

State Specific Training Module for Arkansas

Purpose of this Module

This module will provide some general information that TSPs need to conduct conservation planning in our state. This information is general in nature so the TSP may need to follow up with additional reading or training to make sure they have the knowledge, skill, licenses and certifications to conduct conservation planning in this state.

What is the Purpose of the Natural Resources Conservation Service?



NRCS is USDA's technical agency for providing assistance to private land managers, conservation districts, tribes, and other organizations in planning and carrying out conservation activities and programs

What's a Conservation Plan?



A conservation plan is the record of decisions and supporting information for treatment of a unit of land meeting planning criteria for one or more identified natural resource concerns as a result of the planning process.

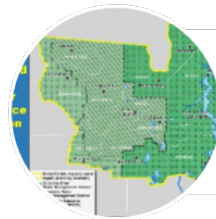
Types of Conservation Plans



Individual Level Plans

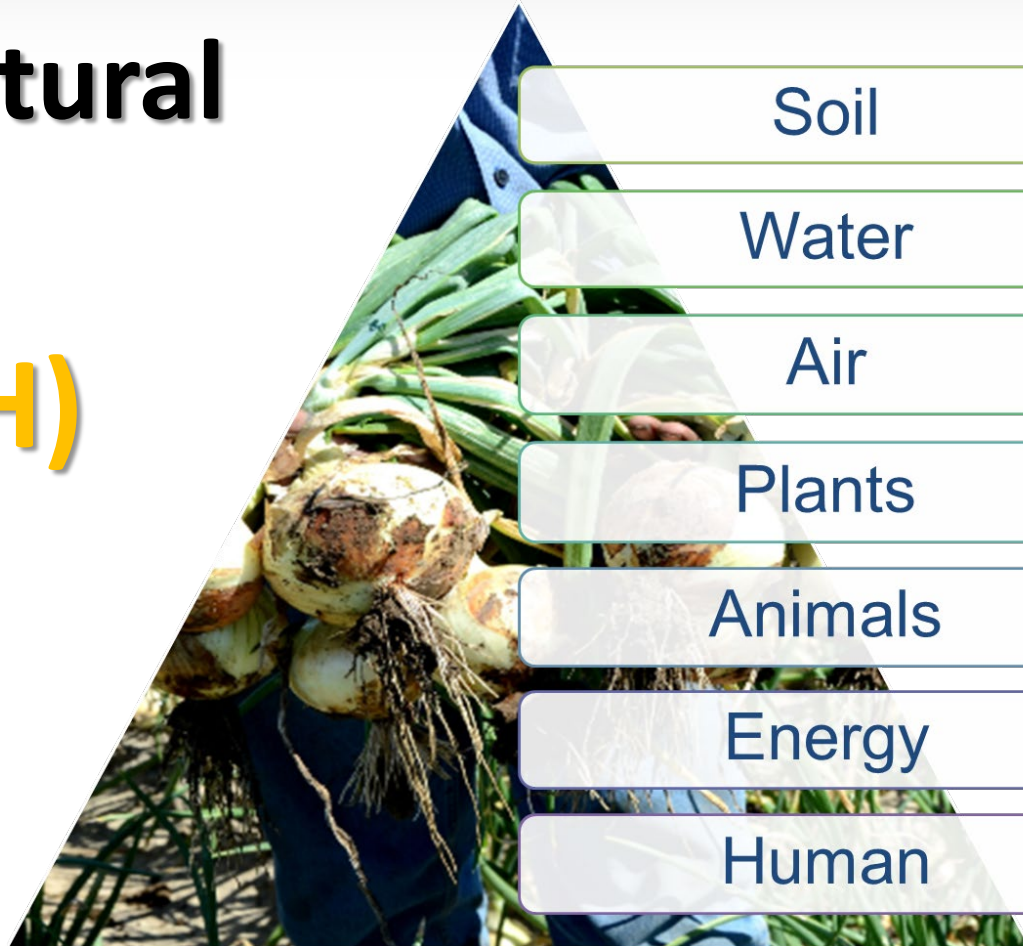


Comprehensive plans with units of government



Areawide Plans

What are Natural Resources (SWAPAE+H)



Soil

Water

Air

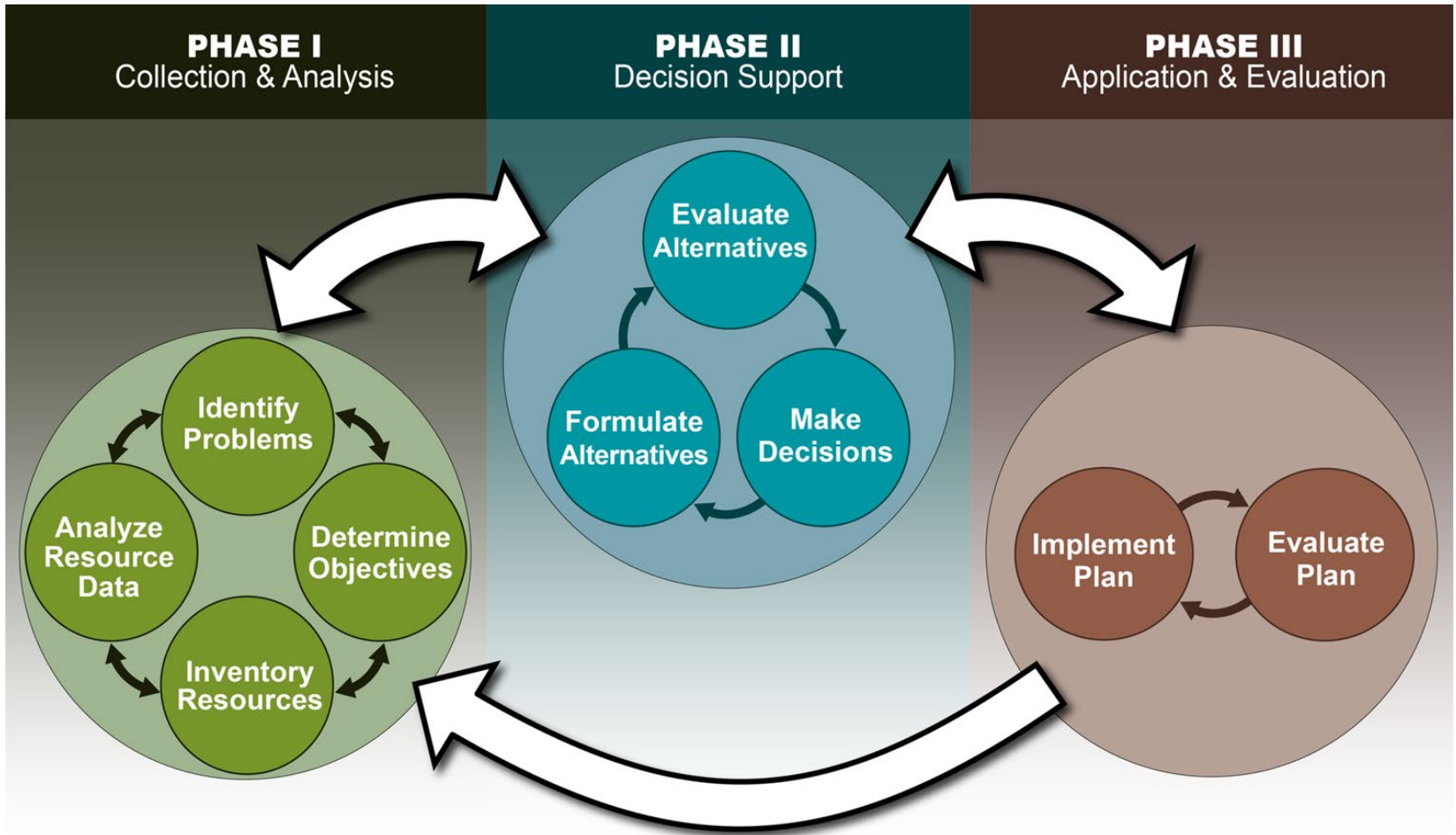
Plants

Animals

Energy

Human

NRCS Planning Process



Review of State Laws

Arkansas Code of 1987 Annotated Tit. 17, Subtit. 2., Ch. 13 Note Agricultural Consultants Licensing Act

A.C.A. § 17-13-102. It is the intent of the General Assembly that the agricultural community continue to have a choice of seeking the advice of whomever they choose regarding the areas indicated in this chapter as the functions of licensed agricultural consultants. It is also the General Assembly's intent that by providing a mechanism whereby persons may be licensed by the State Plant Board as agricultural consultants, they may thereby hold themselves out as “licensed agricultural consultants” which will inform the public that they have met the qualifications required by this chapter.

A licensed agricultural consultant is a person who is licensed by the State Plant Board to perform the following functions:

- (1) Provide advice or prescriptions for the control or eradication of any insect or mite pest;
- (2) Provide advice or prescriptions for the control or eradication of any plant pathogen, including nematodes;
- (3) Provide advice or prescriptions for the control or eradication of any weed;
- (4) Provide advice or prescriptions for the use of fertilizer, lime, or micronutrients based on soil classification and cropping systems and soil or plant tests; and
- (5) Provide other functions as the board may deem appropriate.

Source: [A.C.A. Tit. 17, Subtit. 2., Ch. 13 Note](#)

Review of State Laws

Arkansas Code of 1987 Annotated

Tit. 17, Subtit. 2., Ch. 31 Note

State Board of Registration for Foresters Act

A.C.A. § 17-31-101. The purpose of this chapter is to ensure that no person shall use in connection with the person's name, or otherwise assume, use, or advertise any title or description that the person is a forester, unless the person is registered as herein provided.

