Southeast Conservation Blueprint Summary

for South Carolina

Created 03/31/2025

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The Southeast Conservation Blueprint 2024

Southeast Conservation Adaptation Strategy

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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 2024 Development Process
- View and download the Blueprint data and make maps on the Blueprint page of the SECAS Atlas

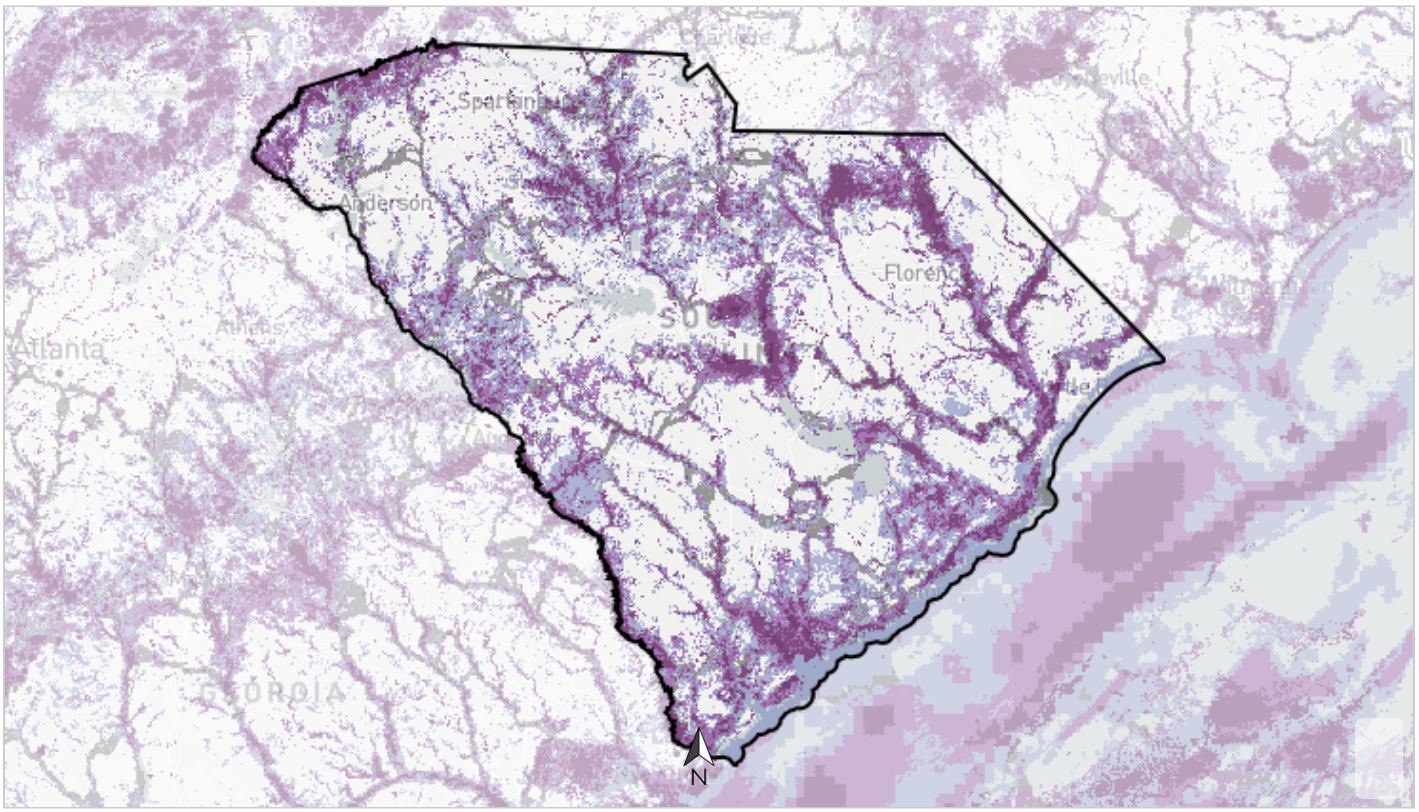
We're here to help!

- 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!

Southeast Blueprint Priorities



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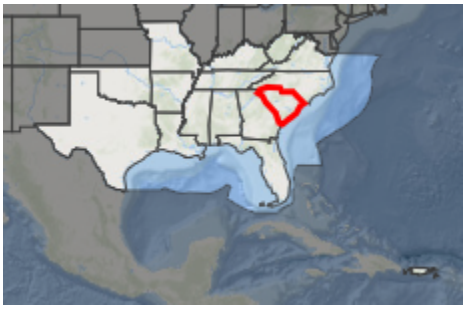


Priorities for a connected network of lands and waters

- 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.

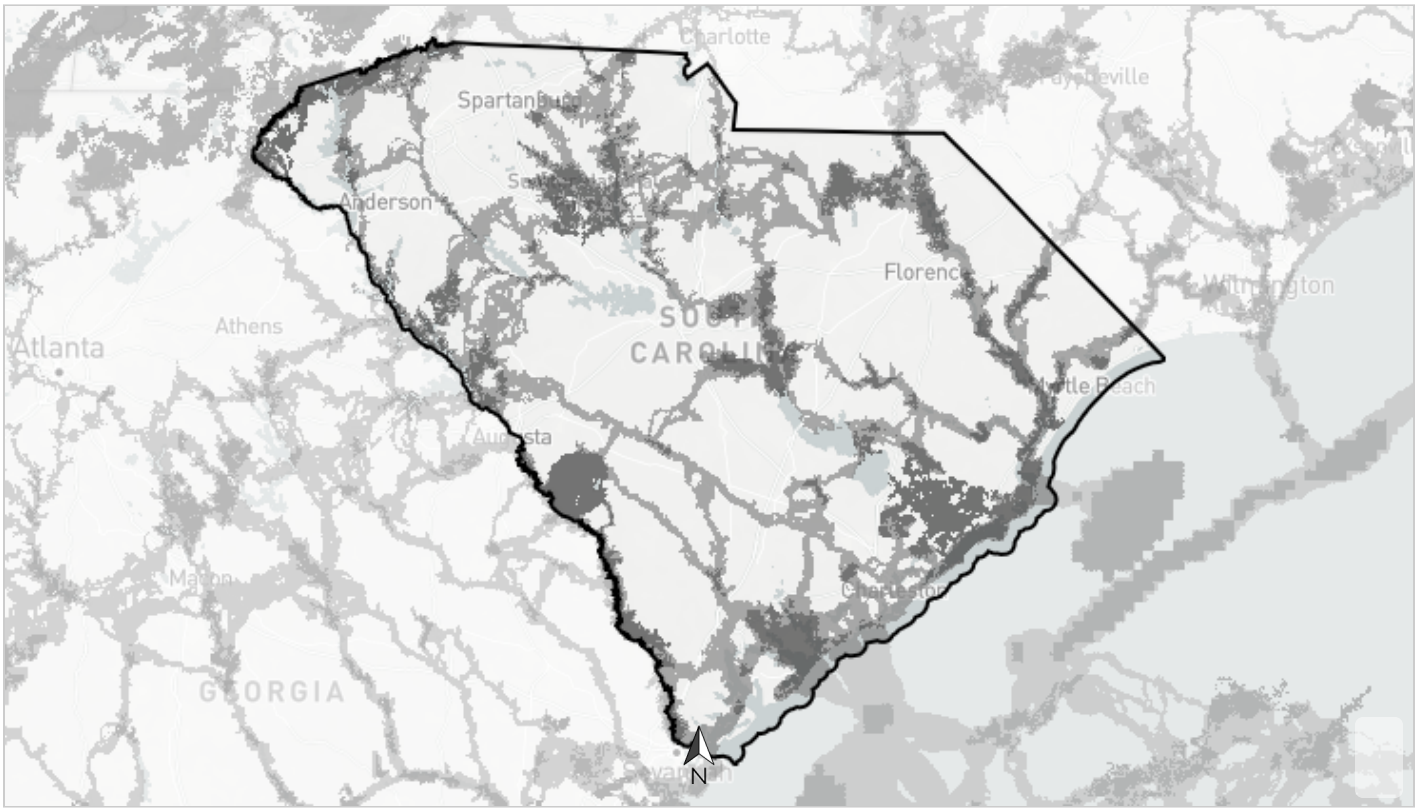
Table 1: Extent of each Blueprint priority category within South Carolina.

Priority Category	Acres	Percent of Area
Highest priority	2,189,951	10.7%
High priority	2,994,812	14.6%
Medium priority	4,309,630	21.0%
Priority connections	1,150,540	5.6%
Lower priority	9,850,093	48.1%
Total area	**20,495,027**	**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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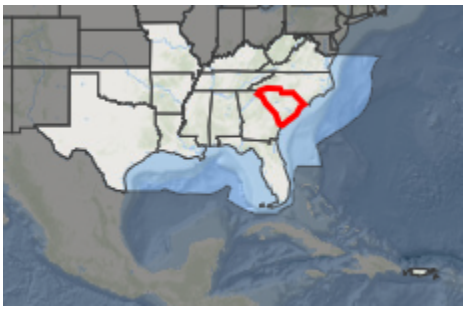


Hubs
Corridors

Table 2: Extent of hubs and corridors within South Carolina.

Type	Acres	Percent of Area
Hubs	2,428,973	11.9%
Corridors	4,340,897	21.2%
Not a hub or corridor	13,725,157	67.0%
Total area	**20,495,027**	**100%**

Indicator Summary

Table 3: Terrestrial indicators.

Indicator	Present
Amphibian & reptile areas	✓
East Coastal Plain open pine birds	✓
Fire frequency	✓
Grasslands and savannas	✓
Greenways & trails	✓
Intact habitat cores	✓
Landscape condition	✓
Potential access to parks	✓
Resilient terrestrial sites	✓
South Atlantic forest birds	✓
South Atlantic low-urban historic landscapes	✓
Urban park size	✓

Table 4: Freshwater indicators.

Indicator	Present
Atlantic migratory fish habitat	✓
Gulf migratory fish connectivity	-
Imperiled aquatic species	✓
Natural landcover in floodplains	✓
Network complexity	✓
Permeable surface	✓

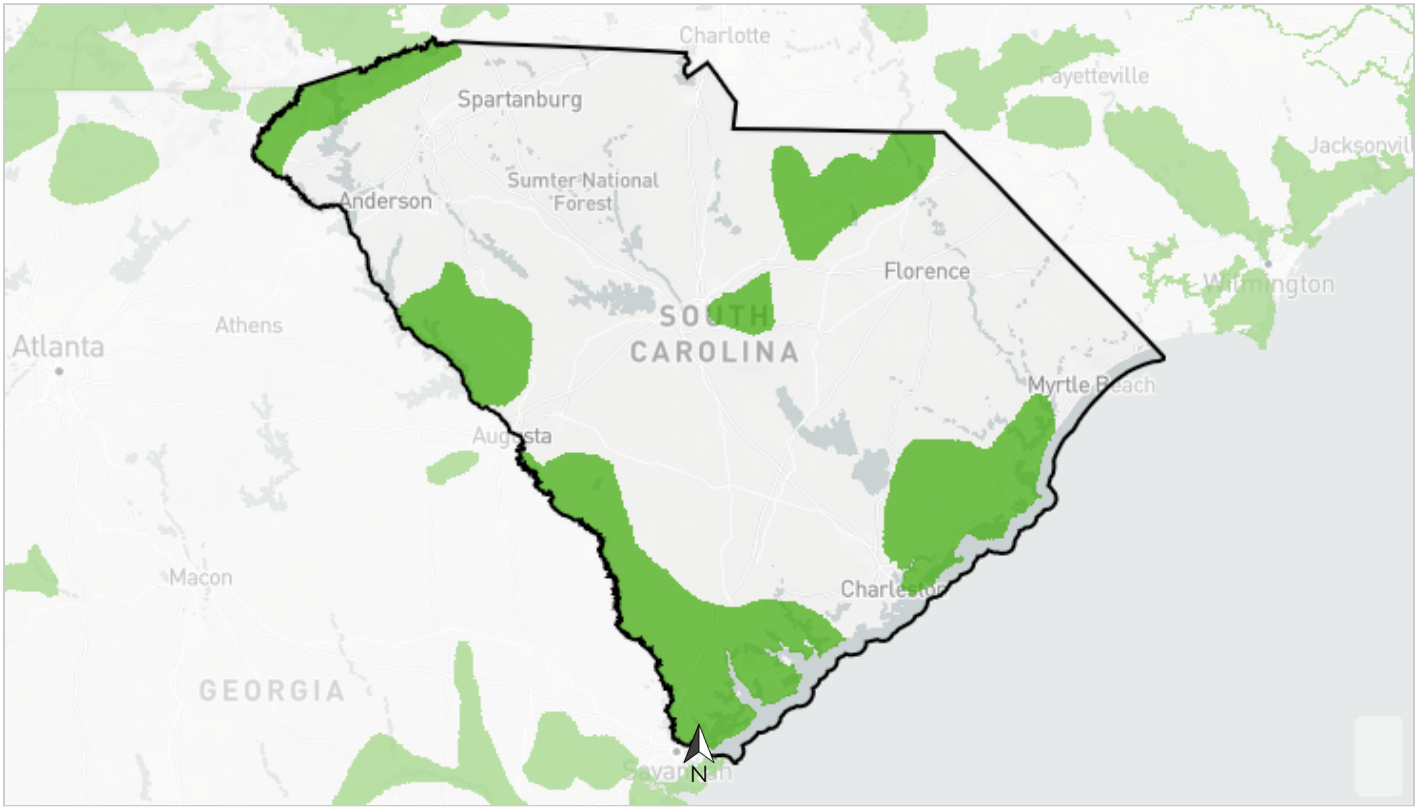
Table 5: Coastal & marine indicators.

Indicator	Present
Atlantic coral & hardbottom	✓
Atlantic deep-sea coral richness	-
Atlantic estuarine fish habitat	✓
Atlantic marine birds	✓
Atlantic marine mammals	✓
Coastal shoreline condition	✓
Estuarine coastal condition	✓
Island habitat	✓
Marine highly migratory fish	-
Resilient coastal sites	✓
South Atlantic beach birds	✓
South Atlantic maritime forest	✓
Stable coastal wetlands	✓

Terrestrial

Amphibian & reptile areas

This indicator represents Priority Amphibian and Reptile Conservation Areas (PARCAs) across the Southeast. PARCA is 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 (i.e., endemism). 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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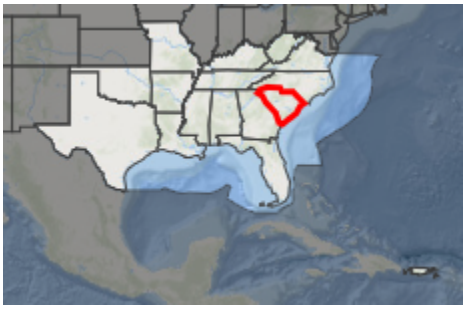


Priority Amphibian and Reptile Conservation Area (PARCA)

Not a PARCA (excluding Kentucky and Virginia)

Table 6: Indicator values for amphibian & reptile areas within South Carolina. A good condition threshold is not yet defined for this indicator.

	Indicator Values	Acres	Percent of Area
↑ High	Priority Amphibian and Reptile Conservation Area (PARCA)	4,785,215	23.3%
↓ Low	Not a PARCA (excluding Kentucky and Virginia)	15,709,812	76.7%
	Area not evaluated for this indicator	*0.22*	*<0.1%*
	Total area	**20,495,027**	**100%**

Priority Amphibian and Reptile Conservation Areas:

Balsam/Pisgah

Balsam/Pisgah is a large PARCA that encompasses five counties in the Blue Ridge Mountains of North Carolina. Included in this area is a portion of Pisgah National Forest, the most visited national forest in the United States. This region boasts some of the highest elevation peaks east of the Mississippi, pristine headwater streams, hardwood forests, and countless waterfalls. Several species occupy this PARCA, including the eastern hellbender, timber rattlesnake, green salamander, coal skink, and southern pygmy salamander. Threats to the Balsam/Pisgah PARCA include increased flooding and drought periods due to climate change, impacts from heavy recreation such as habitat destruction and water pollution, and logging, which may affect sensitive habitats.

Blue Ridge Escarpment

South Carolina's Blue Ridge Escarpment is a region where the Blue Ridge Mountains meet the Atlantic Piedmont ecoregion. This region is characterized by high rainfall, lush cove forests, bare rocky cliffs and numerous small streams and rivers. This is the southern extent of the distribution for a wide variety of rare salamanders that find refuge in the cool and moist conditions provided by the Appalachian Mountains. These populations are increasingly fragmented from development.

Francis Marion

The Francis Marion PARCA lies entirely within the Mid-Atlantic Coastal Forest ecoregion and is largely owned by the U.S. Forest Service along the coast north of Charleston, South Carolina. A high level of biodiversity and several imperiled species, such as the Carolina gopher frog, spotted turtle, and northern pine snake, make this forest their home and face threats associated with invasive species, fire suppression, and wetland overgrowth. Important conservation efforts are helping to recover the state's declining gopher frog populations and fill gaps in research, such as radio-tracking pine snakes to better understand how they utilize microhabitats and their different resources.

