

# Southeast Conservation Blueprint Summary

for Arkansas



Created 11/20/2025

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[The Southeast Conservation Blueprint 2025](#)

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## About the Southeast Blueprint

The Southeast Conservation Blueprint is the primary product of the [Southeast Conservation Adaptation Strategy](#) (SECAS). It is a living, spatial plan to achieve the SECAS vision of a connected network of lands and waters across the Southeast and Caribbean. The Blueprint is regularly updated to incorporate new data, partner input, and information about on-the-ground conditions.

The Blueprint identifies priority areas based on a suite of natural and cultural resource indicators representing terrestrial, freshwater, and marine ecosystems. A connectivity analysis identifies corridors that link coastal and inland areas and span climate gradients.

For more information:

- Visit the [Blueprint webpage](#)
- Review the [Blueprint 2025 Development Process](#)
- View and download the Blueprint data and make maps on the [Blueprint page of the SECAS Atlas](#)

### We're here to help!

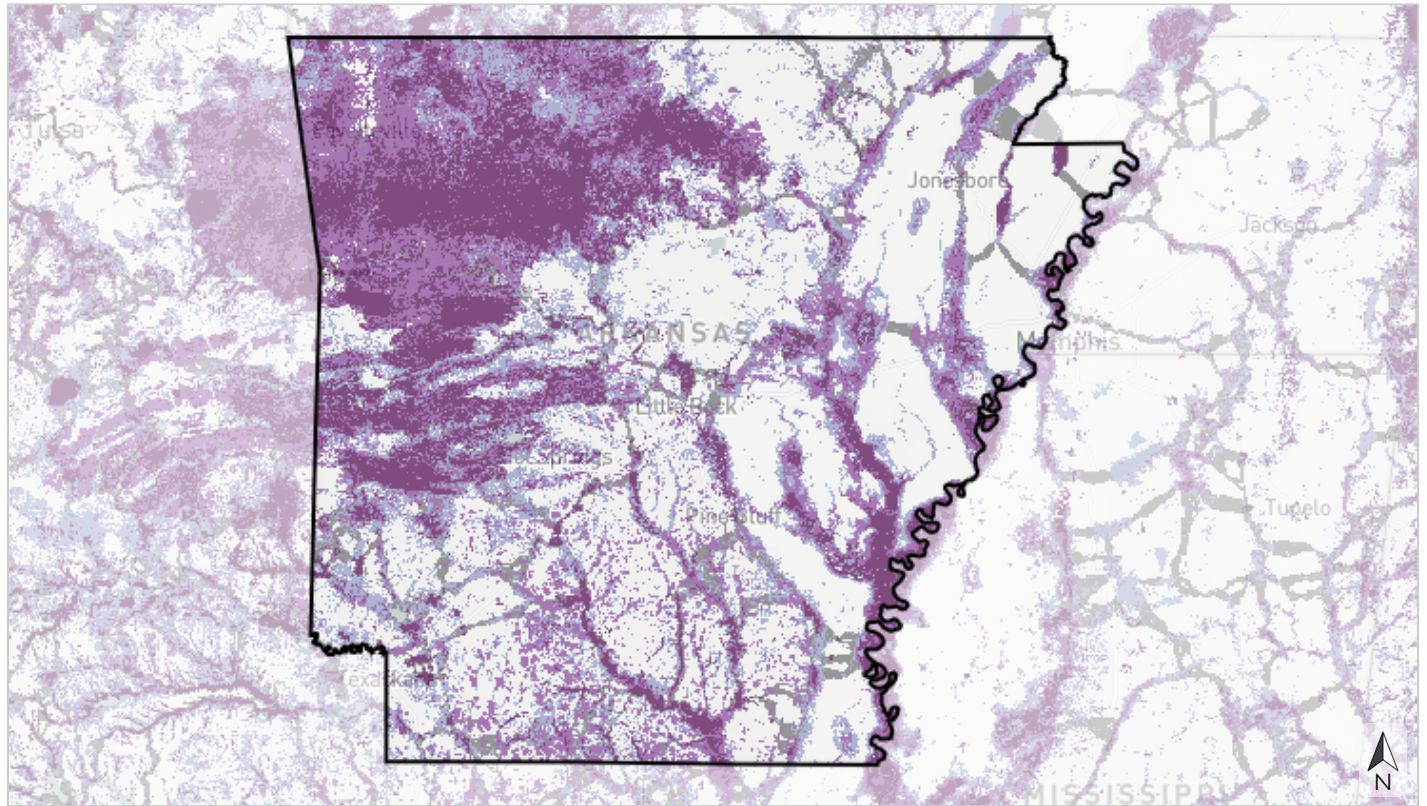
- Do you have a question about the Blueprint?
- Would you like help using the Blueprint to support a proposal or inform a decision?
- Do you have a suggestion on how to improve the Blueprint? The Blueprint and its inputs are regularly revised based on input from people like you.
- Do you have feedback on how to improve the Blueprint Explorer interface?

If you need help or have questions, [contact Southeast Blueprint staff](#) by reaching out to a member of the user support team.

We're here to support you. We really mean it. It's what we do!

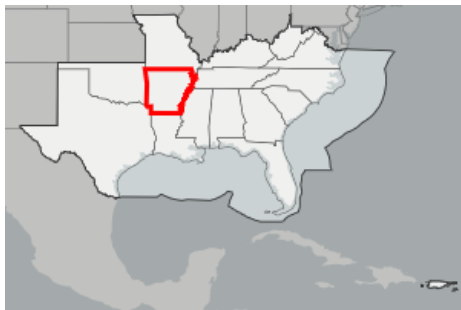
This report was generated by the Southeast Conservation Blueprint Explorer, which was developed by [Astute Spruce, LLC](#) in partnership with the U.S. Fish and Wildlife Service under the [Southeast Conservation Adaptation Strategy](#).

## Southeast Blueprint Priorities



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### Priorities for a connected network of lands and waters

- Highest priority
- High priority
- Medium priority
- Priority connections

# Priority Categories

## For a connected network of lands and waters

In total, Blueprint priorities and priority connections cover roughly 50% of the Southeast Blueprint geography.

### Highest priority

Areas where conservation action would make the biggest impact, based on a suite of natural and cultural resource indicators. This class covers roughly 10% of the Southeast Blueprint geography.

### High priority

Areas where conservation action would make a big impact, based on a suite of natural and cultural resource indicators. This class covers roughly 15% of the Southeast Blueprint geography.

### Medium priority

Areas where conservation action would make an above-average impact, based on a suite of natural and cultural resource indicators. This class covers roughly 20% of the Southeast Blueprint geography.

### Priority connections

Connections between priority areas that cover the shortest distance possible while routing through as much Blueprint priority as possible. This class covers roughly 5% of the Southeast Blueprint geography.

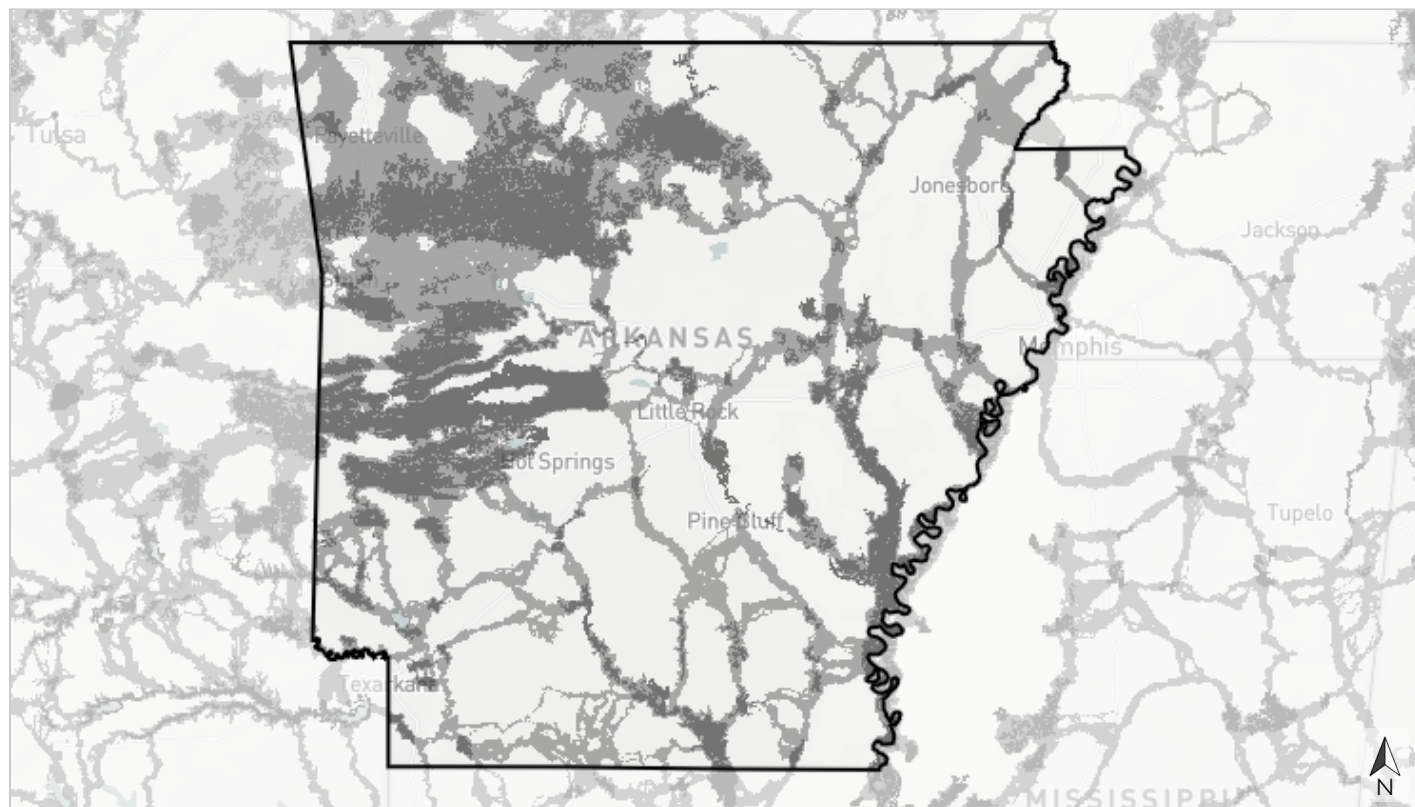
Table 1: Extent of each Blueprint priority category within Arkansas.

| Priority Category    | Acres      | Percent of Area |
|----------------------|------------|-----------------|
| Highest priority     | 5,788,254  | 17.0%           |
| High priority        | 6,833,822  | 20.1%           |
| Medium priority      | 5,809,611  | 17.1%           |
| Priority connections | 1,769,247  | 5.2%            |
| Lower priority       | 13,845,827 | 40.7%           |
| Total area           | 34,046,760 | 100%            |

## Hubs and Corridors

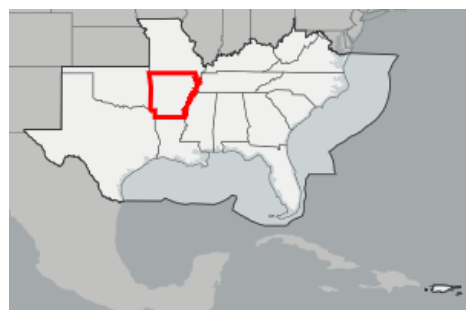
The Blueprint uses a least-cost path connectivity analysis to identify corridors that link hubs across the shortest distance possible, while also routing through as much Blueprint priority as possible.

In the continental Southeast, hubs are large patches (~5,000+ acres) of highest priority Blueprint areas and/or protected lands.



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■ Hubs  
■ Corridors

Table 2: Extent of hubs and corridors within Arkansas.

| Type                  | Acres      | Percent of Area |
|-----------------------|------------|-----------------|
| Hubs                  | 5,774,914  | 17.0%           |
| Corridors             | 8,410,608  | 24.7%           |
| Not a hub or corridor | 19,861,239 | 58.3%           |
| Total area            | 34,046,760 | 100%            |

# Indicator Summary

Table 3: Terrestrial indicators.

| Indicator   | Present |
|---|---------|
| <a href="#">Fire frequency</a>  | ✓       |
| <a href="#">Grassland &amp; savanna extent</a>                            | ✓       |
| <a href="#">Grassland &amp; savanna restoration</a>                       | ✓       |
| <a href="#">Greenways &amp; trails</a>                                    | ✓       |
| <a href="#">Imperiled amphibians &amp; reptiles</a>                       | ✓       |
| <a href="#">Imperiled mammals</a>   | ✓       |
| <a href="#">Intact habitat cores</a>                                      | ✓       |
| <a href="#">Landscape condition</a>                                       | ✓       |
| <a href="#">Mississippi Alluvial Valley forest birds - protection</a>     | ✓       |
| <a href="#">Mississippi Alluvial Valley forest birds - reforestation</a>  | ✓       |
| <a href="#">Potential access to parks</a>                                 | ✓       |
| <a href="#">Resilient terrestrial sites</a>                               | ✓       |
| <a href="#">River cane restoration</a>                                    | ✓       |
| <a href="#">Urban park size</a>   | ✓       |
| <a href="#">West Coastal Plain &amp; Ouachitas forested wetland birds</a> | ✓       |
| <a href="#">West Coastal Plain &amp; Ouachitas open pine birds</a>        | ✓       |
| West Gulf Coast mottled duck nesting                                      | -       |

Table 4: Freshwater indicators.

| Indicator  | Present |
|--|---------|
| <a href="#">Floodplain inundation</a>            | ✓       |
| Gulf migratory fish connectivity                 | -       |
| <a href="#">Imperiled aquatic species</a>        | ✓       |
| <a href="#">Lakes &amp; reservoirs</a>           | ✓       |
| <a href="#">Natural landcover in floodplains</a> | ✓       |
| <a href="#">Network complexity</a>               | ✓       |
| <a href="#">Permeable surface</a>                | ✓       |

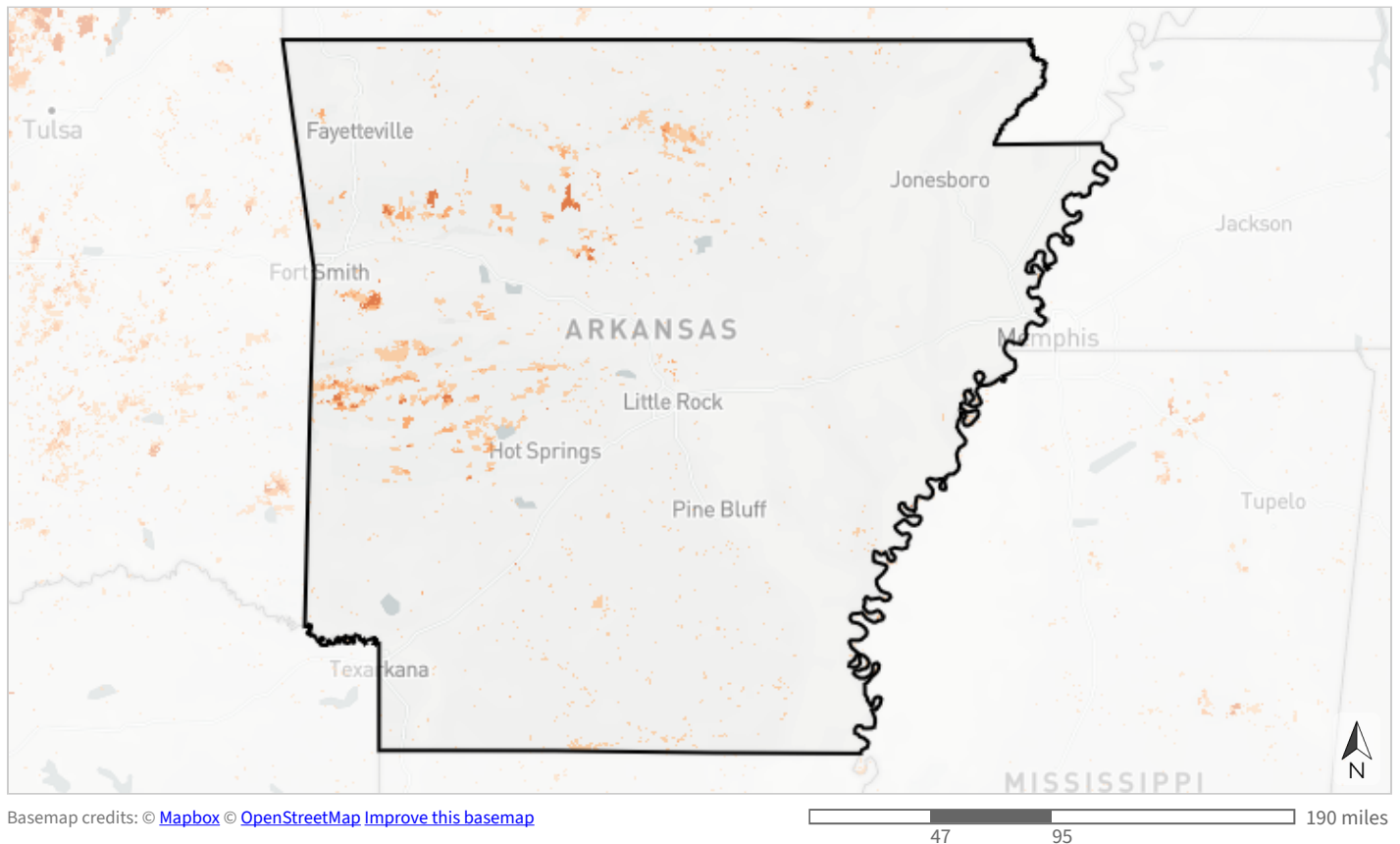




Terrestrial

## Fire frequency

This indicator uses remote sensing to estimate the number of times an area has been burned from 2013 to 2021. Many Southeastern ecosystems rely on regular, low-intensity fires to maintain habitat, encourage native plant growth, and reduce wildfire risk. This indicator combines burned area layers from U.S. Geological Survey Landsat data and the inter-agency Monitoring Trends in Burn Severity program. Landsat-based fire predictions within the range of longleaf pine are also available through Southeast FireMap.



