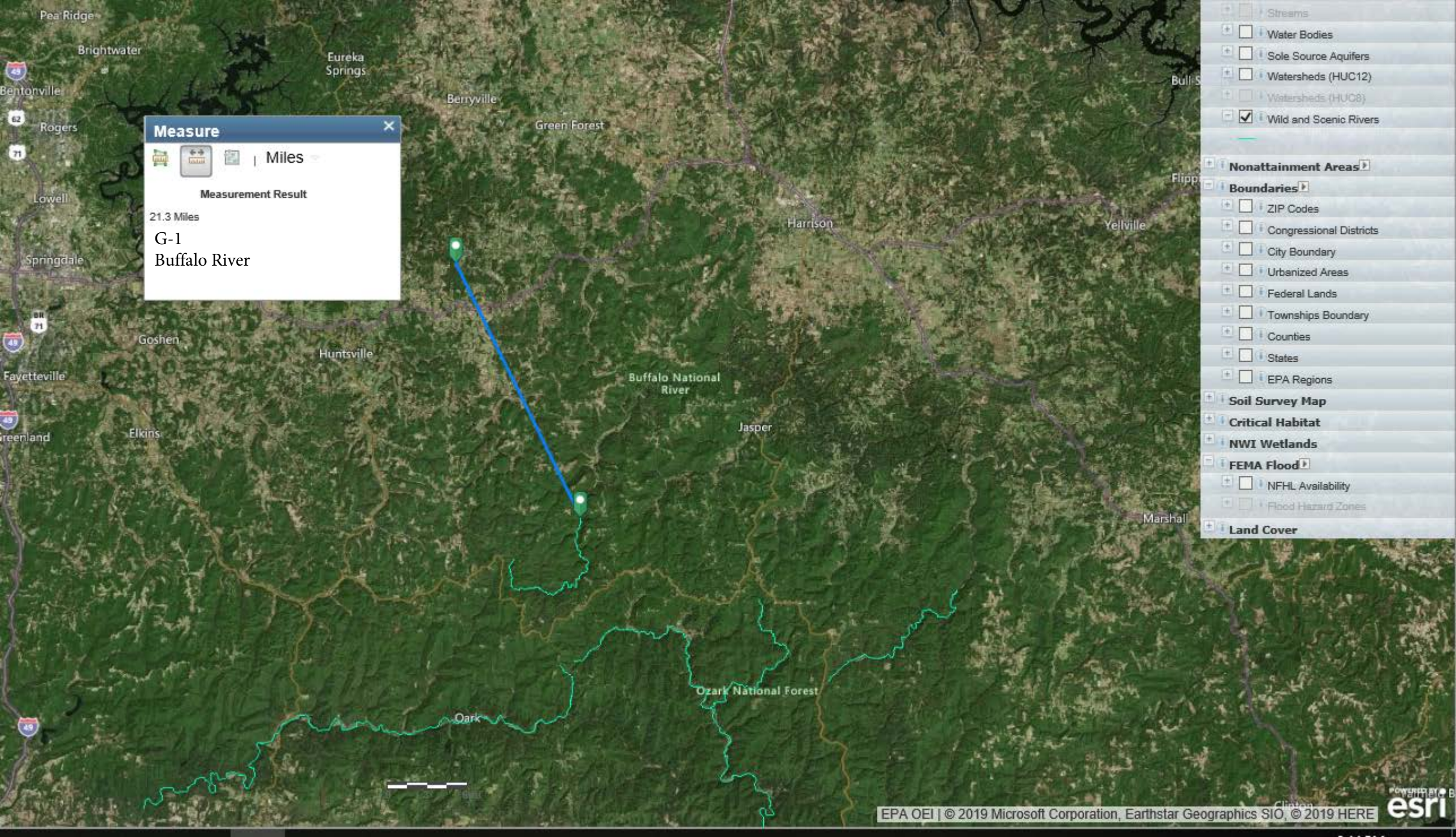
Measurement Result

14.9 Miles

F-1

OBJECTID = 1736

OBJECTID = 1736
OBJECTID_1 = 28939
URL =
<https://www.wilderness.net/NWPS/wilderness>
WID=85
NAME = Buffalo National River
Wilderness
STATE = AR
Comment = Has adjacent polygons
dateLastMo = Sat, 30 Mar 2019
00:00:00 GMT
CenterX = -92.7981237236
CenterY = 36.0857393292
WID = 85
NAME_ABBRE =
Buffalo_National_River
GlobalID = bfe7d0d6-cb4e-48ad-9efd-4c8c07f3d601
CreationDate = Tue, 23 Jul 2019
15:54:42 GMT



Measure

 Miles

Measurement Result

21.3 Miles

G-1
Buffalo River

- ☐ Streams
- ☐ Water Bodies
- ☐ Sole Source Aquifers
- ☐ Watersheds (HUC12)
- ☐ Watersheds (HUC8)
- ☒ Wild and Scenic Rivers
- Nonattainment Areas**
- Boundaries**
 - ☐ ZIP Codes
 - ☐ Congressional Districts
 - ☐ City Boundary
 - ☐ Urbanized Areas
 - ☐ Federal Lands
 - ☐ Townships Boundary
 - ☐ Counties
 - ☐ States
 - ☐ EPA Regions
- Soil Survey Map**
- Critical Habitat**
- NWI Wetlands**
- FEMA Flood**
 - ☐ NFHL Availability
 - ☐ Flood Hazard Zones
- Land Cover**



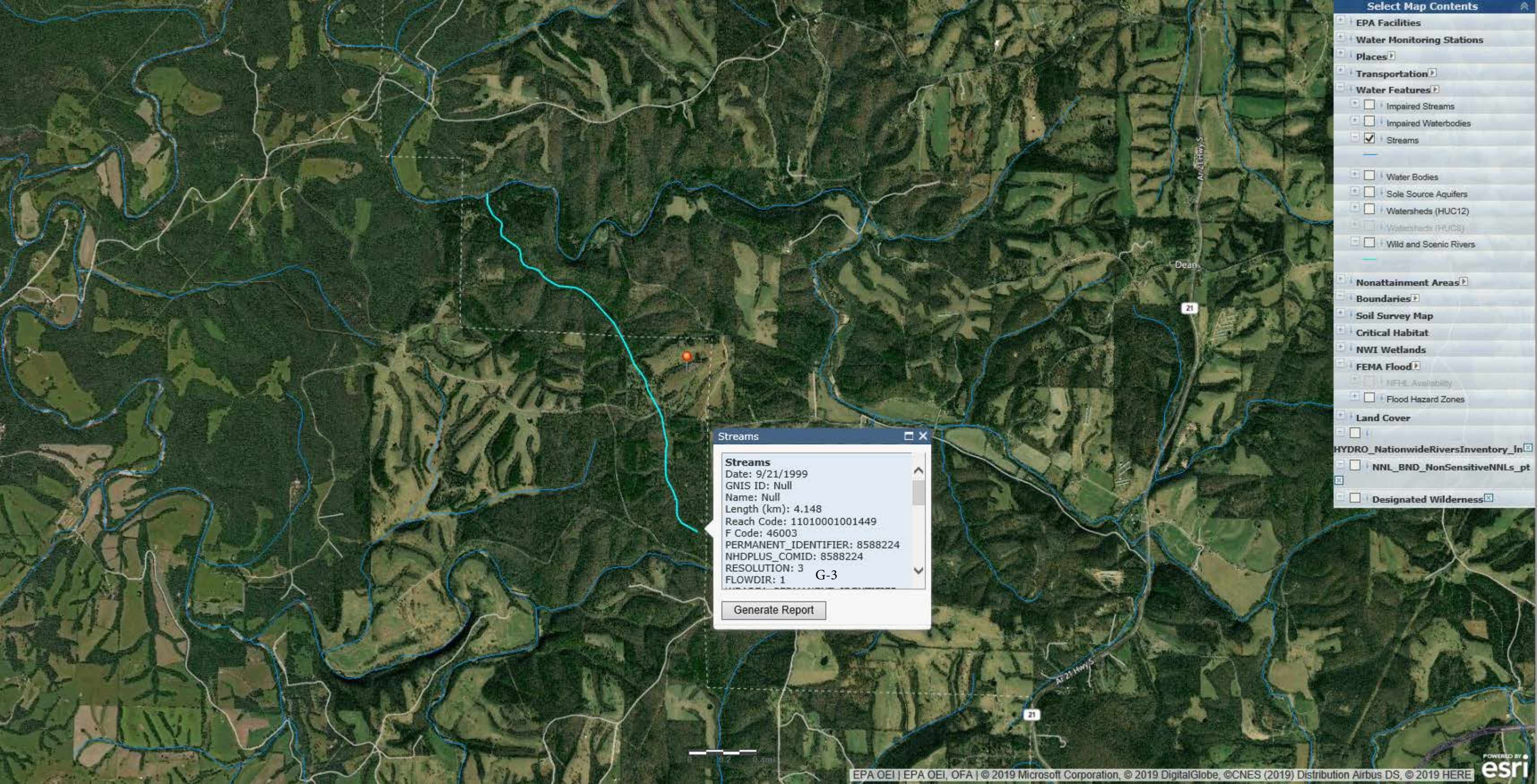
Measure [X]

[Icons] | Miles

Measurement Result

1.62 Miles

G-2 Kings River, Nationwide Rivers Inventory



Select Map Contents

- ☒ EPA Facilities
- ☒ Water Monitoring Stations
- ☒ Places
- ☒ Transportation
- ☒ Water Features
 - ☐ Impaired Streams
 - ☐ Impaired Waterbodies
 - ☒ Streams
 - ☐ Water Bodies
 - ☐ Sole Source Aquifers
 - ☐ Watersheds (HUC12)
 - ☐ Watersheds (HUC8)
 - ☐ Wild and Scenic Rivers
- ☒ Nonattainment Areas
- ☒ Boundaries
- ☒ Soil Survey Map
- ☒ Critical Habitat
- ☒ NWI Wetlands
- ☒ FEMA Flood
 - ☐ NFHL Availability
 - ☐ Flood Hazard Zones
- ☒ Land Cover
- ☒ HYDRO_NationwideRiversInventory_In
- ☒ NNL_BND_NonSensitiveNNLs_pt
- ☒ Designated Wilderness