Source: [A.C.A. Tit. 17, Subtit. 2., Ch. 31 Note](#)

Review of State Laws

Arkansas Code of 1987 Annotated

Tit. 17, Subtit. 2., Ch. 30 Note

State Board of Licensure for Professional Engineers and Professional Surveyors Act

A.C.A. § 17-30-301. A person, unless licensed under the present law, shall not practice or offer to practice engineering unless that person has been licensed under this chapter, except that:

- (1) An engineer-intern may engage in such a practice as an employee of or under the supervision of a licensed engineer;
- (2) A person holding a temporary permit under § 17-30-105(2) may temporarily provide engineering services for the purpose and in the manner provided by the State Board of Licensure for Professional Engineers and Professional Surveyors when granted the temporary license;
- (3) A person may engage in such a practice if that person is employed by a professional engineer and acts under his or her supervision and direction; and
- (4) A firm may not engage in the practice of engineering as a profession except under § 17-30-303.

Source: [A.C.A. Tit. 17, Subtit. 2., Ch. 30, Subch. 3 Note](#)

Review of State Laws

Arkansas Code of 1987 Annotated

Tit. 17, Subtit. 2., Ch. 48, Subch. 2 Note

State Board of Licensure for Professional Engineers and Professional Surveyors Act

A.C.A. § 17-48-201. Licensure required — Sole or group practice — Surveyor interns.

(a) (1) It is unlawful for a person who is not a professional surveyor licensed by the State Board of Licensure for Professional Engineers and Professional Surveyors to hold himself or herself out as a professional surveyor to practice or offer to practice land surveying in the state, as defined in this chapter, or to use in connection with his or her name or otherwise assume or advertise any title or description tending to convey the impression that he or she is a professional surveyor unless the person has been licensed under this chapter.

(a) (2) The State Board of Licensure for Professional Engineers and Professional Surveyors may discipline nonlicensees that violate this chapter by the levy of a fine in an amount not to exceed five thousand dollars (\$5,000) for each offense.

(b) (1)

(A) Admission to practice land surveying and surveying measurement certification shall be determined upon the basis of individual personal qualifications.

(B) The right to engage in the practice of land surveying and surveying measurement certification is a personal right, based upon the qualifications of the individual, evidenced by his or her license certificate, and is not transferable.

(b) (2) “Surveying measurement certification” does not permit the preparation of engineering or architectural design documents or quantity estimate payment documents.

Review of State Laws

Arkansas Code of 1987 Annotated

Tit. 17, Subtit. 2., Ch. 48, Subch. 2 Note (cont.)

State Board of Licensure for Professional Engineers and Professional Surveyors Act

A.C.A. § 17-48-201. Licensure required — Sole or group practice — Surveyor interns.

(c) (1) A professional surveyor may practice his or her profession through the medium of or as a member or employee of a firm if:

(A) All surveys are signed and stamped with the signature and seal of the professional surveyor in responsible charge; and

(B) The firm has complied with § 17-48-207.

(c) (2) The professional surveyor signing and sealing the surveys shall be personally and professionally responsible therefor, and his or her participation in any firm either as a partner, principal, or employee does not limit his or her individual liability.

(d) A surveyor intern may engage in the practice of land surveying only as an employee of or under the supervision of a professional surveyor.

(e) It is unlawful for a person to prepare, distribute, or place the public records, maps, documents, digital files, or other data that bear or contain a seal or any certification consisting of a verbal, numerical, or symbolic representation of the accuracy or precision of surveying measurements as defined in § 17-48-101(6) or that bear or contain a statement of determination by an authoritative professional source unless the maps, documents, digital files, or other data bear or contain the seal of a professional surveyor or professional engineer practicing within his or her respective discipline.

Source: [A.C.A. Tit. 17, Subtit. 2., Ch. 48, Subch. 2 Note](#)

Review of State Laws

Arkansas Code of 1987 Annotated A.C.A. Tit. 17, Subtit. 2., Ch. 50, Subch. 3 Note Arkansas Water Well Construction Act

A.C.A. § 17-50-301. Certificate — Applicant qualifications.

(a) Upon proper application to the Commission on Water Well Construction, a person is entitled to be registered and to be issued a certificate of registration as a certified water well driller or certified pump installer who shall furnish to the commission proof that he or she:

(1) Is at least eighteen (18) years of age;

(2) [Repealed.]

(3) Has knowledge of the rules adopted under this chapter; and

(4)

(A) Has experience as defined by the commission's rules in the work for which he or she is applying for a certificate of registration.

(B) An applicant may satisfy the requirement under subdivision (a)(4)(A) of this section by:

(i) Completing the commission's apprenticeship program;

(ii) Holding a valid certificate of registration from the commission, within the past ten (10) years, of the type and class for which the applicant is applying; or

Review of State Laws

Arkansas Code of 1987 Annotated

A.C.A. Tit. 17, Subtit. 2., Ch. 50, Subch. 3 Note (cont.)

Arkansas Water Well Construction Act

- (iii) Providing a valid certificate from another state of a type and class substantially similar to the type and class for which the applicant is applying for the period of time equal to the requirement for the apprenticeship program.
- (b) The commission shall provide examinations and a course of instruction, when required, that each applicant must pass in order to qualify for the certificate of registration.

Review of State Laws

Arkansas Code of 1987 Annotated

A.C.A. Tit. 15, Subtit. 2., Ch. 20, Subch. 10 Note

Arkansas Soil Nutrient Management Planner and Applicator Certification Act

15-20-1004. Nutrient planner program.

(a) The Arkansas Natural Resources Commission shall develop and implement a nutrient management education, training, and certification program to certify the minimal competence and knowledge of a person preparing a nutrient management plan.

(b)

(1) The planner certification program is voluntary for planners who develop nutrient management plans outside nutrient surplus areas.

(2) The commission may not require a nutrient planner to become certified unless the planner intends to develop nutrient management plans for areas within nutrient surplus areas or the nutrient management plans or the components of the nutrient management plans are to be paid, in whole or part, by federal or state funds.

(c) The commission shall promulgate rules that:

(1) Specify qualifications and standards for a person to be deemed competent in nutrient management plan preparation and provide for the issuance of documentation of certification to the person;

Review of State Laws

Arkansas Code of 1987 Annotated

A.C.A. Tit. 15, Subtit. 2., Ch. 20, Subch. 10 Note (cont.)

Arkansas Soil Nutrient Management Planner and Applicator Certification Act

- (2) Specify the conditions under which a certification issued may be suspended or revoked;
- (3) Establish fees to be paid by a person enrolling in the training and certification programs;
- (4) Provide for the performance of other duties and the exercise of other powers by the Department of Agriculture as may be necessary to provide for the training and certification of a person preparing nutrient management plans; and
- (5) Give due consideration to relevant existing agricultural or other certification programs.

Source: [A.C.A. Tit. 15, Subtit. 2., Ch. 20, Subch. 10 Note](#)

Review of State Laws

Act 85 of the 1935 General Assembly(as Amended)

ARK. CODE 20-22-302

Notice of Intent to Burn Forest Vegetation

- (a) (1) Any person in this state who desires to burn forest vegetation, including debris from land clearing, shall notify the Arkansas Forestry Commission of the person's intention to burn. Notification of the proposed burning shall include the time and location of the intended burning and other facts which the person or the Arkansas Forestry Commission may deem relevant.
- (2) This notification requirement shall not apply to the "open burning" of "yard wastes" as those terms are defined in §8-6-1701.
- (b) The landowner or other person having charge of the land or his or her agent, shall be present and in attendance at the time of the burning.

Review of State Laws

Examples of Arkansas One-Call regulations (that may impact conservation planning) includes, but is not limited to:

- Excavation/trenching for construction of conservation practices



Dial 811 (when calling within the state of Arkansas) or (800) 482-8998.

Source: [Arkansas 811](#)

Review of State FOTG Requirements

The Field Office Technical Guide (FOTG) is the official the repository of conservation planning guidance documents for NRCS FOTG contains:

Section I – General References

Section II – Soil and Site Information

Section III – Conservation Management Systems

Section IV – Practice Standards and Specifications

Section V – Conservation Effect

Source: [Arkansas | Field Office Technical Guide | NRCS - USDA](#)

Review of State FOTG Requirements

Planners should be thoroughly familiar with the conservation practice standards that have been incorporated into the Arkansas Field Office Technical Guide (FOTG) and are being considered as part of the offered alternatives for addressing the client's resource concerns.

Planners should also follow the Statement of Work (SOW) requirements for each practice and utilize specifications, Technical Notes, Operation and Maintenance (O&M) instructions, and implementation requirements that are available for the practices in the Arkansas FOTG.