Long Cane Sumter

The Long Cane Sumter PARCA, encompassing the Sumter National Forest and a few state parks, spans the Southern Outer Piedmont and Carolina Slate Belt ecoregions. This area features dissected plains, low hills, and ridges with diverse rock types and soils, supporting pine plantations, mixed oak forests, and oak-hickory-pine forests. These habitats are vital for the conservation of various reptile and amphibian

species that thrive in the low- to moderate-gradient streams and mixed forest ecosystems.

Northern Sandhills
This region comprises much of the Fall Line sandhill habitat in South Carolina between the Wateree River and the North Carolina state line. This area is characterized by deep, droughty sands dissected by small blackwater streams that typically support pocosin habitats along their margins. Historically, the uplands would have supported longleaf pine, and periodic fire would have played a role in maintaining this forest. Within the existing forest, there are areas of bare sand in addition to sandstone and ironstone outcrops. This region contains many threatened and endangered sandhill species.

Savannah River Low Country
The large Savannah River Low Country PARCA comprises a wide variety of habitats, including longleaf pine flatwoods, mesic savannas and sandhills, blackwater and brownwater rivers and streams, a variety of isolated freshwater wetlands (like Carolina bays), and maritime communities (including maritime forest, beach, dune and swale, and hammocks). This region is home to a significant number of rare and declining amphibian and reptile species and is one of South Carolina's most diverse areas for herpetofauna.

Upper Chattooga
Situated within the Blue Ridge, the Upper Chattooga PARCA is a sanctuary of hardwoods covering rugged terrain. The Chattooga River, carving its way south, is a high-quality watershed. The area is home to some of the highest peaks within the state and is notably cooler than other areas at the same latitude. The region has high salamander diversity, including multiple species found nowhere else in Georgia.

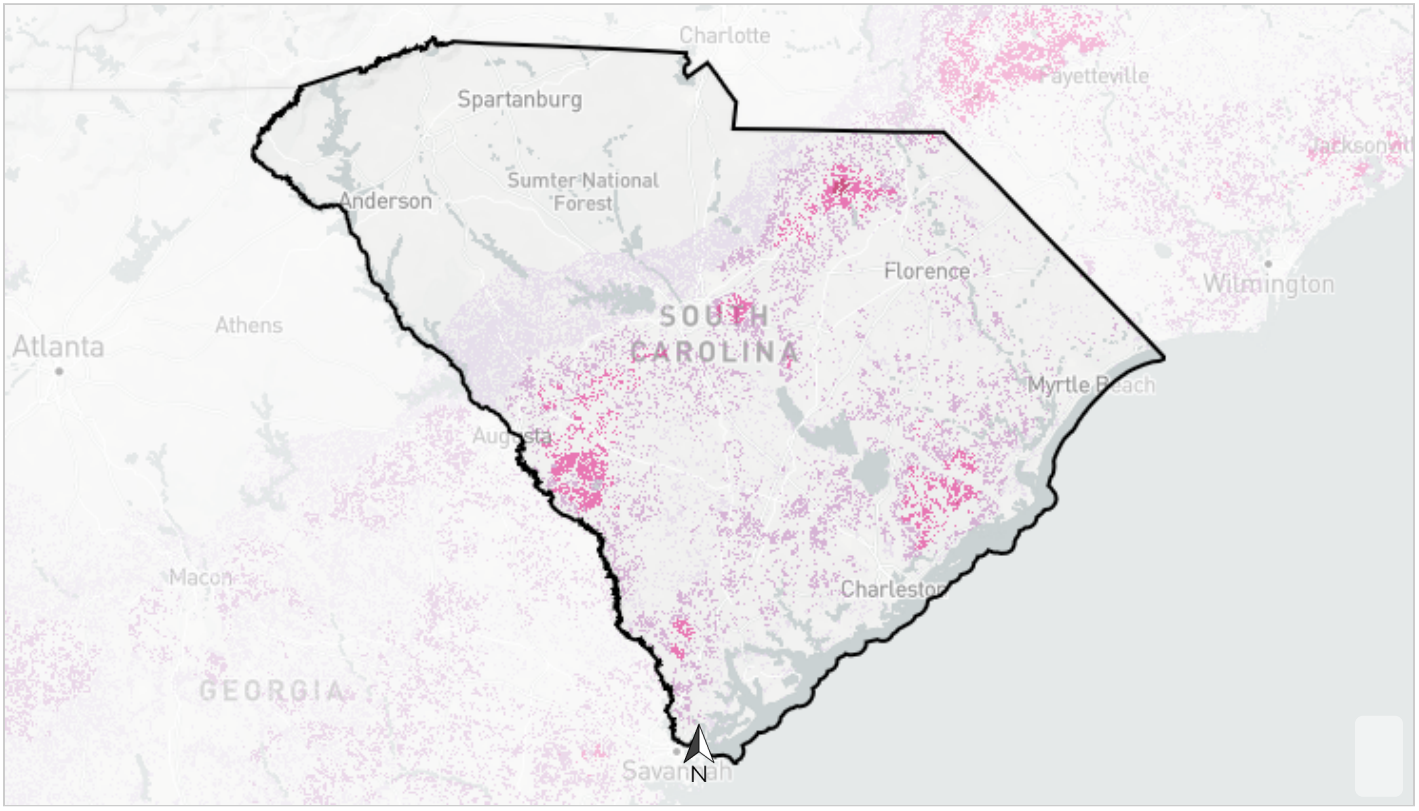
Upper Wateree
The Upper Wateree PARCA in central South Carolina encompasses diverse habitats crucial for reptile and amphibian conservation. It includes rolling hills of the Sandhills ecoregion, featuring Cretaceous-age sands and consistent stream flows due to significant groundwater storage. Key habitats are longleaf pine with wiregrass, oak-pine forests, and bottomland hardwood forests along the Wateree River, supporting a variety of imperiled species.

To learn more and explore the GIS data, view this indicator in the SECAS Atlas.

Terrestrial

East Coastal Plain open pine birds

This indicator identifies areas within the historic longleaf pine range east of the Mississippi River where creating or maintaining open pine habitat would most benefit six focal species of birds (Bachman's sparrow, red-cockaded woodpecker, Henslow's sparrow, red-headed woodpecker, Northern bobwhite, brown-headed nuthatch). It prioritizes areas for open pine conservation based on suitability for longleaf pine, feasibility of prescribed burning, proximity to protected lands, habitat suitability for focal bird species, and proximity to bird source populations. It originates from the East Gulf Coastal Plain Joint Venture's prioritization of areas for open pine ecosystem restoration.



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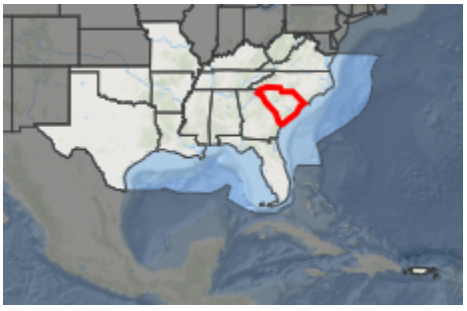


Priority for open pine conservation for focal bird species

- High priority (score >80-100)
- Medium-high priority (score >60-80)
- Medium priority (score >40-60)
- Medium-low priority (score >20-40)
- Low priority (score 0-20)
- Not a priority (not identified as upland pine)

Table 7: Indicator values for East Coastal Plain open pine birds within South Carolina. A good condition threshold is not yet defined for this indicator.

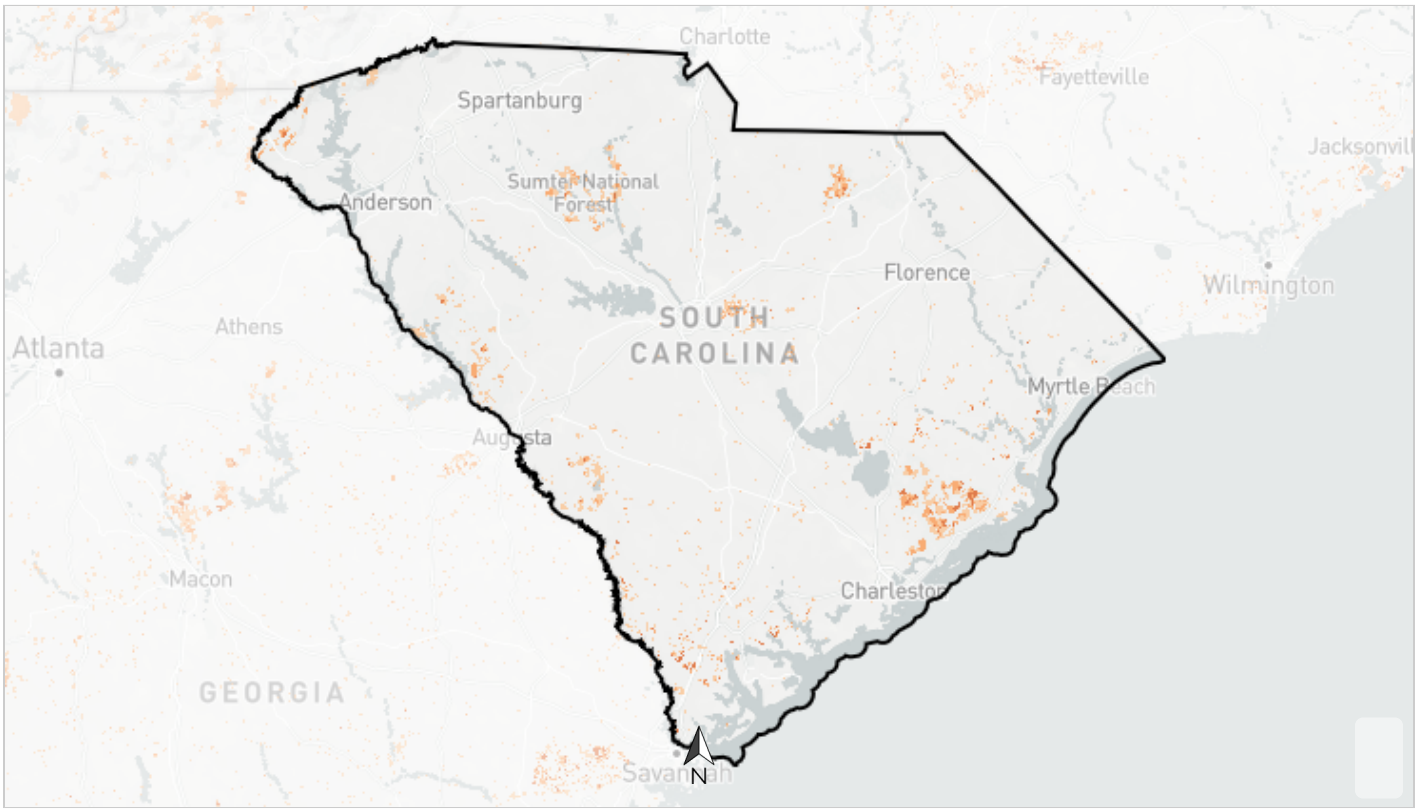
	Indicator Values: Priority for open pine conservation for focal bird species	Acres	Percent of Area
↑ High	High priority (score >80-100)	0	0%
	Medium-high priority (score >60-80)	8,735	<0.1%
	Medium priority (score >40-60)	412,973	2.0%
	Medium-low priority (score >20-40)	1,685,969	8.2%
	Low priority (score 0-20)	1,472,764	7.2%
↓ Low	Not a priority (not identified as upland pine)	10,860,038	53.0%
	Area not evaluated for this indicator	*6,054,549*	*29.5%*
	Total area	**20,495,027**	**100%**

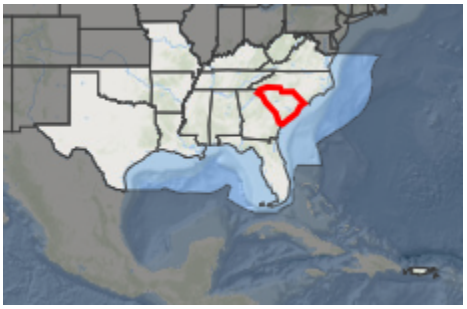
To learn more and explore the GIS data, view this indicator in the SECAS Atlas.

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 8: Indicator values for fire frequency within South Carolina. Good condition thresholds reflect the range of indicator values that occur in healthy, functioning ecosystems.

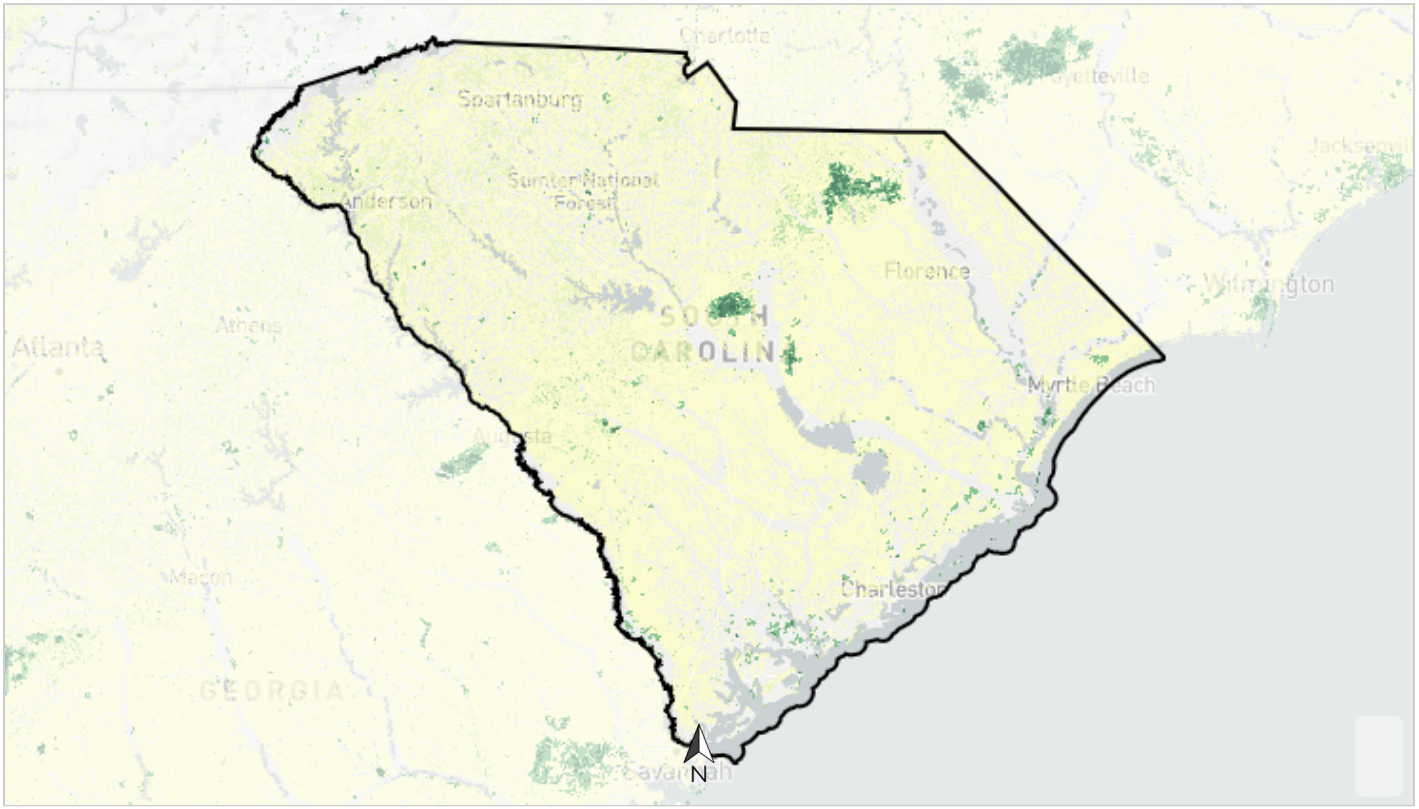
	Indicator Values	Acres	Percent of Area	
↑ High	Burned 3+ times from 2013-2021	40,228	0.2%	
	Burned 2 times from 2013-2021	134,043	0.7%	↑ In good condition
	Burned 1 time from 2013-2021	513,256	2.5%	↓ Not in good condition
↓ Low	Not burned from 2013-2021 or row crop	19,802,137	96.6%	
	Area not evaluated for this indicator	*5,364*	*<0.1%*	
	Total area	**20,495,027**	**100%**	

To learn more and explore the GIS data, view this indicator in the SECAS Atlas.

Terrestrial

Grasslands and savannas

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, likely locations managed for biodiversity, 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 biophysical settings, Oklahoma and Texas ecological systems maps, and more.



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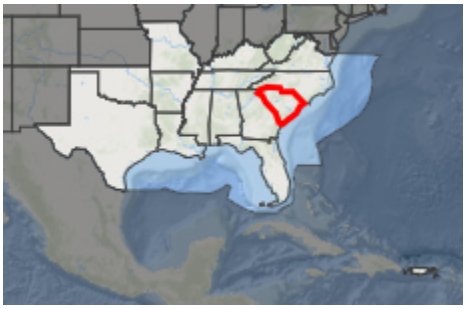

- Known grassland/savanna
- Likely grassland/savanna >10 acres
- Likely grassland/savanna ≤10 acres
- Pollinator buffer around known or likely grassland/savanna
- Potential grassland/savanna in mostly natural landscape
- Potential grassland/savanna in more altered landscape
- Historic grassland/savanna
- Not identified as grassland/savanna

Table 9: Indicator values for grasslands and savannas within South Carolina. 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	193	<0.1%	
	Likely grassland/savanna >10 acres	93,629	0.5%	
	Likely grassland/savanna ≤10 acres	18,390	<0.1%	↑ In good condition
	Pollinator buffer around known or likely grassland/savanna	241,129	1.2%	↓ Not in good condition
	Potential grassland/savanna in mostly natural landscape	430,854	2.1%	
	Potential grassland/savanna in more altered landscape	2,032,981	9.9%	
	Historic grassland/savanna	10,103,749	49.3%	
↓ Low	Not identified as grassland/savanna	6,990,744	34.1%	
	Area not evaluated for this indicator	*583,356*	*2.8%*	
	Total area	**20,495,027**	**100%**	

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.