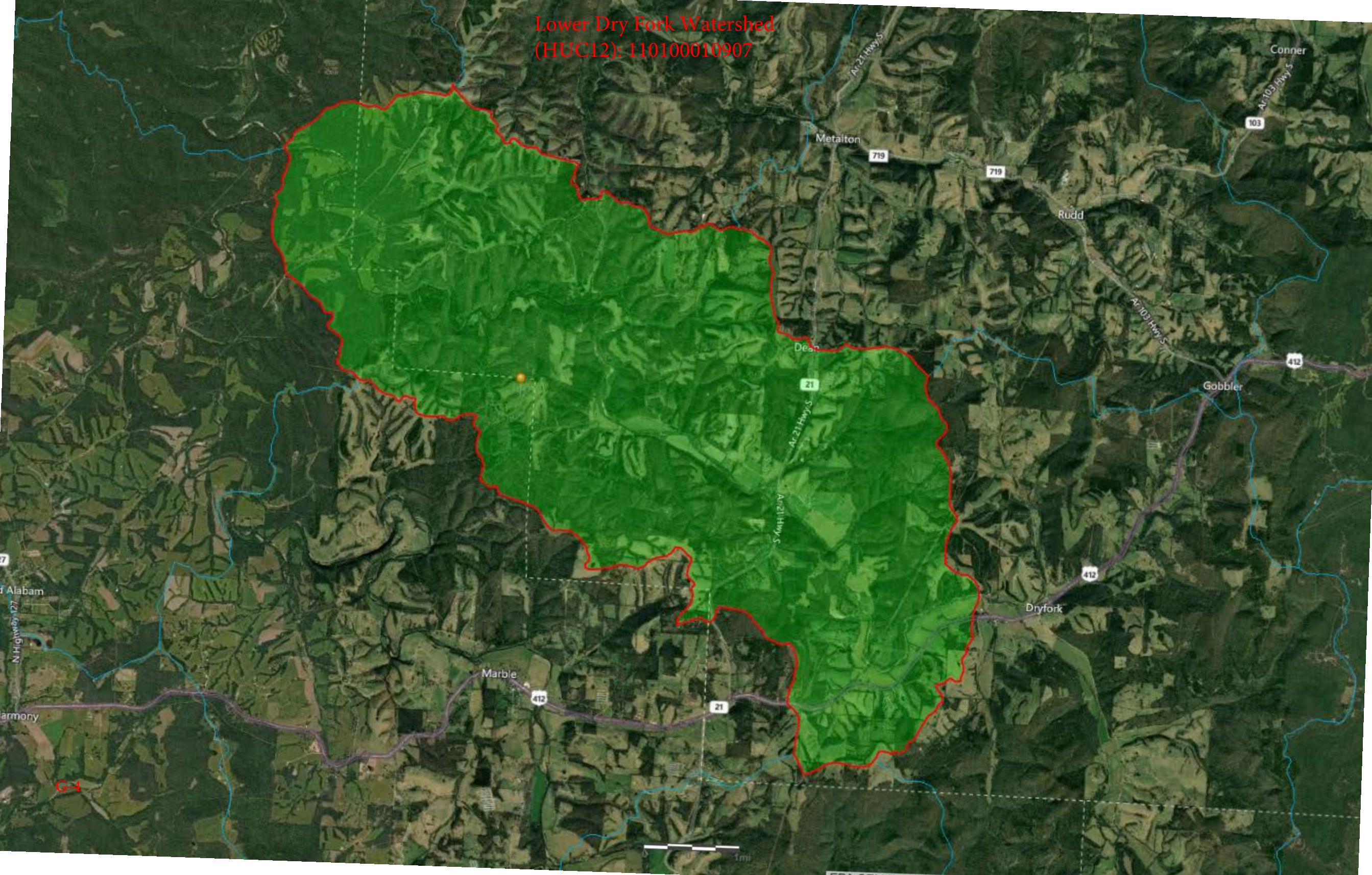
Streams

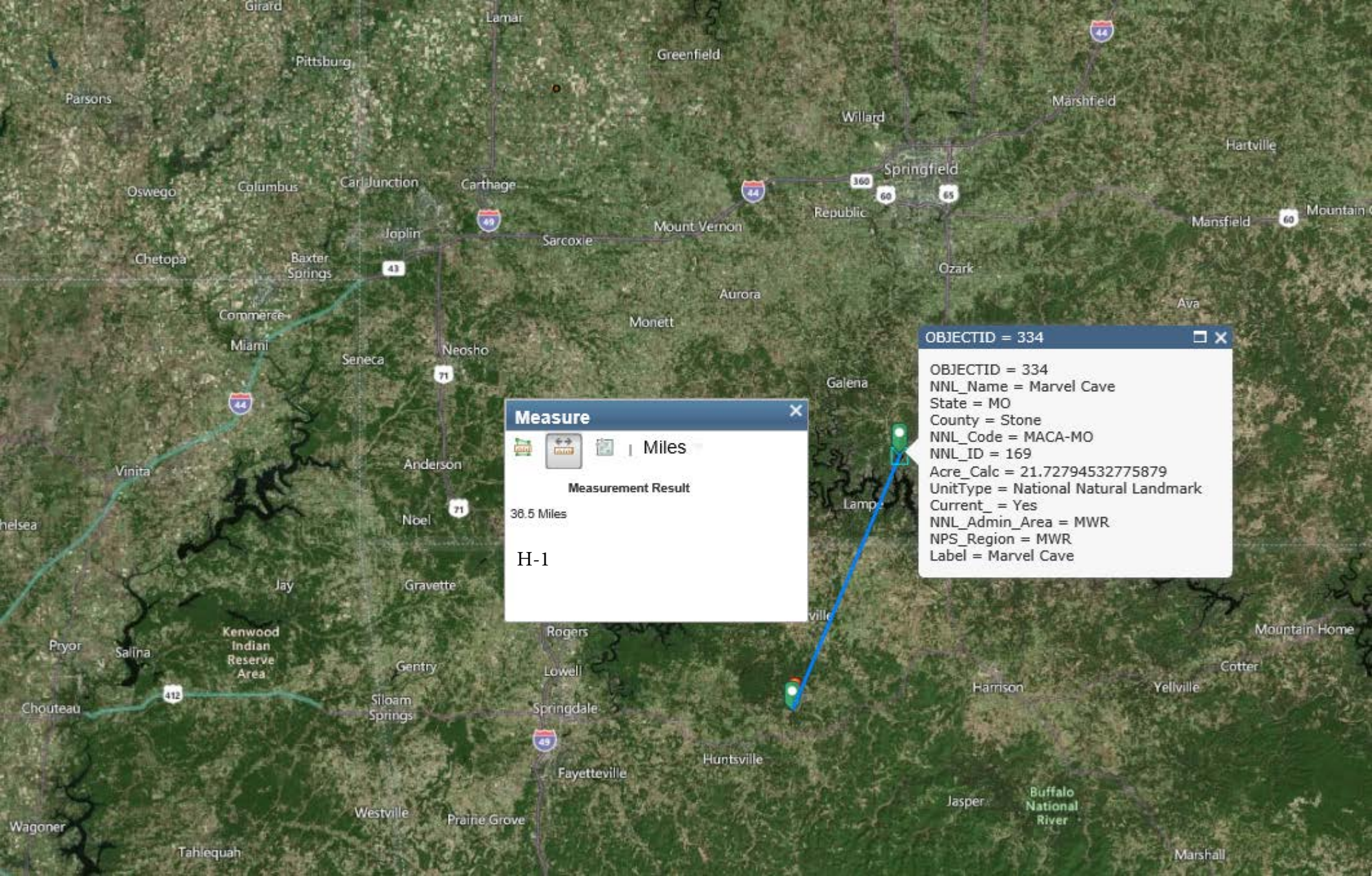
Date: 9/21/1999
 GNIS ID: Null
 Name: Null
 Length (km): 4.148
 Reach Code: 11010001001449
 F Code: 46003
 PERMANENT_IDENTIFIER: 8588224
 NHDPLUS_COMID: 8588224
 RESOLUTION: 3
 FLOWDIR: 1

G-3

Generate Report

Lower Dry Fork Watershed
(HUC12: 110100010907)





Measure

 Miles

Measurement Result

36.5 Miles

H-1

OBJECTID = 334

OBJECTID = 334
NNL_Name = Marvel Cave
State = MO
County = Stone
NNL_Code = MACA-MO
NNL_ID = 169
Acre_Calc = 21.72794532775879
UnitType = National Natural Landmark
Current_ = Yes
NNL_Admin_Area = MWR
NPS_Region = MWR
Label = Marvel Cave



Please remember, National Natural Landmarks (NNLs) are not national parks. NNL status does not indicate public ownership, and many sites are not open for visitation. H-2

AD-1026

(10-30-14)

U.S. DEPARTMENT OF AGRICULTURE

FarmServiceAgency

HIGHLY ERODIBLE LAND CONSERVATION (HELC) AND
WETLAND CONSERVATION (WC) CERTIFICATION

Read attached AD-1026 Appendix before completing form.

PART A – BASIC INFORMATION

1. [Redacted] 3. Crop Year 2019

4. Names of affiliated persons with farming interests. Enter "None," if applicable.

Affiliated persons with farming interests must also file an AD-1026. See Item 7 in the Appendix for a definition of an affiliated person.

5. Check one of these boxes if the statement applies; otherwise continue to Part B.

A. ☐ The producer in Part A does not have interest in land devoted to agriculture. Examples include bee keepers who place their hives on another person's land, producers of crops grown in greenhouses, and producers of aquaculture AND these producers do not own/lease any agricultural land themselves. **Note:** Do not check this box if the producer shares in a crop.

B. ☐ The producer in Part A meets all three of the following:

- does not participate in any USDA program that is subject to HELC and WC compliance except Federal Crop Insurance.
- only has interest in land devoted to agriculture which is exclusively used for perennial crops, except sugarcane, and
- has not converted a wetland after February 7, 2014.

Perennial crops include, but are not limited to, tree fruit, tree nuts, grapes, olives, native pasture and perennial forage. A producer that produces alfalfa should contact the Natural Resources Conservation Service at the nearest USDA Service Center to determine whether such production qualifies as production of a perennial crop.

Note: If either box is checked, and the producer in Part A does not participate in Farm Service Agency (FSA) or Natural Resources Conservation Service (NRCS) programs, the full tax identification number of the producer must be provided, but establishment of detailed farm records with FSA is not required. Go to Part D and sign and date.

PART B - HELC/WC COMPLIANCE QUESTIONS

Indicate YES or NO to each question.

If you are unsure of whether a HEL determination, wetland determination, or NRCS evaluation has been completed, contact your local USDA Service Center.

YES	NO
	X
X	
	X
	X

6. During the crop year entered in Part A or the term of a requested USDA loan, did or will the producer in Part A plant or produce an agricultural commodity (including sugarcane) on land for which an HEL determination has not been made?

7. Has anyone performed (since December 23, 1985), or will anyone perform any activities to:

A. Create new drainage systems, conduct land leveling, filling, dredging, land clearing, or excavation that has **NOT** been evaluated by NRCS? If "YES", indicate the year(s): _____

B. Improve or modify an existing drainage system that has **NOT** been evaluated by NRCS? If "YES", indicate the year(s): _____

C. Maintain an existing drainage system that has **NOT** been evaluated by NRCS? If "YES", indicate the year(s): _____
Note: Maintenance is the repair, rehabilitation, or replacement of the capacity of existing drainage systems to allow for the continued use of wetlands currently in agricultural production and the continued management of other areas as they were used before December 23, 1985. This allows a person to reconstruct or maintain the capacity of the original system or install a replacement system that is more durable or will realize lower maintenance or costs.

Note: If "YES" is checked for Item 7A or 7B, then Part C must be completed to authorize NRCS to make an HELC/WC and/or certified wetland determination on the identified land. If "YES" is checked for Item 7C, NRCS does not have to conduct a certified wetland determination.

8. Check one or both boxes, if applicable; otherwise, continue to Part C or D.

A. ☐ Check this box only if the producer in Part A has FCIC reinsured crop insurance and filing this form represents the first time the producer in Part A, including any affiliated person, has been subject to HELC and WC provisions.

B. ☐ Check this box if either of the following applies to the producer and crop year entered in Part A:

- Is a tenant on a farm that is/will not be in compliance with HELC and WC provisions because the landlord refuses to allow compliance, but all other farms not associated with that landlord are in compliance. (AD-1026B, Tenant Exemption Request, must be completed).
- Is a landlord of a farm that is/will not be in compliance with HELC and WC provisions because of a violation by the tenant on that farm, but all other farms not associated with that tenant are in compliance. (AD-1026C, Landlord or Landowner Exemption Request, must be completed).

PART C – ADDITIONAL INFORMATION

9. If "YES" was checked in Item 6 or 7, provide the following information for the land to which the answer applies:

A. Farm and/or tract/field number: _____

If unknown, contact the Farm Service Agency at the nearest USDA Service Center.

B. Activity: _____

C. Current land use (specify crops): _____

D. County: _____

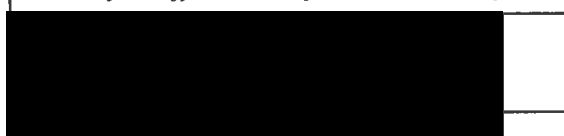
PART D – CERTIFICATION OF COMPLIANCE

I have received and read the AD-1026 Appendix and understand and agree to the terms and conditions therein on all land in which I (or the producer in Part A if different) and any affiliated person have or will have an interest. I understand that eligibility for certain USDA program benefits is contingent upon this certification of compliance with HELC and WC provisions and I am responsible for any non-compliance. I understand and agree that this certification of compliance is considered continuous and will remain in effect unless revoked or a violation is determined. I further understand and agree that:

- all applicable payments must be refunded if a determination of ineligibility is made for a violation of HELC or WC provisions.
- NRCS may verify whether a HELC violation or WC has occurred.
- a revised Form AD-1026 must be filed if there are any operation changes or activities that may affect compliance with the HELC and WC provisions. I understand that failure to revise Form AD-1026 for such changes may result in ineligibility for certain USDA program benefits or other consequences.
- affiliated persons are also subject to compliance with HELC and WC provisions and their failure to comply or file Form AD-1026 will result in loss of eligibility for applicable benefits to any individuals or entities with whom they are considered affiliated.

Producer's Certification:

I hereby certify that the information on this form is true and correct to the best of my knowledge.

 Sign and date if NRCS determination is needed.	10B. Title/Relationship (If Signing in Representative Capacity)	10C. Date (MM-DD-YYYY) 9-11-19
	11A. Signature of FSA Representative	11B. Date (MM-DD-YYYY)

IMPORTANT: If you are unsure about the applicability of HELC and WC provisions to your land, contact your local USDA Service Center for details concerning the location of any highly erodible land or wetland and any restrictions applying to your land according to NRCS determinations before planting an agricultural commodity or performing any drainage or manipulation. Failure to certify and properly revise your compliance certification when applicable may: (1) affect your eligibility for USDA program benefits, including whether you qualify for reinstatement of benefits through the Good Faith process; and (2) result in other consequences.