Source: [Arkansas | Field Office Technical Guide | NRCS - USDA](#)

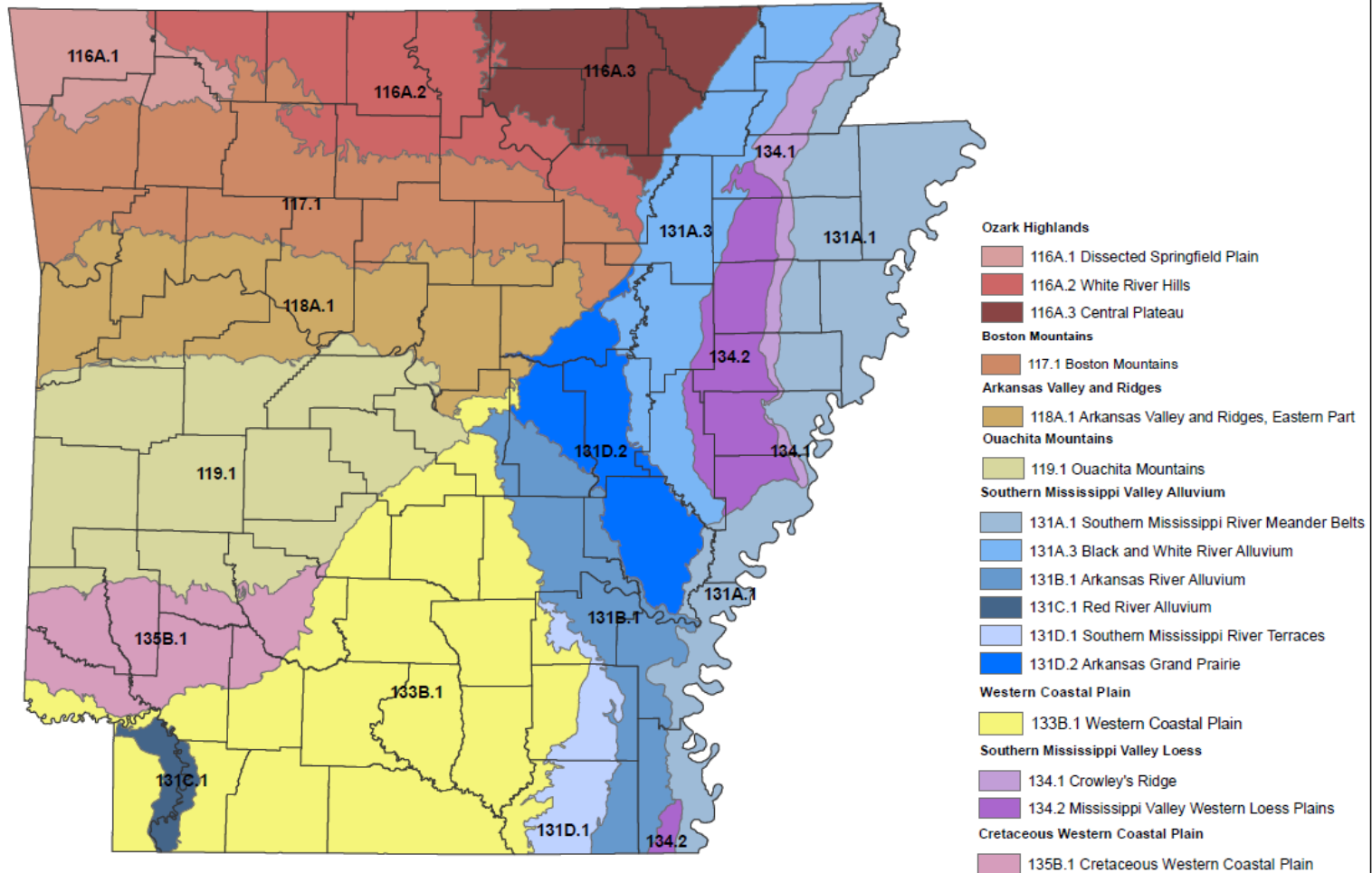
Review of Important Resource Issues

This is a review of important resource issues in the State of AR. Contact the NRCS State Resource Conservationist for additional information.

Helen Denniston, State Resource Conservationist

Helen.Denniston@usda.gov

Common Resource Areas (CRA's) of Arkansas



Arkansas

Common Resource Areas

- 116A.1 - Dissected Springfield Plain: This CRA consists of moderately dissected steep slopes, narrow ridges, and narrow valley bottoms. Relief is generally 150-250 feet. Soils are mainly deep, cherty loams formed from cherty Mississippian limestones. Forests of oak and oak-pine and woodlands dominate the landscape, with cleared land restricted to valley bottoms and some ridges.
- 116A.2 - White River Hills: This CRA consists of steep slopes, narrow ridges, and narrow valley bottoms. Relief is as high as 600 feet. Soils are rocky and thin over carbonate bedrock with areas of rugged dolomite knobs. Local karst, losing streams, and large springs are characteristic. Dolomite glades are the most extensive in Missouri. Dense forests of oak, oak-pine and cedar thickets dominate the landscape.
- 116A.3 - Central Plateau: This CRA consists of some of the least dissected portions of the Ozark Highlands. Dominated by carbonate lithology, it is strongly karstic in many portions and is mantled by a very thick solution residuum. Lack of surface water and droughty soils are characteristics. Much of the land has been cleared for pasture although oak forests and brush dominate locally.

Arkansas

Common Resource Areas

- 117.1 - Boston Mountains: This CRA consists of dissected, rugged mountain with steep slopes, sharp ridges and narrow valleys. Soils are mainly moderately deep to shallow, stony and nonstony, with loamy textures. Soils are low in natural fertility and most areas are not suited for crop production. The area is dominantly forested with some cleared areas on mountaintops, narrow benches, and in valleys. mainly used for pasture.
- 118A.1 - Arkansas Valley and Ridges, Eastern Part: This CRA consists of nearly level to steep sandstone capped ridges and valleys. Soils are are mainly moderately deep to deep, stony and nonstony, with loamy textures. Dominant soils are low in natural fertility. About 50 percent of the area is forested. Cleared areas are mainly pastureland, but there are areas of cropland along the Arkansas River that are important to the economy of the region.
- 119.1 - Ouachita Mountains: This CRA consists of rugged steep mountains with parallel ridges that are divided by narrow valleys. Soil are shallow to moderately deep on mountains and ridges, and moderately deep to deep in the stream valleys. This areas is generally poorly suited for crop production. Most areas remain in forest land. Lesser sloping areas on mountain tops, ridges and in valleys are used for pasture.

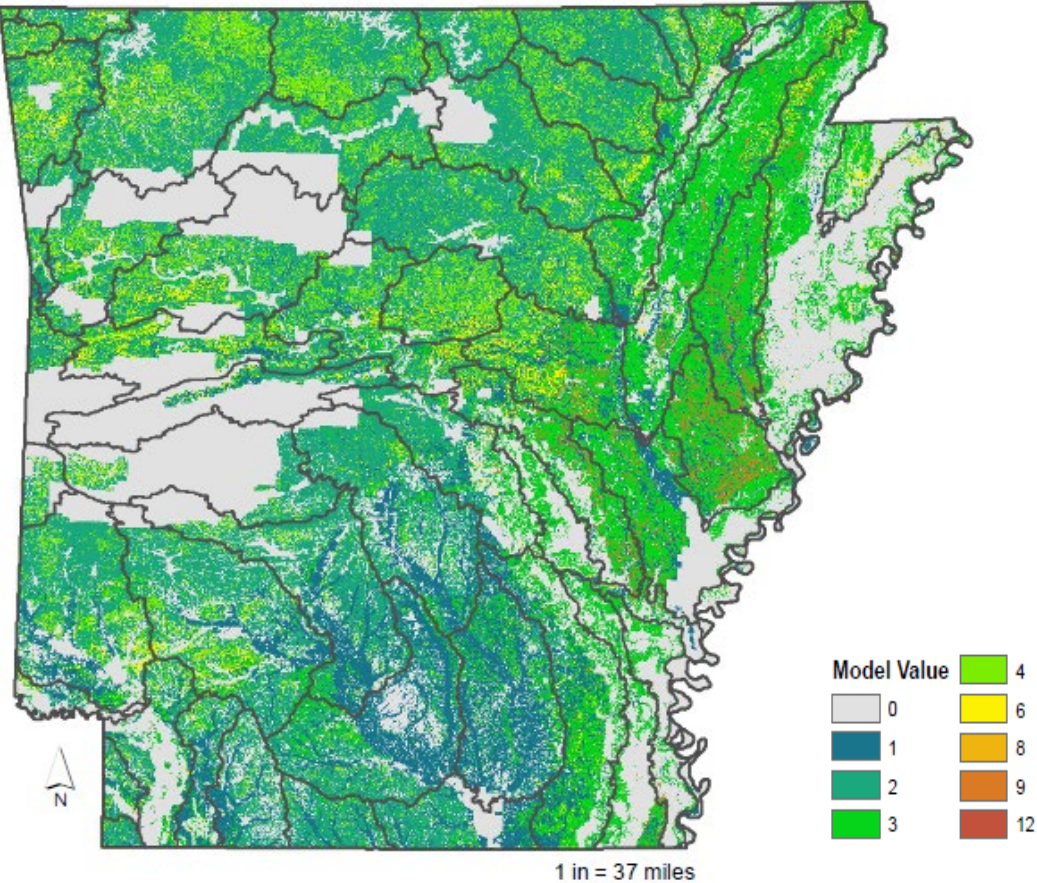
Arkansas

Common Resource Areas

- 131A.1 - Southern Mississippi River Meander Belts: This CRA is dominantly level to nearly level flood plains of the Mississippi River. Soils are deep, fertile, and most are well suited to crop production. Most of the area has been cleared of forest and is used mainly for growing cotton, soybeans, rice and wheat. Some areas require surface drainage for crop production. Some areas of converted wetlands are being restored.
- 131A.3 - Black and White River Alluvium: This CRA consists of level to nearly level alluvial plains of the Black and White Rivers that includes some tracts of windblown sands and some natural wetlands. Soils are deep and most are well suited to crop production. Most of the area has been cleared of forest and is used for growing rice, soybeans, and wheat. Some areas of dunes and swales support rare plant species.
- 131B.1 - Arkansas River Alluvium: This CRA consists of level to nearly level floodplains of the Arkansas River. The deep, fertile soils in this areas are well suited for crop production. Most of the area has been cleared of forest and used mainly for growing cotton, soybeans and rice. Surface drainage is required on some areas for crop production. Wetland hydrology and vegetation is being restored on some converted wetlands.