- Burned 3+ times from 2013-2021
- Burned 2 times from 2013-2021
- Burned 1 time from 2013-2021
- Not burned from 2013-2021 or row crop

Table 5: Indicator values for fire frequency within Arkansas. Good condition thresholds reflect the range of indicator values that occur in healthy, functioning ecosystems.

|        | Indicator Values                      | Acres             | Percent of Area |                         |
|--------|---------------------------------------|-------------------|-----------------|-------------------------|
| ↑ High | Burned 3+ times from 2013-2021        | 54,570            | 0.2%            |                         |
|        | Burned 2 times from 2013-2021         | 156,068           | 0.5%            | ↑ In good condition     |
|        | Burned 1 time from 2013-2021          | 850,511           | 2.5%            | ↓ Not in good condition |
| ↓ Low  | Not burned from 2013-2021 or row crop | 32,985,610        | 96.9%           |                         |
|        | <b>Total area</b>                     | <b>34,046,760</b> | <b>100%</b>     |                         |

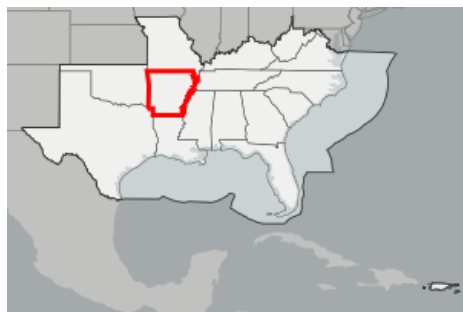
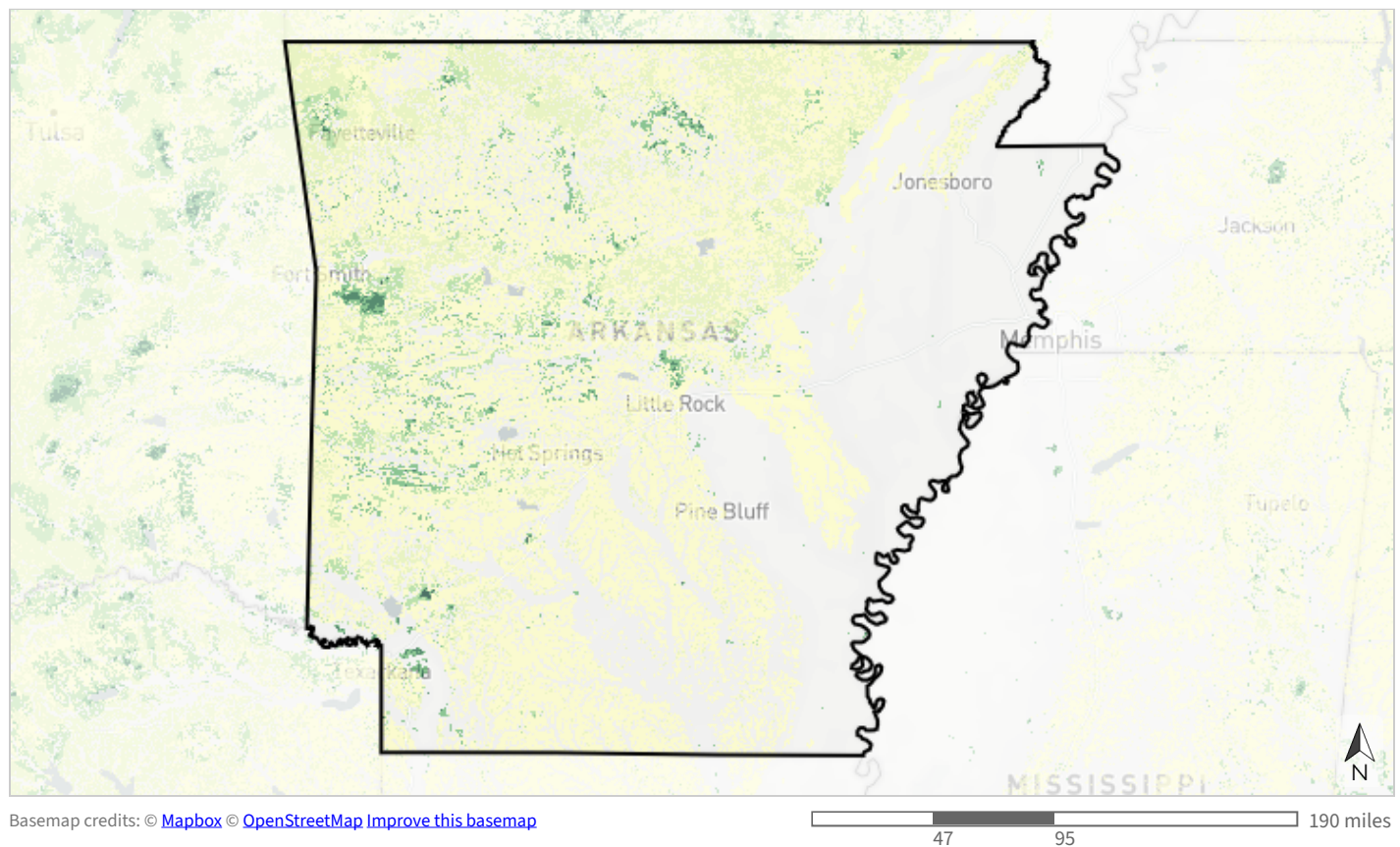
To learn more and explore the GIS data, [view this indicator in the SECAS Atlas](#).



Terrestrial

## Grassland & savanna extent

This indicator represents grasslands and savannas in the southeastern United States, which support important plants, reptiles, amphibians, mammals, birds, and pollinators. It considers known grassland and savanna locations, predicted locations within protected areas, and surrounding pollinator buffers. It also incorporates other potential grassland and savanna locations within natural and altered landscapes, and restoration opportunities within historic locations based on past fire intervals and historic ecosystem predictions. This indicator combines data from multiple sources, including the Southeastern Grasslands Institute, the National Land Cover Database, LANDFIRE, Oklahoma and Texas ecological systems maps, and more.



- Known grassland/savanna
- Likely grassland/savanna >10 acres
- Likely grassland/savanna ≤10 acres
- Pollinator buffer around known or likely grassland/savanna
- Potential grassland/savanna in grassland/savanna hub
- Potential grassland/savanna outside grassland/savanna hub
- Historic grassland/savanna
- Not identified as grassland/savanna

Table 6: Indicator values for grassland & savanna extent within Arkansas. Good condition thresholds reflect the range of indicator values that occur in healthy, functioning ecosystems.

|        | Indicator Values   | Acres             | Percent of Area |                         |
|--------|--|-------------------|-----------------|-------------------------|
| ↑ High | Known grassland/savanna                                    | 7,701             | <0.1%           |                         |
|        | Likely grassland/savanna >10 acres                         | 93,037            | 0.3%            |                         |
|        | Likely grassland/savanna ≤10 acres                         | 39,422            | 0.1%            | ↑ In good condition     |
|        | Pollinator buffer around known or likely grassland/savanna | 427,457           | 1.3%            | ↓ Not in good condition |
|        | Potential grassland/savanna in grassland/savanna hub       | 1,062,267         | 3.1%            |                         |
|        | Potential grassland/savanna outside grassland/savanna hub  | 3,005,746         | 8.8%            |                         |
|        | Historic grassland/savanna                                 | 11,916,222        | 35.0%           |                         |
| ↓ Low  | Not identified as grassland/savanna                        | 17,494,908        | 51.4%           |                         |
|        | <b>Total area</b>  | <b>34,046,760</b> | <b>100%</b>     |                         |

To learn more and explore the GIS data, [view this indicator in the SECAS Atlas](#).

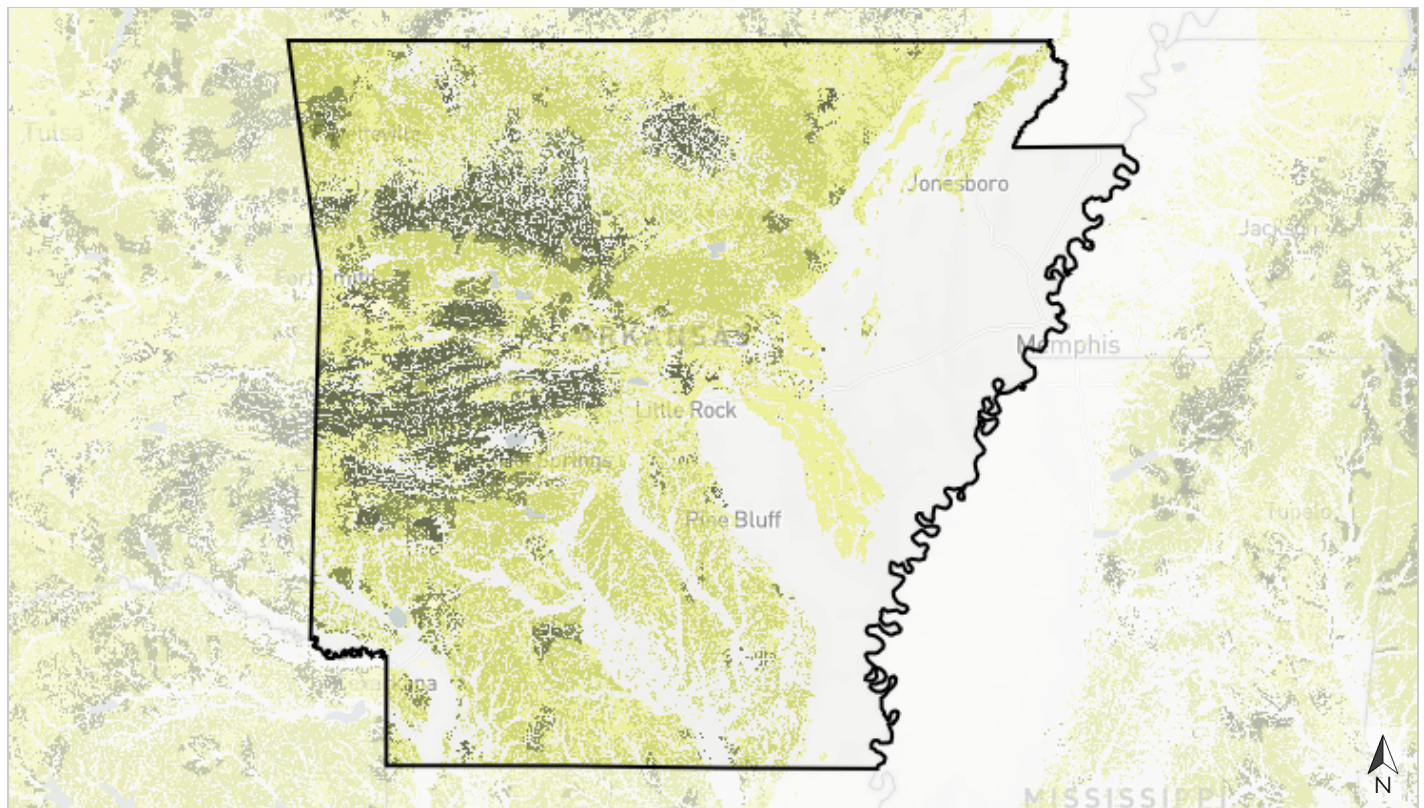




Terrestrial

## Grassland & savanna restoration

This indicator represents potential restoration opportunities for grasslands and savannas within their historic range in the southeastern United States. Grasslands support important plants, reptiles, amphibians, mammals, birds, and pollinators, but have significantly declined from their current extent. It considers proximity to clusters of existing grasslands and savannas, protected areas with management potential, landcover classes with good restoration potential, priority areas for restoration of longleaf and shortleaf pine, and historic grassland and savanna locations. This indicator combines data from multiple sources, including the Southeast Blueprint grassland and savanna extent indicator, the Longleaf Suitability Analysis, shortleaf pine suitability, landcover from the National Land Cover Database and LANDFIRE, and more.



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### Restoration priority

- Highest (in a grassland/savanna hub, in a protected area with management potential, in a historic patch >10 acres)
- Very high (in a grassland/savanna hub, unprotected landcover with good restoration potential, in a historic patch >10 acres)
- High (outside a grassland/savanna hub, in a protected area with management potential, in a historic patch >10 acres)
- Medium (outside a grassland/savanna hub, unprotected landcover with good restoration potential, in a historic patch >10 acres)
- Low (other historic grassland/savanna)
- Very low (already known or likely grassland/savanna)
- Lowest (not identified as historic grassland/savanna)

Table 7: Indicator values for grassland & savanna restoration within Arkansas. A good condition threshold is not yet defined for this indicator.

|        | Indicator Values: Restoration priority   | Acres             | Percent of Area |
|--------|--|-------------------|-----------------|
| ↑ High | Highest (in a grassland/savanna hub, in a protected area with management potential, in a historic patch >10 acres)             | 1,702,709         | 5.0%            |
|        | Very high (in a grassland/savanna hub, unprotected landcover with good restoration potential, in a historic patch >10 acres)   | 1,661,258         | 4.9%            |
|        | High (outside a grassland/savanna hub, in a protected area with management potential, in a historic patch >10 acres)           | 109,736           | 0.3%            |
|        | Medium (outside a grassland/savanna hub, unprotected landcover with good restoration potential, in a historic patch >10 acres) | 5,483,790         | 16.1%           |
|        | Low (other historic grassland/savanna)   | 7,270,167         | 21.4%           |
| ↓ Low  | Very low (already known or likely grassland/savanna)   | 140,161           | 0.4%            |
|        | Lowest (not identified as historic grassland/savanna)  | 17,678,939        | 51.9%           |
|        | <b>Total area</b>  | <b>34,046,760</b> | <b>100%</b>     |

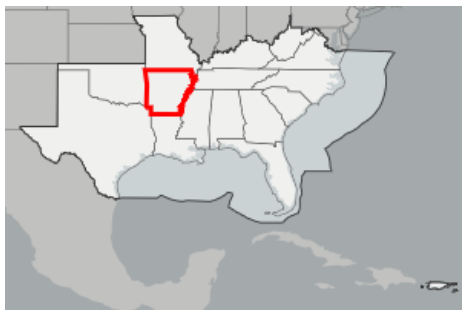
To learn more and explore the GIS data, [view this indicator in the SECAS Atlas](#).



Terrestrial

## Greenways & trails

This cultural resource indicator measures both the natural condition and connected length of greenways and trails to characterize the quality of the recreational experience. Natural condition is based on the amount of impervious surface surrounding the path. Connected length captures how far a person can go without leaving a dedicated path, based on common distances for walking, running, and biking. This indicator originates from OpenStreetMap data and the National Land Cover Database.



- Mostly natural and connected for  $\geq 40$  km
- Mostly natural and connected for 5 to  $< 40$  km or partly natural and connected for  $\geq 40$  km
- Mostly natural and connected for 1.9 to  $< 5$  km, partly natural and connected for 5 to  $< 40$  km, or developed and connected for  $\geq 40$  km
- Mostly natural and connected for  $< 1.9$  km, partly natural and connected for 1.9 to  $< 5$  km, or developed and connected for 5 to  $< 40$  km
- Partly natural and connected for  $< 1.9$  km or developed and connected for 1.9 to  $< 5$  km
- Developed and connected for  $< 1.9$  km
- Sidewalk
- Not identified as a trail, sidewalk, or other path

Table 8: Indicator values for greenways & trails within Arkansas. Good condition thresholds reflect the range of indicator values that occur in healthy, functioning ecosystems.

|        | Indicator Values  | Acres             | Percent of Area |                         |
|--------|---|-------------------|-----------------|-------------------------|
| ↑ High | Mostly natural and connected for ≥40 km   | 7,212             | <0.1%           |                         |
|        | Mostly natural and connected for 5 to <40 km or partly natural and connected for ≥40 km   | 8,735             | <0.1%           |                         |
|        | Mostly natural and connected for 1.9 to <5 km, partly natural and connected for 5 to <40 km, or developed and connected for ≥40 km  | 6,069             | <0.1%           |                         |
|        | Mostly natural and connected for <1.9 km, partly natural and connected for 1.9 to <5 km, or developed and connected for 5 to <40 km | 3,548             | <0.1%           | ↑ In good condition     |
| ↓ Low  | Partly natural and connected for <1.9 km or developed and connected for 1.9 to <5 km  | 2,149             | <0.1%           | ↓ Not in good condition |
|        | Developed and connected for <1.9 km   | 2,390             | <0.1%           |                         |
|        | Sidewalk  | 10,989            | <0.1%           |                         |
|        | Not identified as a trail, sidewalk, or other path  | 34,005,668        | 99.9%           |                         |
|        | <b>Total area</b>   | <b>34,046,760</b> | <b>100%</b>     |                         |

To learn more and explore the GIS data, [view this indicator in the SECAS Atlas](#).

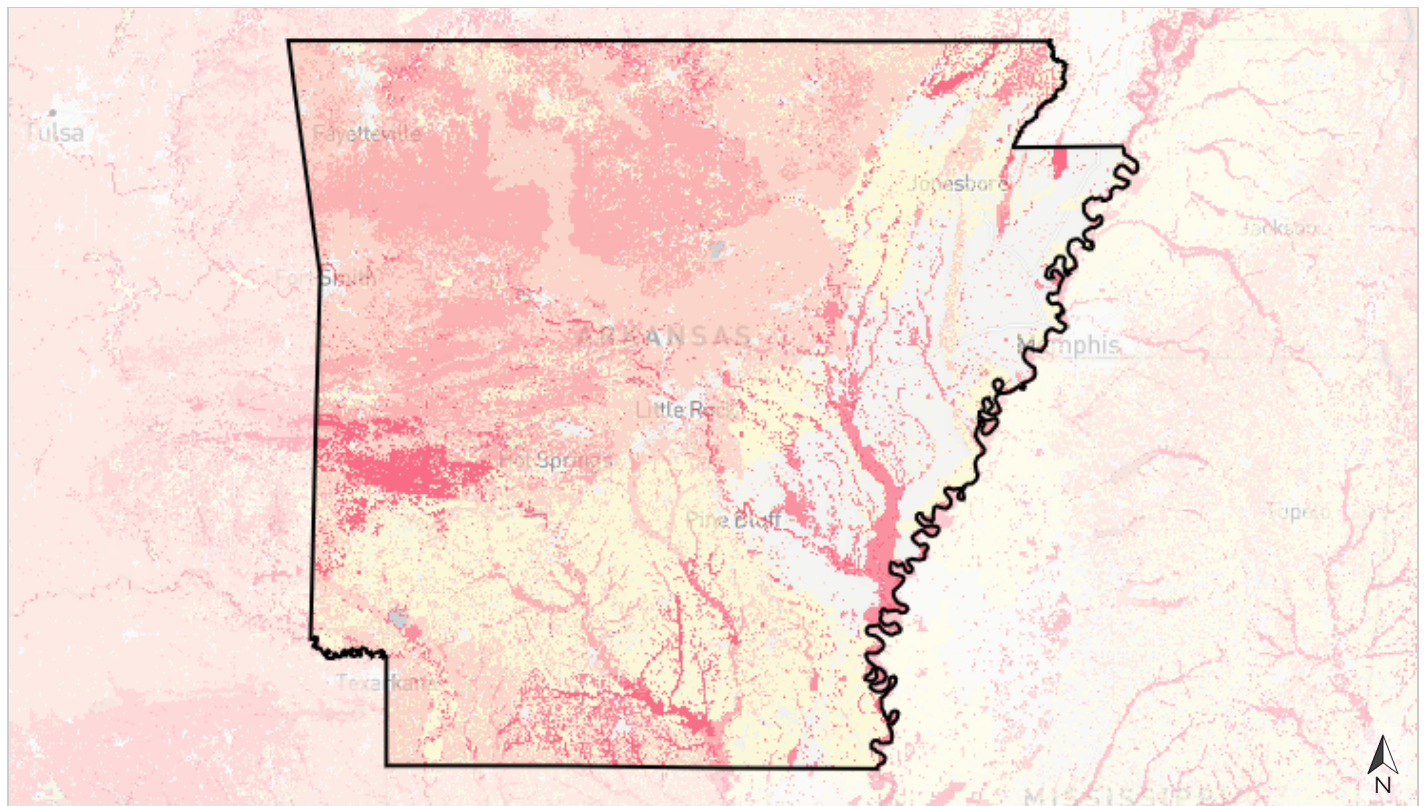




Terrestrial

## Imperiled amphibians & reptiles

This indicator identifies potential habitat to support amphibian and reptile Regional Species of Greatest Conservation Need (RSGCN). Using a rarity-weighted richness approach, it prioritizes places important for species that are restricted to smaller ranges, such as narrow endemics, which are therefore more vulnerable to habitat loss or change. RSGCN are regional priority species derived from the list of SGCN identified in Southeast State Wildlife Action Plans as most in need of conservation action. RSGCN were chosen based on consistent criteria, such as level of conservation concern, regional stewardship responsibility, and ecological significance. This indicator uses models from the U.S. Geological Survey Gap Analysis Project that are based on known species ranges, species-habitat relationships, and landcover.