NOTE: The following statement is made in accordance with the Privacy Act of 1974 (5 USC 552a - as amended). The authority for requesting the information identified on this form is 7 CFR Part 12, the Food Security Act of 1985 (Pub. L. 99-198), and the Agricultural Act of 2014 (Pub. L. 113-79). The information will be used to certify compliance with HELC and WC provisions and to determine producer eligibility to participate in and receive benefits under programs administered by USDA agencies. The information collected on this form may be disclosed to other Federal, State, Local government agencies, Tribal agencies, and nongovernmental entities that have been authorized access to the information by statute or regulation and/or as described in applicable Routine Uses identified in the System of Records Notice for USDA/FSA-2, Farm Records File (Automated) and USDA/FSA-14, Applicant/Borrower. Providing the requested information is voluntary. However, failure to furnish the requested information will result in a determination of producer ineligibility to participate in and receive benefits under programs administered by USDA agencies.

This information collection is exempted from the Paperwork Reduction Act as specified in the Agricultural Act of 2014 (Pub. L. 113-79, Title II, Subtitle G, Funding and Administration). The provisions of appropriate criminal and civil fraud, privacy, and other statutes may be applicable to the information provided. **RETURN THIS COMPLETED FORM AD-1026 TO YOUR COUNTY FARM SERVICE AGENCY (FSA) OFFICE.**

The U.S. Department of Agriculture (USDA) prohibits discrimination against its customers, employees, and applicants for employment on the basis of race, color, national origin, age, disability, sex, gender identity, religion, reprisal, and where applicable, political beliefs, marital status, familial or parental status, sexual orientation, or all or part of an individual's income is derived from any public assistance program, or protected genetic information in employment or in any program or activity conducted or funded by the Department. (Not all prohibited basis will apply to all programs and/or employment activities.) Persons with disabilities, who wish to file a program complaint, write to the address below or if you require alternative means of communication for program information (e.g., Braille, large print, audiotape, etc.) please contact USDA's TARGET Center at (202) 720-2600 (voice and TDD). Individuals who are deaf, hard of hearing, or have speech disabilities and wish to file either an EEO or program complaint, please contact USDA through the Federal Relay Service at (800) 877-8339 or (800) 845-6136 (in Spanish).

If you wish to file a Civil Rights program complaint of discrimination, complete the USDA Program Discrimination Complaint Form, found online at http://www.ascr.usda.gov/complaint_filing_cust.html, or at any USDA office, or call (866) 632-9992 to request the form. You may also write a letter containing all of the information requested in the form. Send your completed complaint form or letter by mail to U.S. Department of Agriculture, Director, Office of Adjudication, 1400 Independence Avenue, S.W., Washington, D.C. 20250-9410, by fax (202) 690-7442 or email at program.intake@usda.gov. USDA is an equal opportunity provider and employer.

U.S. DEPARTMENT OF AGRICULTURE

FarmServiceAgency

HIGHLY ERODIBLE LAND CONSERVATION (HELC) AND
WETLAND CONSERVATION (WC) CERTIFICATION

Read attached AD-1026 Appendix before completing form.

PART A – BASIC INFORMATION

3. Crop Year
2019

4. Names of affiliated persons with farming interests. Enter "None," if applicable.

Affiliated persons with farming interests must also file an AD-1026. See Item 7 in the Appendix for a definition of an affiliated person.

5. Check one of these boxes if the statement applies; otherwise continue to Part B.

- A. ☐ The producer in Part A does not have interest in land devoted to agriculture. Examples include bee keepers who place their hives on another person's land, producers of crops grown in greenhouses, and producers of aquaculture AND these producers do not own/lease any agricultural land themselves. **Note:** Do not check this box if the producer shares in a crop.
- B. ☐ The producer in Part A meets all three of the following:
- does not participate in any USDA program that is subject to HELC and WC compliance except Federal Crop Insurance.
 - only has interest in land devoted to agriculture which is exclusively used for perennial crops, except sugarcane, and
 - has not converted a wetland after February 7, 2014.

Perennial crops include, but are not limited to, tree fruit, tree nuts, grapes, olives, native pasture and perennial forage. A producer that produces alfalfa should contact the Natural Resources Conservation Service at the nearest USDA Service Center to determine whether such production qualifies as production of a perennial crop.

Note: If either box is checked, and the producer in Part A does not participate in Farm Service Agency (FSA) or Natural Resources Conservation Service (NRCS) programs, the full tax identification number of the producer must be provided, but establishment of detailed farm records with FSA is not required. Go to Part D and sign and date.

PART B - HELC/WC COMPLIANCE QUESTIONS

Indicate YES or NO to each question.

If you are unsure of whether a HEL determination, wetland determination, or NRCS evaluation has been completed, contact your local USDA Service Center.

YES NO

6. During the crop year entered in Part A or the term of a requested USDA loan, did or will the producer in Part A plant or produce an agricultural commodity (including sugarcane) on land for which an HEL determination has not been made?

X

7. Has anyone performed (since December 23, 1985), or will anyone perform any activities to:

A. Create new drainage systems, conduct land leveling, filling, dredging, land clearing, or excavation that has NOT been evaluated by NRCS? If "YES", indicate the year(s):

X

B. Improve or modify an existing drainage system that has NOT been evaluated by NRCS? If "YES", indicate the year(s):

X

C. Maintain an existing drainage system that has NOT been evaluated by NRCS? If "YES", indicate the year(s):

Note: Maintenance is the repair, rehabilitation, or replacement of the capacity of existing drainage systems to allow for the continued use of wetlands currently in agricultural production and the continued management of other areas as they were used before December 23, 1985. This allows a person to reconstruct or maintain the capacity of the original system or install a replacement system that is more durable or will realize lower maintenance or costs.

X

Note: If "YES" is checked for Item 7A or 7B, then Part C must be completed to authorize NRCS to make an HELC/WC and/or certified wetland determination on the identified land. If "YES" is checked for Item 7C, NRCS does not have to conduct a certified wetland determination.

8. Check one or both boxes, if applicable; otherwise, continue to Part C or D.

A. ☐ Check this box only if the producer in Part A has FCIC reinsured crop insurance and filing this form represents the first time the producer in Part A, including any affiliated person, has been subject to HELC and WC provisions.

B. ☐ Check this box if either of the following applies to the producer and crop year entered in Part A:

- Is a tenant on a farm that is/will not be in compliance with HELC and WC provisions because the landlord refuses to allow compliance, but all other farms not associated with that landlord are in compliance. (AD-1026B, Tenant Exemption Request, must be completed).
- Is a landlord of a farm that is/will not be in compliance with HELC and WC provisions because of a violation by the tenant on that farm, but all other farms not associated with that tenant are in compliance. (AD-1026C, Landlord or Landowner Exemption Request, must be completed).

PART C – ADDITIONAL INFORMATION

9. If "YES" was checked in Item 6 or 7, provide the following information for the land to which the answer applies:

A. Farm and/or tract/field number:

If unknown, contact the Farm Service Agency at the nearest USDA Service Center.

B. Activity:

C. Current land use (specify crops):

D. County:

PART D – CERTIFICATION OF COMPLIANCE

I have received and read the AD-1026 Appendix and understand and agree to the terms and conditions therein on all land in which I (or the producer in Part A if different) and any affiliated person have or will have an interest. I understand that eligibility for certain USDA program benefits is contingent upon this certification of compliance with HELC and WC provisions and I am responsible for any non-compliance. I understand and agree that this certification of compliance is considered continuous and will remain in effect unless revoked or a violation is determined. I further understand and agree that:

- all applicable payments must be refunded if a determination of ineligibility is made for a violation of HELC or WC provisions.
- NRCS may verify whether a HELC violation or WC has occurred.
- a revised Form AD-1026 must be filed if there are any operation changes or activities that may affect compliance with the HELC and WC provisions. I understand that failure to revise Form AD-1026 for such changes may result in ineligibility for certain USDA program benefits or other consequences
- affiliated persons are also subject to compliance with HELC and WC provisions and their failure to comply or file Form AD-1026 will result in loss of eligibility for applicable benefits to any individuals or entities with whom they are considered affiliated.

Producer's Certification:

I hereby certify that the information on this form is true and correct to the best of my knowledge.

	10B. Title/Relationship (If Signing in Representative Capacity)	10C. Date (MM-DD-YYYY) 9-11-19
FOR FSA USE ONLY (for referral to NRCS) Sign and date if NRCS determination is needed.	11A. Signature of FSA Representative	11B. Date (MM-DD-YYYY)

IMPORTANT: If you are unsure about the applicability of HELC and WC provisions to your land, contact your local USDA Service Center for details concerning the location of any highly erodible land or wetland and any restrictions applying to your land according to NRCS determinations before planting an agricultural commodity or performing any drainage or manipulation. Failure to certify and properly revise your compliance certification when applicable may: (1) affect your eligibility for USDA program benefits, including whether you qualify for reinstatement of benefits through the Good Faith process; and (2) result in other consequences.

NOTE: The following statement is made in accordance with the Privacy Act of 1974 (5 USC 552a - as amended). The authority for requesting the information identified on this form is 7 CFR Part 12, the Food Security Act of 1985 (Pub. L. 99-198) and the Agricultural Act of 2014 (Pub. L. 113-79). The information will be used to certify compliance with HELC and WC provisions and to determine producer eligibility to participate in and receive benefits under programs administered by USDA agencies. The information collected on this form may be disclosed to other Federal, State, Local government agencies, Tribal agencies, and nongovernmental entities that have been authorized access to the information by statute or regulation and/or as described in applicable Routine Uses identified in the System of Records Notice for USDA/FSA-2, Farm Records File (Automated) and USDA/FSA-14, Applicant/Borrower. Providing the requested information is voluntary. However, failure to furnish the requested information will result in a determination of producer ineligibility to participate in and receive benefits under programs administered by USDA agencies.

This information collection is exempted from the Paperwork Reduction Act as specified in the Agricultural Act of 2014 (Pub. L. 113-79, Title II, Subtitle G, Funding and Administration). The provisions of appropriate criminal and civil fraud, privacy, and other statutes may be applicable to the information provided. **RETURN THIS COMPLETED FORM AD-1026 TO YOUR COUNTY FARM SERVICE AGENCY (FSA) OFFICE.**

The U.S. Department of Agriculture (USDA) prohibits discrimination against its customers, employees, and applicants for employment on the basis of race, color, national origin, age, disability, sex, gender identity, religion, reprisal and where applicable, political beliefs, marital status, familial or parental status, sexual orientation, or all or part of an individual's income is derived from any public assistance program, or protected genetic information in employment or in any program or activity conducted or funded by the Department. (Not all prohibited basis will apply to all programs and/or employment activities.) Persons with disabilities who wish to file a program complaint, write to the address below or if you require alternative means of communication for program information (e.g., Braille, large print, audiotape, etc.) please contact USDA's TARGET Center at (202) 720-2600 (voice and TDD). Individuals who are deaf, hard of hearing, or have speech disabilities and wish to file either an EEO or program complaint, please contact USDA through the Federal Relay Service at (800) 877-8339 or (800) 845-6136 (in Spanish).

If you wish to file a Civil Rights program complaint of discrimination, complete the USDA Program Discrimination Complaint Form, found online at http://www.ascr.usda.gov/complaint_filing_cust.html, or at any USDA office, or call (866) 632-9992 to request the form. You may also write a letter containing all of the information requested in the form. Send your completed complaint form or letter by mail to U.S. Department of Agriculture, Director, Office of Adjudication, 1400 Independence Avenue, S.W., Washington, D.C. 20250-9410, by fax (202) 690-7442 or email at program.intake@usda.gov. USDA is an equal opportunity provider and employer.

FSA-858
(02-12-15)U.S. DEPARTMENT OF AGRICULTURE
Farm Service Agency

DETERMINING IF A WETLAND MAY BE PRESENT

1. Date
09-11-19

2. State Office
Arkansas

3. County Office
Madison

INSTRUCTIONS: This form is used by FSA officials when a project has the potential to adversely impact a wetland and a wetland determination has not been previously completed for the project area and is not available from NRCS.

PART A – BASIC INFORMATION

4. Applicant Name

5. Project Location

S 31 & 38, T 18 N, R 24 & 25 W

6. Description of Project and Impact Area

FO Loan funds will be used to purchase 409 acres and construct 4 turkey houses. Proposed construction site is 10.6 acres.

7. How Wetlands Can Be Recognized

Wetlands can be characterized by the presence of three distinguishing factors: wetland vegetation, hydric soils, and wetland hydrology. Wetlands consist primarily of hydric soils because of their capacity to support wetland vegetation. Wetland vegetation is comprised of plant types with the capacity to adapt to wet soil conditions associated with natural hydrological conditions. Therefore, unless an area has been altered or is an uncommon natural situation, the presence of hydric soil and at least one of the other characteristics (wetland vegetation or hydrology) during some portion of the growing season would be indicative of the potential presence of a wetland.