Soil Erosion Resource Concern Model Output

Sheet, Wind and Rill Erosion - 22,058,377 acres Potentially At-Risk

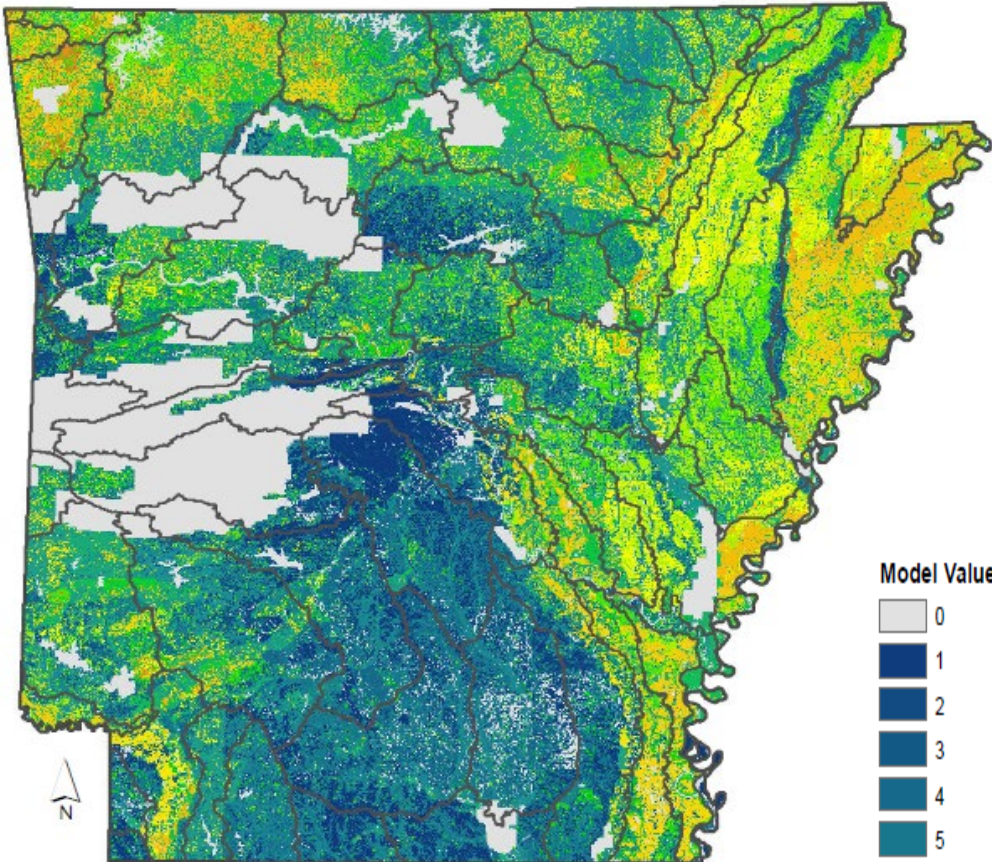


Source: [Arkansas Resource Assessment](#)

Based on Phase I Potential At-Risk Models
created by the Center for Advanced Spatial Technologies
June, 2011

Water Quality Resource Concern Model Output

Excess Nutrients in Surface and Ground Waters - 30,823,325 acres Potentially At-Risk



1 in = 37 miles

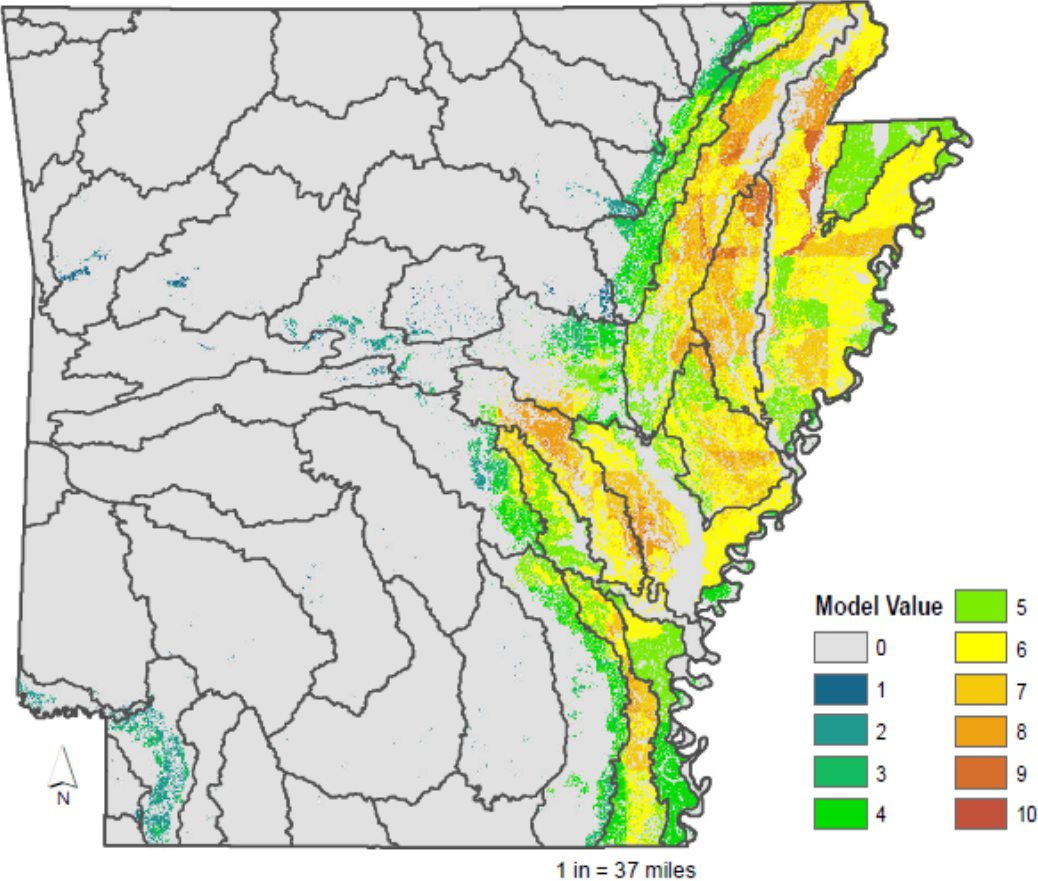
Source: [Arkansas Resource Assessment](#)

Model Value	6	13	20	33	54
0	7	14	21	36	57
1	8	15	22	39	60
2	9	16	24	42	63
3	10	17	26	45	66
4	11	18	27	48	78
5	12	19	30	51	

Based on Phase I Potential At-Risk Models created by the Center for Advanced Spatial Technologies June, 2011

Excess/Inefficient Water Resource Concern Model Output

Inefficient Use of Irrigation Water - 6,759,358 acres Potentially At-Risk



Source: [Arkansas Resource Assessment](#)

Based on Phase I Potential At-Risk Models
created by the Center for Advanced Spatial Technologies
June, 2011

Soil in Arkansas

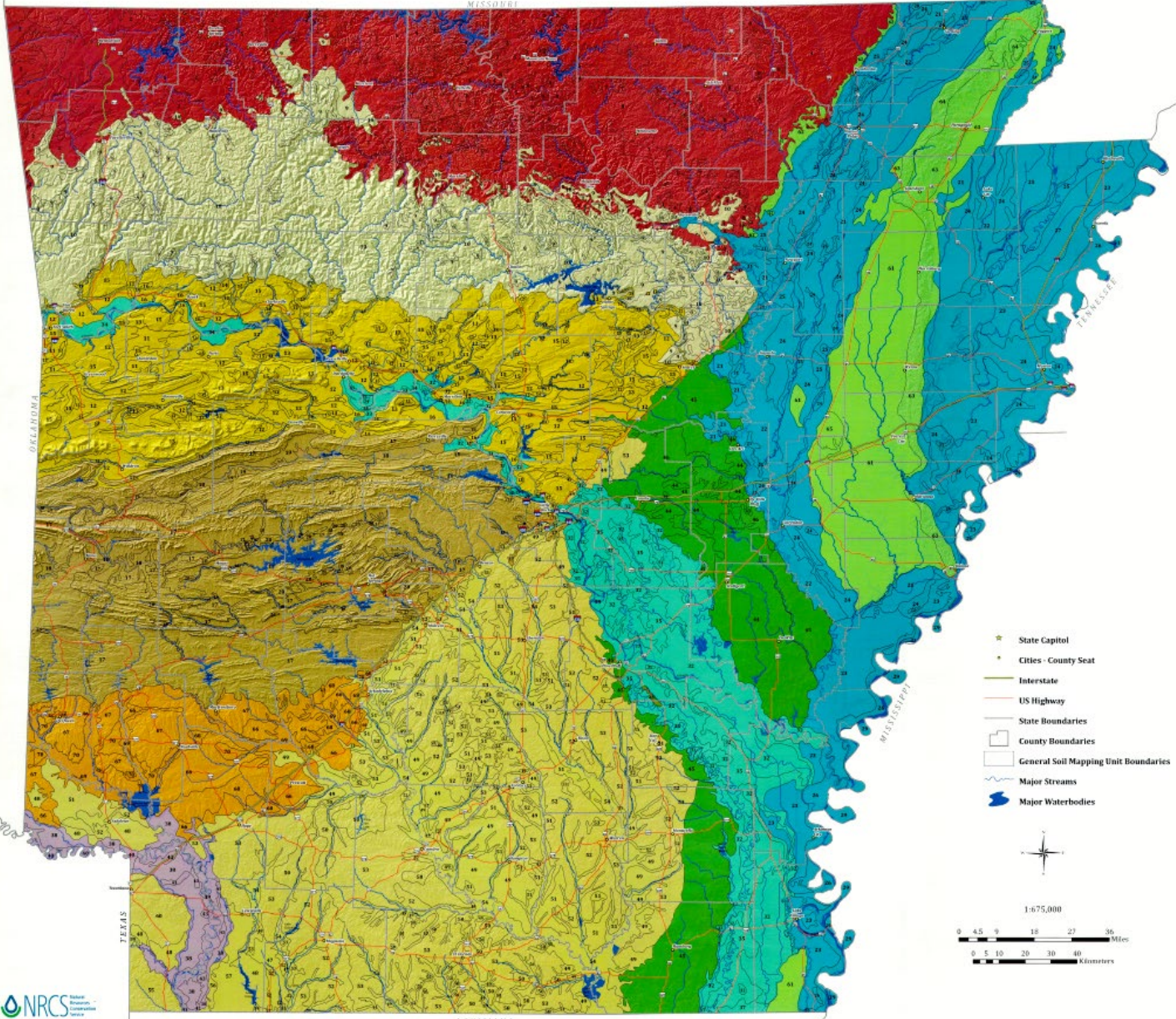
- Soil is one the most precious natural resources in Arkansas as it is the foundation of our most important activity - agriculture.
- Most of the agricultural activity occurs in the Mississippi River Alluvial Plain.
- A relatively small percentage of the soils in the region were formed by the action of wind (Loess) and are mostly concentrated on what we know as Crowley's Ridge. Crop productivity on these soils is often limited by their physical properties.
- In the southern part of Arkansas, we find Coastal Plain soils, which are marine deposits formed when the ocean covered a good portion of southern Arkansas.
- Some row crop agriculture is also present in the Arkansas River Valley. Soils in this area were formed by deposition of the river, by landslides that moved to the foot slopes, and by the weathering of the existent parent material.
- Crop production in the Ozarks Plateaus and Ouachita Mountains is limited, mainly revolving around pasture lands.