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### Importance for range-restricted species

- Highest importance (top 5% of larger analysis area)
- Very high importance (upper 5-10% of larger analysis area)
- High importance (upper 10-20% of larger analysis area)
- Medium importance (above average in larger analysis area)
- Low importance (below average in larger analysis area)
- Developed landcover or no potential habitat

Table 9: Indicator values for imperiled amphibians & reptiles within Arkansas. A good condition threshold is not yet defined for this indicator.

|        | <b>Indicator Values: Importance for range-restricted species</b> | <b>Acres</b>      | <b>Percent of Area</b> |
|--------|--|-------------------|------------------------|
| ↑ High | Highest importance (top 5% of larger analysis area)              | 1,812,289         | 5.3%                   |
|        | Very high importance (upper 5-10% of larger analysis area)       | 1,875,168         | 5.5%                   |
|        | High importance (upper 10-20% of larger analysis area)           | 6,038,700         | 17.7%                  |
|        | Medium importance (above average in larger analysis area)        | 9,405,490         | 27.6%                  |
|        | Low importance (below average in larger analysis area)           | 8,000,284         | 23.5%                  |
| ↓ Low  | Developed landcover or no potential habitat                      | 6,914,829         | 20.3%                  |
|        | <b>Total area</b>  | <b>34,046,760</b> | <b>100%</b>            |

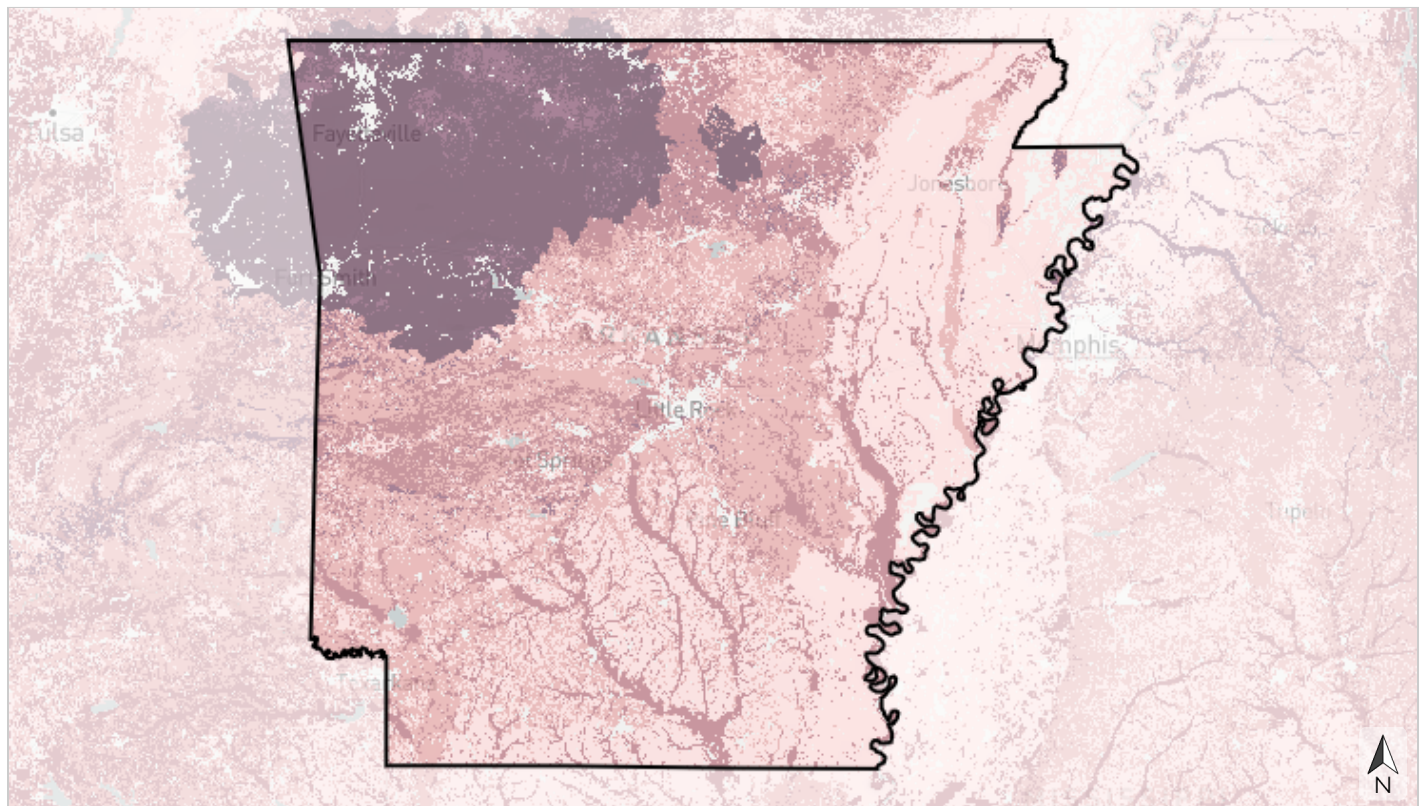
To learn more and explore the GIS data, [view this indicator in the SECAS Atlas](#).



Terrestrial

## Imperiled mammals

This indicator identifies potential habitat to support mammal Regional Species of Greatest Conservation Need (RSGCN). Using a rarity-weighted richness approach, it prioritizes places important for species that are restricted to smaller ranges, such as narrow endemics, which are therefore more vulnerable to habitat loss or change. RSGCN are regional priority species derived from the list of SGCN identified in Southeast State Wildlife Action Plans as most in need of conservation action. RSGCN were chosen based on consistent criteria, such as level of conservation concern, regional stewardship responsibility, and ecological significance. This indicator uses models from the U.S. Geological Survey Gap Analysis Project that are based on known species ranges, species-habitat relationships, and LANDFIRE landcover.



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### Importance for range-restricted species

- Highest importance (top 5% of larger analysis area)
- Very high importance (upper 5-10% of larger analysis area)
- High importance (upper 10-20% of larger analysis area)
- Medium importance (above average in larger analysis area)
- Low importance (below average in larger analysis area)
- Developed landcover or no potential habitat

Table 10: Indicator values for imperiled mammals within Arkansas. A good condition threshold is not yet defined for this indicator.

|        | Indicator Values: Importance for range-restricted species  | Acres             | Percent of Area |
|--------|--|-------------------|-----------------|
| ↑ High | Highest importance (top 5% of larger analysis area)        | 4,727,418         | 13.9%           |
|        | Very high importance (upper 5-10% of larger analysis area) | 1,260,843         | 3.7%            |
|        | High importance (upper 10-20% of larger analysis area)     | 6,057,731         | 17.8%           |
|        | Medium importance (above average in larger analysis area)  | 8,560,164         | 25.1%           |
|        | Low importance (below average in larger analysis area)     | 10,360,770        | 30.4%           |
| ↓ Low  | Developed landcover or no potential habitat                | 3,079,834         | 9.0%            |
|        | <b>Total area</b>  | <b>34,046,760</b> | <b>100%</b>     |

To learn more and explore the GIS data, [view this indicator in the SECAS Atlas](#).

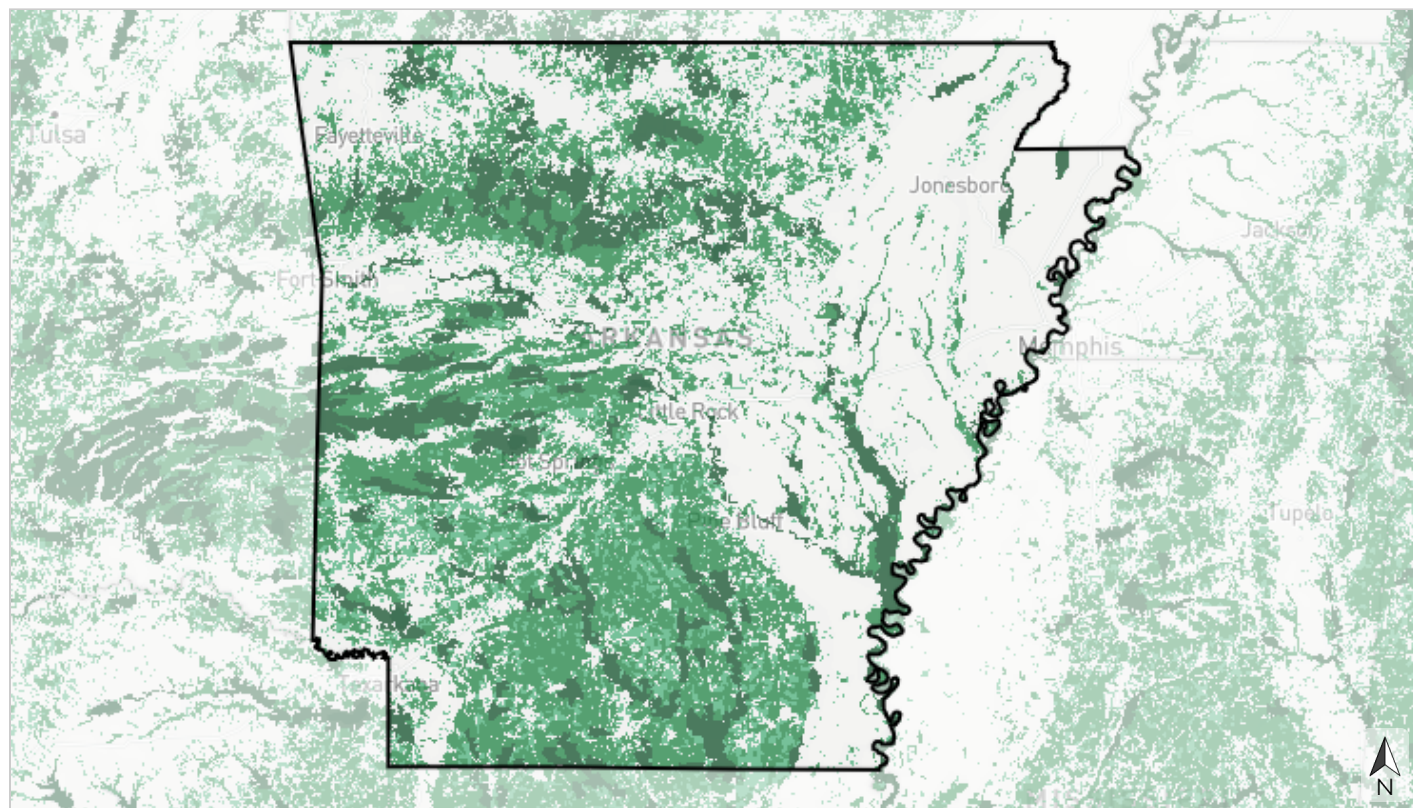




Terrestrial

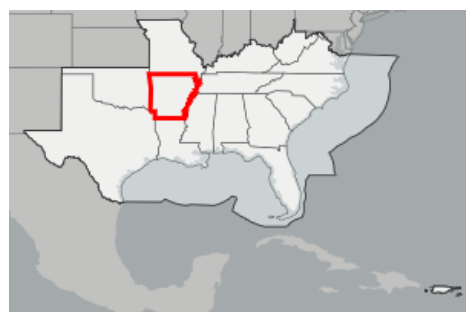
## Intact habitat cores

This indicator represents the size of large, unfragmented patches of natural habitat. It identifies minimally disturbed natural areas at least 100 acres in size and greater than 200 meters wide. Large areas of intact natural habitat are important for many wildlife species, including reptiles and amphibians, birds, and large mammals. This indicator originates from Esri's green infrastructure data.



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- Large core (>10,000 acres)
- Medium core (>1,000-10,000 acres)
- Small core (>100-1,000 acres)
- Not a core

Table 11: Indicator values for intact habitat cores within Arkansas. Good condition thresholds reflect the range of indicator values that occur in healthy, functioning ecosystems.

|        | Indicator Values                  | Acres             | Percent of Area |                         |
|--------|-----------------------------------|-------------------|-----------------|-------------------------|
| ↑ High | Large core (>10,000 acres)        | 4,127,784         | 12.1%           |                         |
|        | Medium core (>1,000-10,000 acres) | 8,204,917         | 24.1%           |                         |
|        | Small core (>100-1,000 acres)     | 3,340,534         | 9.8%            | ↑ In good condition     |
| ↓ Low  | Not a core                        | 18,373,525        | 54.0%           | ↓ Not in good condition |
|        | <b>Total area</b>                 | <b>34,046,760</b> | <b>100%</b>     |                         |

To learn more and explore the GIS data, [view this indicator in the SECAS Atlas](#).



Terrestrial

## Landscape condition

This indicator represents natural areas with limited human alteration while also considering the naturalness of the surrounding landscape. Examples of human alteration include urban development and intense agricultural use. The degree of naturalness across the landscape is a key ecological condition for sustaining species and ecosystem services that are sensitive to habitat fragmentation at multiple scales. This indicator combines data from multiple sources, including the National Land Cover Database; various data on grasslands, mines, quarries, and reservoirs; ideas from the Florida Critical Lands and Waters Identification Project's approach for evaluating land use intensity; and more.



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- Very natural landscape
- Natural landscape
- Mostly natural landscape
- Partly natural landscape
- Altered landscape
- Heavily altered landscape

Table 12: Indicator values for landscape condition within Arkansas. Good condition thresholds reflect the range of indicator values that occur in healthy, functioning ecosystems.

|        | Indicator Values          | Acres             | Percent of Area |                         |
|--------|---------------------------|-------------------|-----------------|-------------------------|
| ↑ High | Very natural landscape    | 3,331,556         | 9.8%            |                         |
|        | Natural landscape         | 9,503,705         | 27.9%           |                         |
|        | Mostly natural landscape  | 7,724,003         | 22.7%           | ↑ In good condition     |
|        | Partly natural landscape  | 11,317,459        | 33.2%           | ↓ Not in good condition |
|        | Altered landscape         | 2,056,431         | 6.0%            |                         |
| ↓ Low  | Heavily altered landscape | 113,606           | 0.3%            |                         |
|        | <b>Total area</b>         | <b>34,046,760</b> | <b>100%</b>     |                         |

To learn more and explore the GIS data, [view this indicator in the SECAS Atlas](#).

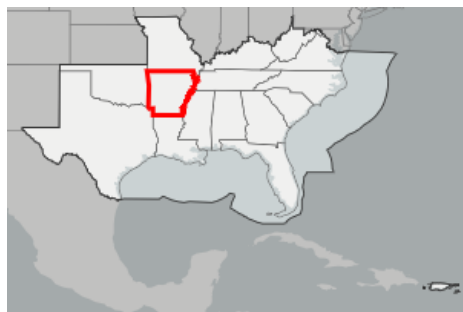
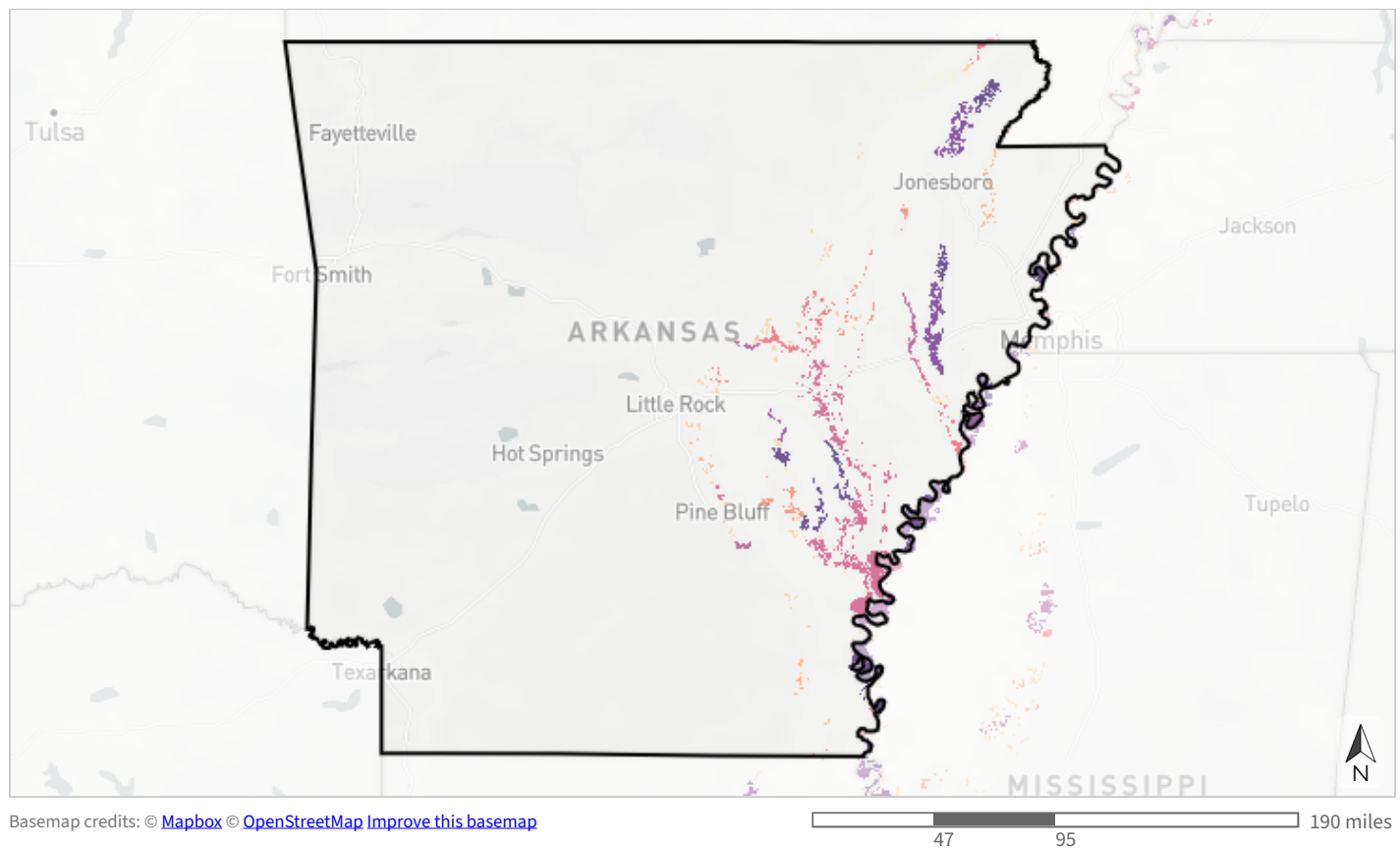




Terrestrial

## Mississippi Alluvial Valley forest birds - protection

This indicator prioritizes areas for new land protection within the Mississippi Alluvial Valley (MAV) based on benefits to forest breeding birds that need large interior cores of bottomland hardwood habitat (Swainson's warbler, cerulean warbler, swallow-tailed kite). The model considers core size, the amount of existing protected land within a forest patch, proximity to reforestation priorities, and risk of conversion to agriculture based on flooding frequency. The highest scores go to drier, unprotected forest patches with cores at least 2,000 ha (~5,000 ac) in size that are adjacent to complementary reforestation priority areas also identified by the Lower Mississippi Valley Joint Venture (LMVJV). This indicator originates from the LMVJV MAV forest breeding bird protection priorities.



### Priority of forest breeding bird habitat patch for future protection

- Score >90-100 (highest priority)
- Score >80-90
- Score >70-80
- Score >60-70
- Score >50-60
- Score >40-50
- Score >30-40
- Score >20-30
- Score >10-20
- Score >0-10 (low priority)
- Score 0 (not a priority)

Table 13: Indicator values for Mississippi Alluvial Valley forest birds - protection within Arkansas. A good condition threshold is not yet defined for this indicator.

|        | <b>Indicator Values: Priority of forest breeding bird habitat patch for future protection</b> | <b>Acres</b>      | <b>Percent of Area</b> |
|--------|---|-------------------|------------------------|
| ↑ High | Score >90-100 (highest priority)  | 123,983           | 0.4%                   |
|        | Score >80-90  | 107,617           | 0.3%                   |
|        | Score >70-80  | 26,396            | <0.1%                  |
|        | Score >60-70  | 23,911            | <0.1%                  |
|        | Score >50-60  | 233,975           | 0.7%                   |
|        | Score >40-50  | 62,130            | 0.2%                   |
|        | Score >30-40  | 36,397            | 0.1%                   |
|        | Score >20-30  | 27,224            | <0.1%                  |
|        | Score >10-20  | 64,028            | 0.2%                   |
|        | Score >0-10 (low priority)  | 7,311             | <0.1%                  |
| ↓ Low  | Score 0 (not a priority)  | 8,924,075         | 26.2%                  |
|        | <i>Area not evaluated for this indicator</i>  | <i>24,409,714</i> | <i>71.7%</i>           |
|        | <b>Total area</b>   | <b>34,046,760</b> | <b>100%</b>            |

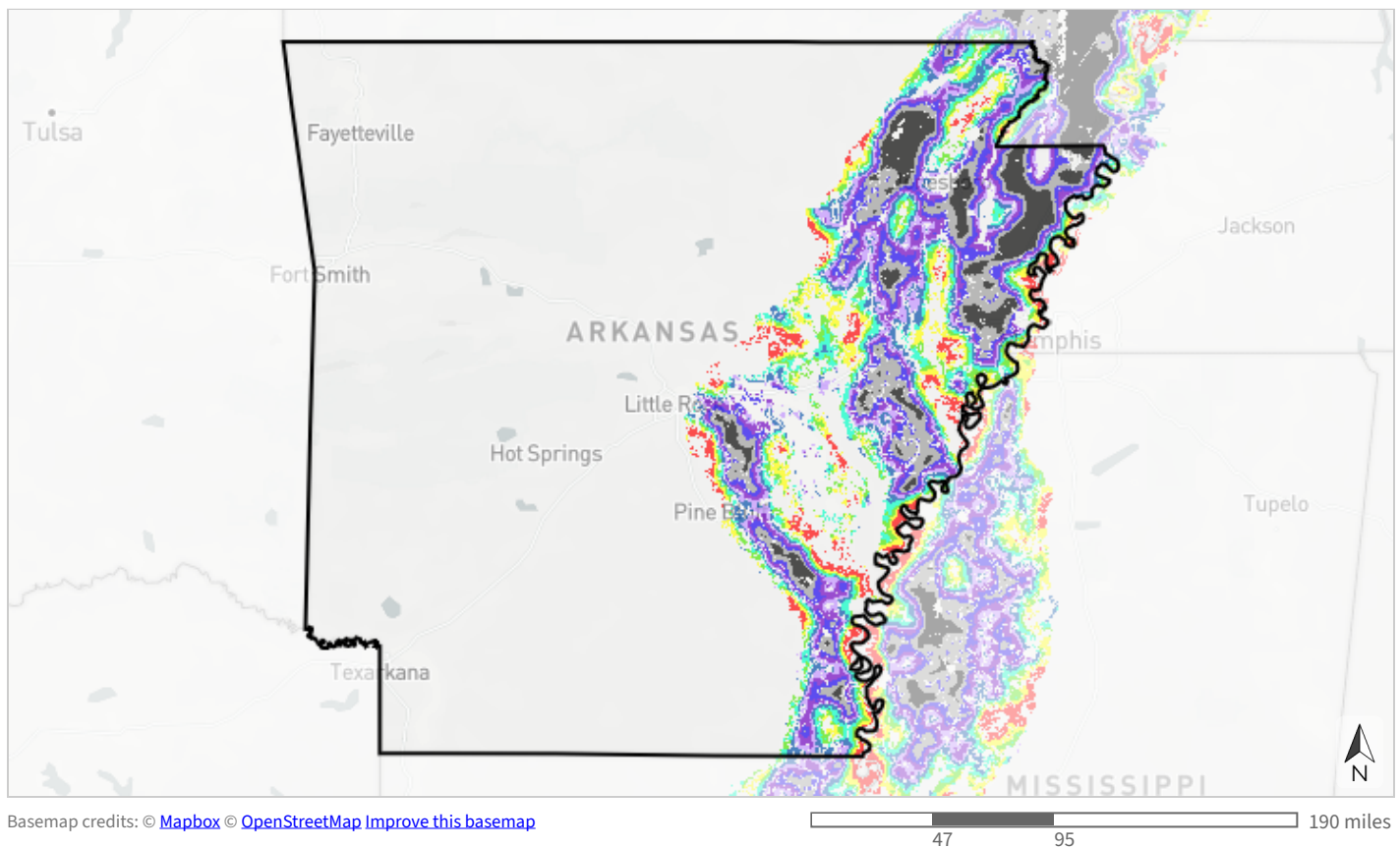
To learn more and explore the GIS data, [view this indicator in the SECAS Atlas](#).