8. Project Area Pre-Screening

Proposals funded with FSA assistance must be assessed for potential adverse wetland impacts; therefore, the project area must be identified and evaluated for the potential presence of a wetland. When a wetland determination for the project area is not available from the Natural Resources Conservation Service (NRCS), the FSA approval official will follow the screening process outlined below:

Note: If the screening process determines either the existence of or cannot conclusively rule out the existence of a wetland, the applicant must relocate the project, or the application will be denied and the applicant will bear the burden of providing documentation from the USACE or other qualified expert that a wetland is not present on the proposed site for the project or that the project is legally permissible.

PART B - PRE-SCREENING

Check the applicable "Yes, No or Unknown":

YES NO UNK

9. Consult either the National Wetland Inventory on line Data Mapper at <http://www.fws.gov/wetlands/Data/Mapper.html> or the USFWS' on information Planning and Conservation System at <http://ecos.fws.gov/ipac/>

Does the wetland map clearly indicate some part of the project area is in a wetland?

If "YES", proceed to Part F, complete Item 2A, and take appropriate action. If "NO", continue screening.

☐ ☒ ☐

10. Is a State or local, permit required for the project's operation or construction? If so, ascertain if, in the course of permitting processes it is a requirement to determine the presence of wetlands and if it is, was the presence of a wetland determined? If permits are not required or have not been issued, continue screening.

Did the permitting process indicate a wetland is present and will be impacted? If "YES", proceed to Part F, complete Item 2B, and take appropriate action. If the permitting process determines a wetland is present but that the project will not impact the wetland, answer "NO" and proceed to Part F, Item 3. If the state or local government permitting process does NOT mention or include a review for wetlands, continue the screening process.

☐ ☒ ☐

PART C – SOIL INDICATORS

Check the applicable box "Yes, No or Unknown":

YES NO UNK

11. There are approximately 2,000 named soils in the United States that may occur in wetlands. Such soils, called **hydric soils**, have characteristics that indicate they were developed in conditions where soil oxygen is limited by the presence of saturated soil for long periods during the growing season. If the soil in the area is listed as hydric by NRCS the area might be a wetland. *State Environmental Coordinators are responsible for identifying hydric soil types found in the state (in consultation with NRCS) and incorporating the listing into the State Environmental Guide. Identify the project area and consult the NRCS Soil Survey:*

<http://websoilsurvey.nrcs.usda.gov/app/WebSoilSurvey.aspx>

Does the project area contain hydric soils or is the site adjacent to prior converted wetland or previously drained areas that may have served to alter the site's hydric soil characteristics?

NOTE: This includes looking for small pockets or "inclusions" of hydric soils within the project area, even though they may only make up a small fraction of the soil map unit.

If "YES", continue screening.* If NO, proceed to Part F and complete Item 1.

☐ ☒ ☐

* If there are hydric soils or non-hydric soils with hydric inclusions in or directly adjoining the project area, a site visit **MUST** be made. During the visit an assessment will be made of the hydrology and, if necessary, vegetation in and adjacent to the proposed project site.

PART D - HYDROLOGY INDICATORS

Check the applicable box "Yes, No or Unknown":		YES	NO	UNK
12.	Hydrology - Wetland hydrology refers to the presence of water at or above the soil surface for a sufficient period of the year to significantly influence the plant types and soils that occur in the area. The following indicators, which can be observed on a site visit, provide some evidence of the periodic presence of flooding or soil saturation: • Standing or flowing water observed during the growing season. • Waterlogged soil during the growing season. • Crops or plants exhibiting signs of stress or mortality due to wetness. • Watermarks. Stains on trees, fences, or other objects indicating water periodically covers the area to the depth shown on the object. • Drift Lines. Small piles of debris oriented in the direction of water movement. • Debris lodged in trees or piled against another object by water. • Sediment deposited on leaves or other objects. Sometimes these become consolidated with small plant parts to form a discernible crust on the soil surface. • Unknown If the site has been significantly disturbed so that any indicators would have been removed. Based on a site visit, were any hydrology indicators observed in the project area? If "YES" or "UNKNOWN", proceed to Part F, complete Item 2C and take appropriate action. If "NO", continue screening process.			
		☐	☐	☐

PART E - VEGETATION INDICATORS

Check the applicable box "Yes, No or Unknown":		YES	NO	UNK
13.	Plants known as hydrophytic vegetation thrive in wetlands. A complete listing can be accessed at http://rsgisias.crrel.usace.army.mil/NWPL/# and predominate regional plant information can be found at http://plants.usda.gov/core/wetlandSearch. It is only important to become familiar with wetland vegetation types which commonly occur in the geographic area of the project. State Environmental Coordinators (in consultation with wetland experts) are responsible for identifying predominant wetland plant types which prevail in the State's geographic regions and incorporating a listing with related pictures into the State Environmental Guide. Review the State Environmental Guide hydrophytic vegetation listing and pictorial reference to become familiar with the appearance and physical characteristics of predominant wetland plants in the region or consult: http://plants.usda.gov/core/wetlandSearch During the site visit observe plants within and adjacent to the project area. NOTE: Any unusual plants or any change in vegetation from that typically found on known non-wetlands. Take pictures of anything questionable and research back at the office. Consult with wetland experts when unsure. Unknown applies to sites where the vegetation is managed in some fashion or has been removed. Based on a site visit, were any indicators of hydrophytic vegetation observed in the project area? If "YES or UNKNOWN", proceed to Part F, complete Item 2C and take appropriate action. If NO, continue to Part F, Item 4, and proceed with application processing.			
		☐	☐	☐

PART F - CONCLUSION

I have reviewed all available information including documents in the loan file, if necessary, made a site inspection and attached are copies of the website maps and soil surveys consulted. The determination is:

1. ☒ Wetland Inventories indicate the project area is not part of a recognized wetland, **AND** the soils review required in Part C has been completed, and it is clear that hydric soils are **NOT** present in the project area. Application processing will continue.
2. ☐ The project area is likely to include and affect a wetland because:
 - ☐ A. Wetlands inventory maps clearly indicate the project area includes wetland.
 - ☐ B. Local or state permitting information for the project indicates that the project area includes wetland and the project will impact wetland.
 - ☐ C. Preliminary wetland assessment results (maps and/or permits) were inconclusive but hydric soils and at least one of the two other wetland indicators identified in Parts D and E were found.

Processing will not continue. Advise the applicant that FSA has determined the site to be unsuitable based on available information; unless they wish to submit an alternative site, the application will be denied. Prepare a denial letter including provisions of 1-APP as appropriate. For FLP applications refer to 1-FLP Paragraph 222 for detailed guidance.

NOTE: The USACE has jurisdiction over areas considered to be "waters of the United States" such as streams or wetlands and contiguous or adjacent conveyance drainage and ditches. For projects with potential to impact a jurisdictional wetland the applicant must provide related documentation in support of a specific exemption or related permit from the USACE to be eligible for FSA assistance.

3. ☐ A local or state permit has been issued for the project; the permit process includes a wetland determination and concludes that there is no wetland present, or there is a wetland but it is not impacted by the project. Application processing will continue.
4. ☐ Hydric soils were identified. I certify that a site inspection was made. None of the wetland indicators identified in Parts D and E were found or observed. Application processing will continue.

PART G - SIGNATURES

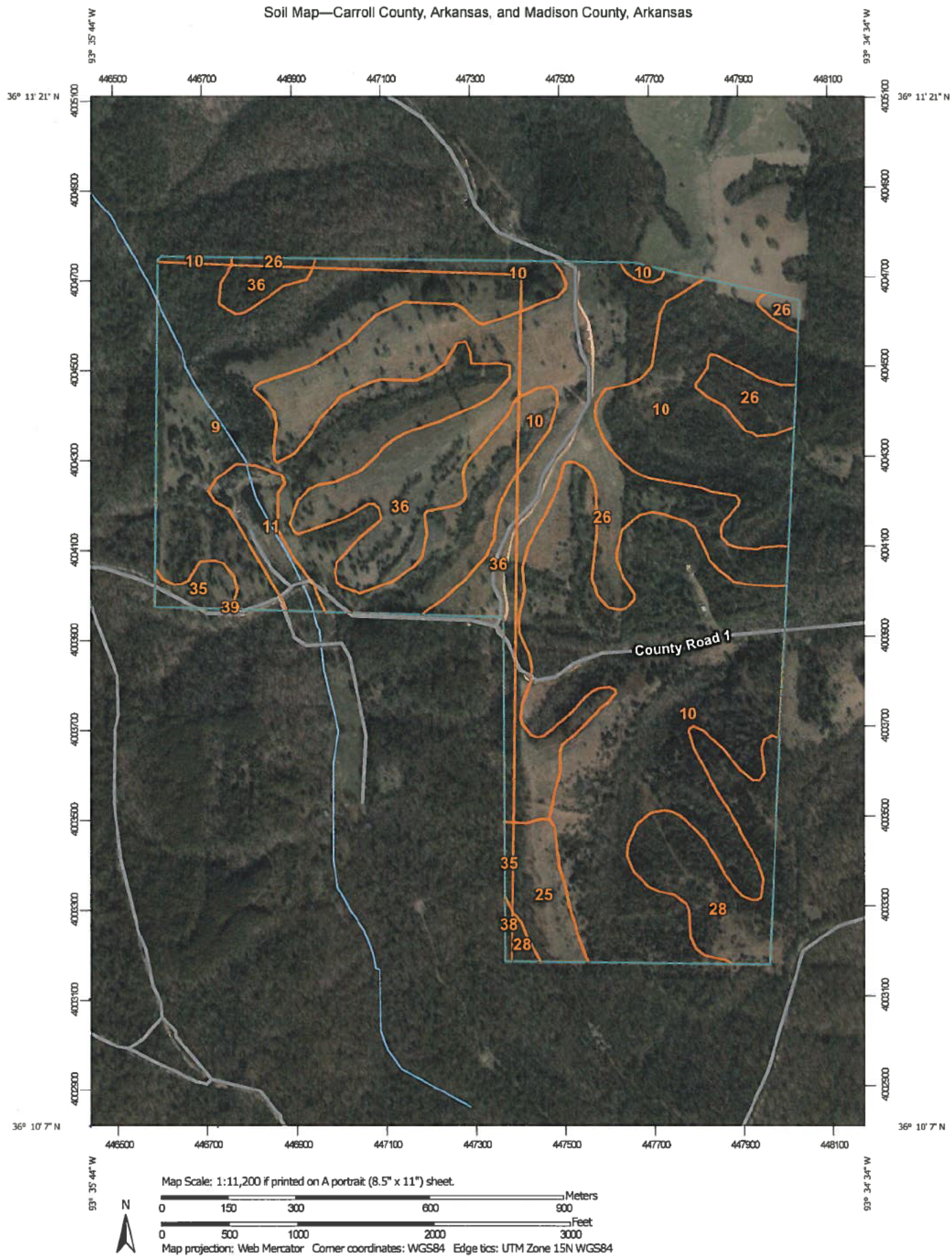
14A. Signature of Preparer 	14B. Printed Name of Preparer Charlene Holt
14C. Title of Preparer and Agency Farm Loan Officer	14D. Date Signed by Preparer 09/11/2019
14E. Address 479 N. Parrott Drive, Rm 2 Huntsville, AR 72740	14F. Phone Number (Including Area Code) 479 738-2196

NOTE: SECs may supplement this Exhibit as needed to reflect wetland indicators in their area. Any modification to this Exhibit requires National Office approval.

The U.S. Department of Agriculture (USDA) prohibits discrimination against its customers, employees, and applicants for employment on the basis of race, color, national origin, age, disability, sex, gender identity, religion, reprisal, and where applicable, political beliefs, marital status, familial or parental status, sexual orientation, or all or part of an individual's income is derived from any public assistance program, or protected genetic information in employment or in any program or activity conducted or funded by the Department. (Not all prohibited bases will apply to all programs and/or employment activities.) Persons with disabilities, who wish to file a program complaint, write to the address below or if you require alternative means of communication for program information (e.g., Braille, large print, audiotape, etc.) please contact USDA's TARGET Center at (202) 720-2600 (voice and TDD). Individuals who are deaf, hard of hearing, or have speech disabilities and wish to file either an EEO or program complaint, please contact USDA through the Federal Relay Service at (800) 877-8339 or (800) 845-6136 (in Spanish).

If you wish to file a Civil Rights program complaint of discrimination, complete the USDA Program Discrimination Complaint Form, found online at http://www.ascr.usda.gov/complaint_filing_cust.html or at any USDA office, or call (866) 632-9992 to request the form. You may also write a letter containing all of the information requested in the form. Send your completed complaint form or letter by mail to U.S. Department of Agriculture, Director, Office of Adjudication, 1400 Independence Avenue, S.W., Washington, D.C. 20250-9410, by fax (202) 690-7442 or email at program.intake@usda.gov. USDA is an equal opportunity provider and employer.