"Stuttgart" the Arkansas State Soil

- Stuttgart soils are named for the city of Stuttgart in Southeast Arkansas. They are used primarily for cropland with the dominant crops being rice, soybeans, small grains, and corn. The Stuttgart area is famous for its large fall and winter population of ducks and geese. These waterfowl feed heavily on the crops grown on the Stuttgart soils. Stuttgart soils have been mapped on about 200,000 acres in Arkansas. The Stuttgart series consists of very deep moderately well to somewhat poorly drained soils formed in silty and clayey alluvium. These level to gently sloping soils are on Prairie terraces in the Lower Mississippi Valley. Stuttgart's silt loam surface texture and the slow permeability in its clayey subsoil makes the soil ideal for rice production.

"Stuttgart" the Arkansas State Soil

- Stuttgart soils are in the Alfisols soil order. Alfisols are mostly soils of intermediate age. The "Albaquultic" subgroup implies that the soil has an abrupt textural change, has a moderately high water table during part of the year, and that the base saturation is less than 60 percent at 50 inches below the top of the subsoil. The term "fine" indicates that the upper subsoil averages between 35 and 60 percent clay. The term "smectitic" implies that the clay in the subsoil is dominated by minerals that expand upon wetting and contract upon drying. "Thermic" refers to an average annual soil temperature of between 15o to 22oC (59o to 72oF).
- Typical Stuttgart Soil Profile
 - Surface: 0 to 11 inches - dark grayish brown and grayish brown silt loam
 - Subsurface: 11 to 23 inches - yellowish brown silt loam
 - Subsoil: 23 - 35 inches - red silty clay; 35 - 80 inches - grayish brown and light brownish gray silty clay loam
- Soil Family Classification
 - Fine, smectitic, thermic Albaquultic Hapludalfs



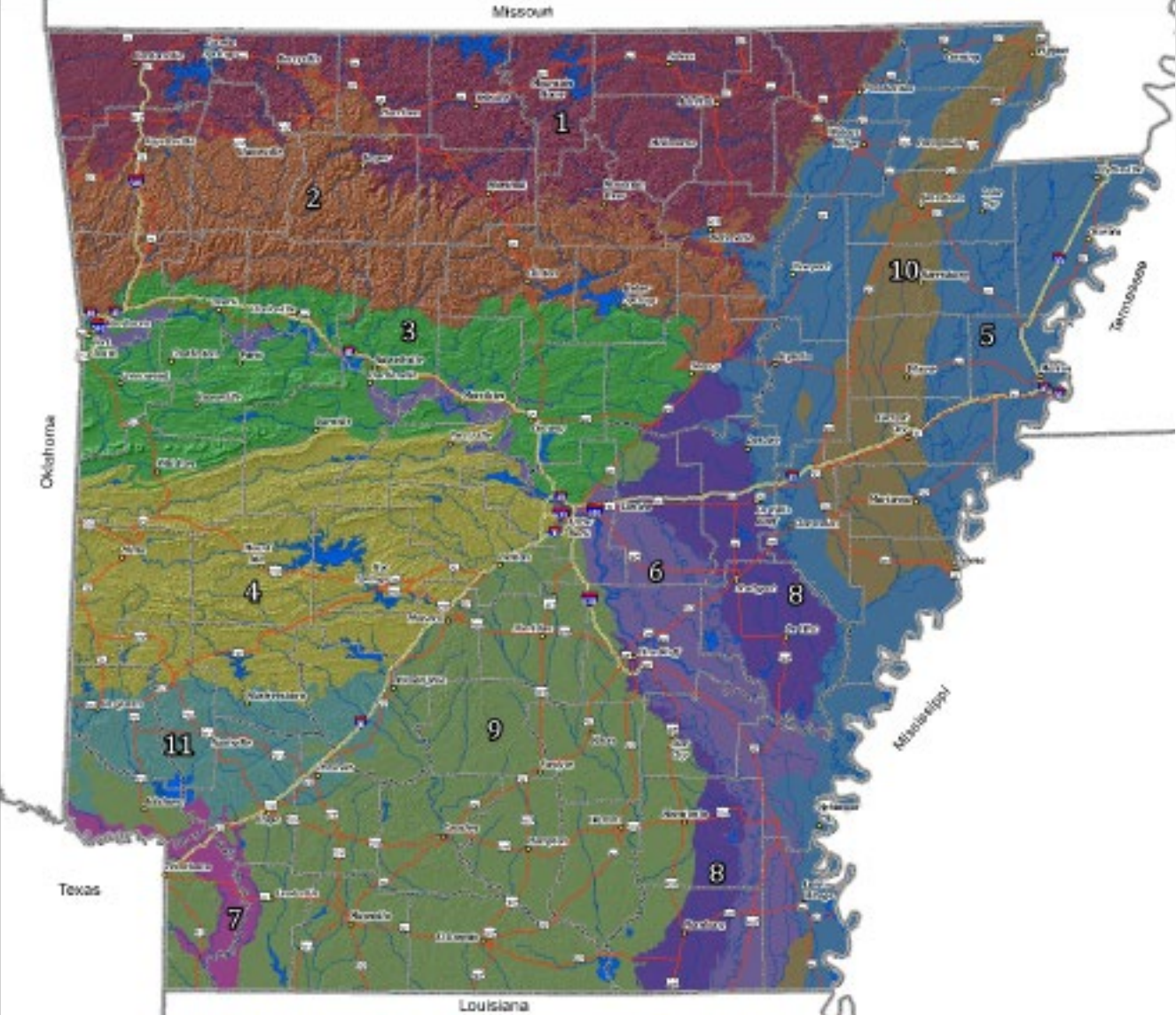
s of Arkansas

Arkansas Soil Regions

- 1 Ozark Highland
- 2 Boston Mountains
- 3 Arkansas Valley and Ridges, Eastern Part
- 4 Ouachita Mountains
- 5 Southern Mississippi River Alluvium
- 6 Arkansas River Alluvium
- 7 Red River Alluvium
- 8 Southern Mississippi River Terraces
- 9 Western Coastal Plain
- 10 Southern Mississippi Valley Loess
- 11 Cretaceous Western Coastal Plain