Terrestrial

## Mississippi Alluvial Valley forest birds - reforestation

This indicator prioritizes areas for reforestation within the Mississippi Alluvial Valley (MAV) based on benefits to three species of forest breeding birds that need large interior cores of bottomland hardwood habitat (Swainson's warbler, cerulean warbler, swallow-tailed kite). The model considers the core size, number of cores, and percent of local forest cover that would result from reforestation, as well as risk of conversion to agriculture based on flooding frequency. The highest scores go to drier areas where reforestation would create new forest patches containing interior cores at least 2,000 ha (~5,000 ac) in size. It originates from the Lower Mississippi Valley Joint Venture MAV forest breeding bird reforestation priorities.



### Likelihood that reforestation will contribute to forest breeding bird habitat needs

- Most likely ( $\geq 90$ th percentile)
- Most likely (80th to  $< 90$ th percentile)
- More likely (70th to  $< 80$ th percentile)
- Less likely (60th to  $< 70$ th percentile)
- Least likely (50th to  $< 60$ th percentile)
- Least likely (40th to  $< 50$ th percentile)
- Least likely (30th to  $< 40$ th percentile)
- Least likely (20th to  $< 30$ th percentile)
- Least likely (10th to  $< 20$ th percentile)
- Least likely ( $< 10$ th percentile)
- Not a priority for reforestation

Table 14: Indicator values for Mississippi Alluvial Valley forest birds - reforestation within Arkansas. A good condition threshold is not yet defined for this indicator.

| Indicator Values: Likelihood that reforestation will contribute to forest breeding bird habitat needs |   | Acres      | Percent of Area |
|---|---|------------|-----------------|
| ↑ High  | Most likely (≥90th percentile)          | 402,348    | 1.2%            |
|   | Most likely (80th to <90th percentile)  | 525,061    | 1.5%            |
|   | More likely (70th to <80th percentile)  | 543,185    | 1.6%            |
|   | Less likely (60th to <70th percentile)  | 633,973    | 1.9%            |
|   | Least likely (50th to <60th percentile) | 643,829    | 1.9%            |
|   | Least likely (40th to <50th percentile) | 674,179    | 2.0%            |
|   | Least likely (30th to <40th percentile) | 708,501    | 2.1%            |
|   | Least likely (20th to <30th percentile) | 719,444    | 2.1%            |
|   | Least likely (10th to <20th percentile) | 919,661    | 2.7%            |
|   | Least likely (<10th percentile)         | 698,957    | 2.1%            |
| ↓ Low   | Not a priority for reforestation        | 3,168,299  | 9.3%            |
|   | Area not evaluated for this indicator   | 24,409,323 | 71.7%           |
| Total area  |   | 34,046,760 | 100%            |

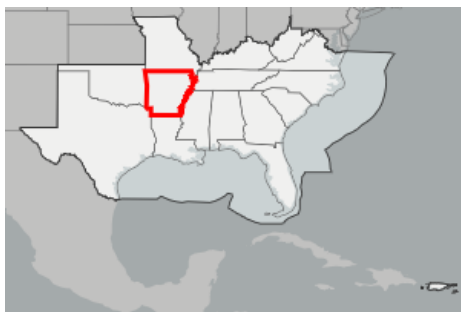
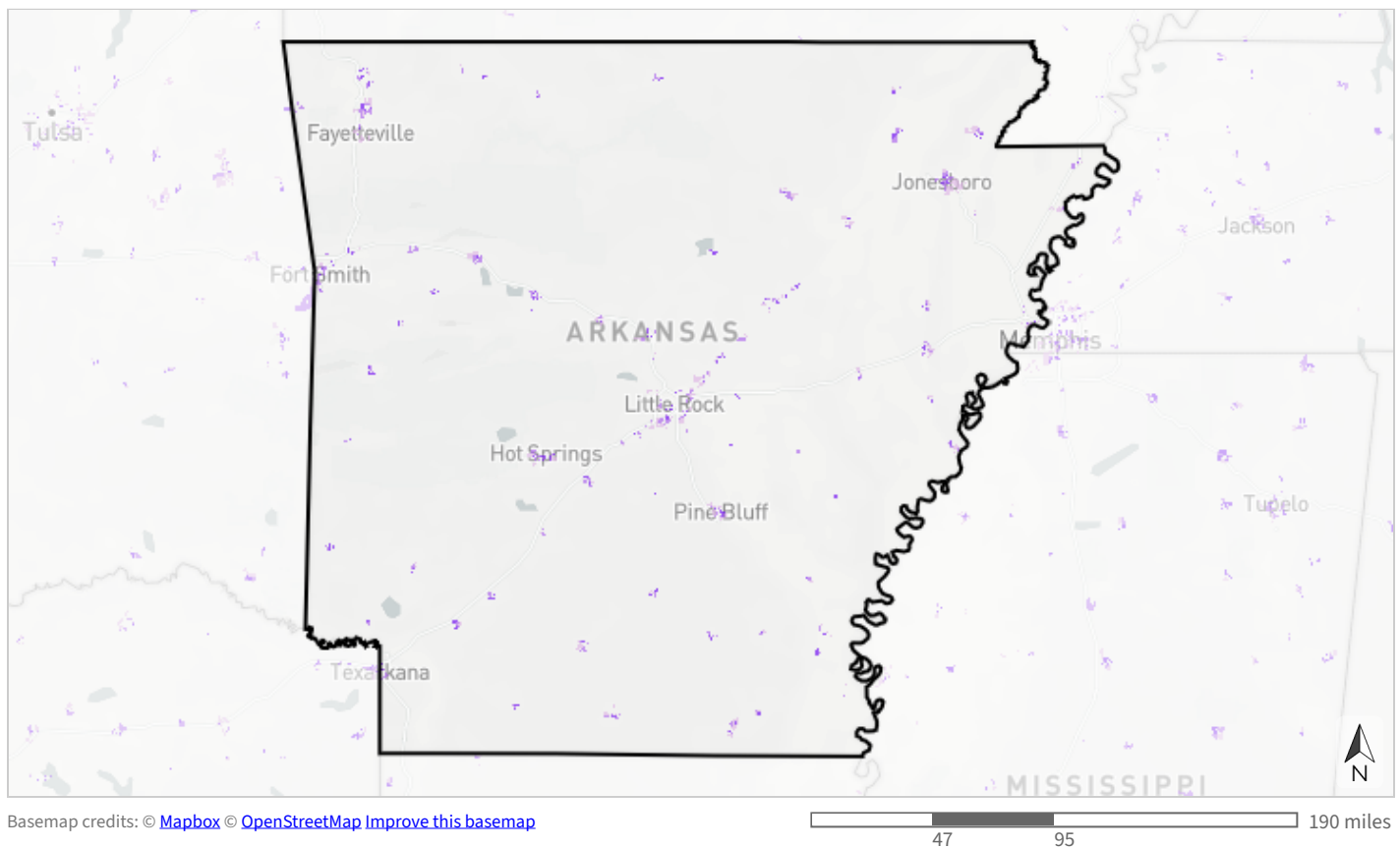
To learn more and explore the GIS data, [view this indicator in the SECAS Atlas](#).



Terrestrial

## Potential access to parks

This cultural resource indicator prioritizes places to create new parks that would fill gaps in access to open space within socially vulnerable communities in urban areas. It identifies areas where residents currently lack access to parks within a 10-minute walk (accounting for walkable road networks and access barriers like highways and fences), then prioritizes based on park need using demographic and environmental metrics. Parks help improve public health, foster a conservation ethic by providing opportunities for people to connect with nature, and support critical ecosystem services. This indicator originates from the Trust for Public Land's ParkServe park priority areas and the Center for Disease Control's Social Vulnerability Index.



### Priority for a new park to serve people who lack nearby park access

- Very high priority
- High priority
- Moderate priority
- Not identified as a priority (within urban areas)

Table 15: Indicator values for potential access to parks within Arkansas. A good condition threshold is not yet defined for this indicator.

|        | <b>Indicator Values: Priority for a new park to serve people who lack nearby park access</b> | <b>Acres</b>      | <b>Percent of Area</b> |
|--------|--|-------------------|------------------------|
| ↑ High | Very high priority   | 65,308            | 0.2%                   |
|        | High priority  | 110,294           | 0.3%                   |
|        | Moderate priority  | 108,532           | 0.3%                   |
| ↓ Low  | Not identified as a priority (within urban areas)  | 33,762,626        | 99.2%                  |
|        | <b>Total area</b>  | <b>34,046,760</b> | <b>100%</b>            |

To learn more and explore the GIS data, [view this indicator in the SECAS Atlas](#).

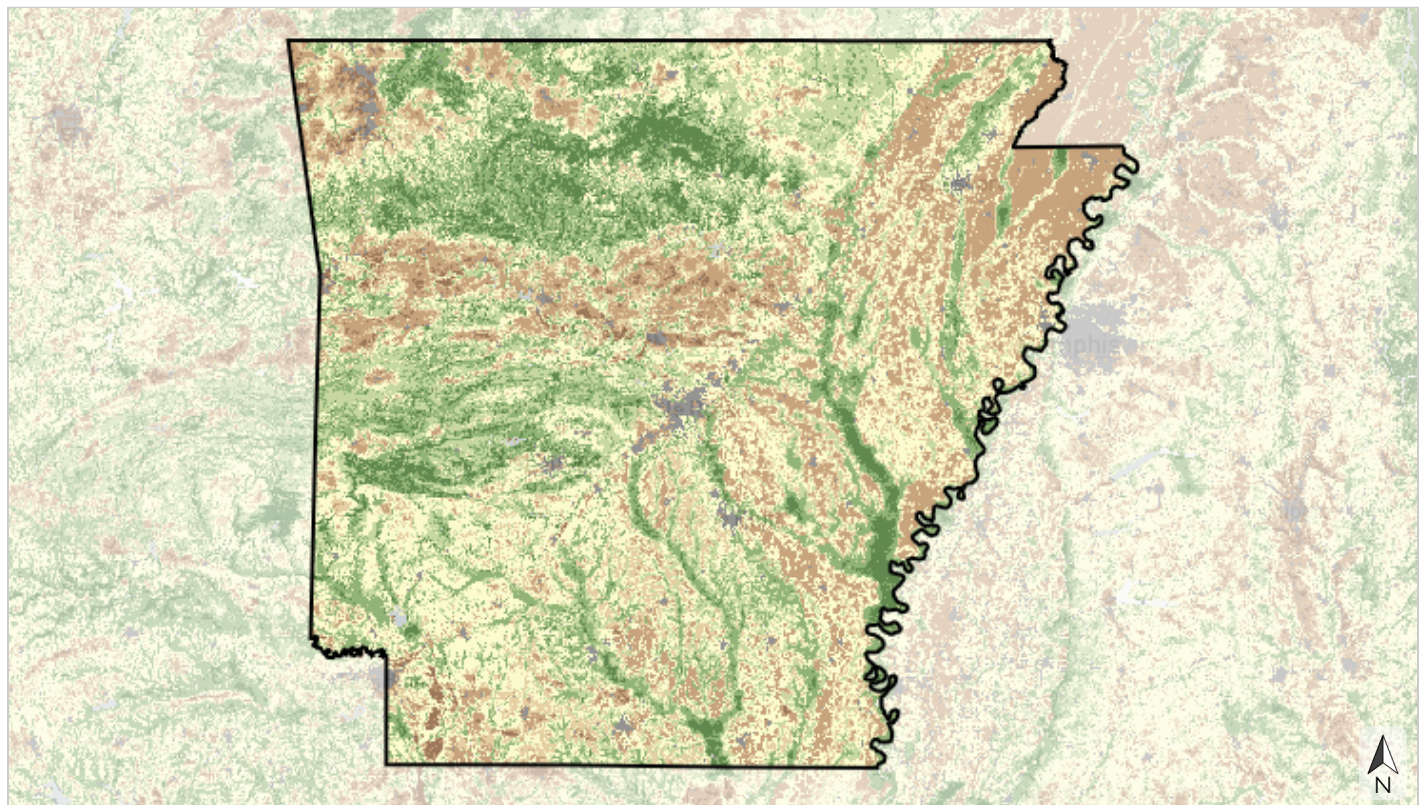




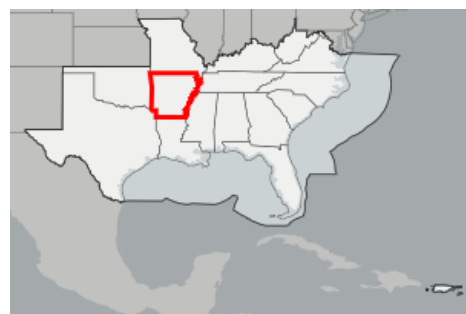
Terrestrial

## Resilient terrestrial sites

This indicator depicts an area's capacity to maintain species diversity and ecosystem function in the face of climate change. It measures two factors that influence resilience. The first, landscape diversity, reflects the number of microhabitats and climatic gradients created by topography, elevation, and hydrology. The second, local connectedness, reflects the degree of habitat fragmentation and strength of barriers to species movement. Highly resilient sites contain many different habitat niches that support biodiversity, and allow species to move freely through the landscape to find suitable microclimates as the climate changes. This indicator originates from The Nature Conservancy's Resilient Land data.



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- Most resilient
- More resilient
- Slightly more resilient
- Average/median resilience
- Slightly less resilient
- Less resilient
- Least resilient
- Developed

Table 16: Indicator values for resilient terrestrial sites within Arkansas. A good condition threshold is not yet defined for this indicator.

|        | Indicator Values                      | Acres             | Percent of Area |
|--------|---------------------------------------|-------------------|-----------------|
| ↑ High | Most resilient                        | 1,903,463         | 5.6%            |
|        | More resilient                        | 5,825,578         | 17.1%           |
|        | Slightly more resilient               | 6,149,532         | 18.1%           |
|        | Average/median resilience             | 8,524,647         | 25.0%           |
|        | Slightly less resilient               | 4,723,067         | 13.9%           |
|        | Less resilient                        | 4,861,947         | 14.3%           |
|        | Least resilient                       | 311,582           | 0.9%            |
| ↓ Low  | Developed                             | 861,548           | 2.5%            |
|        | Area not evaluated for this indicator | 885,396           | 2.6%            |
|        | <b>Total area</b>                     | <b>34,046,760</b> | <b>100%</b>     |

To learn more and explore the GIS data, [view this indicator in the SECAS Atlas](#).

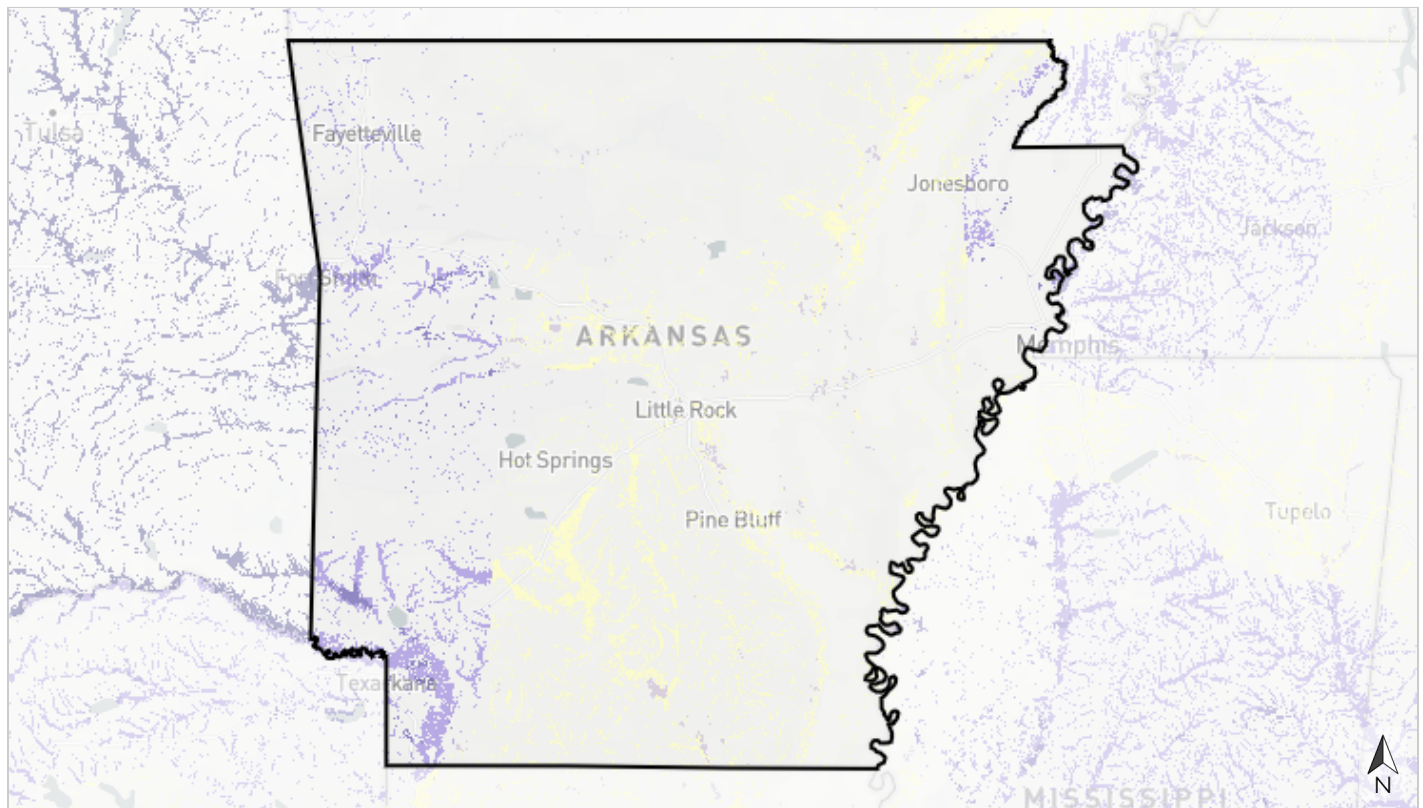




Terrestrial

## River cane restoration

This indicator represents priority places for river cane restoration and co-stewardship near the lands of federally recognized Tribes. River cane is a bamboo species native to the Southeast. Historically, it was abundant and widespread, forming dense patches called canebrakes that could stretch for miles within the floodplain. Today, it has been reduced to less than 2% of its former extent. River cane not only provides significant habitat value and ecosystem services, but many Southeastern Native American Tribes consider it a cultural keystone species important to the continuity of traditional lifeways. This indicator combines data from multiple sources, including Natural Resources Conservation Service soils data, the Environmental Protection Agency's estimated floodplain, lands of federally recognized Tribes lands from the U.S. Census Bureau, and more.