Soil Map—Carroll County, Arkansas, and Madison County, Arkansas



MAP LEGEND

	Area of Interest (AOI)		Soil Area
	Area of Interest (AOI)		Stony Spot
	Soils		Very Stony Spot
	Soil Map Unit Polygons		Wet Spot
	Soil Map Unit Lines		Other
	Soil Map Unit Points		Special Line Features
	Special Point Features		Water Features
	Blowout		Streams and Canals
	Borrow Pit		Transportation
	Clay Spot		Rails
	Closed Depression		Interstate Highways
	Gravel Pit		US Routes
	Gravelly Spot		Major Roads
	Landfill		Local Roads
	Lava Flow		Background
	Marsh or swamp		Aerial Photography
	Mine or Quarry		
	Miscellaneous Water		
	Perennial Water		
	Rock Outcrop		
	Saline Spot		
	Sandy Spot		
	Severely Eroded Spot		
	Sinkhole		
	Slide or Slip		
	Sodic Spot		

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:20,000.

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

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL:
Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

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

Soil Survey Area: Carroll County, Arkansas
Survey Area Data: Version 17, Sep 14, 2018

Soil Survey Area: Madison County, Arkansas
Survey Area Data: Version 15, Sep 12, 2018

Your area of interest (AOI) includes more than one soil survey area. These survey areas may have been mapped at different scales, with a different land use in mind, at different times, or at different levels of detail. This may result in map unit symbols, soil properties, and interpretations that do not completely agree across soil survey area boundaries.

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Sep 16, 2015—Oct 30, 2017

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

Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
10	Clarksville very gravelly silt loam, 20 to 50 percent slopes	144.6	36.9%
25	Nixa very gravelly silt loam, 3 to 8 percent slopes	8.6	2.2%
26	Nixa very gravelly silt loam, 8 to 12 percent slopes	57.6	14.7%
28	Noark very gravelly silt loam, 8 to 20 percent slopes	22.5	5.7%
Subtotals for Soil Survey Area		233.3	59.6%
Totals for Area of Interest		391.6	100.0%

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
9	Clarksville very gravelly silt loam, 20 to 50 percent slopes	92.2	23.5%
11	Elsah very cherty silt loam, occasionally flooded	8.1	2.1%
35	Nixa very gravelly silt loam, 3 to 8 percent slopes	4.4	1.1%
36	Nixa very gravelly silt loam, 8 to 12 percent slopes	52.9	13.5%
38	Noark very cherty silt loam, 12 to 20 percent slopes	0.5	0.1%
39	Noark very gravelly silt loam, 20 to 40 percent slopes	0.1	0.0%
Subtotals for Soil Survey Area		158.3	40.4%
Totals for Area of Interest		391.6	100.0%

Map Unit Description (Brief, Generated)

The map units delineated on the detailed soil maps in a soil survey represent the soils or miscellaneous areas in the survey area. The map unit descriptions in this report, along with the maps, provide information on the composition of map units and properties of their components.

A map unit delineation on a soil map represents an area dominated by one or more major kinds of soil or miscellaneous areas. A map unit is identified and named according to the taxonomic classification of the dominant soils. Within a taxonomic class there are precisely defined limits for the properties of the soils. On the landscape, however, the soils are natural phenomena, and they have the characteristic variability of all natural phenomena. Thus, the range of some observed properties may extend beyond the limits defined for a taxonomic class. Areas of soils of a single taxonomic class rarely, if ever, can be mapped without including areas of other taxonomic classes. Consequently, every map unit is made up of the soils or miscellaneous areas for which it is named and some minor components that belong to taxonomic classes other than those of the major soils.

The Map Unit Description (Brief, Generated) report displays a generated description of the major soils that occur in a map unit. Descriptions of non-soil (miscellaneous areas) and minor map unit components are not included. This description is generated from the underlying soil attribute data.

Additional information about the map units described in this report is available in other Soil Data Mart reports, which give properties of the soils and the limitations, capabilities, and potentials for many uses. Also, the narratives that accompany the Soil Data Mart reports define some of the properties included in the map unit descriptions.

Report—Map Unit Description (Brief, Generated)

Carroll County, Arkansas

Map Unit: 10—Clarksville very gravelly silt loam, 20 to 50 percent slopes

Component: Clarksville (90%)

The Clarksville component makes up 90 percent of the map unit. Slopes are 20 to 50 percent. This component is on hills, hills. The parent material consists of loamy colluvium over clayey residuum weathered from cherty limestone. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is somewhat excessively drained. Water movement in the most restrictive layer is moderately low. Available water to a depth of 60 inches (or restricted depth) is low. Shrink-swell potential is low. This soil is not flooded. It is not ponded. There is no zone of water saturation within a depth of 72 inches. Organic matter content in the surface horizon is about 69 percent. Below this thin organic horizon the organic matter content is about 4 percent. This component is in the F116AY958MO Low-base Chert Exposed Backslope Woodland, Low-base Chert Protected Backslope Woodland, Pinus Echinata-quercus Alba/amorpha Canescens-vaccinium Arboreum/aster-schizachyrium Scoparium, Pinus Echinata-quercus Velutina/vaccinium Pallidum/schizachyrium Scoparium-dalea ecological site. Nonirrigated land capability classification is 7s. This soil does not meet hydric criteria. There are no saline horizons within 30 inches of the soil surface.

Component: Bendavis (10%)

Generated brief soil descriptions are created for major soil components. The Bendavis soil is a minor component.

Map Unit: 25—Nixa very gravelly silt loam, 3 to 8 percent slopes

Component: Nixa (90%)

The Nixa component makes up 90 percent of the map unit. Slopes are 3 to 8 percent. This component is on hillslopes, hills. The parent material consists of slope alluvium over pedisidiment over residuum weathered from limestone. Depth to a root restrictive layer, fragipan, is 11 to 30 inches (depth from the mineral surface is 11 to 29 inches). The natural drainage class is moderately well drained. Water movement in the most restrictive layer is low. Available water to a depth of 60 inches (or restricted depth) is low. Shrink-swell potential is low. This soil is not flooded. It is not ponded. A seasonal zone of water saturation is at 19 inches (depth from the mineral surface is 18 inches) during January, February, March, April, May, December. Organic matter content in the surface horizon is about 69 percent. Below this thin organic horizon the organic matter content is about 2 percent. This component is in the F116BY004MO Low-base Chert Upland Woodland , Low-base Chert Upland Woodland ecological site. Nonirrigated land capability classification is 4s. This soil does not meet hydric criteria. There are no saline horizons within 30 inches of the soil surface.

Component: Bendavis (10%)

Generated brief soil descriptions are created for major soil components. The Bendavis soil is a minor component.

Map Unit: 26—Nixa very gravelly silt loam, 8 to 12 percent slopes

Component: Nixa (90%)

The Nixa component makes up 90 percent of the map unit. Slopes are 8 to 12 percent. This component is on hillslopes, hills. The parent material consists of slope alluvium over pedisegment over residuum weathered from limestone. Depth to a root restrictive layer, fragipan, is 11 to 30 inches (depth from the mineral surface is 11 to 29 inches). The natural drainage class is moderately well drained. Water movement in the most restrictive layer is low. Available water to a depth of 60 inches (or restricted depth) is low. Shrink-swell potential is low. This soil is not flooded. It is not ponded. A seasonal zone of water saturation is at 17 inches (depth from the mineral surface is 17 inches) during January, February, March, April, May, December. Organic matter content in the surface horizon is about 69 percent. Below this thin organic horizon the organic matter content is about 2 percent. This component is in the F116BY004MO Low-base Chert Upland Woodland , Low-base Chert Upland Woodland ecological site. Nonirrigated land capability classification is 4s. This soil does not meet hydric criteria. There are no saline horizons within 30 inches of the soil surface.

Component: Noark (5%)

Generated brief soil descriptions are created for major soil components. The Noark soil is a minor component.

Component: Bendavis (5%)

Generated brief soil descriptions are created for major soil components. The Bendavis soil is a minor component.

Map Unit: 28—Noark very gravelly silt loam, 8 to 20 percent slopes

Component: Noark (85%)

The Noark component makes up 85 percent of the map unit. Slopes are 8 to 20 percent. This component is on hills, hillslopes. The parent material consists of slope alluvium over residuum weathered from limestone. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is well drained. Water movement in the most restrictive layer is moderately low. Available water to a depth of 60 inches (or restricted depth) is low. Shrink-swell potential is low. This soil is not flooded. It is not ponded. There is no zone of water saturation within a depth of 72 inches. Organic matter content in the surface horizon is about 69 percent. Below this thin organic horizon the organic matter content is about 5 percent. This component is in the F116BY033MO Low-base Chert Exposed Backslope Woodland, Low-base Chert Protected Backslope Woodland , Low-base Chert Upland Woodland ecological site. Nonirrigated land capability classification is 6e. This soil does not meet hydric criteria. There are no saline horizons within 30 inches of the soil surface.

Component: Nixa (10%)

Generated brief soil descriptions are created for major soil components. The Nixa soil is a minor component.

Component: Bendavis (5%)

Generated brief soil descriptions are created for major soil components. The Bendavis soil is a minor component.

Madison County, Arkansas

Map Unit: 9—Clarksville very gravelly silt loam, 20 to 50 percent slopes

Component: Clarksville (90%)

The Clarksville component makes up 90 percent of the map unit. Slopes are 20 to 50 percent. This component is on hills, hills. The parent material consists of loamy colluvium over clayey residuum weathered from cherty limestone. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is somewhat excessively drained. Water movement in the most restrictive layer is moderately low. Available water to a depth of 60 inches (or restricted depth) is low. Shrink-swell potential is low. This soil is not flooded. It is not ponded. There is no zone of water saturation within a depth of 72 inches. Organic matter content in the surface horizon is about 69 percent. Below this thin organic horizon the organic matter content is about 4 percent. This component is in the F116AY958MO Low-base Chert Exposed Backslope Woodland, Low-base Chert Protected Backslope Woodland, Pinus Echinata-quercus Alba/amorpha Canescens-vaccinium Arboreum/aster-schizachyrium Scoparium, Pinus Echinata-quercus Velutina/vaccinium Pallidum/schizachyrium Scoparium-dalea ecological site. Nonirrigated land capability classification is 7s. This soil does not meet hydric criteria. There are no saline horizons within 30 inches of the soil surface.

Component: Bendavis (10%)

Generated brief soil descriptions are created for major soil components. The Bendavis soil is a minor component.

Map Unit: 11—Elsah very cherty silt loam, occasionally flooded

Component: Elsah (95%)

The Elsah component makes up 95 percent of the map unit. Slopes are 0 to 3 percent. This component is on hills, flood plains. The parent material consists of gravelly alluvium. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is well drained. Water movement in the most restrictive layer is moderately high. Available water to a depth of 60 inches (or restricted depth) is moderate. Shrink-swell potential is low. This soil is frequently flooded. It is not ponded. There is no zone of water saturation within a depth of 72 inches. Organic matter content in the surface horizon is about 1 percent. Nonirrigated land capability classification is 3s. This soil does not meet hydric criteria.

Component: Aquents (5%)

Generated brief soil descriptions are created for major components. The Aquents soil is a minor component.

Map Unit: 35—Nixa very gravelly silt loam, 3 to 8 percent slopes

Component: Nixa (90%)

The Nixa component makes up 90 percent of the map unit. Slopes are 3 to 8 percent. This component is on hillslopes, hills. The parent material consists of slope alluvium over pedisegment over residuum weathered from limestone. Depth to a root restrictive layer, fragipan, is 11 to 30 inches (depth from the mineral surface is 11 to 29 inches). The natural drainage class is moderately well drained. Water movement in the most restrictive layer is low. Available water to a depth of 60 inches (or restricted depth) is low. Shrink-swell potential is low. This soil is not flooded. It is not ponded. A seasonal zone of water saturation is at 19 inches (depth from the mineral surface is 18 inches) during January, February, March, April, May, December. Organic matter content in the surface horizon is about 69 percent. Below this thin organic horizon the organic matter content is about 2 percent. This component is in the F116BY004MO Low-base Chert Upland Woodland , Low-base Chert Upland Woodland ecological site. Nonirrigated land capability classification is 4s. This soil does not meet hydric criteria. There are no saline horizons within 30 inches of the soil surface.

Component: Bendavis (10%)

Generated brief soil descriptions are created for major soil components. The Bendavis soil is a minor component.