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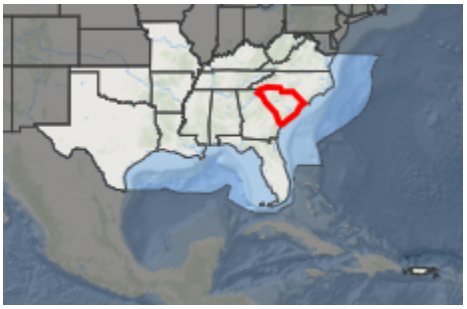


- Mostly natural and connected for ≥40 km
- Mostly natural and connected for 5 to <40 km or partly natural and connected for ≥40 km
- Mostly natural and connected for 1.9 to <5 km, partly natural and connected for 5 to <40 km, or developed and connected for ≥40 km
- Mostly natural and connected for <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 10: Indicator values for greenways & trails within South Carolina. Good condition thresholds reflect the range of indicator values that occur in healthy, functioning ecosystems.

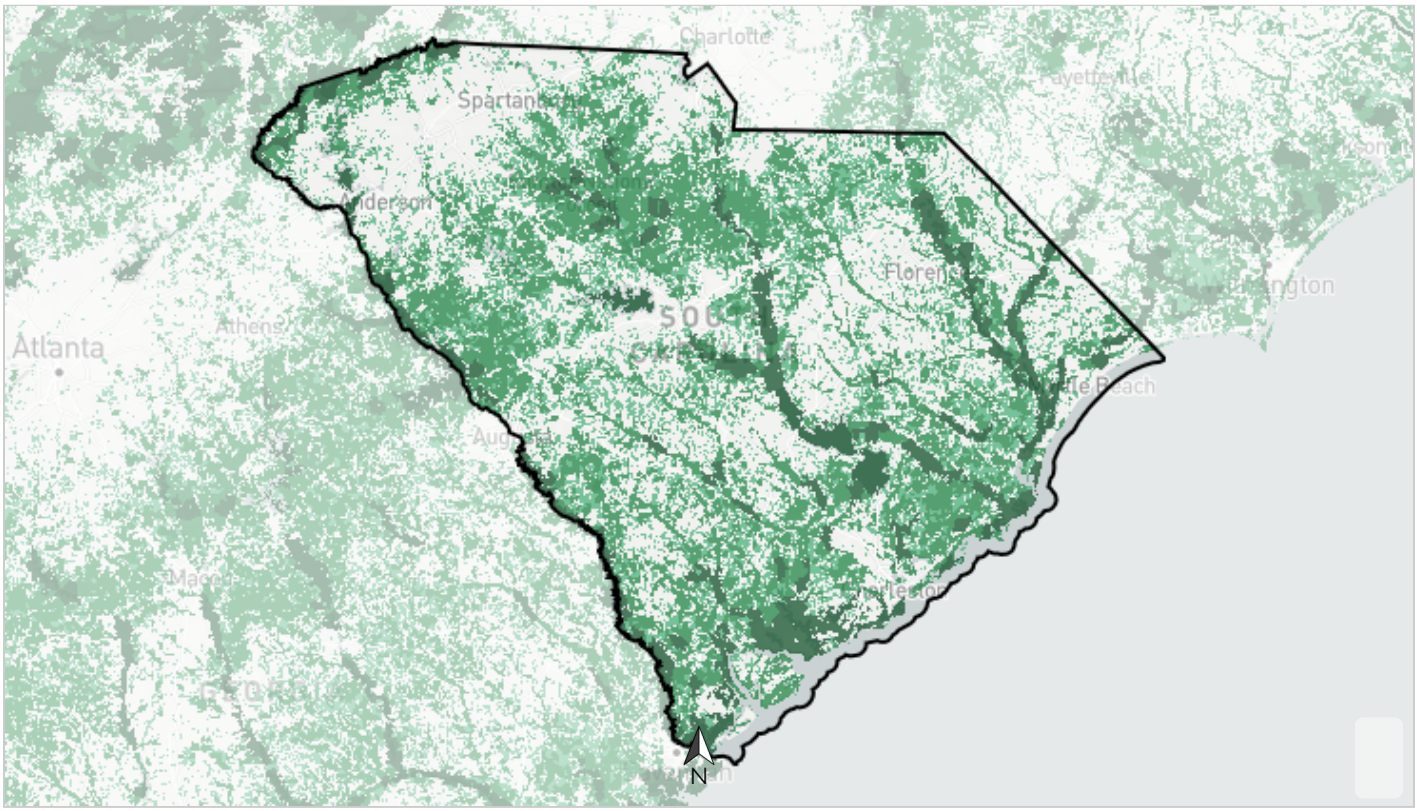
	Indicator Values	Acres	Percent of Area	
↑ High	Mostly natural and connected for ≥40 km	3,509	<0.1%	
	Mostly natural and connected for 5 to <40 km or partly natural and connected for ≥40 km	7,611	<0.1%	
	Mostly natural and connected for 1.9 to <5 km, partly natural and connected for 5 to <40 km, or developed and connected for ≥40 km	6,869	<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	5,719	<0.1%	↑ In good condition
	Partly natural and connected for <1.9 km or developed and connected for 1.9 to <5 km	3,772	<0.1%	↓ Not in good condition
	Developed and connected for <1.9 km	4,698	<0.1%	
	Sidewalk	19,202	<0.1%	
↓ Low	Not identified as a trail, sidewalk, or other path	20,434,995	99.7%	
	Area not evaluated for this indicator	*8,652*	*<0.1%*	
	Total area	**20,495,027**	**100%**	

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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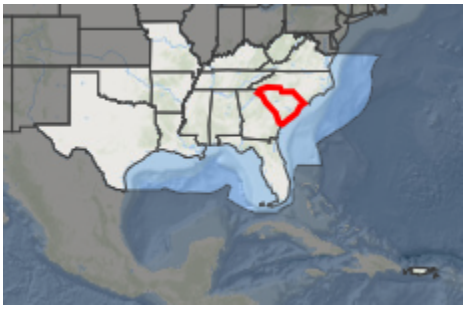


- Large core (>10,000 acres)
- Medium core (>1,000-10,000 acres)
- Small core (>100-1,000 acres)
- Not a core

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

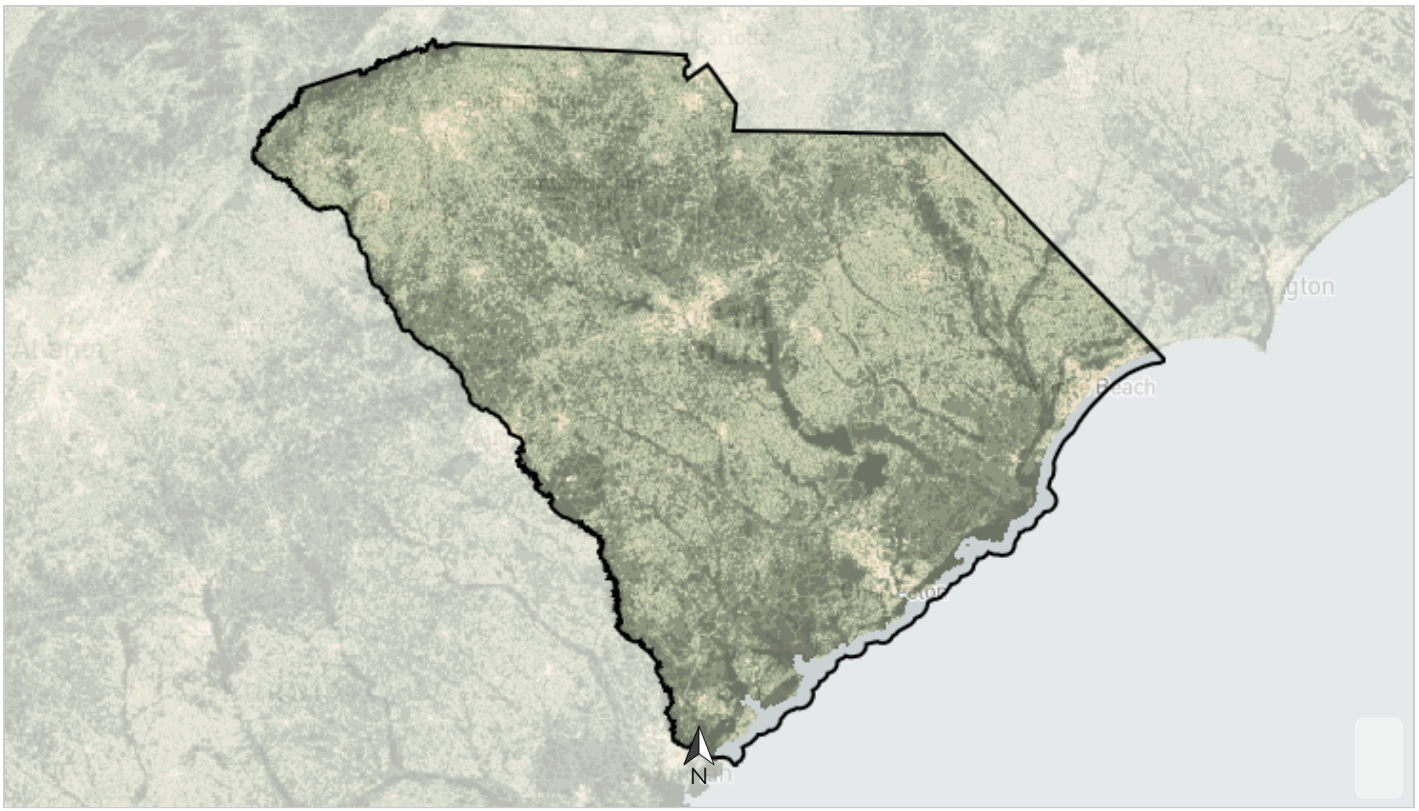
	Indicator Values	Acres	Percent of Area	
↑ High	Large core (>10,000 acres)	2,228,551	10.9%	
	Medium core (>1,000-10,000 acres)	4,957,745	24.2%	
	Small core (>100-1,000 acres)	3,269,978	16.0%	↑ In good condition
↓ Low	Not a core	10,030,102	48.9%	↓ Not in good condition
	Area not evaluated for this indicator	*8,652*	*<0.1%*	
	Total area	**20,495,027**	**100%**	

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 uses the National Land Cover Dataset, various data on grasslands, mines, and quarries, and ideas from the Florida Critical Lands and Waters Identification Project's approach for evaluating landscape integrity.



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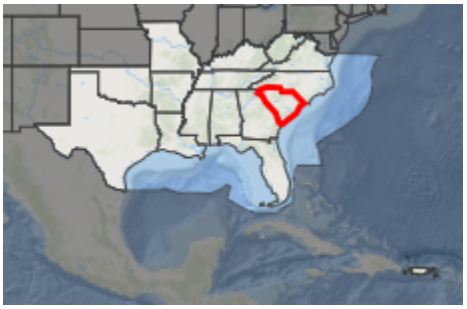


- Very natural landscape
- Natural landscape
- Mostly natural landscape
- Partly natural landscape
- Altered landscape
- Heavily altered landscape

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

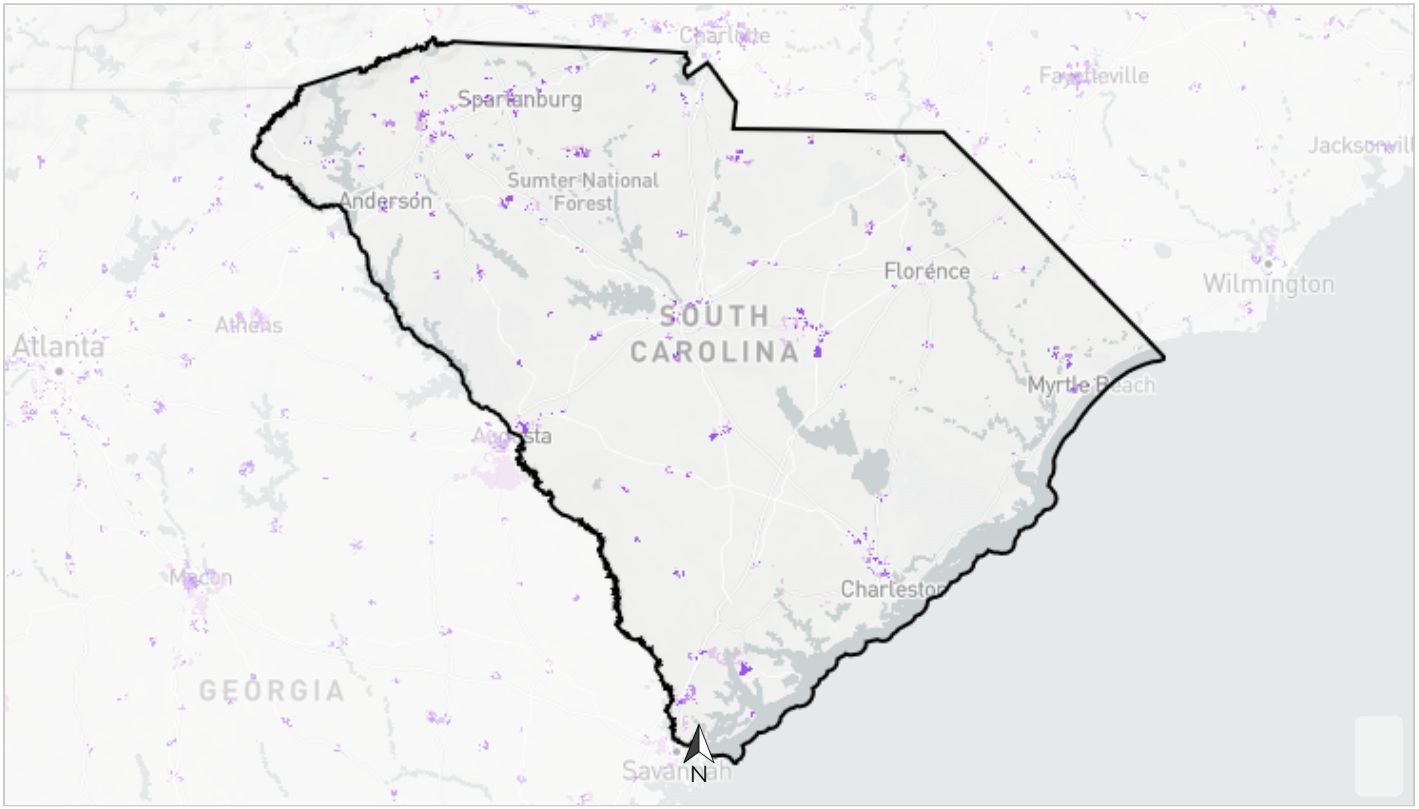
	Indicator Values	Acres	Percent of Area	
↑ High	Very natural landscape	2,383,242	11.6%	
	Natural landscape	6,330,268	30.9%	
	Mostly natural landscape	6,252,979	30.5%	↑ In good condition
	Partly natural landscape	4,309,400	21.0%	↓ Not in good condition
	Altered landscape	522,693	2.6%	
↓ Low	Heavily altered landscape	113,089	0.6%	
	Area not evaluated for this indicator	*583,356*	*2.8%*	
	Total area	**20,495,027**	**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 equitable 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.



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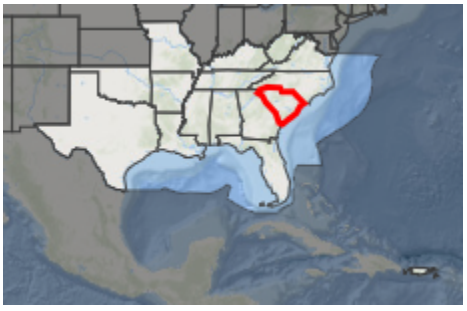


Priority for a new park that would create nearby equitable access

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

Table 13: Indicator values for potential access to parks within South Carolina. A good condition threshold is not yet defined for this indicator.