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47 95 190 miles



- Potential river cane restoration/management area on Tribal land
- Potential river cane restoration/management area on protected land near Tribal lands
- Potential river cane restoration/management area near Tribal lands
- Potential river cane restoration/management area on protected land
- Potential river cane restoration/management area
- Not identified as a rivercane restoration/management area

Table 17: Indicator values for river cane restoration within Arkansas. A good condition threshold is not yet defined for this indicator.

|        | Indicator Values   | Acres             | Percent of Area |
|--------|--|-------------------|-----------------|
| ↑ High | Potential river cane restoration/management area on Tribal land                      | 0                 | 0%              |
|        | Potential river cane restoration/management area on protected land near Tribal lands | 200,933           | 0.6%            |
|        | Potential river cane restoration/management area near Tribal lands                   | 1,178,815         | 3.5%            |
|        | Potential river cane restoration/management area on protected land                   | 246,409           | 0.7%            |
|        | Potential river cane restoration/management area                                     | 3,071,613         | 9.0%            |
| ↓ Low  | Not identified as a rivercane restoration/management area                            | 29,348,990        | 86.2%           |
|        | <b>Total area</b>  | <b>34,046,760</b> | <b>100%</b>     |

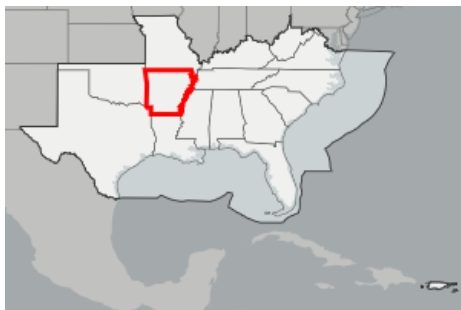
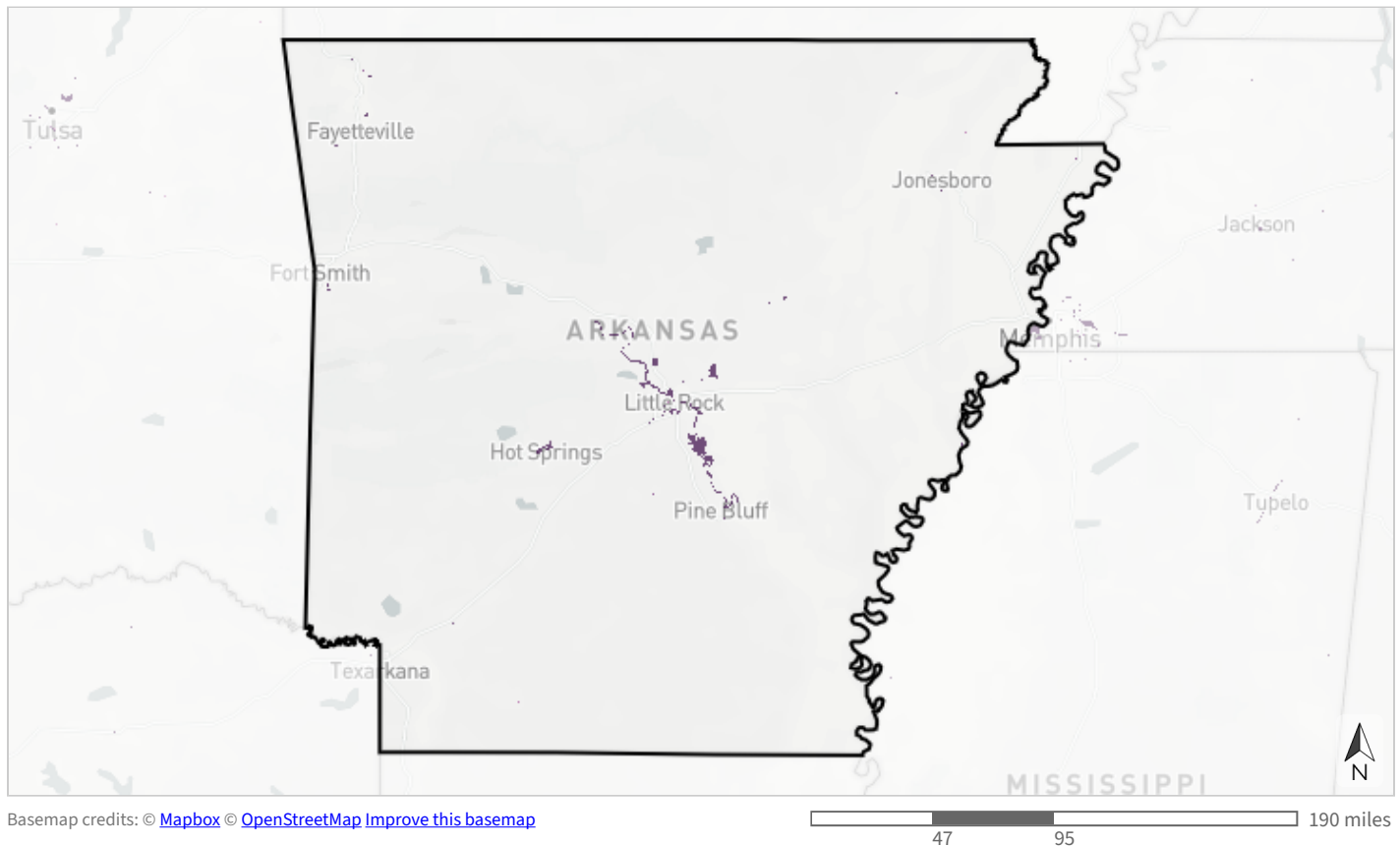
To learn more and explore the GIS data, [view this indicator in the SECAS Atlas](#).



Terrestrial

## Urban park size

This cultural resource indicator measures the size of parks larger than 5 acres in the urban environment. Protected natural areas in urban environments provide urban residents a nearby place to connect with nature, and offer refugia for some species. This indicator complements the equitable access to potential parks indicator by capturing the value of existing parks. It originates from the Protected Areas Database of the United States, U.S. Census Bureau urban areas, and the National Land Cover Database.



- 75+ acre urban park
- 50 to <75 acre urban park
- 30 to <50 acre urban park
- 10 to <30 acre urban park
- 5 to <10 acre urban park
- <5 acre urban park
- Not identified as an urban park

Table 18: Indicator values for urban park size within Arkansas. A good condition threshold is not yet defined for this indicator.

|        | Indicator Values                | Acres             | Percent of Area |
|--------|---------------------------------|-------------------|-----------------|
| ↑ High | 75+ acre urban park             | 81,509            | 0.2%            |
|        | 50 to <75 acre urban park       | 1,472             | <0.1%           |
|        | 30 to <50 acre urban park       | 1,833             | <0.1%           |
|        | 10 to <30 acre urban park       | 3,143             | <0.1%           |
|        | 5 to <10 acre urban park        | 1,121             | <0.1%           |
|        | <5 acre urban park              | 1,043             | <0.1%           |
| ↓ Low  | Not identified as an urban park | 33,956,639        | 99.7%           |
|        | <b>Total area</b>               | <b>34,046,760</b> | <b>100%</b>     |

To learn more and explore the GIS data, [view this indicator in the SECAS Atlas](#).



Terrestrial

## West Coastal Plain & Ouachitas forested wetland birds

This indicator is an index of habitat suitability for five forested wetland bird species (Acadian flycatcher, Kentucky warbler, yellow-throated warbler, prothonotary warbler, red-shouldered hawk) within bottomland hardwood forests and riparian areas in the West Gulf Coastal Plain/Ouachitas (WGCP/O) Bird Conservation Region. It uses metrics like patch size, dispersal distance, and distance to water to assess the potential for habitat to support sustainable populations of these birds. This indicator originates from the Lower Mississippi Valley Joint Venture's forested wetland decision support model for the WGCP/O region.



### Habitat suitability for forested wetland bird umbrella species

- High habitat suitability (score >80)
- Medium-high habitat suitability (score >60-80)
- Medium habitat suitability (score >40-60)
- Medium-low habitat suitability (score >20-40)
- Low habitat suitability (score >0-20)
- Not suitable (score = 0)

Table 19: Indicator values for West Coastal Plain & Ouachitas forested wetland birds within Arkansas. A good condition threshold is not yet defined for this indicator.

| Indicator Values: Habitat suitability for forested wetland bird umbrella species |  | Acres      | Percent of Area |
|--|--|------------|-----------------|
| ↑ High   | High habitat suitability (score >80)           | 434,926    | 1.3%            |
|  | Medium-high habitat suitability (score >60-80) | 185,880    | 0.5%            |
|  | Medium habitat suitability (score >40-60)      | 174,337    | 0.5%            |
|  | Medium-low habitat suitability (score >20-40)  | 225,997    | 0.7%            |
|  | Low habitat suitability (score >0-20)          | 223,536    | 0.7%            |
| ↓ Low  | Not suitable (score = 0)                       | 14,900,629 | 43.8%           |
|  | Area not evaluated for this indicator          | 17,901,455 | 52.6%           |
| Total area   |  | 34,046,760 | 100%            |

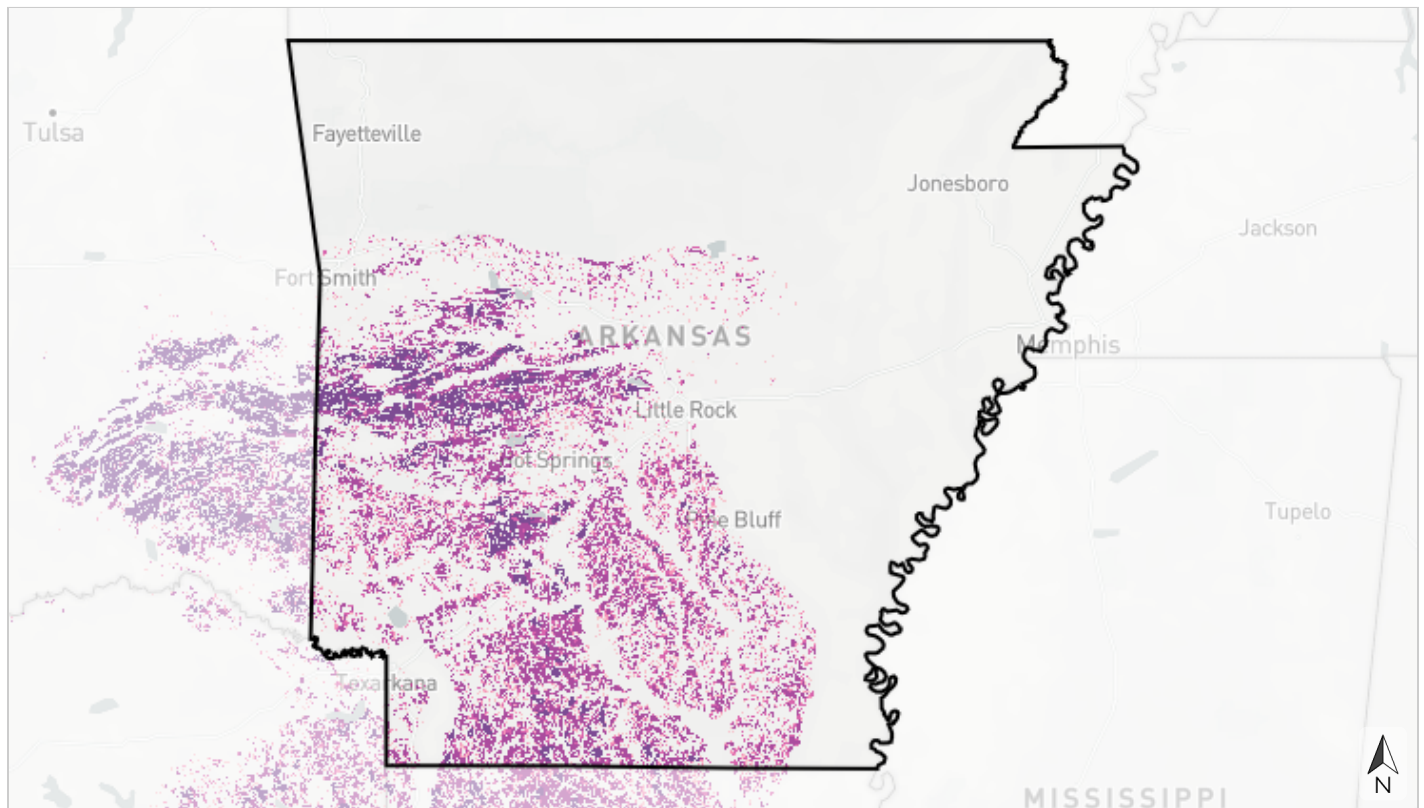
To learn more and explore the GIS data, [view this indicator in the SECAS Atlas](#).



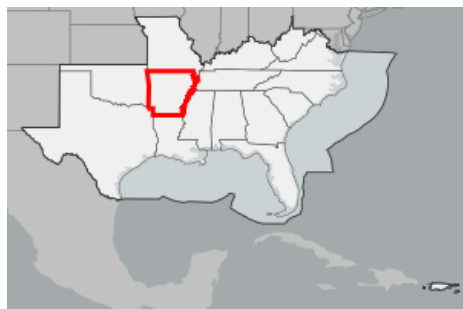
Terrestrial

## West Coastal Plain & Ouachitas open pine birds

This indicator identifies areas with pine trees that, if managed for open condition, could support a population of three umbrella bird species (brown-headed nuthatch, Bachman's sparrow, red-cockaded woodpecker). It evaluates potential habitat in the West Gulf Coastal Plain/Ouachitas (WGCP/O) Bird Conservation Region based on each species' habitat needs and population dynamics, prioritizing opportunities to restore and manage habitat to benefit open pine birds. Final scores reflect both the selectiveness of the species and whether an area meets the habitat requirements through one large patch, or clusters of smaller patches in sufficiently close proximity for breeding pairs to disperse. This indicator updates the Lower Mississippi Valley Joint Venture's open pine decision support model for the WGCP/O region.



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### Ability of pine patch to support a population of umbrella bird species if managed in open condition

- Large enough to support a population of all 3 species
- Large enough to support a population of 2 species
- Large enough to support a population of 1 species
- Part of a cluster of nearby patches able to support a population of all 3 species
- Part of a cluster of nearby patches able to support a population of 2 species
- Part of a cluster of nearby patches able to support a population of 1 species
- Pine patch too small and isolated to support a population of any species or not an upland pine patch

Table 20: Indicator values for West Coastal Plain & Ouachitas open pine birds within Arkansas. A good condition threshold is not yet defined for this indicator.

| <b>Indicator Values: Ability of pine patch to support a population of umbrella bird species if managed in open condition</b> |  | <b>Acres</b>      | <b>Percent of Area</b> |
|--|--|-------------------|------------------------|
| ↑ High   | Large enough to support a population of all 3 species  | 624,957           | 1.8%                   |
|  | Large enough to support a population of 2 species  | 2,240,410         | 6.6%                   |
|  | Large enough to a population of 1 species  | 748,822           | 2.2%                   |
|  | Part of a cluster of nearby patches able to support a population of all 3 species                    | 492,774           | 1.4%                   |
|  | Part of a cluster of nearby patches able to support a population of 2 species                        | 1,146,366         | 3.4%                   |
|  | Part of a cluster of nearby patches able to support a population of 1 species                        | 10,827            | <0.1%                  |
| ↓ Low  | Pine patch too small and isolated to support a population of any species or not an upland pine patch | 10,882,573        | 32.0%                  |
|  | <i>Area not evaluated for this indicator</i>   | <i>17,900,032</i> | <i>52.6%</i>           |
| <b>Total area</b>  |  | <b>34,046,760</b> | <b>100%</b>            |

To learn more and explore the GIS data, [view this indicator in the SECAS Atlas](#).

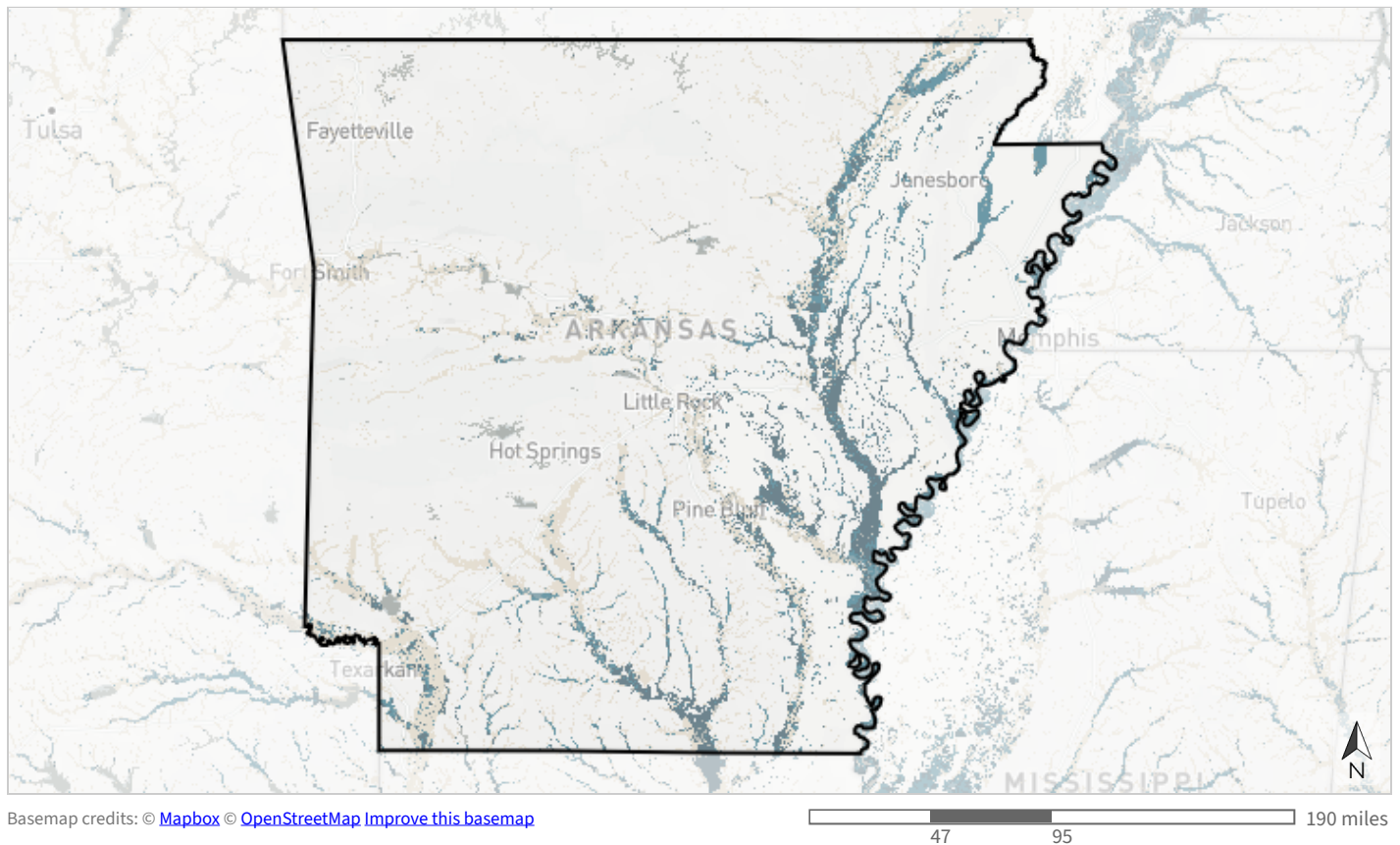




Freshwater

## Floodplain inundation

This indicator uses the frequency of inundation to measure the hydrologic function of the floodplain. In a natural floodplain, water can move freely from mainstem rivers and lakes onto different parts of the floodplain. This cycle of frequent, but not persistent, flooding supports many aquatic species and habitats, like fish, waterfowl and swamp forests. It also provides essential ecosystem services such as nutrient retention and downstream flood control. When parts of the floodplain stay constantly wet or dry, this may signal negative impacts from structures like dikes, dams, and levees, which disconnect waterbodies from their adjacent floodplains. This indicator is based on Sentinel-2 satellite imagery and methods developed by Yvonne Allen of the U.S. Fish and Wildlife Service.