Map Unit: 36—Nixa very gravelly silt loam, 8 to 12 percent slopes

Component: Nixa (90%)

The Nixa component makes up 90 percent of the map unit. Slopes are 8 to 12 percent. This component is on hillslopes, hills. The parent material consists of slope alluvium over pedisegment over residuum weathered from limestone. Depth to a root restrictive layer, fragipan, is 11 to 30 inches (depth from the mineral surface is 11 to 29 inches). The natural drainage class is moderately well drained. Water movement in the most restrictive layer is low. Available water to a depth of 60 inches (or restricted depth) is low. Shrink-swell potential is low. This soil is not flooded. It is not ponded. A seasonal zone of water saturation is at 17 inches (depth from the mineral surface is 17 inches) during January, February, March, April, May, December. Organic matter content in the surface horizon is about 69 percent. Below this thin organic horizon the organic matter content is about 2 percent. This component is in the F116BY004MO Low-base Chert Upland Woodland , Low-base Chert Upland Woodland ecological site. Nonirrigated land capability classification is 4s. This soil does not meet hydric criteria. There are no saline horizons within 30 inches of the soil surface.

Component: Noark (5%)

Generated brief soil descriptions are created for major soil components. The Noark soil is a minor component.

Component: Bendavis (5%)

Generated brief soil descriptions are created for major soil components. The Bendavis soil is a minor component.

Map Unit: 38—Noark very cherty silt loam, 12 to 20 percent slopes

Component: Noark (100%)

The Noark component makes up 100 percent of the map unit. Slopes are 12 to 20 percent. This component is on hills, hills, hills. The parent material consists of clayey residuum weathered from cherty limestone. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is well drained. Water movement in the most restrictive layer is moderately high. Available water to a depth of 60 inches (or restricted depth) is moderate. Shrink-swell potential is moderate. This soil is not flooded. It is not ponded. There is no zone of water saturation within a depth of 72 inches. Organic matter content in the surface horizon is about 2 percent. Nonirrigated land capability classification is 6e. This soil does not meet hydric criteria.

Map Unit: 39—Noark very gravelly silt loam, 20 to 40 percent slopes

Component: Noark (90%)

The Noark component makes up 90 percent of the map unit. Slopes are 20 to 40 percent. This component is on hills, hillslopes. The parent material consists of slope alluvium over residuum weathered from limestone. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is well drained. Water movement in the most restrictive layer is moderately low. Available water to a depth of 60 inches (or restricted depth) is low. Shrink-swell potential is low. This soil is not flooded. It is not ponded. There is no zone of water saturation within a depth of 72 inches. Organic matter content in the surface horizon is about 69 percent. Below this thin organic horizon the organic matter content is about 5 percent. This component is in the F116BY033MO Low-base Chert Exposed Backslope Woodland, Low-base Chert Protected Backslope Woodland, Low-base Chert Protected Backslope Woodland ecological site. Nonirrigated land capability classification is 7e. This soil does not meet hydric criteria. There are no saline horizons within 30 inches of the soil surface.

Component: Bendavis (10%)

Generated brief soil descriptions are created for major soil components. The Bendavis soil is a minor component.

Data Source Information

Soil Survey Area: Carroll County, Arkansas

Survey Area Data: Version 17, Sep 14, 2018

Soil Survey Area: Madison County, Arkansas

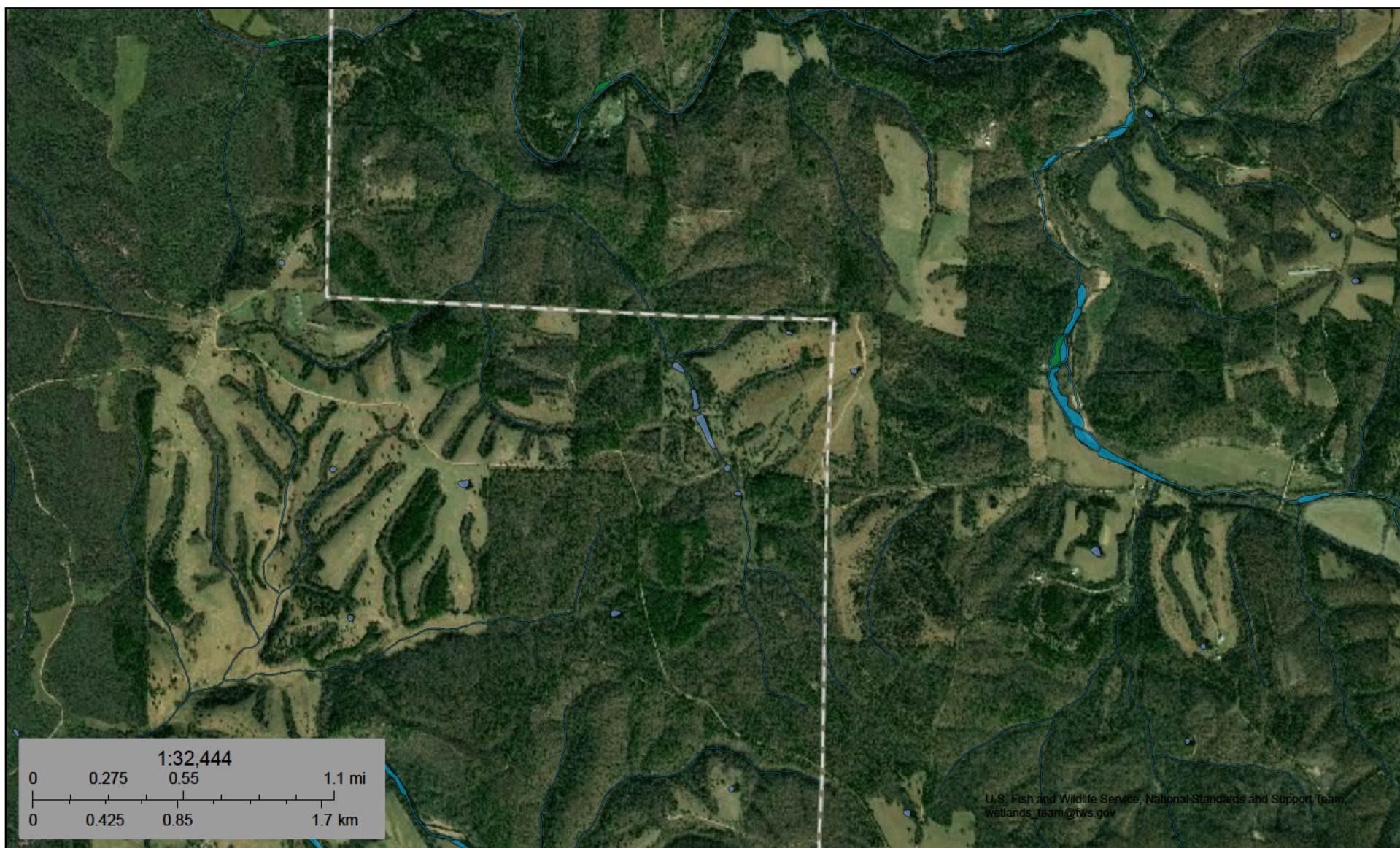
Survey Area Data: Version 15, Sep 12, 2018



U.S. Fish and Wildlife Service

National Wetlands Inventory

Wetlands



U.S. Fish and Wildlife Service, National Standards and Support Team
wetlands_team@fws.gov

November 7, 2019

Wetlands

Estuarine and Marine Deepwater

Estuarine and Marine Wetland
I-2

Freshwater Emergent Wetland

Freshwater Forested/Shrub Wetland

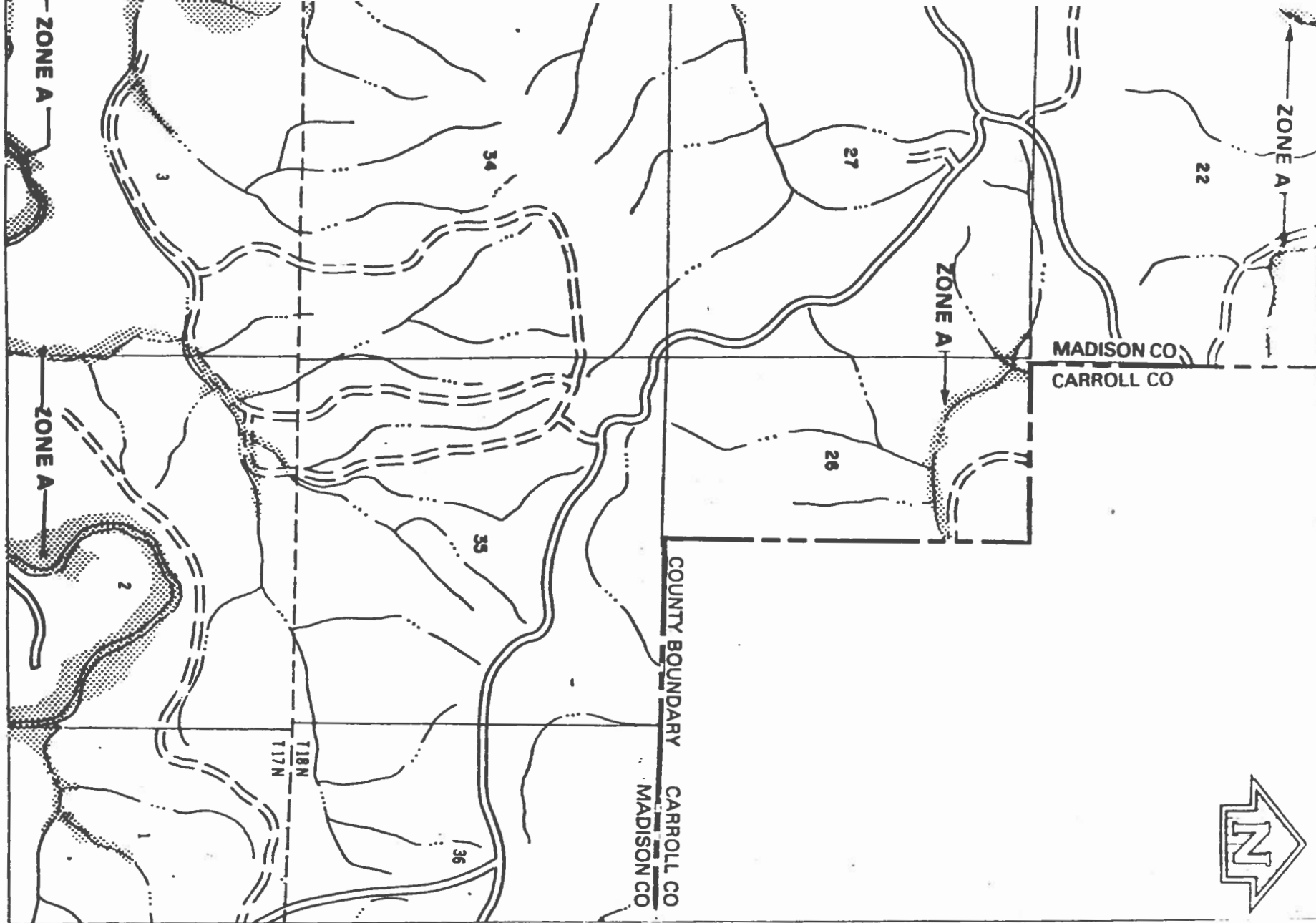
Freshwater Pond

Lake

Other

Riverine

This map is for general reference only. The US Fish and Wildlife Service is not responsible for the accuracy or currentness of the base data shown on this map. All wetlands related data should be used in accordance with the layer metadata found on the Wetlands Mapper web site.