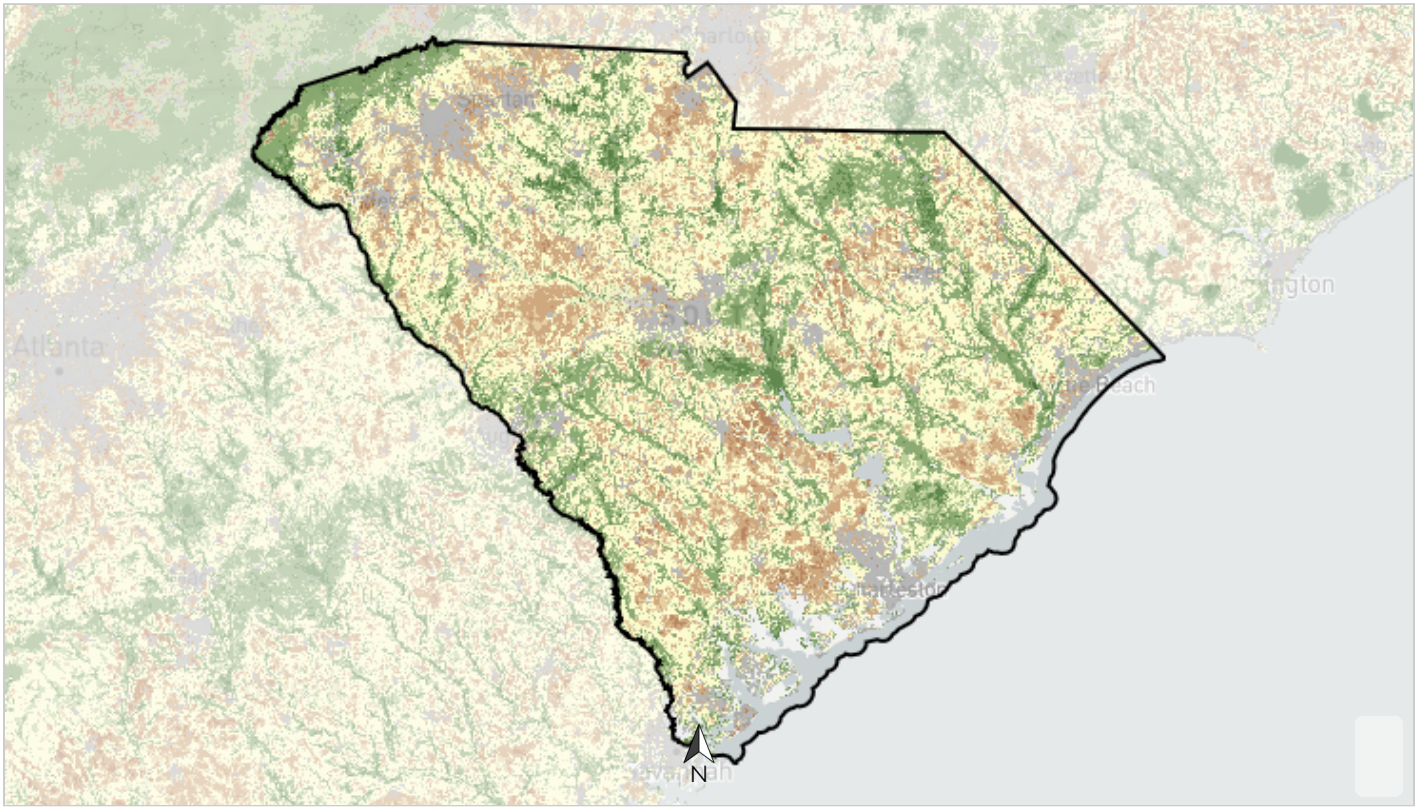
	Indicator Values: Priority for a new park that would create nearby equitable access	Acres	Percent of Area
↑ High	Very high priority	102,574	0.5%
	High priority	93,678	0.5%
	Moderate priority	108,118	0.5%
↓ Low	Not identified as a priority (within urban areas)	19,608,844	95.7%
	Area not evaluated for this indicator	*581,814*	*2.8%*
	Total area	**20,495,027**	**100%**

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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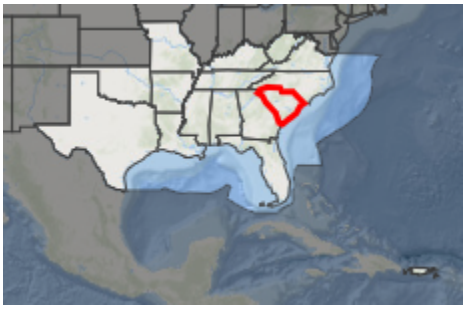


- Most resilient
- More resilient
- Slightly more resilient
- Average/median resilience
- Slightly less resilient
- Less resilient
- Least resilient
- Developed

Table 14: Indicator values for resilient terrestrial sites within South Carolina. A good condition threshold is not yet defined for this indicator.

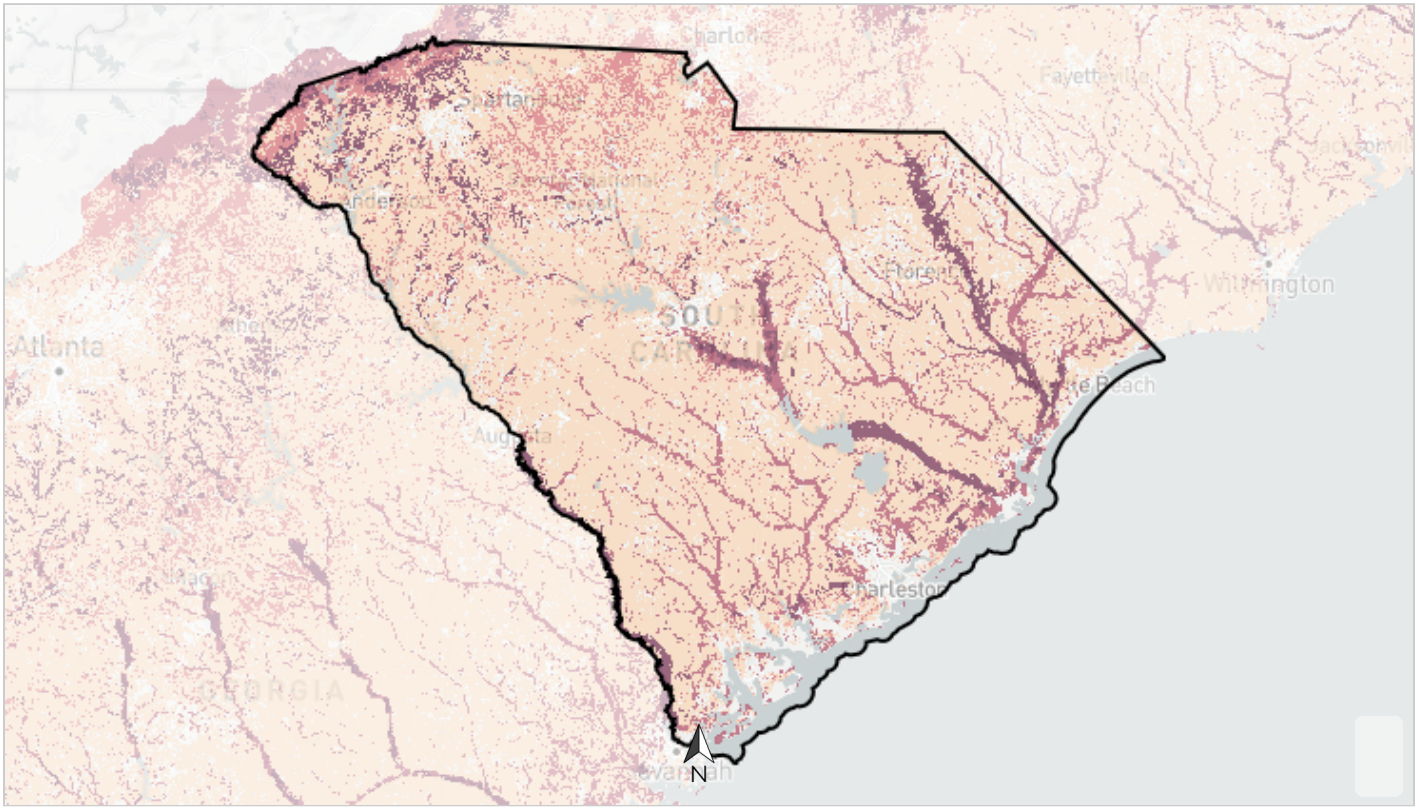
	Indicator Values	Acres	Percent of Area
↑ High	Most resilient	458,965	2.2%
	More resilient	2,514,266	12.3%
	Slightly more resilient	2,265,775	11.1%
	Average/median resilience	5,682,987	27.7%
	Slightly less resilient	2,338,749	11.4%
	Less resilient	1,930,952	9.4%
	Least resilient	277,777	1.4%
↓ Low	Developed	2,430,077	11.9%
	Area not evaluated for this indicator	*2,595,479*	*12.7%*
	Total area	**20,495,027**	**100%**

To learn more and explore the GIS data, view this indicator in the SECAS Atlas.

Terrestrial

South Atlantic forest birds

This indicator is an index of habitat suitability for twelve upland hardwood and forested wetland bird species (wood thrush, whip-poor-will, American woodcock, red-headed woodpecker, Chuck-will's widow, hooded warbler, Kentucky warbler, Acadian flycatcher, Northern parula, black-throated green warbler, prothonotary warbler, Swainson's warbler) based on patch size and other ecosystem characteristics such as proximity to water and proximity to forest and ecotone edge. The needs of these species are increasingly restrictive at higher index values, reflecting better quality habitat. It originates from Southeast Gap Analysis Program and Designing Sustainable Landscapes bird habitat models.



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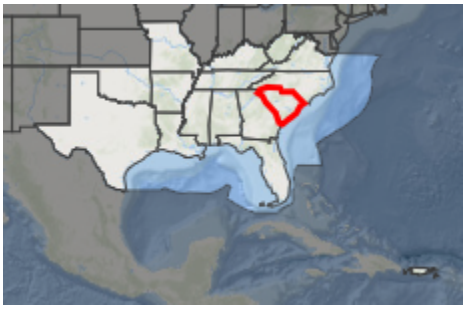


Potential for presence of forest bird index species

- Very large patches near water (potential for Swainson's warbler)
- Large patches often near water (potential for Northern parula, black-throated green warbler, or Prothonotary warbler)
- Medium patches (potential for Acadian flycatcher)
- Small patches often near water (potential for hooded warbler or Kentucky warbler)
- Very small patches or near open areas (potential for wood thrush, whip-poor-will, red-headed woodpecker, Chuck-will's widow, or American woodcock)
- Less potential

Table 15: Indicator values for South Atlantic forest birds within South Carolina. Good condition thresholds reflect the range of indicator values that occur in healthy, functioning ecosystems.

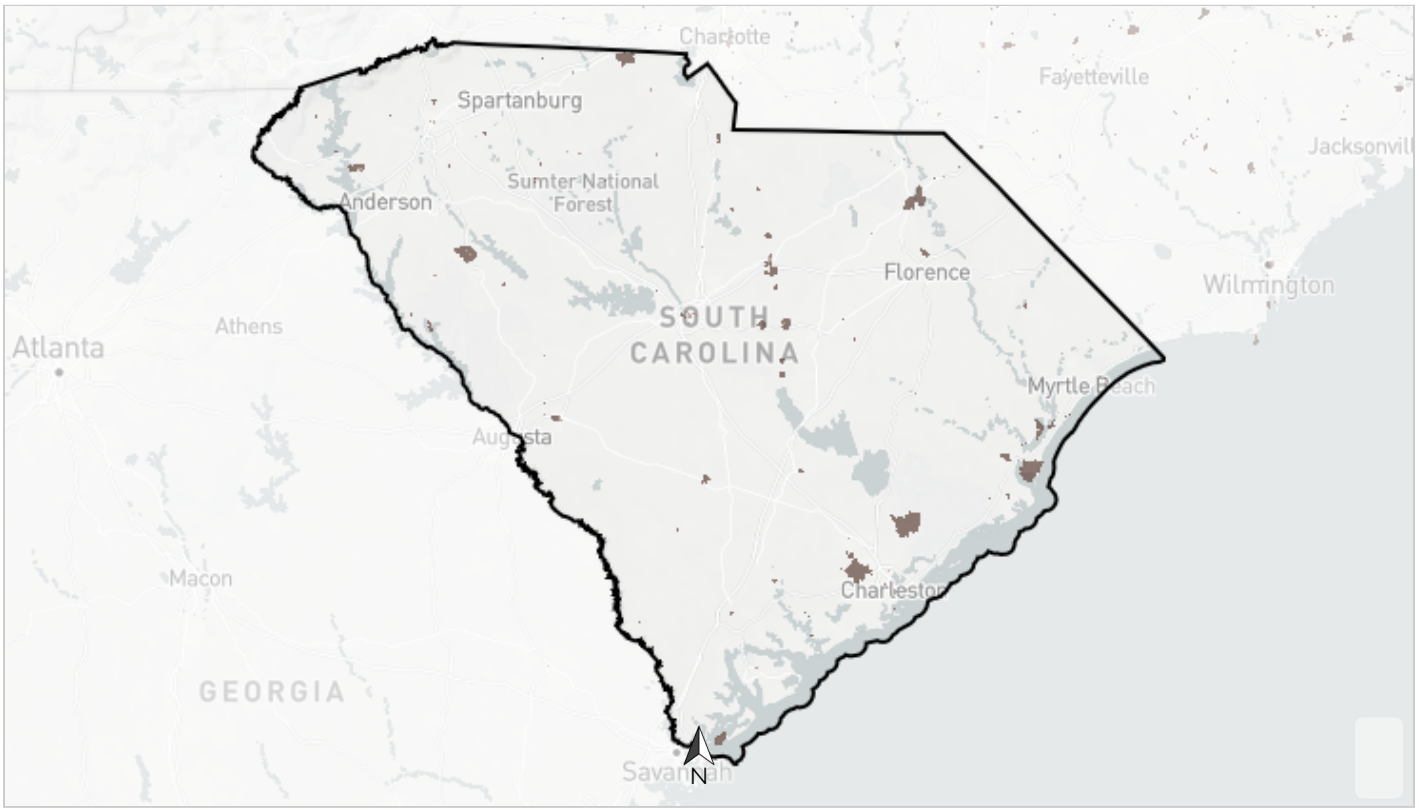
	Indicator Values: Potential for presence of forest bird index species	Acres	Percent of Area	
↑ High	Very large patches near water (potential for Swainson's warbler)	934,058	4.6%	
	Large patches often near water (potential for Northern parula, black-throated green warbler, or Prothonotary warbler)	1,801,392	8.8%	
	Medium patches (potential for Acadian flycatcher)	1,493,529	7.3%	
	Small patches often near water (potential for hooded warbler or Kentucky warbler)	898,263	4.4%	↑ In good condition
	Very small patches or near open areas (potential for wood thrush, whip-poor-will, red-headed woodpecker, Chuck-will's widow, or American woodcock)	11,062,751	54.0%	↓ Not in good condition
↓ Low	Less potential	4,295,362	21.0%	
	Area not evaluated for this indicator	*9,672*	*<0.1%*	
	Total area	**20,495,027**	**100%**	

To learn more and explore the GIS data, view this indicator in the SECAS Atlas.

Terrestrial

South Atlantic low-urban historic landscapes

This cultural resource indicator is an index of sites on the National Register of Historic Places surrounded by limited urban development. It identifies significant historic places that remain connected to their context in the natural world. It uses the National Land Cover Database and historic places data from the National Park Service and various state historic resource agencies.



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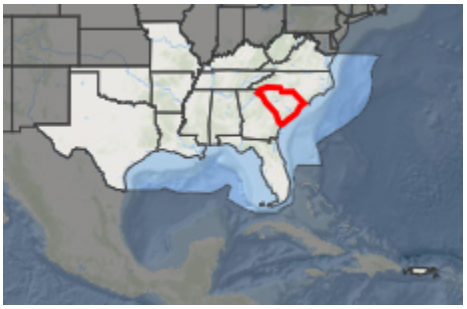


- Historic place with nearby low-urban buffer
- Historic place with nearby high-urban buffer
- Not in the National Register of Historic Places

Table 16: Indicator values for South Atlantic low-urban historic landscapes within South Carolina. A good condition threshold is not yet defined for this indicator.