### Frequency of inundation within the floodplain

- Frequent inundation (flooded in 21-90% of days with available data)
- Regular inundation (flooded in 6-20% of days with available data)
- Occasional inundation (flooded in 2-5% of days with available data)
- Persistent inundation (flooded in 91-100% of days with available data)
- No detected inundation (flooded in 0% of days with available data)
- Not identified as a floodplain

Table 21: Indicator values for floodplain inundation within Arkansas. Good condition thresholds reflect the range of indicator values that occur in healthy, functioning ecosystems.

| Indicator Values: Frequency of inundation within the floodplain |  | Acres             | Percent of Area |                         |
|---|--|-------------------|-----------------|-------------------------|
| ↑ High  | Frequent inundation (flooded in 21-90% of days with available data)    | 1,402,222         | 4.1%            |                         |
|   | Regular inundation (flooded in 6-20% of days with available data)      | 1,123,258         | 3.3%            | ↑ In good condition     |
|   | Occasional inundation (flooded in 2-5% of days with available data)    | 632,951           | 1.9%            | ↓ Not in good condition |
|   | Persistent inundation (flooded in 91-100% of days with available data) | 512,773           | 1.5%            |                         |
|   | No detected inundation (flooded in 0% of days with available data)     | 3,098,204         | 9.1%            |                         |
| ↓ Low   | Not identified as a floodplain   | 27,277,352        | 80.1%           |                         |
|   | <b>Total area</b>  | <b>34,046,760</b> | <b>100%</b>     |                         |

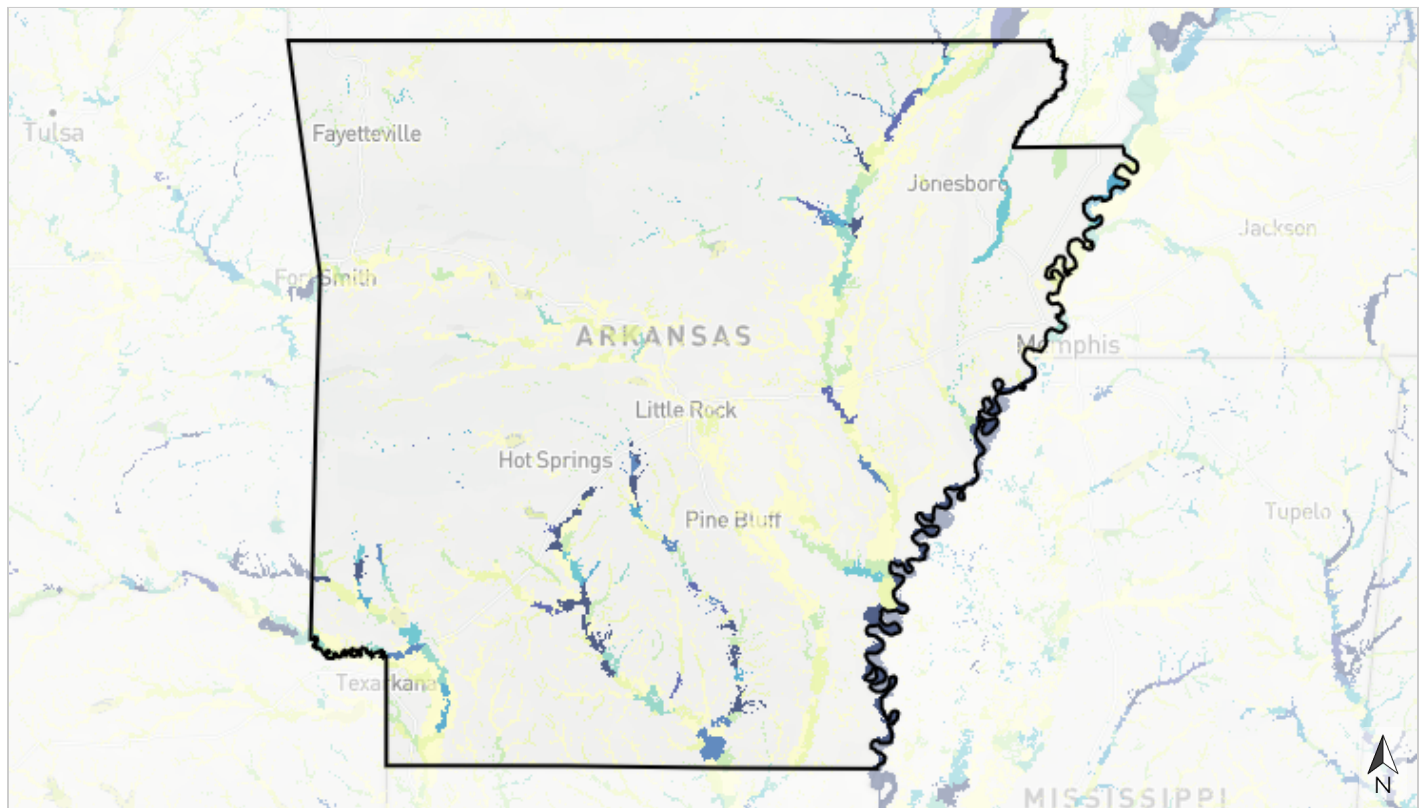
To learn more and explore the GIS data, [view this indicator in the SECAS Atlas](#).



Freshwater

## Imperiled aquatic species

This indicator measures the number of aquatic animal Regional Species of Greatest Conservation Need (RSGCN) observed within each 12-digit HUC subwatershed, including fish, mussels, snails, crayfish, and amphibians. RSGCN are regional priority species derived from the list of SGCN identified in Southeast State Wildlife Action Plans as most in need of conservation action. RSGCN were chosen based on consistent criteria, such as level of conservation concern, regional stewardship responsibility, and ecological significance. This indicator originates from state Natural Heritage Program data collected by the Southeast Aquatic Resources Partnership and applies to the Environmental Protection Agency's estimated floodplain, which spatially defines areas estimated to be inundated by a 100-year flood (also known as the 1% annual chance flood).



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### Number of aquatic animal Regional Species of Greatest Conservation Need (RSGCN) observed

- 8+ species
- 7 species
- 6 species
- 5 species
- 4 species
- 3 species
- 2 species
- 1 species
- 0 species
- Not identified as a floodplain

Table 22: Indicator values for imperiled aquatic species within Arkansas. A good condition threshold is not yet defined for this indicator.

| <b>Indicator Values: Number of aquatic animal Regional Species of Greatest Conservation Need (RSGCN) observed</b> |                                | <b>Acres</b>      | <b>Percent of Area</b> |
|---|--------------------------------|-------------------|------------------------|
| ↑ High  | 8+ species                     | 461,463           | 1.4%                   |
|   | 7 species                      | 96,493            | 0.3%                   |
|   | 6 species                      | 126,889           | 0.4%                   |
|   | 5 species                      | 106,945           | 0.3%                   |
|   | 4 species                      | 163,788           | 0.5%                   |
|   | 3 species                      | 292,781           | 0.9%                   |
|   | 2 species                      | 544,388           | 1.6%                   |
|   | 1 species                      | 1,150,672         | 3.4%                   |
|   | 0 species                      | 3,825,990         | 11.2%                  |
| ↓ Low   | Not identified as a floodplain | 27,277,352        | 80.1%                  |
|   | <b>Total area</b>              | <b>34,046,760</b> | <b>100%</b>            |

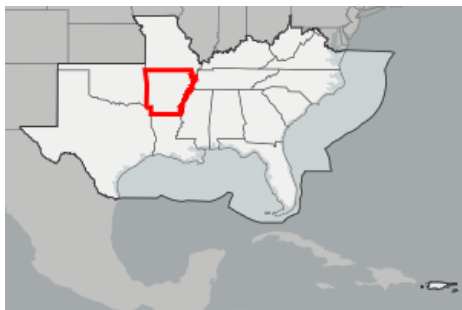
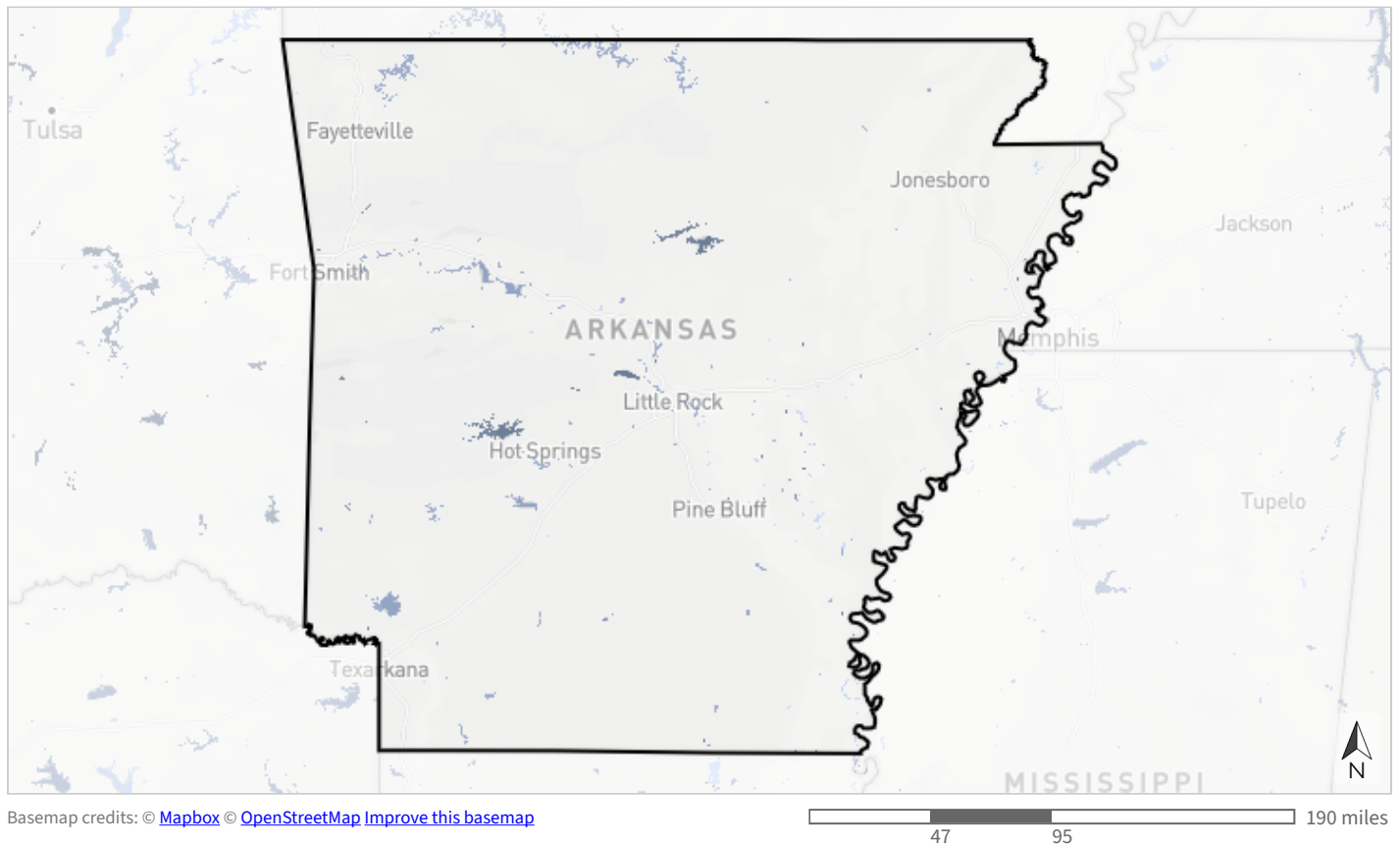
To learn more and explore the GIS data, [view this indicator in the SECAS Atlas](#).



Freshwater

## Lakes & reservoirs

This indicator assesses the condition of lakes and reservoirs based on the amount of natural landcover within the upstream watershed. Higher scores go to lakes and reservoirs with less surrounding urban and agricultural development (including intensive forest management for timber production), which negatively impact drinking water quality and quantity and fish habitat. This indicator uses waterbody and watershed data from the LAGOS-LOCUS dataset, as well as landcover from the National Land Cover Database and LANDFIRE.



- Lake or reservoir with low disturbance (0-25%) in upstream watershed
- Lake or reservoir with medium disturbance (>25-60%) in upstream watershed
- Lake or reservoir with high disturbance (>60%) in upstream watershed
- Not identified as a lake or reservoir

Table 23: Indicator values for lakes & reservoirs within Arkansas. Good condition thresholds reflect the range of indicator values that occur in healthy, functioning ecosystems.

|        | Indicator Values  | Acres             | Percent of Area |                         |
|--------|---|-------------------|-----------------|-------------------------|
| ↑ High | Lake or reservoir with low disturbance (0-25%) in upstream watershed      | 129,106           | 0.4%            | ↑ In good condition     |
|        | Lake or reservoir with medium disturbance (>25-60%) in upstream watershed | 271,274           | 0.8%            | ↓ Not in good condition |
|        | Lake or reservoir with high disturbance (>60%) in upstream watershed      | 97,603            | 0.3%            |                         |
| ↓ Low  | Not identified as a lake or reservoir                                     | 33,548,777        | 98.5%           |                         |
|        | <b>Total area</b>   | <b>34,046,760</b> | <b>100%</b>     |                         |

To learn more and explore the GIS data, [view this indicator in the SECAS Atlas](#).

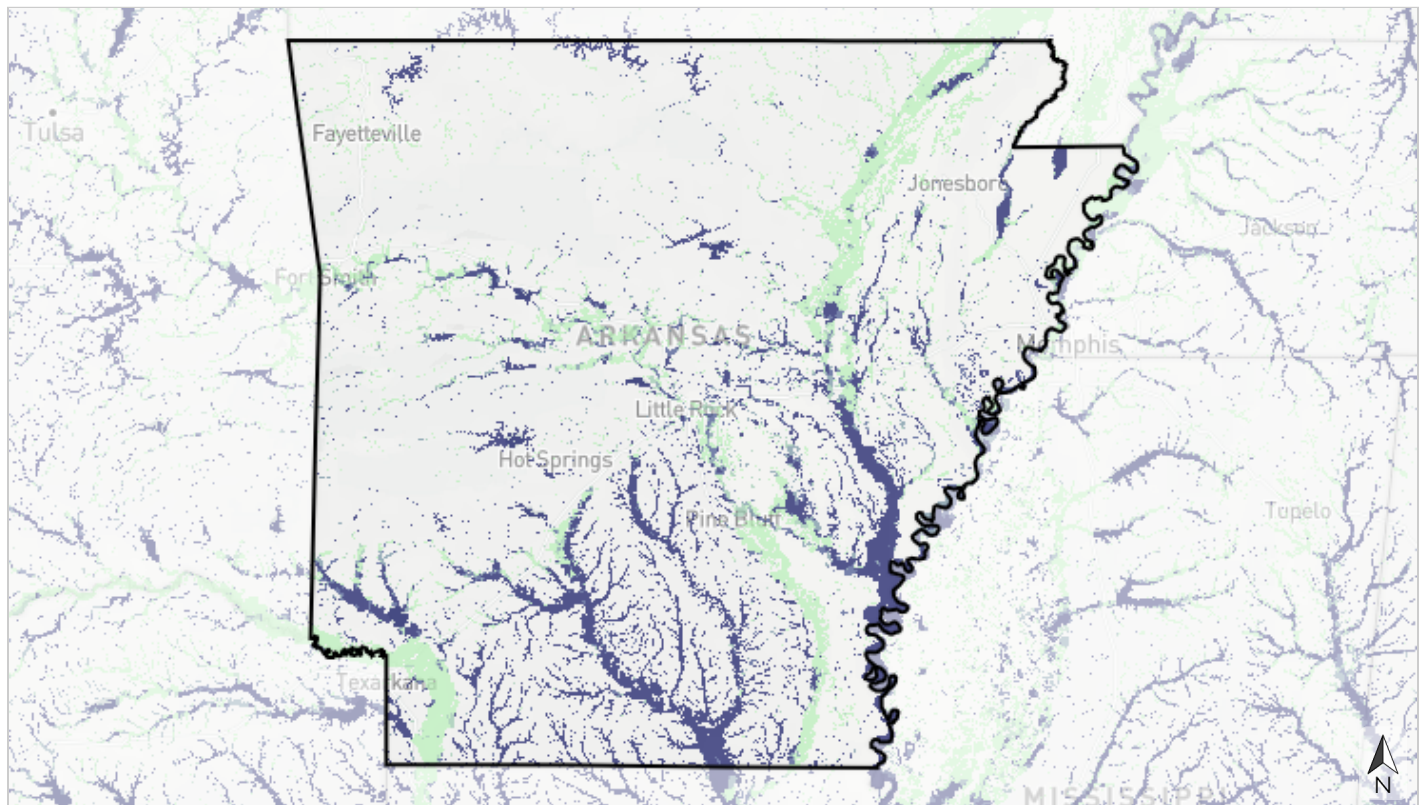




Freshwater

## Natural landcover in floodplains

This indicator measures the amount of natural landcover in the estimated floodplain of rivers and streams within each catchment. It assesses the stream channel and its surrounding riparian buffer, measuring the percent of unaltered habitat like forests, wetlands, or open water (rather than agriculture or development). Intact vegetated buffers within the floodplain of rivers and streams provide aquatic habitat, improve water quality, reduce erosion and flooding, recharge groundwater, and more. This indicator originates from the National Land Cover Database and applies to the Environmental Protection Agency's estimated floodplain, which spatially defines areas estimated to be inundated by a 100-year flood (also known as the 1% annual chance flood).