Highway Type

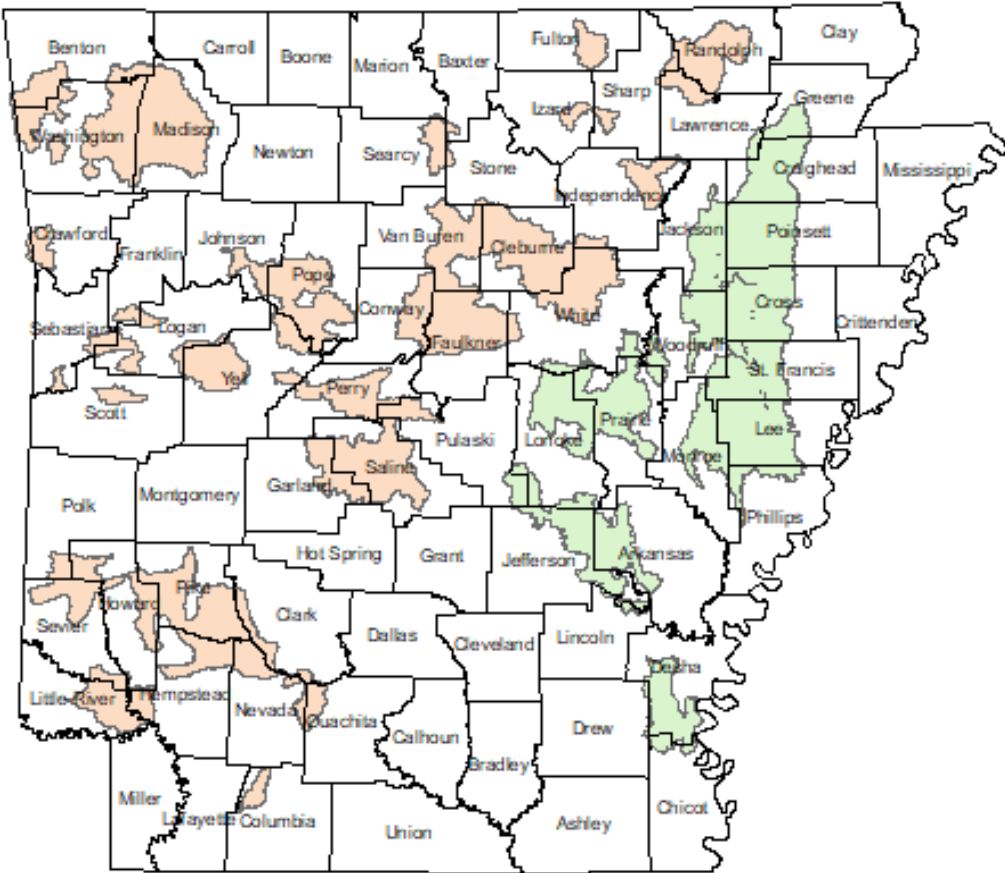
- Interstate
- US Highway
- Major Streams
- Major Waterbodies





Map

AR High Priority Source Water Protection Areas

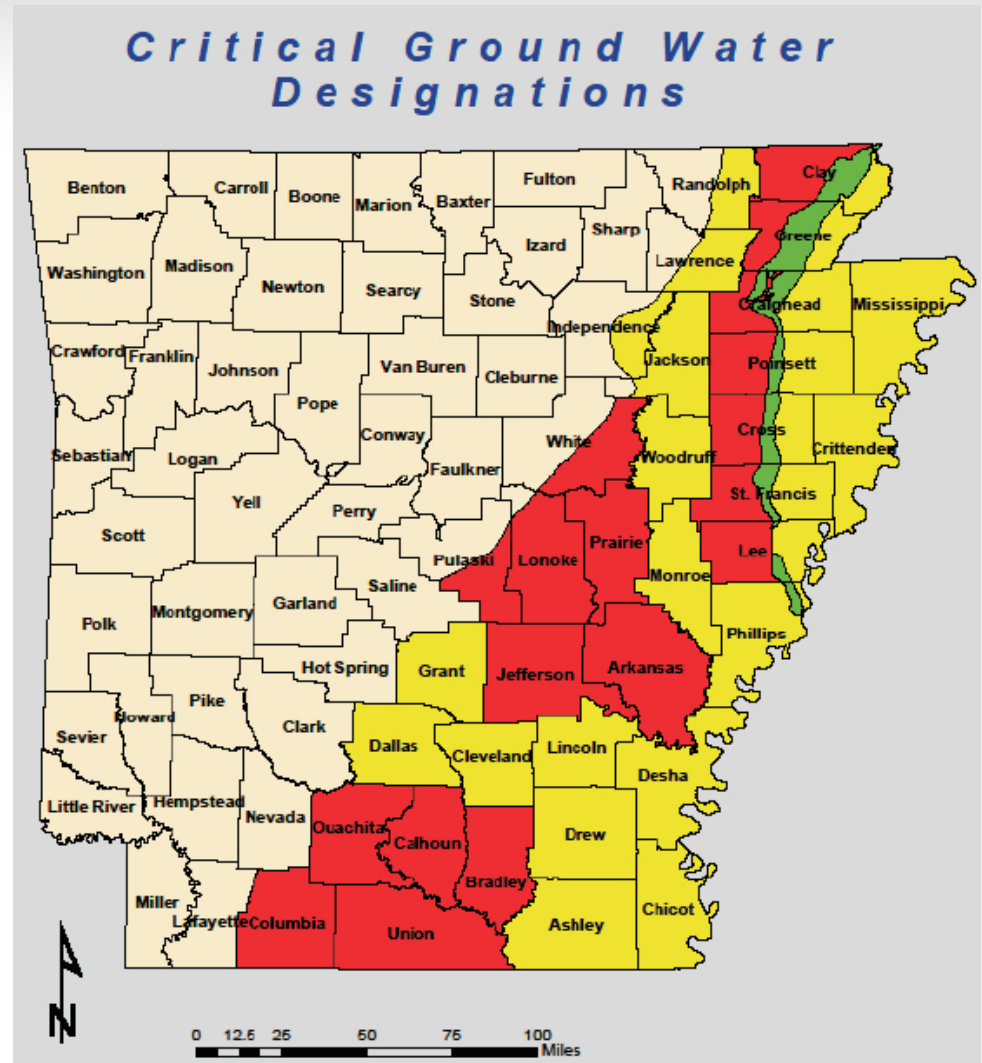


- Legend**
- SWP_Focus_Area_Quality
 - SWP_Focus_Area_Quantity

Arkansas Critical Ground Water Designations

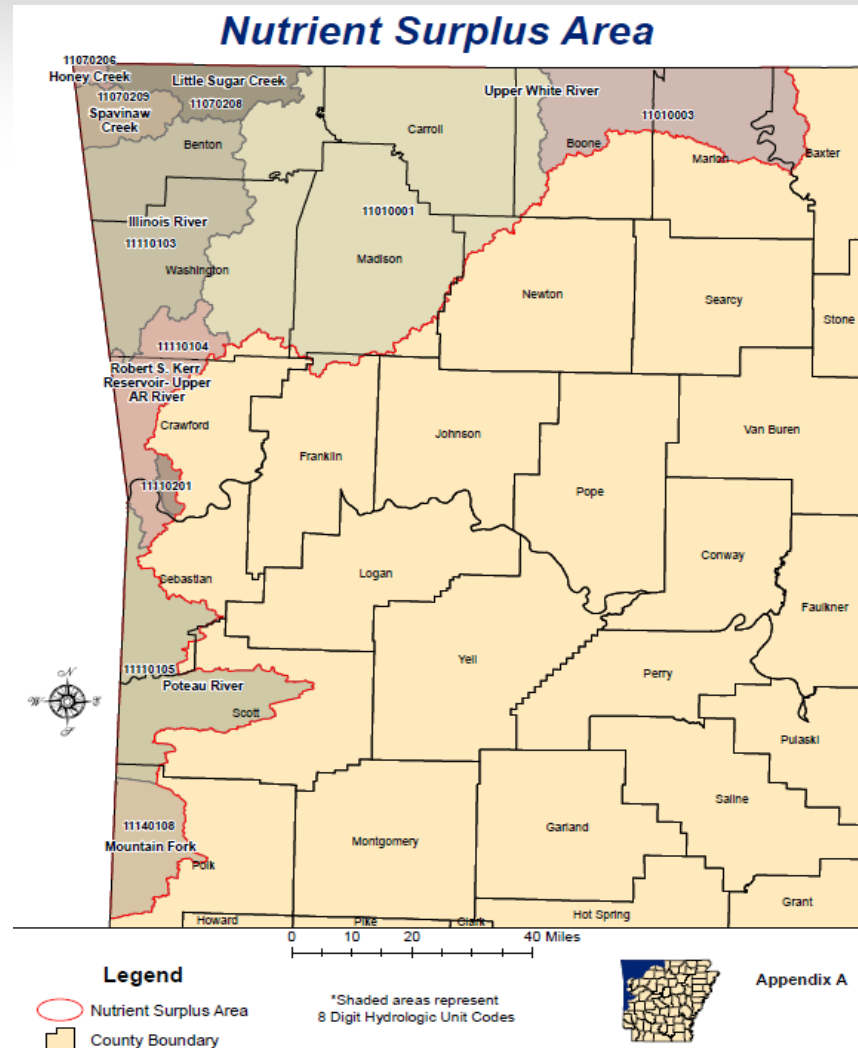
Arkansas has an abundance of good quality groundwater. However, some parts of the state are not so fortunate. The groundwater supply is being depleted faster than the rate of recharge. If this trend continues, it will result in permanent damage to the aquifers and a serious ground water shortage. Measures must be taken to protect the state's precious ground water supply. This can be done by reducing the use of ground water through conservation and use of excess surface water.

Source: www.anrc.arkansas.gov



Arkansas Nutrient Surplus Areas

Nutrient surplus area” means a defined geographic area, declared by Ark. Code Ann. § 15-20-1104 and described more specifically in Subtitle II of these Rules, which has been determined to be an area in which the soil concentration of one or more nutrients is so high or the physical characteristics of the soil or area is such that continued application of the nutrient to the soil could negatively impact soil fertility and the waters within the state.



Arkansas Nutrient Surplus Areas

Act 1061 of 2003 (codified at Ark. Code Ann. § 15-20-1104) declared the following areas to be nutrient surplus areas:

1. The Illinois River watershed, included within Benton, Washington, and Crawford counties;
2. The Spavinaw Creek watershed, included within Benton County;
3. The Honey Creek watershed, included within Benton County;
4. The Little Sugar Creek watershed, included within Benton County;
5. The upper Arkansas River watershed, which includes Lee Creek within Crawford and Washington counties, and Massard Creek within Sebastian County;
6. The Poteau River watershed, included within Scott, Sebastian, and Polk counties;
7. The Mountain Fork of the Little River watershed, included within Polk County; and
8. The upper White River watershed above its confluence with Crooked Creek.