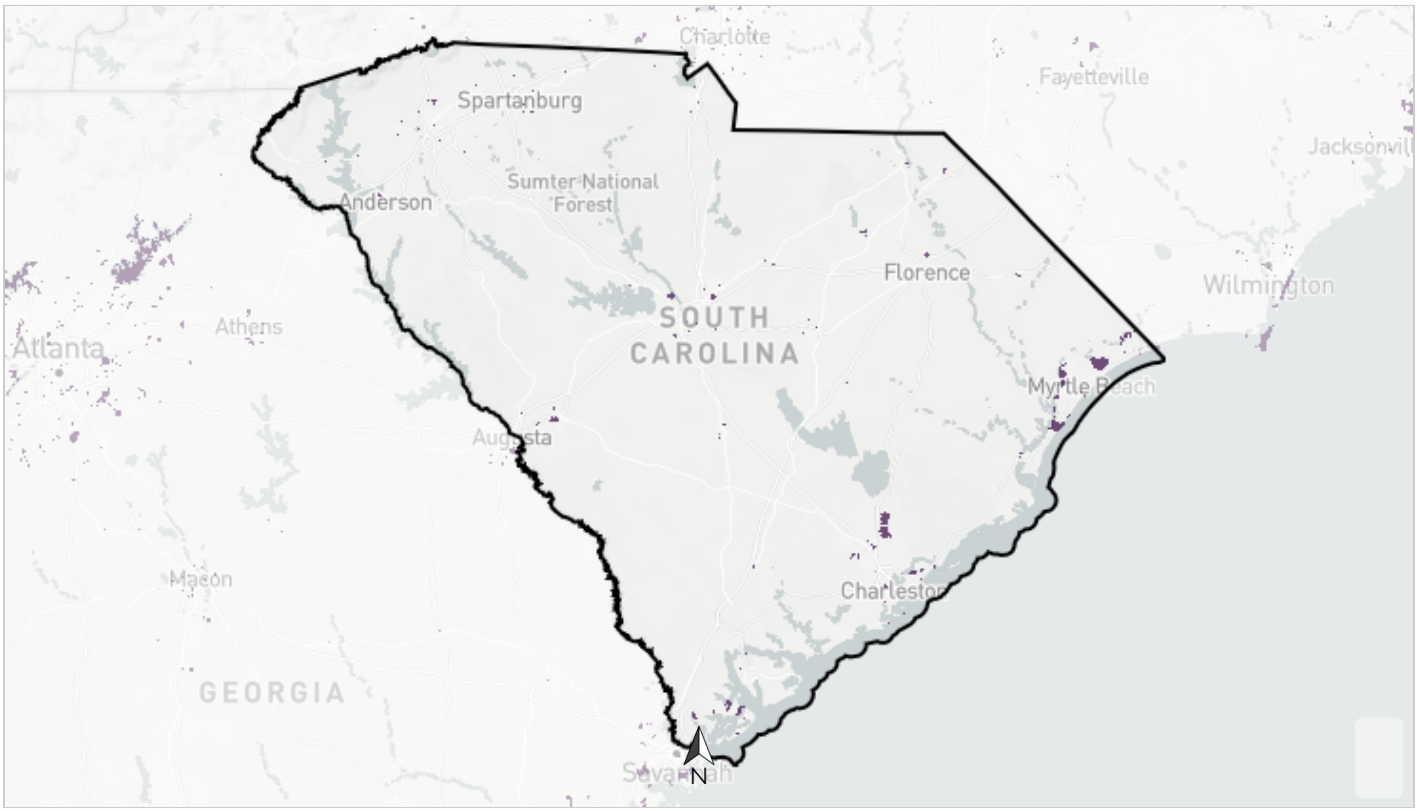
	Indicator Values	Acres	Percent of Area
↑ High	Historic place with nearby low-urban buffer	194,869	1.0%
	Historic place with nearby high-urban buffer	23,823	0.1%
↓ Low	Not in the National Register of Historic Places	19,958,784	97.4%
	Area not evaluated for this indicator	*317,552*	*1.5%*
	Total area	**20,495,027**	**100%**

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, Census urban areas, and the National Land Cover Database.



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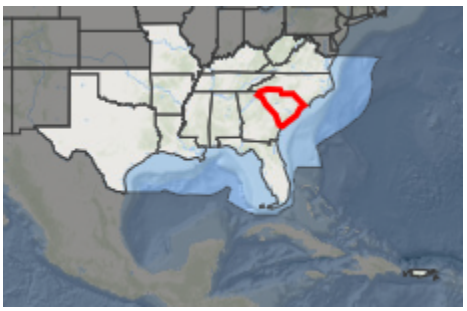


- 75+ acre urban park
- 50 to <75 acre urban park
- 30 to <50 acre urban park
- 10 to <30 acre urban park
- 5 to <10 acre urban park
- <5 acre urban park
- Not identified as an urban park

Table 17: Indicator values for urban park size within South Carolina. A good condition threshold is not yet defined for this indicator.

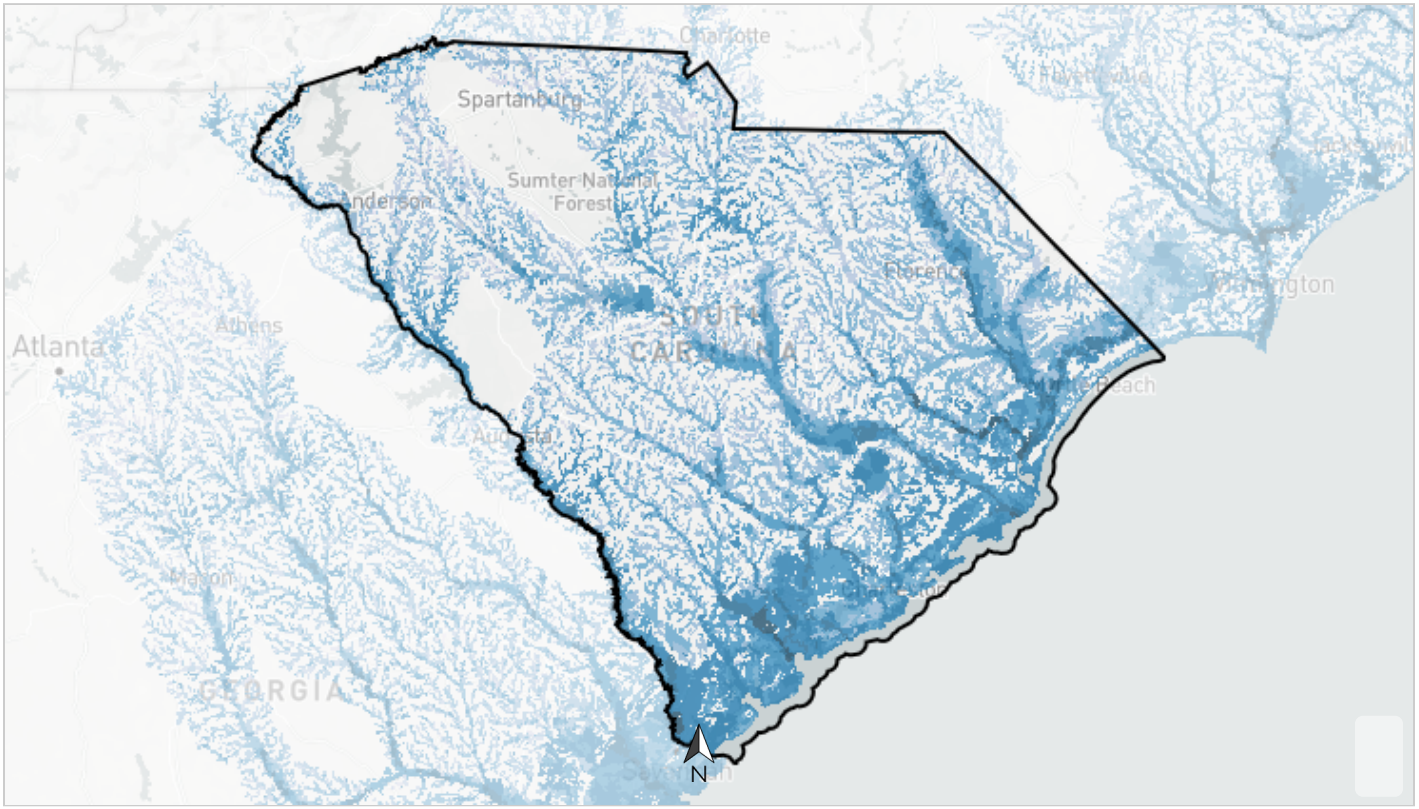
	Indicator Values	Acres	Percent of Area
↑ High	75+ acre urban park	87,886	0.4%
	50 to <75 acre urban park	3,822	<0.1%
	30 to <50 acre urban park	4,214	<0.1%
	10 to <30 acre urban park	7,204	<0.1%
	5 to <10 acre urban park	3,001	<0.1%
	<5 acre urban park	3,172	<0.1%
↓ Low	Not identified as an urban park	20,320,646	99.1%
	Area not evaluated for this indicator	*65,083*	*0.3%*
	Total area	**20,495,027**	**100%**

To learn more and explore the GIS data, view this indicator in the SECAS Atlas.

Freshwater

Atlantic migratory fish habitat

This indicator measures the condition of migratory fish habitat along the Atlantic coast within each catchment, using metrics of water quality, aquatic connectivity, habitat fragmentation, flow alteration, and more. Areas of excellent fish habitat are already in good condition and face few threats. Restoration opportunity areas are doing well in some respects, but restoration projects could significantly improve them. Degraded areas of opportunity face many challenges, and restoration projects are unlikely to increase available fish habitat unless particularly large in scope and scale. This indicator originates from the Atlantic Coast Fish Habitat Partnership's fish habitat conservation area mapping and prioritization project.



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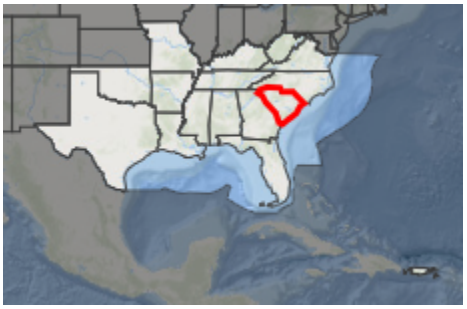


- Final score of 80 (areas of excellent fish habitat)
- Final score of 70 (areas of excellent fish habitat)
- Final score of 60 (restoration opportunity areas)
- Final score of 50 (restoration opportunity areas)
- Final score of 40 (restoration opportunity areas)
- Final score of 30 (restoration opportunity areas)
- Final score of 20 (restoration opportunity areas)
- Final score of 10 (degraded areas of opportunity)
- Final score of 0 (degraded areas of opportunity)

Table 18: Indicator values for Atlantic migratory fish habitat within South Carolina. Good condition thresholds reflect the range of indicator values that occur in healthy, functioning ecosystems.

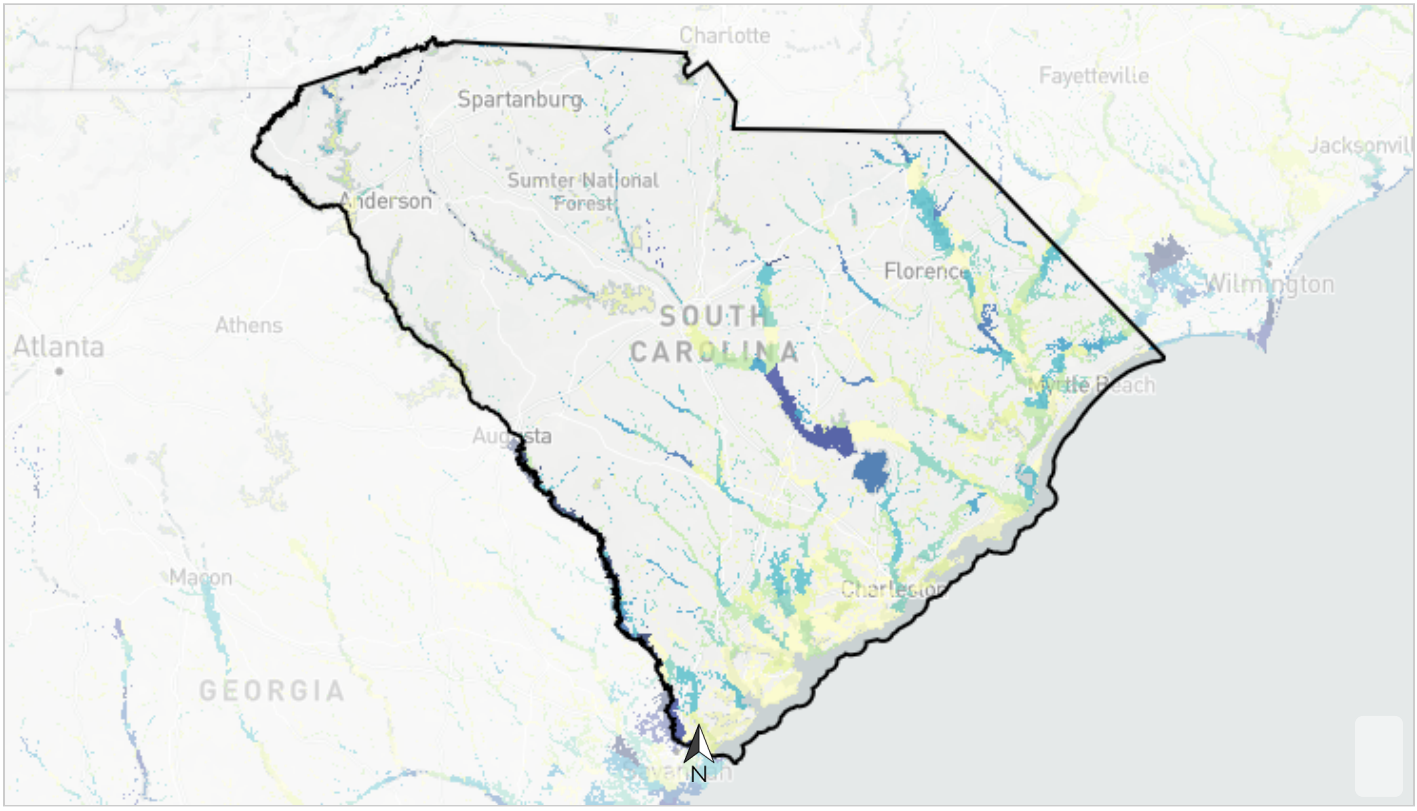
	Indicator Values	Acres	Percent of Area	
↑ High	Final score of 80 (areas of excellent fish habitat)	58,785	0.3%	
	Final score of 70 (areas of excellent fish habitat)	313,891	1.5%	↑ In good condition
	Final score of 60 (restoration opportunity areas)	1,138,246	5.6%	↓ Not in good condition
	Final score of 50 (restoration opportunity areas)	854,579	4.2%	
	Final score of 40 (restoration opportunity areas)	730,271	3.6%	
	Final score of 30 (restoration opportunity areas)	617,447	3.0%	
	Final score of 20 (restoration opportunity areas)	179,166	0.9%	
	Final score of 10 (degraded areas of opportunity)	27,034	0.1%	
↓ Low	Final score of 0 (degraded areas of opportunity)	2,116	<0.1%	
	Area not evaluated for this indicator	*16,573,490*	*80.9%*	
	Total area	**20,495,027**	**100%**	

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 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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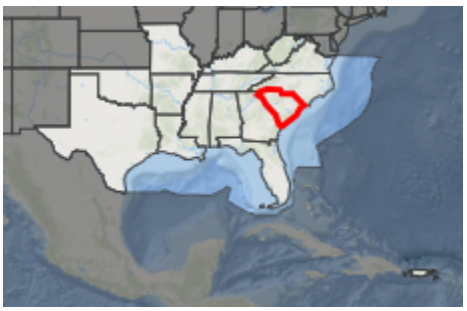


Number of aquatic animal Regional Species of Greatest Conservation Need (RSGCN) observed

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

Table 19: Indicator values for imperiled aquatic species within South Carolina. A good condition threshold is not yet defined for this indicator.

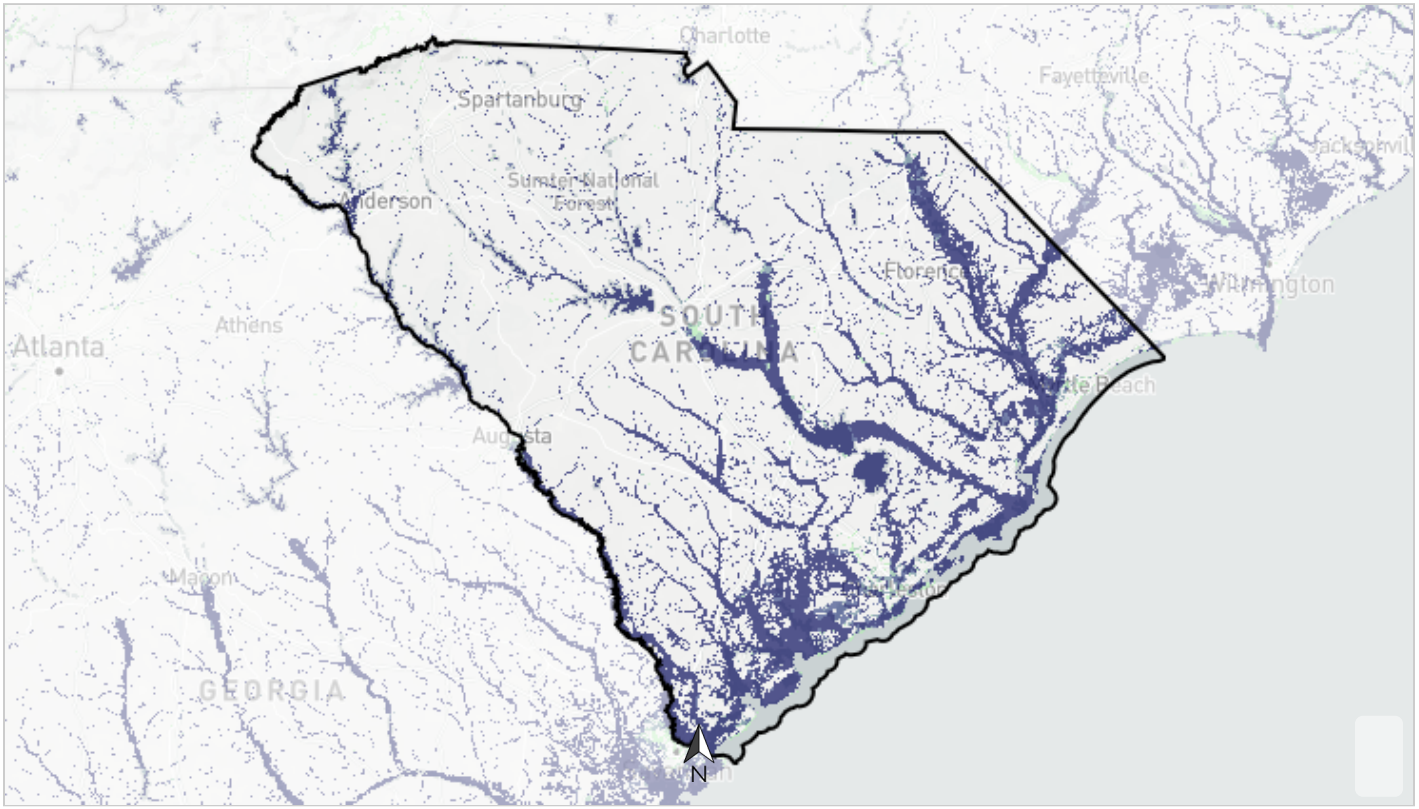
	Indicator Values: Number of aquatic animal Regional Species of Greatest Conservation Need (RSGCN) observed	Acres	Percent of Area
↑ High	8+ species	72,287	0.4%
	7 species	145,110	0.7%
	6 species	139,754	0.7%
	5 species	194,090	0.9%
	4 species	498,499	2.4%
	3 species	481,557	2.3%
	2 species	821,691	4.0%
	1 species	738,248	3.6%
	0 species	1,011,879	4.9%
↓ Low	Not identified as a floodplain	15,772,044	77.0%
	Area not evaluated for this indicator	*619,868*	*3.0%*
	Total area	**20,495,027**	**100%**

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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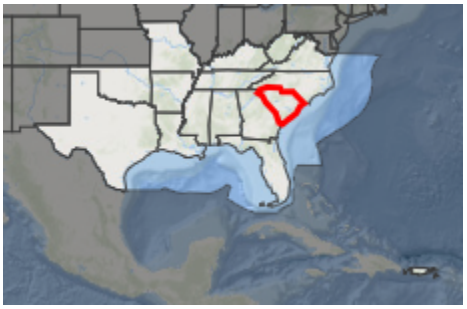


Percent natural landcover within the estimated floodplain, by catchment

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

Table 20: Indicator values for natural landcover in floodplains within South Carolina. Good condition thresholds reflect the range of indicator values that occur in healthy, functioning ecosystems.