COUNTY BOUNDARY
CARROLL CO
MADISON CO

MADISON CO
CARROLL CO

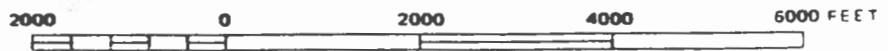
JOINS 12

DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT

Federal Insurance Administration

MADISON CO., AR
(UNINC. AREA)

APPROXIMATE SCALE

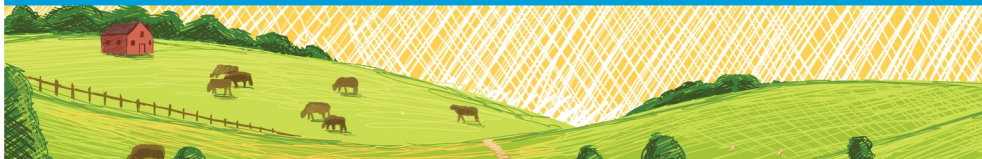


FLOOD HAZARD BOUNDARY MAP

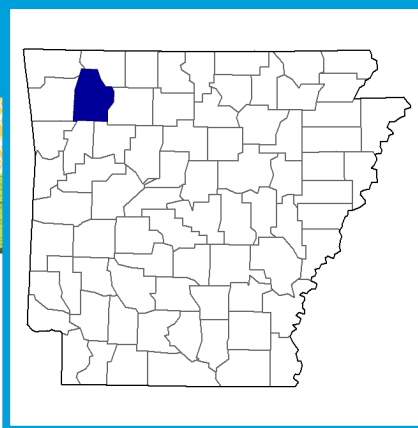
EFFECTIVE DATE

6/14/77

11



Madison County Arkansas



Total and Per Farm Overview, 2017 and change since 2012

	2017	% change since 2012
Number of farms	1,229	-2
Land in farms (acres)	277,701	+3
Average size of farm (acres)	226	+5
Total	(\$)	
Market value of products sold	279,342,000	+34
Government payments	830,000	-69
Farm-related income	1,464,000	-20
Total farm production expenses	196,135,000	+7
Net cash farm income	85,500,000	+186
Per farm average	(\$)	
Market value of products sold	227,292	+36
Government payments (average per farm receiving)	3,474	-60
Farm-related income	4,676	-7
Total farm production expenses	159,589	+9
Net cash farm income	69,569	+191

3 Percent of state agriculture sales

Share of Sales by Type (%)

Crops	2
Livestock, poultry, and products	98

Land in Farms by Use (%) ^a

Cropland	22
Pastureland	42
Woodland	30
Other	5

Acres irrigated: 689

(Z)% of land in farms

Land Use Practices (% of farms)

No till	3
Reduced till	1
Intensive till	2
Cover crop	1

Farms by Value of Sales

	Number	Percent of Total ^a
Less than \$2,500	313	25
\$2,500 to \$4,999	136	11
\$5,000 to \$9,999	147	12
\$10,000 to \$24,999	232	19
\$25,000 to \$49,999	132	11
\$50,000 to \$99,999	87	7
\$100,000 or more	182	15

Farms by Size

	Number	Percent of Total ^a
1 to 9 acres	32	3
10 to 49 acres	229	19
50 to 179 acres	482	39
180 to 499 acres	376	31
500 to 999 acres	70	6
1,000 + acres	40	3

Market Value of Agricultural Products Sold

	Sales (\$1,000)	Rank in State ^b	Counties Producing Item	Rank in U.S. ^b	Counties Producing Item
Total	279,342	5	75	294	3,077
Crops	6,055	40	75	2,278	3,073
Grains, oilseeds, dry beans, dry peas	(D)	45	50	(D)	2,916
Tobacco	-	-	-	-	323
Cotton and cottonseed	-	-	23	-	647
Vegetables, melons, potatoes, sweet potatoes	175	25	72	1,328	2,821
Fruits, tree nuts, berries	(D)	7	72	(D)	2,748
Nursery, greenhouse, floriculture, sod	(D)	11	55	(D)	2,601
Cultivated Christmas trees, short rotation woody crops	-	-	20	-	1,384
Other crops and hay	3,536	5	75	727	3,040
Livestock, poultry, and products	273,286	4	75	127	3,073
Poultry and eggs	244,464	4	72	30	3,007
Cattle and calves	27,075	6	75	585	3,055
Milk from cows	1,320	5	21	886	1,892
Hogs and pigs	(D)	(D)	62	(D)	2,856
Sheep, goats, wool, mohair, milk	92	10	70	1,351	2,984
Horses, ponies, mules, burros, donkeys	168	14	70	1,103	2,970
Aquaculture	(D)	19	29	(D)	1,251
Other animals and animal products	39	18	65	1,079	2,878

Total Producers ^c	2,113	Percent of farms that:	Top Crops in Acres ^d		
Sex					
Male	1,264	Have internet access	Forage (hay/haylage), all	46,099	
Female	849			Grapes	(D)
			Corn for silage or greenchop	(D)	
Age			Soybeans for beans	(D)	
<35	198	Farm organically	Sorghum for silage/greenchop	(D)	
35 – 64	1,206				
65 and older	709				
Race					
American Indian/Alaska Native	26	Sell directly to consumers			
Asian	20				
Black or African American	-				
Native Hawaiian/Pacific Islander	-	Hire farm labor			
White	2,011				
More than one race	56				
Other characteristics					
Hispanic, Latino, Spanish origin	44	Are family farms			
With military service	200				
New and beginning farmers	610				

See 2017 Census of Agriculture, U.S. Summary and State Data, for complete footnotes, explanations, definitions, commodity descriptions, and methodology.

^a May not add to 100% due to rounding. ^b Among counties whose rank can be displayed. ^c Data collected for a maximum of four producers per farm.

^d Crop commodity names may be shortened; see full names at www.nass.usda.gov/go/cropnames.pdf. ^e Position below the line does not indicate rank.

(D) Withheld to avoid disclosing data for individual operations. (NA) Not available. (Z) Less than half of the unit shown. (-) Represents zero.



United States Department of Agriculture
National Agricultural Statistics Service

Arkansas Cattle County Estimates

Released: June 13, 2019



Delta Region – Arkansas Field Office

10800 Financial Centre Parkway, Suite 110, Little Rock, Arkansas 72211

(501) 228-9926 · (855) 270-2705 FAX · www.nass.usda.gov

Cooperating with the University of Arkansas – Division of Agriculture

Cattle: Inventory on Farms – County: January 1, 2018 and 2019

[Individual county estimates not available for counties not shown, but are included in other counties]

District and County	All cattle and calves		Beef cows	
	2018 (number of head)	2019 (number of head)	2018 (number of head)	2019 (number of head)
District 10				
Benton	96,000	97,000	48,500	49,000
Boone	80,000	81,000	37,000	37,500
Carroll	81,000	82,000	¹	¹
Madison	68,000	69,000	37,000	37,500
Newton	19,900	20,000	12,000	12,100
Washington	99,000	100,000	¹	¹
District 20				
Baxter	18,000	18,300	9,500	9,600
Cleburne	26,500	26,500	13,200	13,400
Fulton	43,500	44,000	¹	¹
Izard	35,500	36,000	18,800	18,900
Marion	42,500	43,000	¹	¹
Searcy	36,500	36,500	¹	¹
Sharp	29,500	30,000	15,400	15,500
Stone	36,000	36,500	16,100	16,200
Van Buren	27,500	27,500	13,400	13,300
District 30				
Clay	6,700	6,800	3,400	3,500
Craighead	5,000	5,100	2,800	2,900
Greene	7,300	7,300	4,300	4,400
Independence	42,000	42,500	23,000	23,500
Jackson	3,700	3,600	2,200	2,200
Lawrence	15,300	15,500	9,400	9,500
Mississippi	400	400	200	200
Poinsett	2,700	2,700	1,600	1,600
Randolph	35,000	35,500	17,800	17,900
White	47,000	48,000	26,000	26,500
District 40				
Crawford	25,500	25,500	13,400	13,500
Franklin	56,000	56,000	¹	¹
Johnson	27,500	28,000	14,500	14,600
Logan	64,000	64,000	¹	¹
Polk	38,000	38,500	21,500	21,500
Pope	37,000	37,500	18,800	18,900
Scott	22,000	22,000	12,900	13,000
Sebastian	28,000	28,000	¹	¹
Yell	39,500	40,000	24,500	25,000
District 50				
Conway	36,500	37,000	¹	¹
Faulkner	35,000	35,500	19,500	19,600
Garland	6,100	6,100	4,000	4,000
Grant	12,000	12,100	4,700	4,800
Hot Spring	15,100	15,300	8,800	8,900
Perry	14,600	14,800	8,900	9,000
Pulaski	4,600	4,600	2,600	2,700
Saline	7,300	7,400	¹	¹
District 60				
Arkansas	2,600	2,700	1,400	1,500
Crittenden	500	500	300	300
Cross	2,200	2,200	1,300	1,400
Lee	1,200	1,200	600	600
Lonoke	13,500	13,700	6,300	6,400
Monroe	400	400	200	200
Phillips	1,100	1,100	900	900
Prairie	2,300	2,300	1,400	1,400
Saint Francis	1,600	1,600	1,000	1,100
Woodruff	900	900	400	400

See footnote(s) at end of table



United States Department of Agriculture
National Agricultural Statistics Service

Arkansas Cattle County Estimates

Released: June 13, 2019



Delta Region – Arkansas Field Office

10800 Financial Centre Parkway, Suite 110, Little Rock, Arkansas 72211
(501) 228-9926 · (855) 270-2705 FAX · www.nass.usda.gov

Cooperating with the University of Arkansas – Division of Agriculture

Cattle: Inventory on Farms – County: January 1, 2018 and 2019 (continued)

[Individual county estimates not available for counties not shown, but are included in other counties]

District and County	All cattle and calves		Beef cows	
	2018 (number of head)	2019 (number of head)	2018 (number of head)	2019 (number of head)
District 70				
Hempstead	53,000	54,000	32,000	32,500
Howard	44,000	44,500	24,000	24,500
Lafayette	32,000	32,500	9,900	10,000
Little River	31,500	32,000	15,200	15,300
Miller	22,000	22,500	¹	¹
Montgomery	20,000	20,500	12,500	12,700
Pike	25,000	25,500	12,000	12,100
Sevier	35,000	35,500	¹	¹
District 80				
Bradley	3,800	3,800	2,300	2,300
Calhoun	3,300	3,400	1,700	1,700
Clark	11,800	11,900	¹	¹
Cleveland	5,400	5,500	3,100	3,200
Columbia	11,400	11,400	6,300	6,400
Dallas	2,600	2,600	1,500	1,500
Nevada	20,000	21,000	11,300	11,300
Ouachita	3,800	3,900	2,700	2,700
Union	6,400	6,400	3,800	3,900
District 90				
Ashley	3,000	3,000	1,700	1,700
Chicot	4,700	4,700	2,100	2,100
Desha	500	500	300	300
Drew	10,700	10,700	4,900	5,000
Jefferson	2,600	2,600	1,600	1,600
Lincoln	8,000	8,000	¹	¹
Other counties	-	-	295,600	299,300
State total	1,760,000	1,780,000	924,000	935,000

- Represent zero.

¹ Included in other counties.

Location: User-specified point center at 36.182197, -93.587578
 Ring (buffer): 5-miles radius
 Description:

Summary	Census 2010
Population	1,197
Population Density (per sq. mile)	15
Minority Population	79
% Minority	7%
Households	483
Housing Units	573
Land Area (sq. miles)	78.40
% Land Area	100%
Water Area (sq. miles)	0.28
% Water Area	0%

Population by Race	Number	Percent
Total	1,197	-----
Population Reporting One Race	1,180	99%
White	1,135	95%
Black	2	0%
American Indian	18	2%
Asian	10	1%
Pacific Islander	0	0%
Some Other Race	15	1%
Population Reporting Two or More Races	17	1%
Total Hispanic Population	36	3%
Total Non-Hispanic Population	1,161	97%
White Alone	1,118	93%
Black Alone	1	0%
American Indian Alone	18	2%
Non-Hispanic Asian Alone	10	1%
Pacific Islander Alone	0	0%
Other Race Alone	1	0%
Two or More Races Alone	12	1%

Population by Sex	Number	Percent
Male	609	51%
Female	588	49%

Population by Age	Number	Percent
Age 0-4	66	5%
Age 0-17	287	24%
Age 18+	910	76%
Age 65+	181	15%

Households by Tenure	Number	Percent
Total	483	
Owner Occupied	393	81%
Renter Occupied	89	19%

Data Note: Detail may not sum to totals due to rounding. Hispanic population can be of any race.
Source: U.S. Census Bureau, Census 2010 Summary File 1.

Location: User-specified point center at 36.182197, -93.587578

Ring (buffer): 5-miles radius

Description:

Summary of ACS Estimates		2013 - 2017	
Population		1,118	
Population Density (per sq. mile)		14	
Minority Population		50	
% Minority		4%	
Households		437	
Housing Units		595	
Housing Units Built Before 1950		68	
Per Capita Income		25,217	
Land Area (sq. miles) (Source: SF1)		78.39	
% Land Area		100%	
Water Area (sq. miles) (Source: SF1)		0.28	
% Water Area		0%	

	2013 - 2017 ACS Estimates	Percent	MOE (±)
Population by Race			
Total	1,118	100%	409
Population Reporting One Race	1,078	96%	526
White	1,072	96%	409
Black	0	0%	11
American Indian	6	1%	73
Asian	0	0%	11
Pacific Islander	0	0%	11
Some Other Race	0	0%	11
Population Reporting Two or More Races	40	4%	89
Total Hispanic Population	7	1%	30
Total Non-Hispanic Population	1,111		
White Alone	1,068	96%	409
Black Alone	0	0%	11
American Indian Alone	6	1%	73
Non-Hispanic Asian Alone	0	0%	11
Pacific Islander Alone	0	0%	11
Other Race Alone	0	0%	11
Two or More Races Alone	37	3%	89
Population by Sex			
Male	532	48%	218
Female	586	52%	238
Population by Age			
Age 0-4	75	7%	87
Age 0-17	251	22%	162
Age 18+	867	78%	235
Age 65+	205	18%	108

Data Note: Detail may not sum to totals due to rounding. Hispanic population can be of any race.