Arkansas's 303(d) List

The 303(d) list is developed by DEQ every two years under provisions of Section 303(d) of the Federal Clean Water Act. DEQ assesses water quality monitoring data from numerous locations around the state and utilizes a comprehensive assessment methodology to determine which waters are not meeting their designated uses or water quality standards as listed in the Arkansas Water Quality Standards (Rule 2 of the Arkansas Pollution Control and Ecology Commission).

[Draft 303\(d\) - Online Maps](#)

Source: [Arkansas Environmental Quality](#)

Arkansas Historic Preservation

- In accordance with the Section 106 implementing regulations promulgated by the Advisory Council on Historic Preservation (36 CFR Part 800), federal agencies are required to consult on undertakings with the potential to affect historic properties of cultural and religious significance to a tribe or tribes. Tribal consultation is an essential component of identifying historic properties within an area of potential effects (APE). Initiate consultation early in the project planning process.
- For additional information regarding tribal consultation on federal undertakings in Arkansas, please contact the tribe directly or the Arkansas Historic Preservation Program.
- This is a [list](#) of federally recognized Indian tribes associated with the State of Arkansas, compiled to assist federal agencies in meeting their Section 106 review responsibilities under the National Historic Preservation Act of 1966, as amended.
- For questions about historic properties and/or cultural resources when doing conservation planning please contact Scott Smallwood, Arkansas Cultural Resource Specialist. Scott.Smallwood@usda.gov

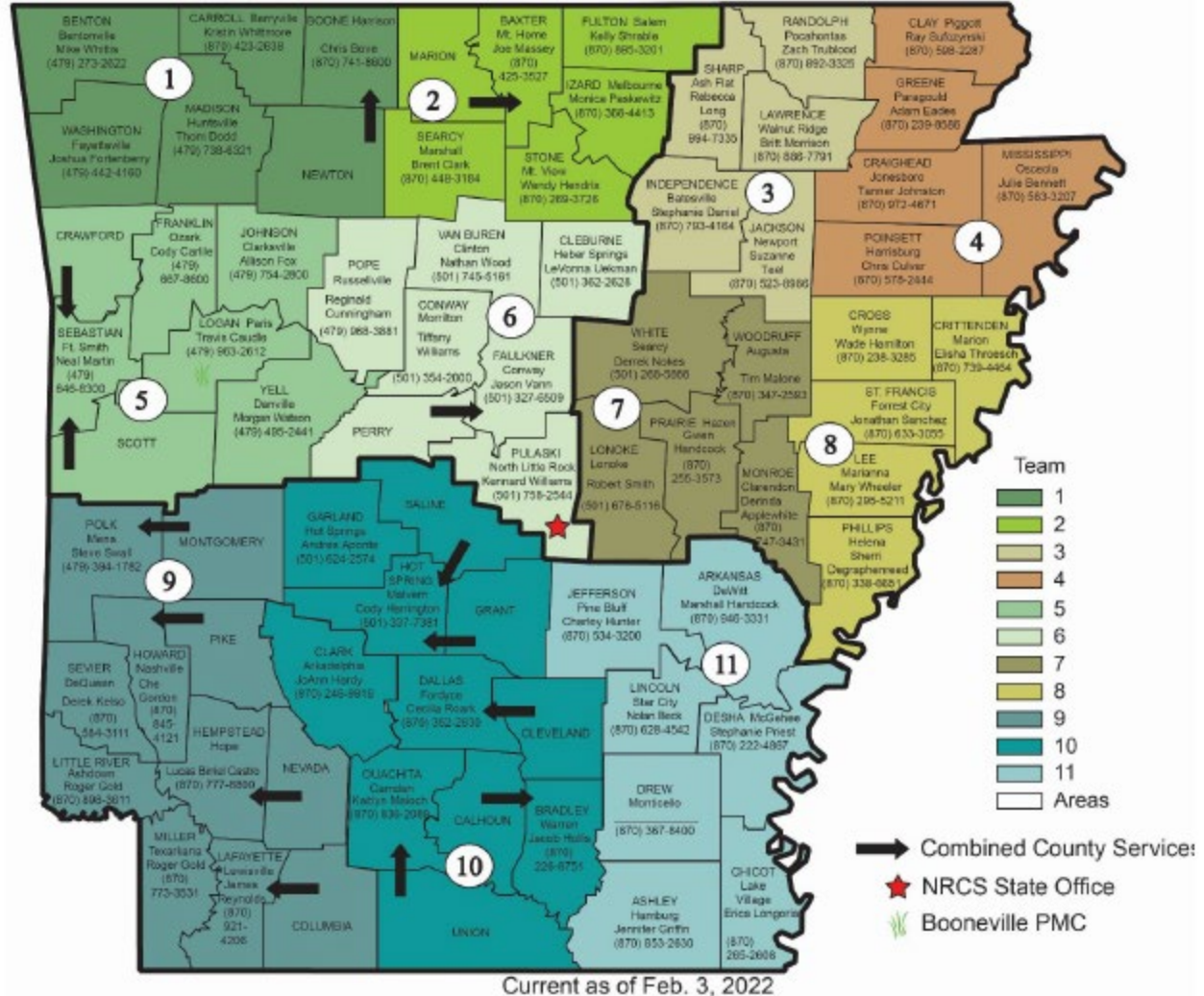
Protected/Threatened/Endangered Species

- Protected, Threatened and/or endangered species are found in the State of AR. Impacts to these species should be a consideration when planning within this State.
- Contact the NRCS State Biologist or the State Wildlife Coordinator for additional information on planning consideration for the different protected species and/or Threatened/endangered species in the State.
- James Baker, NRCS State Biologist (james.baker@usda.gov)
- Ryan Parker, State Wildlife Coordinator (ryana.parker@usda.gov)

Review of Important Resource Issues

- 303d list: <https://www.adeq.state.ar.us/water/planning/integrated/303d/list.aspx>
- T&E: [IPaC: Home \(fws.gov\)](https://www.fws.gov/ipac/)
- Environmental Justice: <https://www.epa.gov/ejscreen>
- Floodplain: <https://msc.fema.gov/portal>
- Invasive Species: [Arkansas Invasive Pests | Invasive animals, plants and diseases in Arkansas \(uada.edu\)](https://www.uada.edu/arkansas-invasive-pests/)
- Migratory Bird: <https://ecos.fws.gov/ipac/>
- Natural Areas: http://www.naturalheritage.com/Natural_Areas/find-a-natural-area
- Wetlands: <https://www.fws.gov/wetlands/>
- Essential Fish Habitat: <https://www.habitat.noaa.gov/protection/efh/efhmapper/>
- Wild and Scenic River: <https://www.rivers.gov/>
- Cultural Resources: https://efotg.sc.egov.usda.gov/references/public/AR/CR_factsheet.pdf
- AR list of Hydric Soils:
https://efotg.sc.egov.usda.gov/references/Public/IL/State_List_NRCS_Hydric_Soils_Report_Dynamic_Data.html
- AR list of High Erodible Soils:
<https://efotg.sc.egov.usda.gov/#/state/AR/documents/section=2&folder=471>

Arkansas NRCS Service Centers



Review of Major Land Uses or Agronomic Practices

- This state is 57% Forest, the other 43% is pasture, and cropland.
- The animal agriculture sector includes production and processing of poultry, eggs, beef and dairy products, sheep and goats, swine and other animals. Beef cattle and poultry are companion enterprise on many farms, with poultry providing cash flow and fertilizer for pastures.
- Arkansas has approximately 6 million acres of forage including about 1.5 million acres of hayland and 4.5 million acres of pasture.
- The average beef cattle herd size is 35 head with 80 percent of the farms having less than 50 head. About 97 percent of the beef cattle farms in Arkansas are family owned and operated.
- There are less than 50 dairies currently in Arkansas.
- Poultry (including broilers, turkeys and chicken eggs) is Arkansas' leading agricultural industry. Many poultry and egg companies are part of the Arkansas poultry industry.

Review of Major Land Uses or Agronomic Practices

- The decrease in number and size of swine operations in Arkansas depicts the change in the swine industry from small and medium sized independents to large contract swine operations. Current estimates indicate 95 percent or more of the swine in Arkansas are grown under contract.
- Arkansas ranks third in the nation for the area of irrigated land. It ranks second in the volume of water pumped for irrigation. To sustain agricultural production, a critical need is access to adequate water to grow crops profitably. About 80% of Arkansas's irrigation demand is provided by groundwater provided by the Lower Mississippi River Basin (LMRB), of which only about 48% of the annual withdraw is sustainable. Water is critically important for Arkansas to support healthy ecosystems, quality of life and the economic well-being of Arkansas.
- Common irrigation methods: center pivots, border, furrow and surge, levee, and drip.