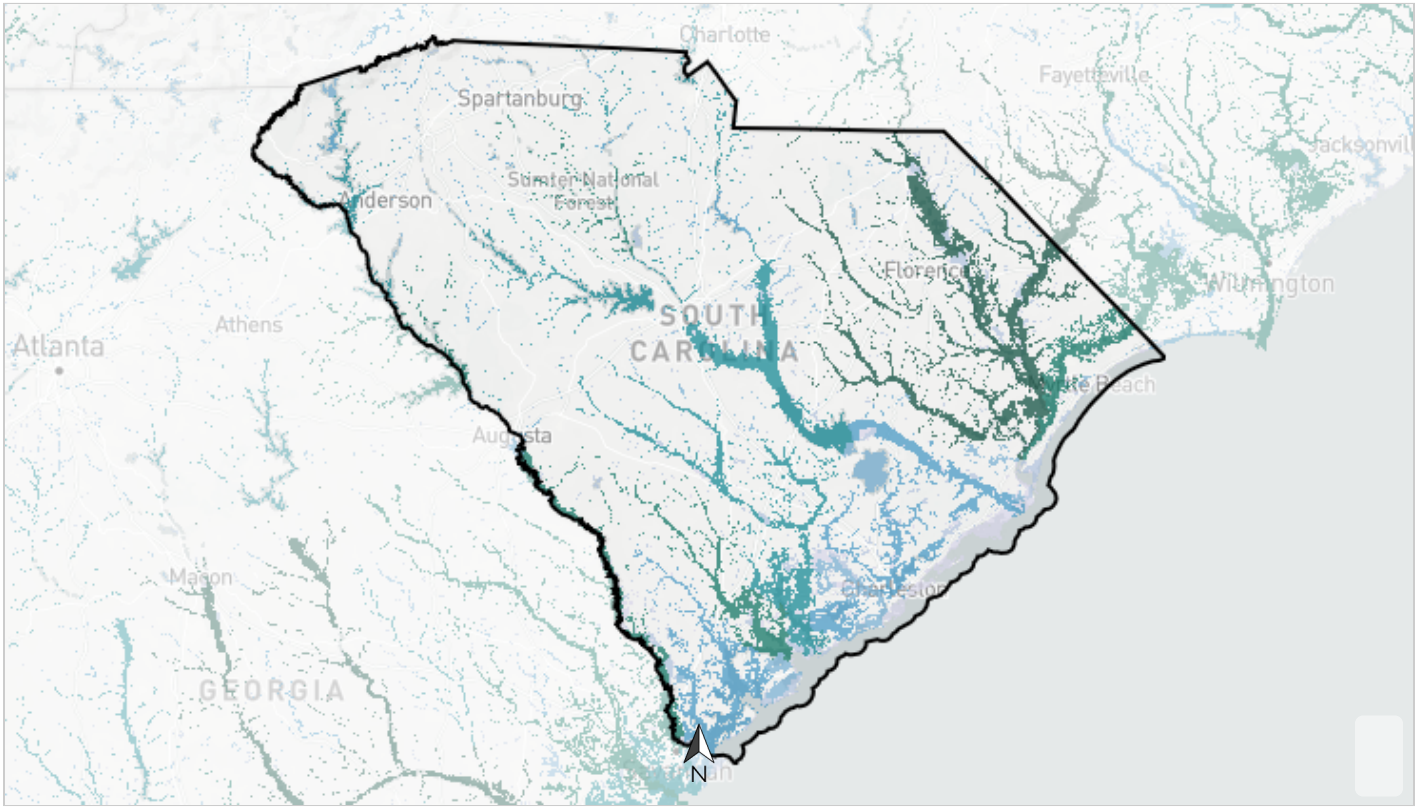
	Indicator Values: Percent natural landcover within the estimated floodplain, by catchment	Acres	Percent of Area	
↑ High	>90% natural landcover	3,580,449	17.5%	
	>80-90% natural landcover	284,803	1.4%	↑ In good condition
	>70-80% natural landcover	105,682	0.5%	↓ Not in good condition
	>60-70% natural landcover	54,266	0.3%	
	≤60% natural landcover	77,915	0.4%	
↓ Low	Not identified as a floodplain	15,772,201	77.0%	
	Area not evaluated for this indicator	*619,712*	*3.0%*	
	Total area	**20,495,027**	**100%**	

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).



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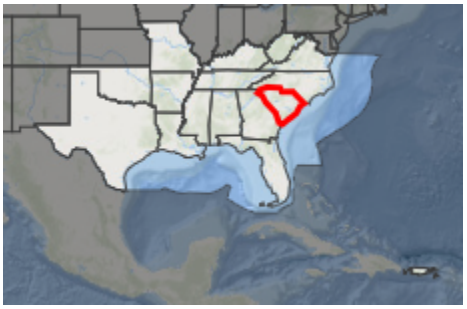


Number of connected stream size classes

- 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 21: Indicator values for network complexity within South Carolina. Good condition thresholds reflect the range of indicator values that occur in healthy, functioning ecosystems.

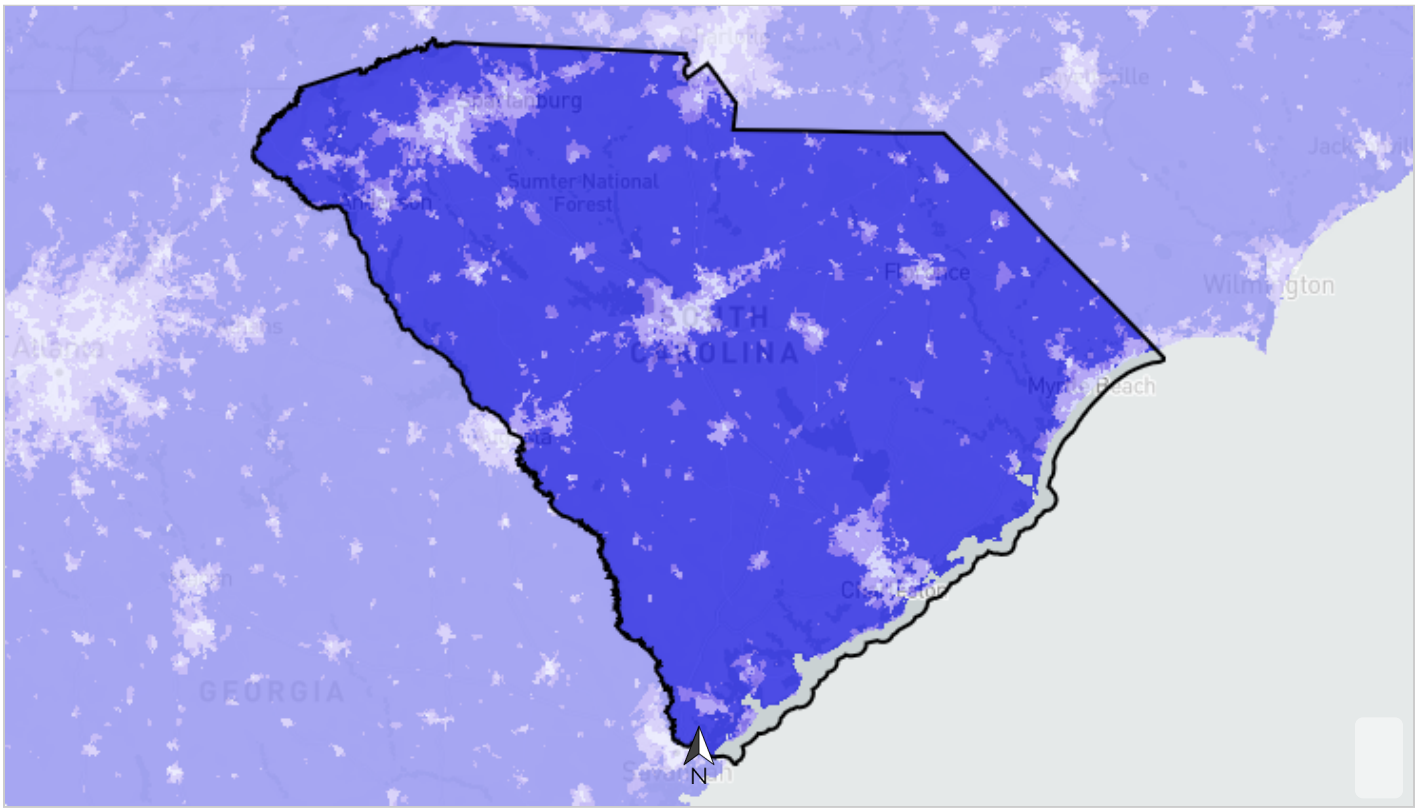
	Indicator Values: Number of connected stream size classes	Acres	Percent of Area	
↑ High	7 size classes	775,353	3.8%	
	6 size classes	594,901	2.9%	
	5 size classes	980,565	4.8%	
	4 size classes	767,403	3.7%	↑ In good condition
	3 size classes	340,051	1.7%	↓ Not in good condition
	2 size classes	333,761	1.6%	
	1 size class	290,265	1.4%	
↓ Low	Not identified as a floodplain	15,772,306	77.0%	
	Area not evaluated for this indicator	*640,422*	*3.1%*	
	Total area	**20,495,027**	**100%**	

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.



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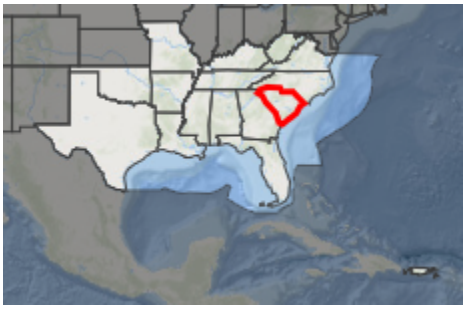


Percent of catchment permeable

- >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 22: Indicator values for permeable surface within South Carolina. Good condition thresholds reflect the range of indicator values that occur in healthy, functioning ecosystems.

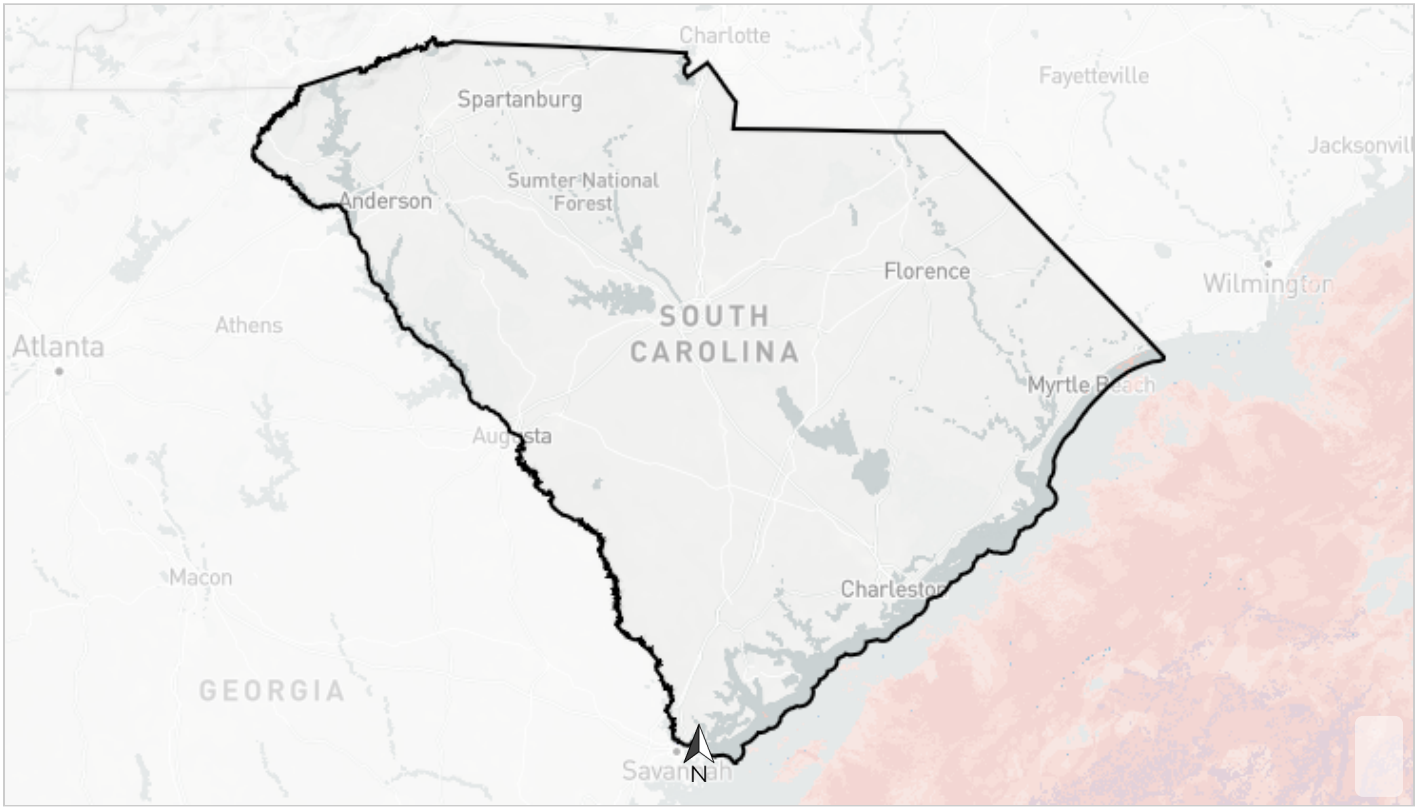
	Indicator Values: Percent of catchment permeable	Acres	Percent of Area	
↑ High	>95% permeable (likely high water quality and supporting most sensitive aquatic species)	17,162,721	83.7%	↑ In good condition
	>90-95% permeable (likely declining water quality and supporting most aquatic species)	1,206,651	5.9%	↓ Not in good condition
	>70-90% permeable (likely degraded water quality and not supporting many aquatic species)	1,230,971	6.0%	
↓ Low	≤70% permeable (likely degraded instream flow, water quality, and aquatic species communities)	274,816	1.3%	
	Area not evaluated for this indicator	*619,868*	*3.0%*	
	Total area	**20,495,027**	**100%**	

To learn more and explore the GIS data, view this indicator in the SECAS Atlas.

Coastal & marine

Atlantic coral & hardbottom

This indicator predicts the presence of coral and hardbottom in the Atlantic Ocean based on direct observations, distribution models, and known locations of artificial reefs and shipwrecks. The models use hardbottom observations and a suite of environmental predictors including measures of depth, seafloor topography and substrate, oceanography, and geography. Hardbottom provides an anchor for important seafloor habitats such as deep-sea corals, plants, and sponges, providing valuable structure that supports a wide range of invertebrate and fish species. This indicator combines data from multiple sources, including The Nature Conservancy's South Atlantic Bight Marine Assessment, several National Oceanic and Atmospheric Administration datasets, Florida state data, and more.