N/A means not available. **Source:** U.S. Census Bureau, American Community Survey (ACS) 2013 - 2017

Location: User-specified point center at 36.182197, -93.587578

Ring (buffer): 5-miles radius

Description:

	2013 - 2017 ACS Estimates	Percent	MOE (±)
Population 25+ by Educational Attainment			
Total	775	100%	223
Less than 9th Grade	51	7%	60
9th - 12th Grade, No Diploma	35	4%	60
High School Graduate	317	41%	138
Some College, No Degree	243	31%	144
Associate Degree	56	7%	79
Bachelor's Degree or more	130	17%	114
Population Age 5+ Years by Ability to Speak English			
Total	1,043	100%	381
Speak only English	1,008	97%	311
Non-English at Home ¹⁺²⁺³⁺⁴	34	3%	104
¹ Speak English "very well"	34	3%	104
² Speak English "well"	0	0%	11
³ Speak English "not well"	0	0%	11
⁴ Speak English "not at all"	0	0%	11
³⁺⁴ Speak English "less than well"	0	0%	11
²⁺³⁺⁴ Speak English "less than very well"	0	0%	11
Linguistically Isolated Households*			
Total	0	0%	11
Speak Spanish	0	0%	11
Speak Other Indo-European Languages	0	0%	11
Speak Asian-Pacific Island Languages	0	0%	11
Speak Other Languages	0	0%	11
Households by Household Income			
Household Income Base	437	100%	120
< \$15,000	25	6%	79
\$15,000 - \$25,000	65	15%	55
\$25,000 - \$50,000	138	32%	97
\$50,000 - \$75,000	101	23%	94
\$75,000 +	108	25%	97
Occupied Housing Units by Tenure			
Total	437	100%	120
Owner Occupied	372	85%	121
Renter Occupied	65	15%	77
Employed Population Age 16+ Years			
Total	894	100%	293
In Labor Force	448	50%	223
Civilian Unemployed in Labor Force	25	3%	48
Not In Labor Force	446	50%	172

Data Note: Detail may not sum to totals due to rounding. Hispanic population can be of anyrace.

N/A means not available. **Source:** U.S. Census Bureau, American Community Survey (ACS)

*Households in which no one 14 and over speaks English "very well" or speaks English only.

Location: User-specified point center at 36.182197, -93.587578

Ring (buffer): 5-miles radius

Description:

	2013 - 2017 ACS Estimates	Percent	MOE (±)
Population by Language Spoken at Home*			
Total (persons age 5 and above)	1,124	100%	286
English	1,094	97%	306
Spanish	10	1%	36
French	0	0%	11
French Creole	N/A	N/A	N/A
Italian	N/A	N/A	N/A
Portuguese	N/A	N/A	N/A
German	0	0%	11
Yiddish	N/A	N/A	N/A
Other West Germanic	N/A	N/A	N/A
Scandinavian	N/A	N/A	N/A
Greek	N/A	N/A	N/A
Russian	N/A	N/A	N/A
Polish	N/A	N/A	N/A
Serbo-Croatian	N/A	N/A	N/A
Other Slavic	N/A	N/A	N/A
Armenian	N/A	N/A	N/A
Persian	N/A	N/A	N/A
Gujarathi	N/A	N/A	N/A
Hindi	N/A	N/A	N/A
Urdu	N/A	N/A	N/A
Other Indic	N/A	N/A	N/A
Other Indo-European	0	0%	11
Chinese	0	0%	11
Japanese	N/A	N/A	N/A
Korean	0	0%	11
Mon-Khmer, Cambodian	N/A	N/A	N/A
Hmong	N/A	N/A	N/A
Thai	N/A	N/A	N/A
Laotian	N/A	N/A	N/A
Vietnamese	0	0%	11
Other Asian	20	2%	89
Tagalog	0	0%	11
Other Pacific Island	N/A	N/A	N/A
Navajo	N/A	N/A	N/A
Other Native American	N/A	N/A	N/A
Hungarian	N/A	N/A	N/A
Arabic	0	0%	11
Hebrew	N/A	N/A	N/A
African	N/A	N/A	N/A
Other and non-specified	0	0%	11
Total Non-English	30	3%	419

Data Note: Detail may not sum to totals due to rounding. Hispanic population can be of any race.

N/A means not available. **Source:** U.S. Census Bureau, American Community Survey (ACS) 2013 - 2017.

*Population by Language Spoken at Home is available at the census tract summary level and up.



Arkansas Natural Resources Commission

FINAL REPORT ON COUNTY REGISTRATION

County	# of Acres	Tons Generated	Tons Removed From Houses	Applied	Stored	Transferred or Sold	Other	Litter Use Difference	No. of Houses	Bird Capacity	Farms Reported (2019)	2018 reg	Diff from 18 to 19	% short or long	% Complete
ASHLEY	391	3,450	3,450	800	100	2,550	0	0	18	191,000	5	5	0	0.0%	100.0%
BAXTER	7,410	3,050	3,010	1,745	0	1,285	0	40	14	234,000	5	5	0	0.0%	100.0%
BENTON	15,422	591,613	573,990	7,829	24,113	549,386	699	8,038	1,070	25,311,767	237	248	-11	-4.4%	95.8%
BOONE	22,656	53,213	48,931	8,839	2,389	37,702	0	0	354	5,840,400	89	90	-1	-1.1%	98.9%
BUFFALO (SEARCY)	928	1,560	1,090	322	470	775	0	477	8	453,000	2	1	1	100.0%	200.0%
CALHOUN	850	1,139	1,139	350	150	639	0	0	8	90,000	3	3	0	0.0%	100.0%
CARROLL	56,320	127,749	106,989	30,957	4,692	71,391	149	199	776	13,997,579	181	184	-3	-1.6%	98.4%
CLARK	883	5,103	3,110	2,036	586	488	0	0	20	276,700	7	6	1	16.7%	116.7%
CLAY	4,896	31,443	21,888	4,700	3,836	13,352	0	0	144	14,667,500	18	15	3	20.0%	120.0%
CLEBURNE	10,808	22,320	19,642	4,393	3,398	11,851	0	0	131	2,482,340	38	39	-1	-2.6%	97.4%
CLEVELAND	4,559	45,956	43,755	3,047	7,222	26,656	9,031	2,201	289	5,558,450	73	73	0	0.0%	100.0%
COLUMBIA	3,284	12,857	8,867	3,105	1,385	4,377	0	0	71	1,381,800	18	17	1	5.9%	105.9%
CONWAY	15,243	37,443	28,640	14,064	2,355	12,222	0	0	246	5,651,175	73	80	-7	-8.8%	91.3%
COSSATOT (SEVIER)	28,182	49,335	47,747	25,412	662	21,803	100	230	478	9,425,200	113	108	5	4.6%	104.6%
CRAIGHEAD	20	800	800	0	0	800	0	0	4	57,537	1	0	1	#DIV/0!	#DIV/0!
CRAWFORD	3,383	6,155	7,044	2,724	571	2,688	0	1,061	42	802,400	16	17	-1	-5.9%	94.1%
DESHA	0	1,470	0	0	0	0	1,470	1,470	8	196,000	1	1	0	0.0%	100.0%
DREW	2,812	5,648	5,648	180	740	4,728	0	0	42	702,900	13	14	-1	-7.1%	92.9%
FRANKLIN	25,964	74,617	71,895	36,052	3,003	32,841	0	0	340	6,823,383	88	84	4	4.8%	104.8%
FULTON	3,843	3,580	3,580	465	95	3,020	0	0	38	558,250	12	12	0	0.0%	100.0%
GARLAND	2,932	4,081	4,081	993	1,047	2,051	0	0	31	357,700	11	12	-1	-8.3%	91.7%
GRANT	270	1,100	1,100	0	0	1,100	0	0	7	217,000	1	1	0	0.0%	100.0%
HEMPSTEAD	34,346	90,434	63,323	34,957	740	27,626	0	0	535	9,829,700	146	145	1	0.7%	100.7%
HOT SPRING	6,211	37,845	37,845	6,390	250	31,206	0	0	56	921,300	18	13	5	38.5%	138.5%
INDEPENDENCE															
IZARD	10,130	17,328	13,400	7,243	1,269	6,418	0	1,530	113	2,491,250	24	27	-3	-11.1%	88.9%
JACKSON	80	900	900	0	0	900	0	0	8	702,200	2	2	0	0.0%	100.0%
JEFFERSON	640	5,660	5,660	41	0	5,619	0	0	35	1,670,100	6	6	0	0.0%	100.0%
JOHNSON	19,407	96,467	78,266	15,812	7,130	52,908	2,416	0	343	6,059,113	85	81	4	4.9%	104.9%
LAFAYETTE	16,550	19,863	18,755	10,485	577	6,557	2,044	908	137	2,322,900	41	44	-3	-6.8%	93.2%
L'EGLE CREEK (Bradley)															
LAWRENCE	3,880	19,991	19,991	2,159	1,900	13,000	2,932	0	108	2,118,871	20	21	-1	-4.8%	95.2%
LINCOLN	27,802	33,785	33,785	2,008	4,256	27,521	0	0	199	4,313,576	48	48	0	0.0%	100.0%
LITTLE RIVER	12,859	21,617	21,557	13,563	5,823	2,131	0	60	147	2,868,400	40	41	-1	-2.4%	97.6%
LOGAN	23,992	95,324	76,405	23,627	3,348	49,430	0	0	517	11,059,336	138	133	5	3.8%	103.8%
MADISON	35,565	78,188	78,188	21,707	0	58,481	0	0	585	11,881,790	153	151	2	1.3%	101.3%
MARION (CROOKED CREEK)	9,489	13,032	13,032	2,268	200	10,564	0	0	88	1,011,600	19	18	1	5.6%	105.6%
MILLER	1,242	3,250	2,914	1,172	0	1,742	0	0	26	437,100	9	8	1	12.5%	
MINE CREEK (HOWARD)	33,541	98,465	73,306	27,869	3,016	42,057	24,692	24,328	601	10,407,960	193	199	-6	-3.0%	97.0%
MONTGOMERY	5,003	10,158	6,854	3,910	78	2,866	0	0	71	1,010,070	31	33	-2	-6.1%	93.9%
NEVADA	10,481	23,717	22,995	11,419	905	10,672	0	0	152	2,586,401	47	49	-2	-4.1%	95.9%
NEWTON	4,840	4,045	4,045	2,895	0	1,150	0	0	24	234,000	7	7	0	0.0%	100.0%
OUACHITA	1,360	4,139	4,872	1,891	3,047	0	0	66	22	481,200	4	1	3	300.0%	400.0%
PERRY	3,858	12,690	10,857	6,719	1,591	2,547	0	0	66	1,381,850	18	19	-1	-5.3%	94.7%
PIKE	13,713	37,257	31,542	13,419	3,013	16,575	1,768	3,233	242	3,691,420	86	86	0	0.0%	100.0%
POLK (RICH MT.)	19,016	64,939	64,939	23,913	1,936	37,693	1,397	0	346	8,720,100	97	100	-3	-3.0%	97.0%
POPE	15,130	41,406	31,892	12,270	1,087	18,410	0	126	261	5,899,010	67	54	13	24.1%	124.1%
POTEAU RIVER (SCOTT)	9,396	65,063	44,949	3,862	80	39,322	5	1,680	332	11,765,000	82	93	-11	-11.8%	98.2%
PULASKI	835	3,518	3,518	0	25	3,493	0	0	20	413,000	3	3	0	0.0%	100.0%
RANDOLPH	20,507	79,736	70,708	12,325	3,250	55,032	103	0	373	9,018,462	72	68	4	5.9%	105.9%
SEBASTIAN	6,523	30,030	26,821	3,785	1,384	21,652	0	0	215	5,590,600	55	58	-3	5.2%	99.5%
SHARP	16,887	60,014	58,452	14,061	3,220	41,171	0	0	342	7,964,830	80	80	0	0.0%	100.0%
STONE	18,802	27,118	27,118	13,518	4,060	9,541	0	0	150	3,656,700	41	42	-1	-2.4%	97.6%
UNION															
VAN BUREN	495	1,624	1,424	560	0	864	0	0	13	312,000	3	3	0	0.0%	100.0%
WASHINGTON	18,585	121,213	94,082	15,286	17,779	72,422	0	11,405	765	16,801,203	161	207	-46	-22.2%	77.8%
WHITE	16,070	48,503	56,173	4,972	1,799	49,402	0	0	205	6,433,600	31	31	0	0.0%	100.0%
YELL	32,887	106,997	104,410	27,724	5,413	42,026	31,642	2,395	558	11,861,621	144	142	2	1.4%	101.4%
54	TOTAL	TOTAL	TOTAL	TOTAL	TOTAL	TOTAL	TOTAL	TOTAL	TOTAL	TOTAL	TOTAL	TOTAL	-46		
	660,758	2,457,998	2,209,374	489,833	134,090	1,560,683	78,448	59,445	11,770	261,192,144	2,976	3,028			

TONS/ACRE 0.74