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47 95 190 miles



### Percent natural landcover within the estimated floodplain, by catchment

- >90% natural landcover
- >80-90% natural landcover
- >70-80% natural landcover
- >60-70% natural landcover
- ≤60% natural landcover
- Not identified as a floodplain

Table 24: Indicator values for natural landcover in floodplains within Arkansas. Good condition thresholds reflect the range of indicator values that occur in healthy, functioning ecosystems.

|        | Indicator Values: Percent natural landcover within the estimated floodplain, by catchment | Acres             | Percent of Area |                         |
|--------|---|-------------------|-----------------|-------------------------|
| ↑ High | >90% natural landcover  | 2,954,907         | 8.7%            |                         |
|        | >80-90% natural landcover   | 592,650           | 1.7%            | ↑ In good condition     |
|        | >70-80% natural landcover   | 406,993           | 1.2%            | ↓ Not in good condition |
|        | >60-70% natural landcover   | 369,623           | 1.1%            |                         |
|        | ≤60% natural landcover  | 2,445,236         | 7.2%            |                         |
| ↓ Low  | Not identified as a floodplain  | 27,277,352        | 80.1%           |                         |
|        | <b>Total area</b>   | <b>34,046,760</b> | <b>100%</b>     |                         |

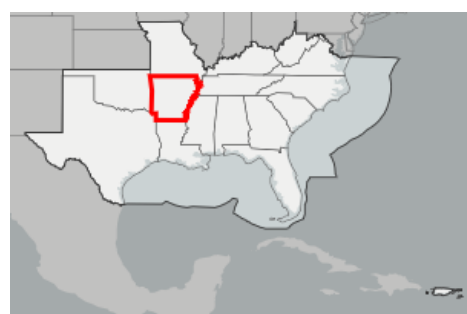
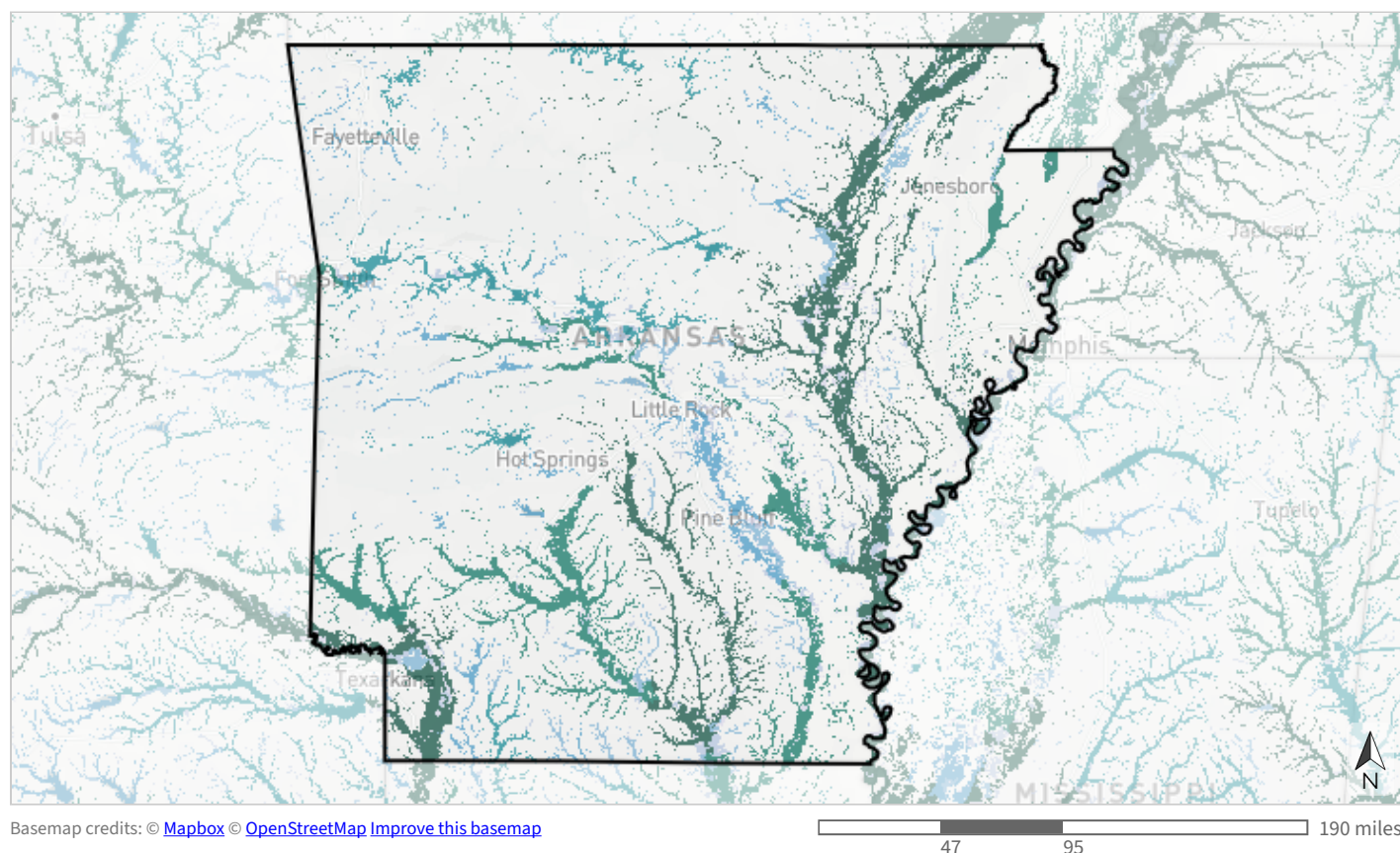
To learn more and explore the GIS data, [view this indicator in the SECAS Atlas](#).



Freshwater

## Network complexity

This indicator depicts the number of connected stream size classes in a river network between dams or waterfalls. River networks with a variety of connected stream classes help retain aquatic biodiversity in a changing climate by allowing species to access climate refugia and move between habitats. This indicator originates from the Southeast Aquatic Resources Partnership and applies to the Environmental Protection Agency's estimated floodplain, which spatially defines areas estimated to be inundated by a 100-year flood (also known as the 1% annual chance flood).



### Number of connected stream size classes

- 7 size classes
- 6 size classes
- 5 size classes
- 4 size classes
- 3 size classes
- 2 size classes
- 1 size class
- Not identified as a floodplain

Table 25: Indicator values for network complexity within Arkansas. Good condition thresholds reflect the range of indicator values that occur in healthy, functioning ecosystems.

|        | Indicator Values: Number of connected stream size classes | Acres             | Percent of Area |                         |
|--------|---|-------------------|-----------------|-------------------------|
| ↑ High | 7 size classes  | 2,612,578         | 7.7%            |                         |
|        | 6 size classes  | 1,595,896         | 4.7%            |                         |
|        | 5 size classes  | 630,470           | 1.9%            |                         |
|        | 4 size classes  | 502,177           | 1.5%            | ↑ In good condition     |
|        | 3 size classes  | 548,964           | 1.6%            | ↓ Not in good condition |
|        | 2 size classes  | 454,715           | 1.3%            |                         |
|        | 1 size class  | 423,368           | 1.2%            |                         |
| ↓ Low  | Not identified as a floodplain                            | 27,278,592        | 80.1%           |                         |
|        | <b>Total area</b>   | <b>34,046,760</b> | <b>100%</b>     |                         |

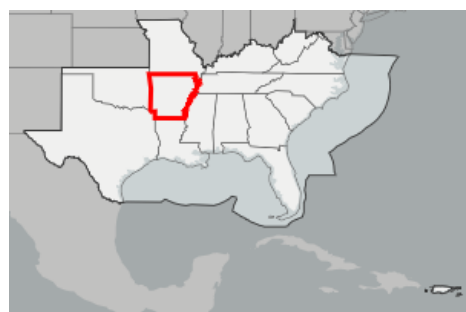
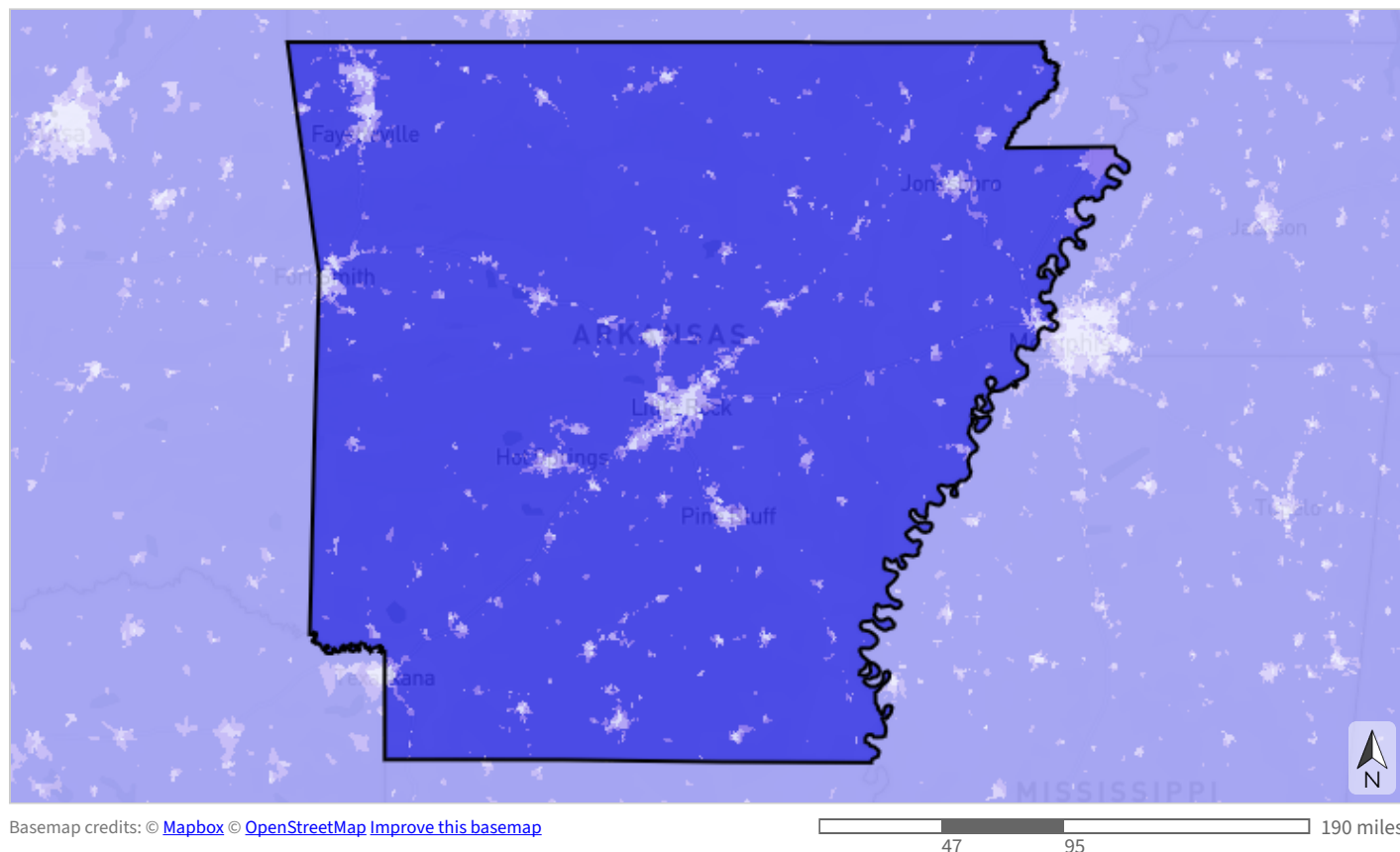
To learn more and explore the GIS data, [view this indicator in the SECAS Atlas](#).



Freshwater

## Permeable surface

This indicator measures the average percent of non-impervious cover within each catchment. High levels of impervious surface degrade water quality and alter freshwater flow, impacting both aquatic species communities and ecosystem services for people, like the availability of clean drinking water. This indicator originates from the National Land Cover Database.



### Percent of catchment permeable

- >95% permeable (likely high water quality and supporting most sensitive aquatic species)
- >90-95% permeable (likely declining water quality and supporting most aquatic species)
- >70-90% permeable (likely degraded water quality and not supporting many aquatic species)
- ≤70% permeable (likely degraded instream flow, water quality, and aquatic species communities)

Table 26: Indicator values for permeable surface within Arkansas. Good condition thresholds reflect the range of indicator values that occur in healthy, functioning ecosystems.

| Indicator Values: Percent of catchment permeable |  | Acres             | Percent of Area |                         |
|--|--|-------------------|-----------------|-------------------------|
| ↑ High   | >95% permeable (likely high water quality and supporting most sensitive aquatic species)       | 32,173,490        | 94.5%           | ↑ In good condition     |
|  | >90-95% permeable (likely declining water quality and supporting most aquatic species)         | 887,524           | 2.6%            | ↓ Not in good condition |
| ↓ Low  | >70-90% permeable (likely degraded water quality and not supporting many aquatic species)      | 744,170           | 2.2%            |                         |
|  | ≤70% permeable (likely degraded instream flow, water quality, and aquatic species communities) | 241,576           | 0.7%            |                         |
|  | <b>Total area</b>  | <b>34,046,760</b> | <b>100%</b>     |                         |

To learn more and explore the GIS data, [view this indicator in the SECAS Atlas](#).



## More Information

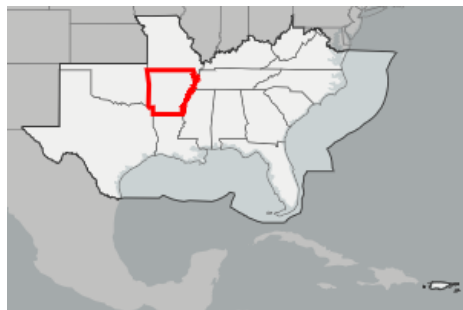
### Priority Amphibian and Reptile Conservation Areas

Priority Amphibian and Reptile Conservation Areas (PARCAs) are an expert-driven, nonregulatory designation that includes places capable of supporting viable amphibian and reptile populations, places occupied by rare or imperiled species, and places rich in biodiversity or species unique to that geographic area. Reptiles and amphibians are a critical part of the Southeast region's rich biodiversity and many populations are declining in the face of threats like habitat loss, invasive species, and climate change. The PARCA dataset is maintained by the [Amphibian and Reptile Conservancy](#) and does not yet include Virginia or Kentucky.



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47 95 190 miles



- Priority Amphibian and Reptile Conservation Area (PARCA)
- Not a PARCA (excluding Kentucky and Virginia)

Table 27: Extent of Priority Amphibian and Reptile Conservation Areas within Arkansas.

| Priority Amphibian and Reptile Conservation Areas status | Acres      | Percent of Area |
|--|------------|-----------------|
| Priority Amphibian and Reptile Conservation Area (PARCA) | 2,367,949  | 7.0%            |
| Not a PARCA (excluding Kentucky and Virginia)            | 31,678,811 | 93.0%           |
| Total area   | 34,046,760 | 100%            |

## **Priority Amphibian and Reptile Conservation Areas at this location:**

### **Arkansas River Valley**

The Arkansas River Valley PARCA is situated between the Ozark Highlands and the Ouachita Mountains. The diverse landscape of the Arkansas River Valley is made up of four unique ecoregions: Scattered High Ridges and Mountains, Arkansas River Floodplain, Arkansas Valley Hills, and Arkansas Valley Plains. Not only is this area important for wildlife, but it's also used by humans for a wide range of agricultural practices. Much of the valley's plains and floodplain forests have been converted to pastureland, hayland, and cropland. Maintaining the health of the valley's aquatic ecosystems, uplands, and floodplain forests will protect the abundant herpetofauna found in the area, including the threatened alligator snapping turtle.

### **Caddo Mountains**

Ouachita National Forest is the oldest and largest national forest in the southern United States, and located in the southeastern portion of this forest is the Caddo Mountains PARCA. This PARCA is part of the Central Mountain Range ecoregion, which is considered the most diverse section of the Ouachitas. This unique mountain range is characterized by ridges that generally align east-west and are underlain by sandstone and novaculite. Perennial springs are common in the Central Mountains and support the various flora species, which are mostly dominated by oak and pine trees. This area is also known for its hot springs, unique crystal formations, and waterfalls.

### **Caddoan**

The Caddoan PARCA in northeast Texas represents a variety of habitats; the eastern portion is generally forested with shortleaf pine, oaks and hickories, transitioning into post oak savanna and prairie in the western portions. Historically, the prairies contained a diverse microtopography of "mima" mounds and depressions. Much of this has been lost as they were converted to agriculture, but some examples on conservation and managed private lands remain. River floodplains contain some of the best bottomland hardwood forest habitat in the state of Texas. Species such as the pygmy rattlesnake, crawfish frog, and the Gulf Coast waterdog call this PARCA home, and they're threatened by fire suppression, forest conversion and clearing, prairie succession, mining, and invasive species.

### **Crowley's Ridge**

This PARCA is located in eastern Arkansas and includes Crowley's Ridge and Village Creek State Park. Crowley's Ridge is a rare geologic formation made up of a disjunct series of loess-capped hills that rise above the flat Mississippi Alluvial Plain. The ridge is enveloped in a lush mixed forest composed of oak, hickory, and uncommon hardwoods such as sugar maple and American beech. This PARCA also includes a portion of the Northern Backswamps ecoregion. Backswamps are key areas for capturing excess nutrients from local waters, storing water during heavy rain events, and providing important habitat for wildlife.

### **Devil's Eyebrow**

This rugged PARCA is steep and rich in biodiversity. Not only is it a safe haven for many amphibians and reptiles threatened by encroaching development, but it supports one of the highest concentrations of rare plant species in Arkansas. This PARCA also contains the state's largest state park, Hobbs State Park Conservation Area. Most of the land is underlain with cherty limestone that includes caves and many spring-fed streams. This area is also known for its glades, but most of the forest and prairies have been

converted to agriculture and residential areas. Fire suppression in the glades have allowed for unwanted woody vegetation to invade and suffocate the rich understory. Restoring the natural fire regime to the area, coupled with woody vegetation removal, will help return the diverse plant communities to this unique landscape and keep it open for pollinators and the dwindling numbers of eastern collared lizards.

### **Illinois River Woodland and Prairie**

The Illinois River Woodland and Prairie PARCA covers a portion of Ozark National Forest and contains more than 30 amphibian species. This region is characterized by low plateaus with extensive plains that are underlain with chert and limestone. Caves and sinkholes are common in the area, along with perennial spring-fed streams. The lower elevation and widespread plains have made this area prone to development and agriculture.

### **Lower Little River**

This important area for reptile and amphibian diversity has an intricate system of large streams, oxbow lakes, and backswamps. Covering hilly dissected uplands, floodplains, and low terraces are various species of oak, pine and cypress trees. This PARCA includes Little River National Wildlife Refuge, which is home to 11 state Champion Trees (largest of their respective species in the state) and offers refuge to several at-risk turtle species.

### **Mount Magazine**

Sitting at 2,753 ft is Mount Magazine, the highest point in Arkansas. Magazine Mountain does not have a peak, but rather a large plateau covered in diverse habitat and rich soil surrounded by abrupt sandstone cliffs. This PARCA is covered by savannas, open woodlands, and forests dominated or co-dominated by upland oaks, hickory and shortleaf pine. Although this area is rich in reptiles and amphibians, it is also known for its rare and abundant butterfly species.

### **Ouachita Mountains East**

This mountain range consists of folded ridges, rolling hills, and broad valleys formed by the erosion of Paleozoic sandstone and shale. Their east-to-west-oriented ridges make them an unusual landmark in North America, but even more impressive is the diversity of salamanders that reside within the forests. Some of the salamanders are found nowhere else and include the Rich Mountain salamander and the Fourche Mountain salamander.

### **Ouachita Mountains West**

Open hills and low mountains (300-400 ft) with valleys filled with fissured cliffs characterize this region. The major habitat types are native mixed shortleaf pine-deciduous forests with diverse bottomland forests along streams (willow, white, and Shumard oaks, as well as black hickory, sweet gum, green ash, and maples) filled with cool, clear, spring-fed water. Large areas have experienced habitat loss with commercial silviculture planted with loblolly pine, while grasslands have been largely converted to exotic species for grazing. This area hosts the highest species richness in the state, where many species from the western and eastern states converge, and is the western extent of the range for several threatened species such as the alligator snapping turtle. Conservation efforts here will focus on preserving fishless ponds for amphibian breeding, restoring pine ecosystems with a native fire regime, and protecting stream headwater habitats.

### **Ozarks**

The Ozark Mountains are known for their many distinctive geological landscapes, including the impressive karst region. This unique region is characterized by an underground wilderness made up of soluble limestone and dolomite. Karst features include caves, clear streams, and sinkholes, and their formation occurs slowly over time. This makes them very susceptible to pollution and vandalism. This subterranean ecosystem provides significant habitat to many species and some of these species are found nowhere else in the world, such as the grotto salamander. Other important habitats of the Ozarks are gravel-bottom streams and accompanying riparian forests, which are essential to many amphibians and reptiles. Restoring these stream and riparian habitats is a conservation goal for this PARCA, along with protecting vulnerable caves and their delicate ecosystems.

### **Poison Springs**

This important area for reptiles and amphibians is part of the West Gulf Coastal Plain. Sandhill barrens, widespread forests of loblolly-shortleaf pine, grasslands, and a variety of oaks (including the rare Arkansas oak) are found within this PARCA. However, most of the forests within this region have been replaced by commercial pine. Fire is also important to the area and many of the plant species are dependent on a routine fire regime to stay healthy.

### **Southwest Glades**

With a step-like landscape of level-crested buttes, lower benches, and bottomlands, the Southwest Glades PARCA is a rugged expanse inhabited by woodlands and rocky glades. Cliffs, sinkholes, and caves are prevalent, with some of the largest caves in Missouri found in this area. The White River runs through this PARCA and is dissected into three reservoirs: Table Rock Lake, Bull Shoals Lake, and Lake Taneycomo. Many glades have been degraded by fire suppression, overgrazing, and the spread of undesirable woody vegetation. These desert-like communities are sensitive to disturbances and their thin soils are susceptible to erosion, which can destroy essential habitat for reptiles and other animals.