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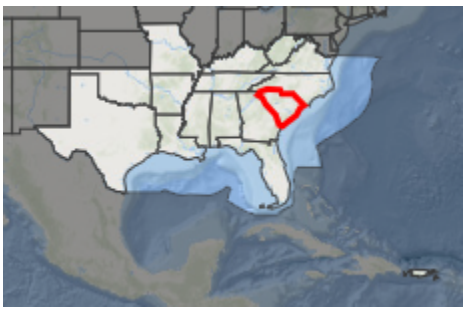


- Confirmed hardbottom-associated species (corals, sponges)
- Confirmed natural hardbottom
- Artificial reefs
- Shipwrecks
- Predicted cold-water coral mounds (Blake Plateau)
- Highest probability of hardbottom (>80th percentile)
- High probability of hardbottom (>60th-80th percentile)
- Medium probability of hardbottom (>40th-60th percentile)
- Not identified as hardbottom

Table 23: Indicator values for Atlantic coral & hardbottom within South Carolina. A good condition threshold is not yet defined for this indicator.

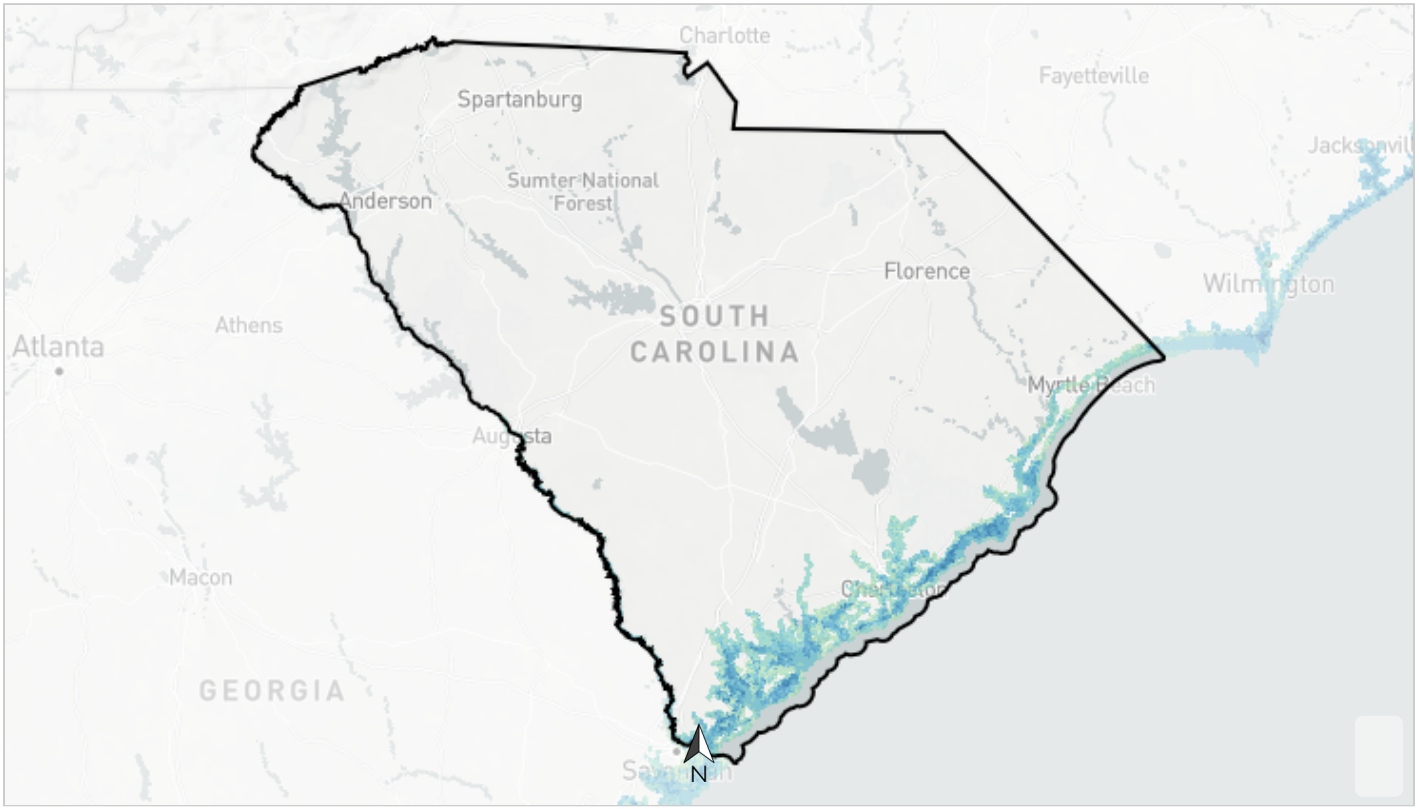
	Indicator Values	Acres	Percent of Area
↑ High	Confirmed hardbottom-associated species (corals, sponges)	70	<0.1%
	Confirmed natural hardbottom	0	0%
	Artificial reefs	487	<0.1%
	Shipwrecks	1,510	<0.1%
	Predicted cold-water coral mounds (Blake Plateau)	0	0%
	Highest probability of hardbottom (>80th percentile)	0	0%
	High probability of hardbottom (>60th-80th percentile)	83	<0.1%
	Medium probability of hardbottom (>40th-60th percentile)	10,772	<0.1%
↓ Low	Not identified as hardbottom	1,732,288	8.5%
	Area not evaluated for this indicator	*18,749,818*	*91.5%*
	Total area	**20,495,027**	**100%**

To learn more and explore the GIS data, view this indicator in the SECAS Atlas.

Coastal & marine

Atlantic estuarine fish habitat

This indicator measures the condition of estuarine fish habitat along the Atlantic coast using metrics of water quality, marsh edges, seagrass and oyster reefs, fragmentation, human development, and more. Areas of excellent fish habitat are already in good condition and face few threats. Restoration opportunity areas are doing well in some respects, but restoration projects could significantly improve them. Degraded areas of opportunity face many challenges, and restoration projects are unlikely to increase available fish habitat unless particularly large in scope and scale. This indicator originates from the Atlantic Coast Fish Habitat Partnership's fish habitat conservation area mapping and prioritization project.



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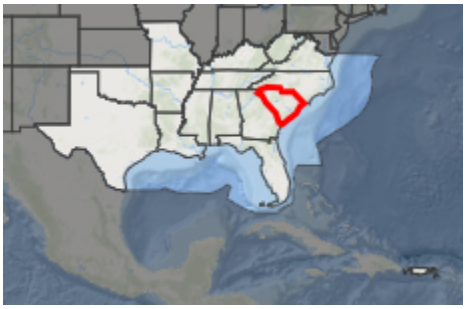


- Final score of 80 (areas of excellent fish habitat)
- Final score of 70 (areas of excellent fish habitat)
- Final score of 60 (restoration opportunity areas)
- Final score of 50 (restoration opportunity areas)
- Final score of 40 (restoration opportunity areas)
- Final score of 30 (restoration opportunity areas)
- Final score of 20 (restoration opportunity areas)
- Final score of 10 (degraded areas of opportunity)
- Final score of 0 (degraded areas of opportunity)

Table 24: Indicator values for Atlantic estuarine fish habitat within South Carolina. Good condition thresholds reflect the range of indicator values that occur in healthy, functioning ecosystems.

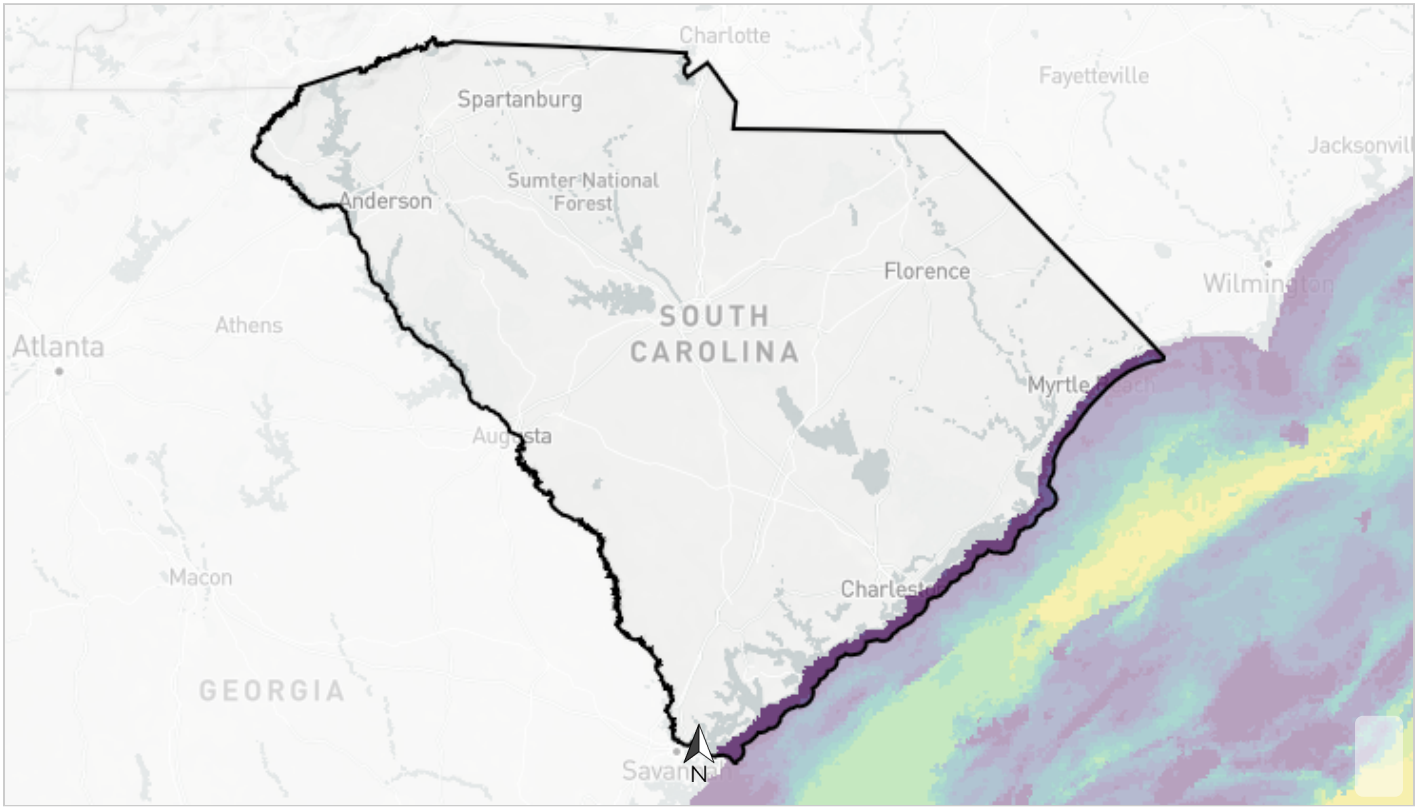
	Indicator Values	Acres	Percent of Area	
↑ High	Final score of 80 (areas of excellent fish habitat)	0	0%	
	Final score of 70 (areas of excellent fish habitat)	14,088	<0.1%	↑ In good condition
	Final score of 60 (restoration opportunity areas)	86,604	0.4%	↓ Not in good condition
	Final score of 50 (restoration opportunity areas)	197,644	1.0%	
	Final score of 40 (restoration opportunity areas)	283,536	1.4%	
	Final score of 30 (restoration opportunity areas)	317,091	1.5%	
	Final score of 20 (restoration opportunity areas)	135,380	0.7%	
	Final score of 10 (degraded areas of opportunity)	23,966	0.1%	
↓ Low	Final score of 0 (degraded areas of opportunity)	491	<0.1%	
	Area not evaluated for this indicator	*19,436,226*	*94.8%*	
	Total area	**20,495,027**	**100%**	

To learn more and explore the GIS data, view this indicator in the SECAS Atlas.

Coastal & marine

Atlantic marine birds

This indicator identifies important areas in the Atlantic Ocean for birds that feed exclusively or mainly at sea. It uses seasonal predictions of relative abundance for 19 species of marine birds (Audubon's shearwater, band-rumped storm petrel, black-capped petrel, black scoter, Bonaparte's gull, bridled tern, brown pelican, common loon, common tern, Cory's shearwater, great shearwater, Manx shearwater, Northern gannet, parasitic jaeger, red-throated loon, royal tern, sooty shearwater, sooty tern, white-winged scoter) based on sightings from boat-based surveys and marine environmental data like fronts, primary productivity, and ocean currents. This indicator originates from Duke University's Marine-life Data and Analysis Team marine bird models.



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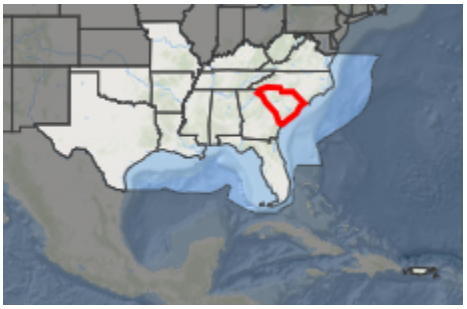


Percentile of importance for marine bird index species (across the full East Coast study area)

- >90th percentile
- >80th-90th percentile
- >70th-80th percentile
- >60th-70th percentile
- >50th-60th percentile
- >40th-50th percentile
- >30th-40th percentile
- >20th-30th percentile
- >10th-20th percentile
- ≤10th percentile
- Land

Table 25: Indicator values for Atlantic marine birds within South Carolina. A good condition threshold is not yet defined for this indicator.

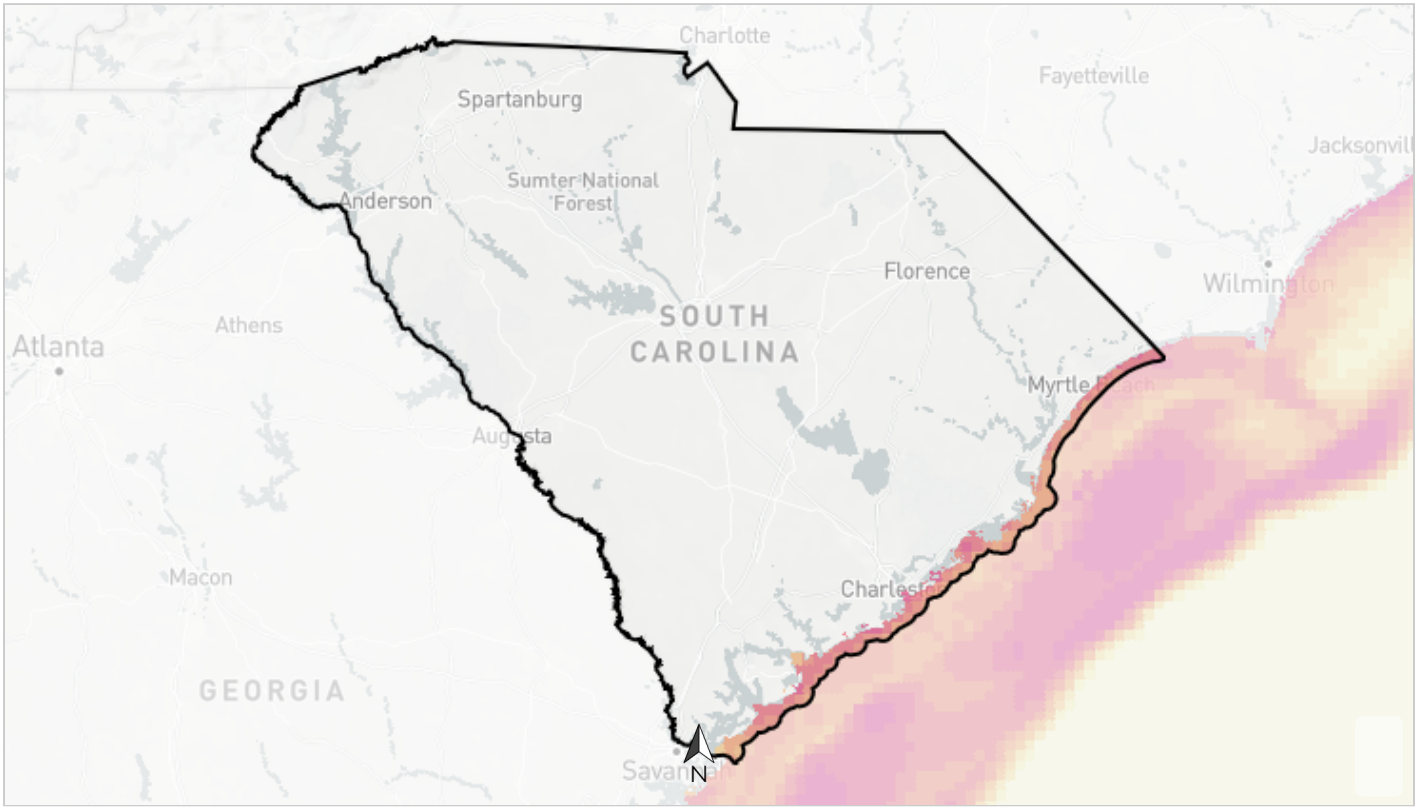
	Indicator Values: Percentile of importance for marine bird index species (across the full East Coast study area)	Acres	Percent of Area
↑ High	>90th percentile	386,789	1.9%
	>80th-90th percentile	69,882	0.3%
	>70th-80th percentile	3,704	<0.1%
	>60th-70th percentile	0	0%
	>50th-60th percentile	0	0%
	>40th-50th percentile	0	0%
	>30th-40th percentile	0	0%
	>20th-30th percentile	0	0%
	>10th-20th percentile	0	0%
	≤10th percentile	0	0%
↓ Low	Land	3,034	<0.1%
	Area not evaluated for this indicator	*20,031,618*	*97.7%*
	Total area	**20,495,027**	**100%**

To learn more and explore the GIS data, view this indicator in the SECAS Atlas.