Review of Major Land Uses or Agronomic Practices

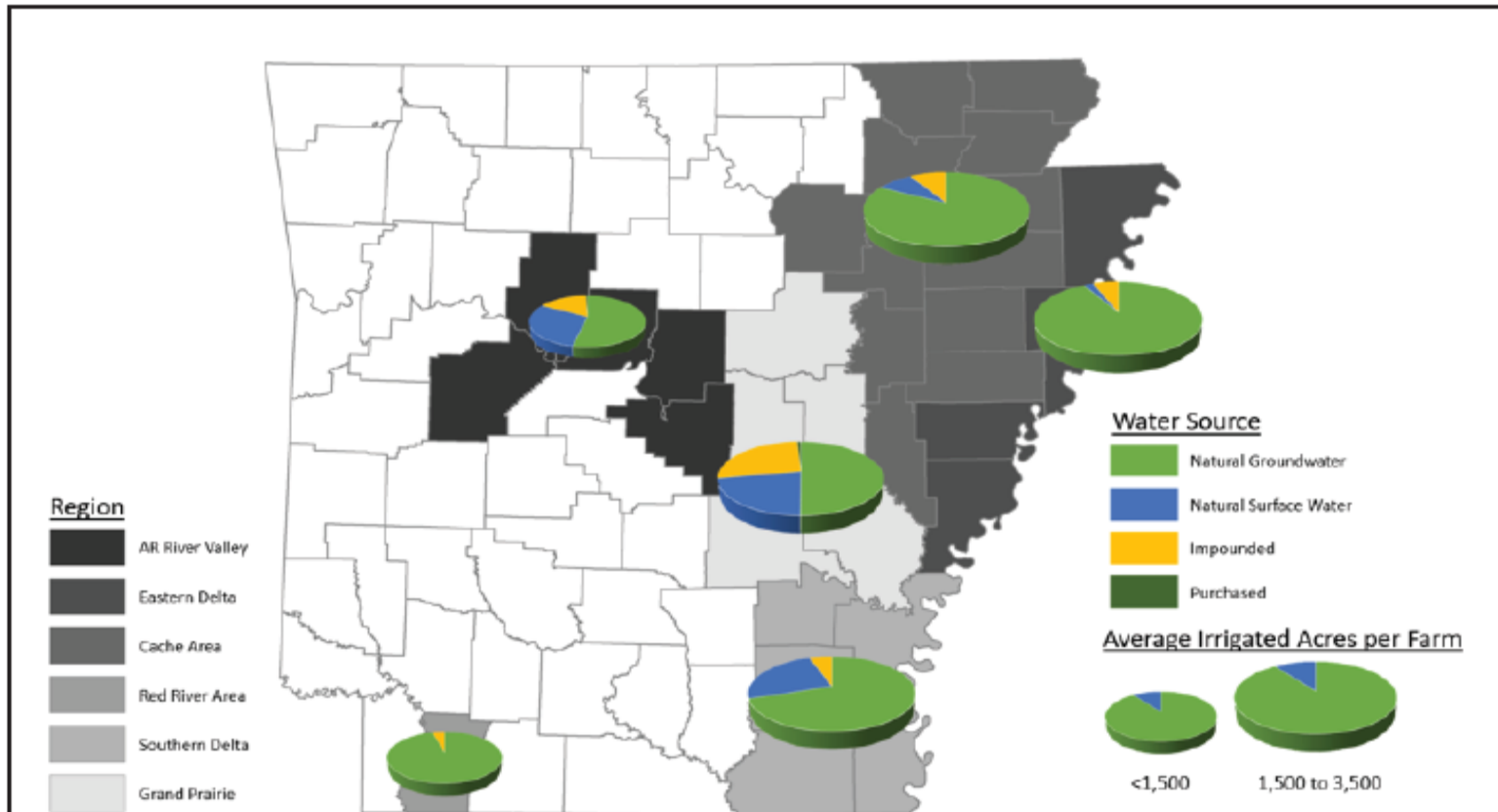
- Arkansas is relatively rich in water resources with annual precipitation of 50 to 57 inches per year, which makes irrigation using surface water a plausible option for agricultural producers.
- Less than 15 percent of water applied to Arkansas crops comes from the surface.
- The Grand Prairie Region has the largest percentage of impounded water used for irrigation at over 27 percent.
- The Arkansas River Valley has the highest percentage of irrigation water coming from natural surface water, at over 29 percent.
- Over 82 percent of the irrigation water used in the Eastern Delta, the Cache Area and the Red River Area comes from natural groundwater.
- Impounded surface water is the most common in the Grand Prairie region, and more than half of the water drawn from the surface rather than recycled water alone.

Review of Major Land Uses or Agronomic Practices

- Rice, soybean and corn producers are the most likely to use impounded water.
- Arkansas is a major producer of a variety of agronomic crops. Besides being the largest producer of rice in the United States, it is a major producer of soybeans, corn, cotton, wheat, and grain sorghum.
- The production of these crops is centered in the eastern third of the state but there are notable concentrations elsewhere, particularly in the river valleys of the Arkansas River (central Arkansas) and the Red River (southwest Arkansas).
- Commercial and greenhouse production of fruit, vegetable, ornamental, and turfgrass crops are also economically important in many sections of the state.

Review of Major Land Uses or Agronomic Practices

- Percent of irrigation water applied by source.



Source: University of Arkansas, 2016 Arkansas Irrigation Survey

Review of Major Land Uses or Agronomic Practices

- Arkansas' forests provide a diversity of services and other important benefits including: timber production, wildlife habitat, recreational opportunities, watershed protection, and aesthetic values.
- 41% of all Arkansas forestland is made up of oak/hickory forest types, followed by loblolly/shortleaf pine at 31%.
- Private landowners including farmers, ranchers, and other individuals own over 69% of the timberland in the state and many actively manage their woodlands.
- National Forests account for 13% of Arkansas's total forested acreage.
- Forest resource companies own or lease 12% of the state's timberland.
- The forest products industry, including the pulp and paper industry, had a total direct plus indirect jobs impact of 66,000 employees in 2017, representing labor income around \$3.1 billion.
- Arkansas forests provide habitat to a host of wildlife species. These range from game species, such as deer, turkey, and ducks, to songbirds for wildlife viewing, and many reptiles and amphibians.

Review of Major Land Uses or Agronomic Practices

- In 2021 42% of Arkansas land was comprised of farms. 42,000 Farms on 14.0 million acres with an average farm size of 333 acres.
- In 2020, Arkansas' top commodities in terms of cash farm receipts were: broilers, soybeans, rice, chicken eggs, corn, cotton, cattle/calves, turkeys and timber.
- Arkansas consistently ranks in the top one-third of the nation for agricultural cash farm receipts.
- Arkansas is in the top 25 states in the production of the following agricultural commodities: (2021 Production Year): rice, cotton, cottonseed, catfish, turkeys, peanuts, chicken eggs, beef cows, soybeans, corn for grain, hay, oats, cattle/calves, hogs/pigs, honey.

Review of Major Land Uses or Agronomic Practices

- Most Common practices by land use:
- Cropland: Irrigation practices, cover crops, residue management, nutrient management, pest management, crop rotations.
- Pastureland: Prescribed grazing, fencing, watering systems, forage/biomass planting, Heavy use are protection, ponds.
- Forestland: Tree/shrub establishment, tree/shrub site preparation, forest stand improvement, firebreaks, prescribed burning.
- Wildlife: Prescribed burning, conservation covers, tree/shrub establishment, forage/biomass planting, field borders, ponds, shallow water development.

Review of Major Land Ownership

- Approximately 17% of this state is public lands. Most of the public land is managed for multiple use, and leases by individual ranchers is common.
- 83% is private land. Conservation planning on private land may include a public component.
- Land owned by agency: FS (82.1%), FWS (12%), NPS (3.1%), DOD (2.8%), BLM (0%).
- Arkansas has seven National Park Service units, two national forests, 12 wilderness areas, four national historic sites, and one national historic trail.
- For Conservation Planning assistance work with the local District Conservationist at the local [USDA Service Center](#).

Expected TSP Workflow

- Individuals interested in the TSP certification should work with the State TSP coordinator. TSP coordinator will assist individuals with the application/certification process.
- Sample plans will be reviewed by the discipline lead/State specialists. Sample plan deficiencies must be corrected before certification is recommended.
- Once TSP application is complete and sample plans have been reviewed/approved, TSP coordinator will discuss with the State Resource Conservationist (SRC) and will submit the State's decision to the Regional/National TSP coordinator for certification.
- The State Resource Conservationist (SRC) or designee will be responsible for reviewing TSP conservation planning for the National Planner Designation.
- Subsequent conservation plans will be reviewed by the Planning specialists at the local/area USDA Service Center.
- The SRC/discipline lead/state specialists will be responsible for reviewing TSP completed work for TSP certification renewals and Quality Assurance Reviews.
- TSPs will work with the local District Conservationist/Area Planning Specialists to make sure the proper environmental evaluations (NRCS.CPA.52) are completed.

Expected TSP Workflow

- Contacts:
- Helen Denniston, State Resource Conservationist
 - Helen.Denniston@usda.gov
- Brent Clark, State TSP Coordinator (Acting)
 - Brent.Clark@usda.gov
- Doug Akin, State TSP Coordinator (Back up)
 - Doug.Akin@usda.gov
- Rich Joslin, NE Area Planning Specialist
 - Rich.Joslin@usda.gov
- Brent Clark, NW Area Planning Specialist
 - Brent.Clark@usda.gov
- James Reynolds, South Area Planning Specialist
 - James.Reynolds@usda.gov

Additional References or Training

- State Field Office Technical Guide at www.nrcs.usda.gov
- State Training for Certified Planner (Contact State TSP Coordinator)
- State Training on CNMP Development (Contact State TSP Coordinator)
- State Nutrient Management Plan Writer Certification [course](#)
- State [Engineering licensing](#)
- State [Agricultural Consultant](#)
- State [Forester Registration](#)

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After viewing the State Specific Training module, please print and sign the completion certificate on the following slide.

The certificate is your acknowledgement that based on the information provided in this module, you have the proper knowledge, skills and ability to conduct planning in this State.

Within your NRCS Registry profile, enter the training and upload the signed certificate to verify completion.

STATE SPECIFIC TRAINING MODULE COMPLETION CERTIFICATE

I, _____ hereby verify I have viewed and understand the content of *Arkansas State*
TSP Name
Specific Training Module and affirm I have the knowledge, skills, and ability to conduct conservation planning
services in this state.

TSP Signature

Date