### **Stink Finger**

The Stink Finger PARCA primarily consisted of shortleaf pine-oak-hickory woodland until post-settlement, when the majority of this community type was removed, and it has since been converted to loblolly pine plantation. Some natural stands of shortleaf pine-oak-hickory woodland still exist in this ecoregion. The major habitat types found within this PARCA consist of batture forests, hardwood slope forests, mixed hardwood-loblolly pine forests, shortleaf pine-oak-hickory woodlands, xeric sandhill woodlands, hardwood flatwoods, calcareous forests, calcareous prairies, saline prairies, and sandbars. The Shreveport Airport contains the last known population of southern crawfish frogs in the state. Threats to this PARCA include urbanization, vehicle mortality, invasive species, and habitat conversion. Major priorities for this PARCA include restoring native habitat types, controlling invasive species, and creating habitat for the southern crawfish frog.

### **Sulfur River**

The Sulfur River PARCA is composed of rolling plains that are broken by nearly flat fluvial terraces, bottomlands, sandy low hills, and low cuestas. One of the biggest bottomland hardwood habitats persisting along the Red River Valley is found within this PARCA and is home to a thriving alligator population. Recreational activities are abundant in this region, but maintaining the water quality and

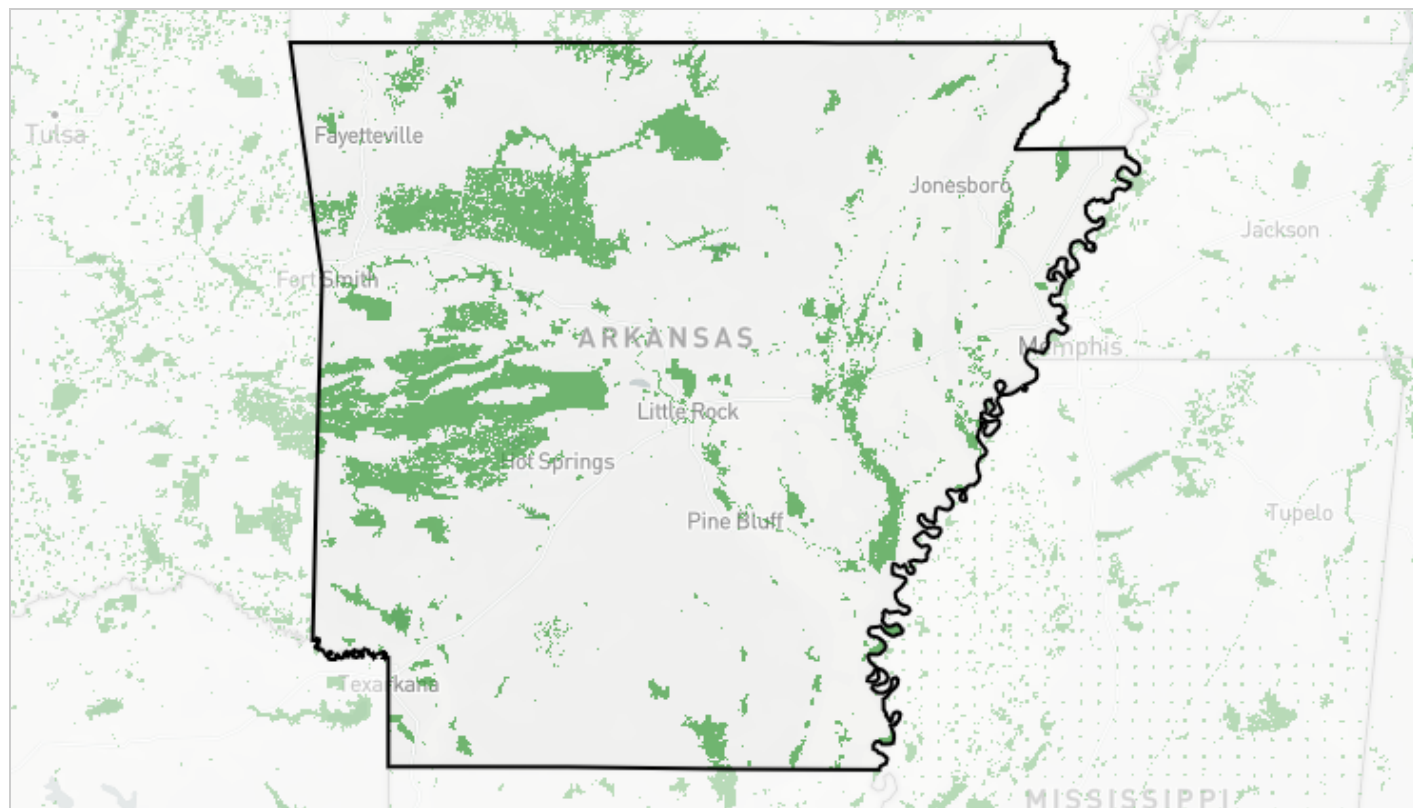
protecting important wetlands will help defend the abundant wildlife.

Names and descriptions of public Priority Amphibian and Reptile Areas were provided by the Amphibian and Reptile Conservancy on August 30, 2024 and edited slightly for clarity and consistency.



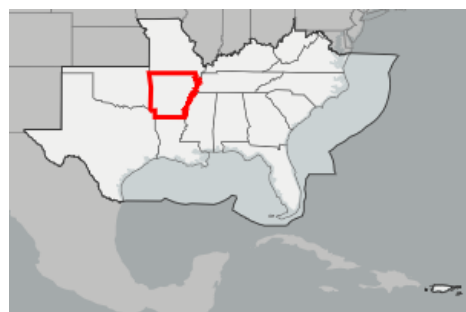
## Protected Areas

Protected areas include a variety of public lands owned or managed by federal, state, and local agencies and nonprofit organizations, as well as some private conservation lands and conservation easements. Protected areas are derived from the [Protected Areas Database of the United States](#) (PAD-US v4.1) and include Fee, Designation, Easement, Marine, and Proclamation (Dept. of Defense lands only) boundaries.



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47 95 190 miles



- Within a protected area
- Not within a protected area

Table 28: Extent of protected areas within Arkansas.

| Protected area status       | Acres      | Percent of Area |
|-----------------------------|------------|-----------------|
| Not within a protected area | 29,372,362 | 86.3%           |
| Within a protected area     | 4,674,398  | 13.7%           |
| Total area                  | 34,046,760 | 100%            |

## Protected areas at this location:

- Ouachita National Forest (USDA Forest Service; 1,430,700 acres)
- Ozark National Forest (USDA Forest Service; 1,132,956 acres)
- Dale Bumpers White River National Wildlife Refuge (US Fish and Wildlife Service; 156,990 acres)
- Ouachita National Wildlife Refuge (144,821 acres)
- Winona Wildlife Management Area (State Fish and Wildlife; 140,594 acres)
- Sylamore Wildlife Management Area (State Fish and Wildlife; 126,808 acres)
- Buffalo National River (National Park Service; 89,039 acres)
- Felsenthal National Wildlife Refuge (US Fish and Wildlife Service; 77,640 acres)
- Cache River National Wildlife Refuge (US Fish and Wildlife Service; 74,597 acres)
- Bull Shoals Recreation Area (67,252 acres)
- National Guard Fort Chaffee Materials Testing Center (65,121 acres)
- Dardanelle Recreation Area (57,103 acres)
- Norfolk Recreation Area (49,604 acres)
- Greers Ferry Recreation Area (41,234 acres)
- Lake Ouachita (38,297 acres)
- Beaver Recreation Area (38,135 acres)
- Millwood Recreation Area (37,670 acres)
- Bull Shoals Lake (35,712 acres)
- Buffalo National River Wilderness Area (34,564 acres)
- National Guard Camp Joseph T Robinson (33,124 acres)
- Bayou Meto (State Fish and Wildlife; 32,023 acres)
- Lake Greeson Wildlife Management Area (State Department of Natural Resources; 31,625 acres)
- Greers Ferry Lake (31,067 acres)
- Beaver Lake (28,875 acres)
- Howard County Wildlife Management Area (State Department of Natural Resources; 27,470 acres)
- ... and 1,179 more protected areas ...

Note: areas are listed based on name, ownership, and boundary information in the Protected Areas Database of the United States, which may include overlapping and duplicate areas.

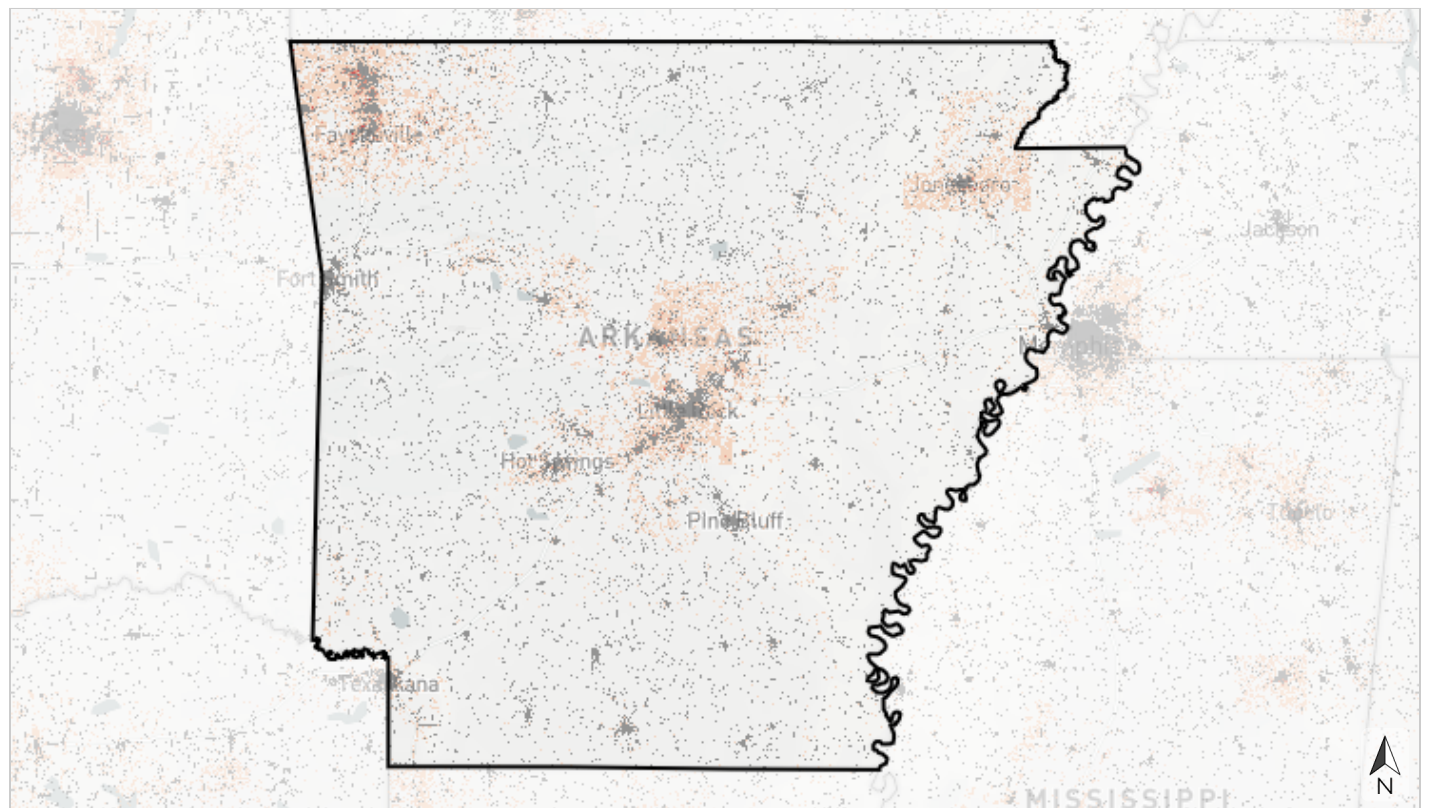
## **Sea-level Rise**

Sea-level rise unlikely to be a threat (inland counties).

## Urban Growth

The FUTURES urban growth model predicts the likelihood that an area will urbanize at every decade from 2020 to 2100. Developed areas from the 2021 National Landcover Database serve as the baseline for current urban areas. The model simulates landscape change based on trends in population growth, local development suitability factors, and an urban patch-growing algorithm. It considers environmental drivers like distance to floodplain, slope, and available infrastructure, and even socio-economic status. The probability of urbanization for each area reflects how many times it urbanized out of 50 model runs.

To explore maps for additional time periods, [click here](#).



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### Probability of urbanization by 2060

- Urban in 2021
- Very high likelihood of urbanization (>50% probability)
- High likelihood of urbanization (25 - 50% probability)
- Moderate likelihood of urbanization (2 - 25% probability)
- Not likely to urbanize

Table 29: Extent of projected urbanization by decade within Arkansas. Values from [FUTURES model projections for the contiguous United States](#) developed by the [Center for Geospatial Analytics](#), NC State University. 2060 corresponds to the [SECAS goal](#): a 10% or greater improvement in the health, function, and connectivity of Southeastern ecosystems by 2060.

| Decade                                   | Acres             | Percent of Area |
|--|-------------------|-----------------|
| Urban in 2021                            | 2,128,897         | 6.3%            |
| 2030 projected extent                    | 2,169,183         | 6.4%            |
| 2040 projected extent                    | 2,192,399         | 6.4%            |
| 2050 projected extent                    | 2,211,703         | 6.5%            |
| 2060 projected extent                    | 2,229,248         | 6.5%            |
| 2070 projected extent                    | 2,244,180         | 6.6%            |
| 2080 projected extent                    | 2,256,281         | 6.6%            |
| 2090 projected extent                    | 2,263,733         | 6.6%            |
| 2100 projected extent                    | 2,267,735         | 6.7%            |
| <i>Not projected to urbanize by 2100</i> | 31,779,025        | 93.3%           |
| <b>Total area</b>                        | <b>34,046,760</b> | <b>100%</b>     |

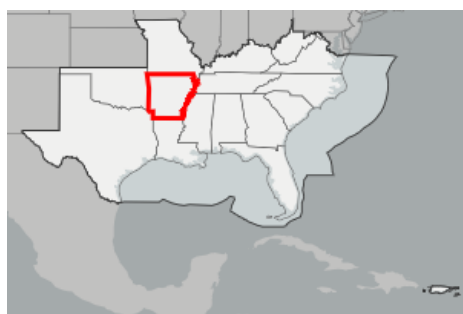
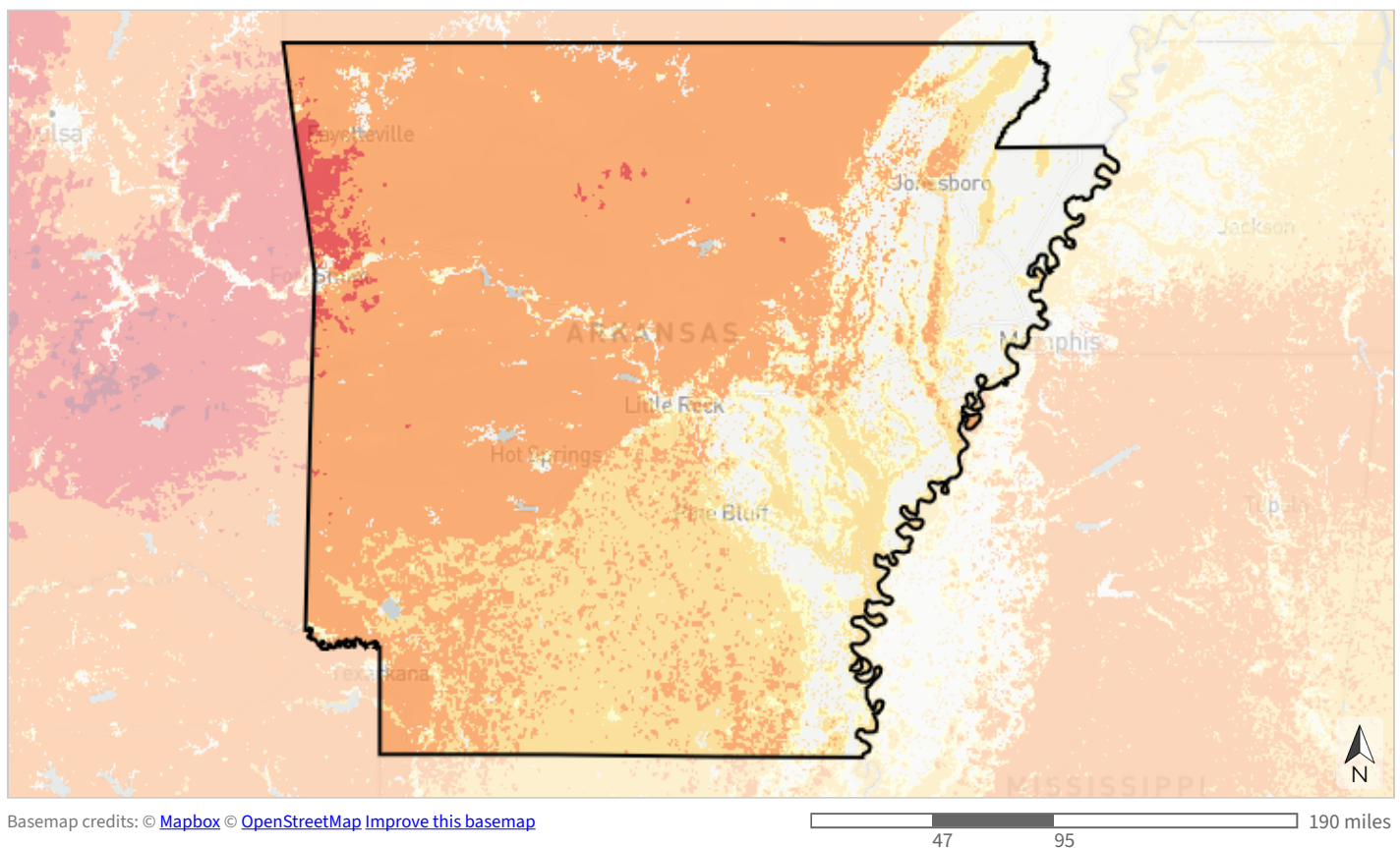
6.3% of this area is already urban in 2021, and an additional 6.0% has at least a moderate probability of urbanizing by 2060.

By 2060, the size of the urban footprint is projected to increase **4.7%** over 2021 levels.



## Wildfire Likelihood

Wildfire likelihood data originate from the Wildfire Risk to Communities project developed by the U.S. Forest Service. This layer depicts the probability of wildfire burning in a specific location in any given year. Annual burn probabilities in the United States range from 0-14%, but do not exceed 8% in the Southeast. Wildfire likelihood is based on fire behavior modeling across thousands of simulations of possible fire seasons. In each simulation, factors contributing to the probability of a fire occurring (such as weather, topography, and ignitions) vary based on patterns derived from observations in recent decades. Wildfire likelihood is not predictive and does not reflect any forecasted future weather or fire danger conditions. It also does not say anything about the intensity of fire if it occurs. To explore additional wildfire risk information, please see the [Wildfire Risk to Communities](#) website.



### Wildfire likelihood (annual burn probability)

- High
- Moderate-high
- Moderate
- Low-moderate
- Low
- Not predicted to experience wildfire

Table 30: Area in each wildfire probability category within Arkansas. Values from the [Wildfire Risk To Communities](#) project developed by the USDA Forest Service.

| Wildfire likelihood (annual burn probability)         | Acres             | Percent of Area |
|---|-------------------|-----------------|
| Not predicted to experience wildfire (0% probability) | 4,813,788         | 14.1%           |
| Low (>0 - 0.01% probability)                          | 2,083,604         | 6.1%            |
| Low-moderate (>0.01 - 0.02154% probability)           | 1,240,770         | 3.6%            |
| Low-moderate (>0.02154 - 0.04642% probability)        | 6,903,111         | 20.3%           |
| Moderate (>0.04642 - 0.1% probability)                | 6,667,643         | 19.6%           |
| Moderate (>0.1 - 0.21544% probability)                | 8,941,135         | 26.3%           |
| Moderate (>0.21544 - 0.46416% probability)            | 2,976,230         | 8.7%            |
| Moderate-high (>0.46416 - 1% probability)             | 412,066           | 1.2%            |
| Moderate-high (>1 - 2.15443% probability)             | 8,413             | <0.1%           |
| High (>2.15443 - 4.64159% probability)                | 0                 | 0%              |
| High (>4.64159% probability)                          | 0                 | 0%              |
| <b>Total area</b>                                     | <b>34,046,760</b> | <b>100%</b>     |