Coastal & marine

Atlantic marine mammals

This indicator identifies important areas in the Atlantic Ocean for dolphins, whales, and seals. It incorporates density predictions for 20 marine mammals species or species groups (Atlantic spotted dolphin, Atlantic white-sided dolphin, Clymene dolphin, common bottlenose dolphin, Cuvier's beaked whale, dwarf and pygmy sperm whales, fin whale, harbor porpoise, humpback whale, mesoplodont beaked whales, North Atlantic right whale, pantropical spotted dolphin, pilot whales, Risso's dolphin, rough-toothed dolphin, seals, short-beaked common dolphin, sperm whale, striped dolphin, unidentified beaked whales) based on sightings from boat-based and aerial surveys and data on oceanographic conditions. It uses marine mammal models developed by the Duke Marine Lab.



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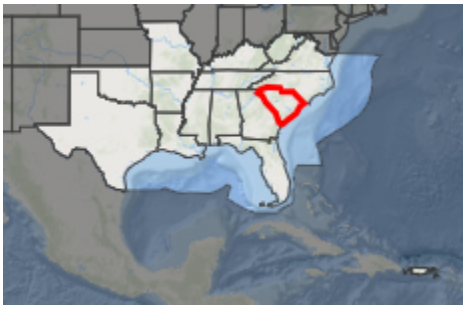


Percentile of importance for marine mammal index species (across the full East Coast study area)

- >90th percentile
- >80th-90th percentile
- >70th-80th percentile
- >60th-70th percentile
- >50th-60th percentile
- >40th-50th percentile
- >30th-40th percentile
- >20th-30th percentile
- >10th-20th percentile
- ≤10th percentile
- Land

Table 26: Indicator values for Atlantic marine mammals within South Carolina. A good condition threshold is not yet defined for this indicator.

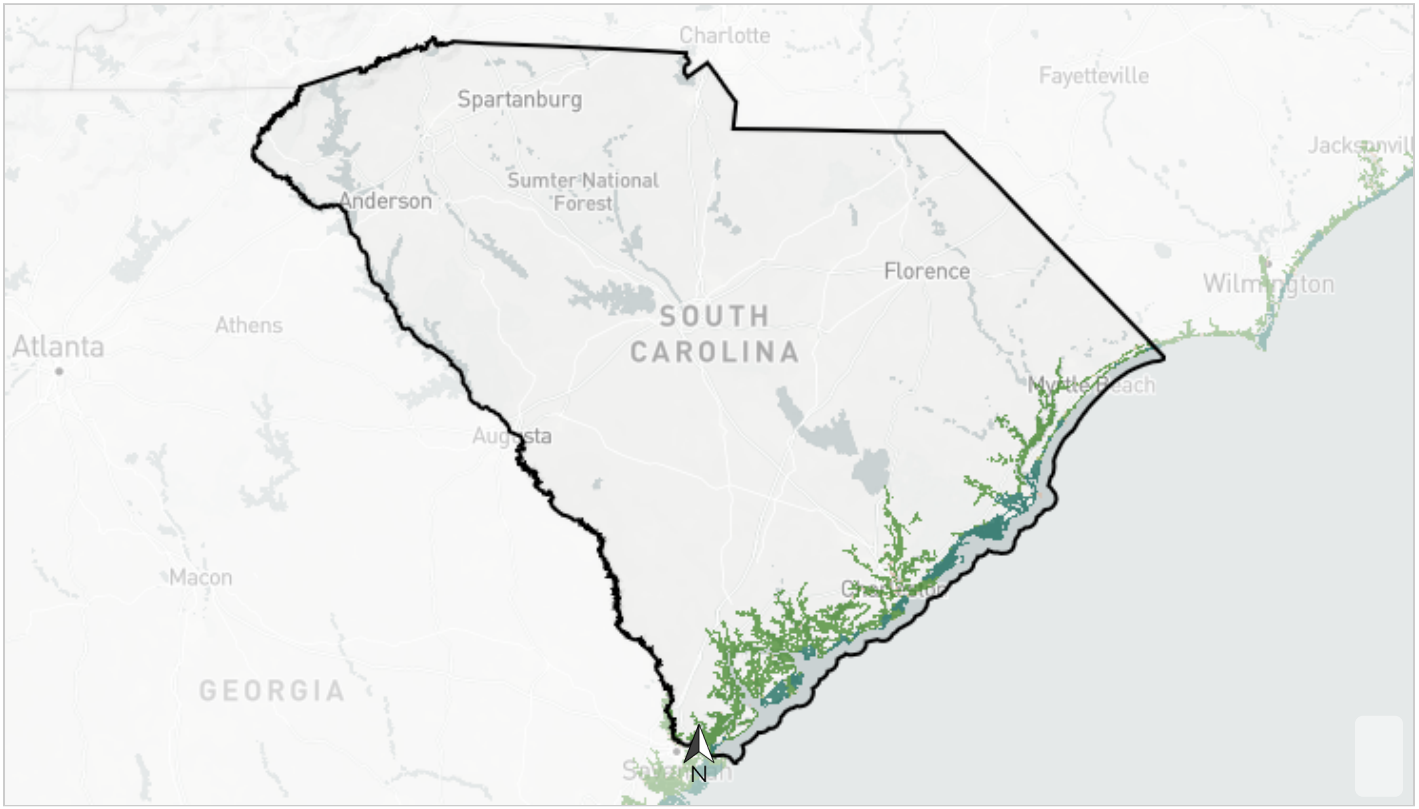
	Indicator Values: Percentile of importance for marine mammal index species (across the full East Coast study area)	Acres	Percent of Area
↑ High	>90th percentile	0	0%
	>80th-90th percentile	30,673	0.1%
	>70th-80th percentile	178,221	0.9%
	>60th-70th percentile	192,445	0.9%
	>50th-60th percentile	141,166	0.7%
	>40th-50th percentile	17,469	<0.1%
	>30th-40th percentile	4,590	<0.1%
	>20th-30th percentile	0	0%
	>10th-20th percentile	0	0%
	≤10th percentile	0	0%
↓ Low	Land	101,382	0.5%
	Area not evaluated for this indicator	*19,829,081*	*96.8%*
	Total area	**20,495,027**	**100%**

To learn more and explore the GIS data, view this indicator in the SECAS Atlas.

Coastal & marine

Coastal shoreline condition

This indicator assesses shoreline condition based on the presence of hardened structures like jetties, groins, and riprap, as well as other human development. By restricting the natural movement of sediment, shoreline armoring increases erosion, prevents the inland migration of coastal ecosystems in response to sea-level rise, and degrades habitat for birds, sea turtles, fish, plants, and other species both on and offshore. Natural shorelines in harder-to-develop coastal areas receive the highest shoreline condition scores, while hardened shorelines receive the lowest scores. This indicator originates from the National Oceanic and Atmospheric Administration's Environmental Sensitivity Index dataset.



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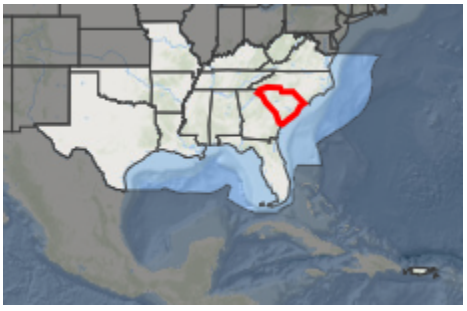


- Natural and harder to develop
- Natural
- Partially armored and harder to develop
- Partially armored
- Armored

Table 27: Indicator values for coastal shoreline condition within South Carolina. Good condition thresholds reflect the range of indicator values that occur in healthy, functioning ecosystems.

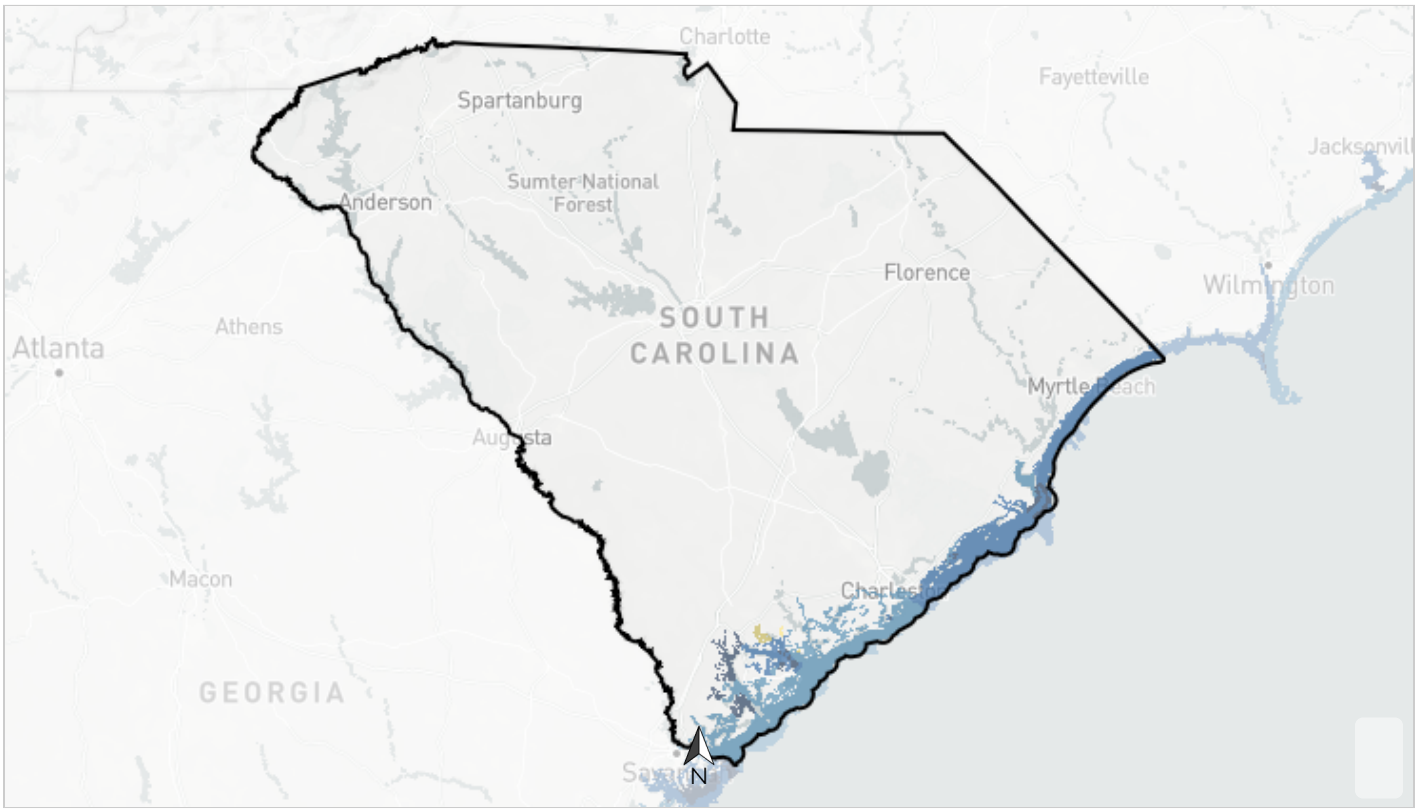
	Indicator Values	Acres	Percent of Area	
↑ High	Natural and harder to develop	26,728	0.1%	
	Natural	82,272	0.4%	↑ In good condition
	Partially armored and harder to develop	53	<0.1%	↓ Not in good condition
	Partially armored	1,141	<0.1%	
↓ Low	Armored	1,737	<0.1%	
	Area not evaluated for this indicator	*20,383,096*	*99.5%*	
	Total area	**20,495,027**	**100%**	

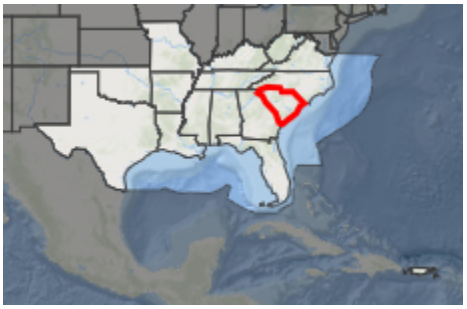
To learn more and explore the GIS data, view this indicator in the SECAS Atlas.

Coastal & marine

Estuarine coastal condition

This indicator combines measures of water quality, sediment quality, contaminants in fish tissue, and benthic community condition to create an overall index of coastal estuarine condition. Estuaries serve as important nursery habitat for wildlife, including many species of fish and shellfish eaten as seafood. They also improve water quality by filtering out sediments and pollutants, provide recreational opportunities, and support coastal economies. This indicator originates from the Environmental Protection Agency's National Coastal Condition Assessment data.





- Good
- Fair to good
- Fair
- Poor to fair
- Poor
- Shallow estuary not assessed for condition

Table 28: Indicator values for estuarine coastal condition within South Carolina. Good condition thresholds reflect the range of indicator values that occur in healthy, functioning ecosystems.

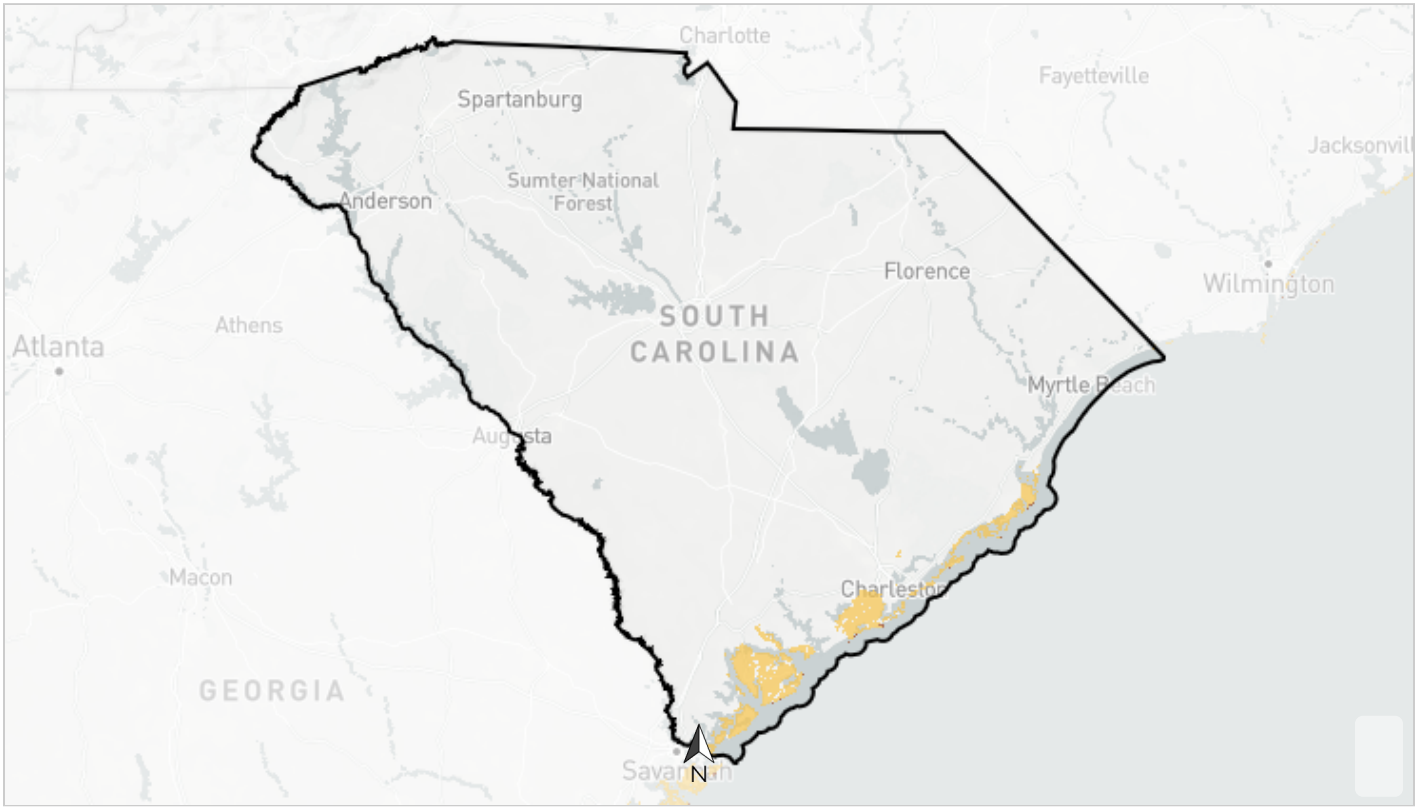
	Indicator Values	Acres	Percent of Area	
↑ High	Good	51,921	0.3%	
	Fair to good	314,947	1.5%	↑ In good condition
	Fair	337,272	1.6%	↓ Not in good condition
	Poor to fair	2,249	<0.1%	
	Poor	444	<0.1%	
↓ Low	Shallow estuary not assessed for condition	46,467	0.2%	
	Area not evaluated for this indicator	*19,741,727*	*96.3%*	
	Total area	**20,495,027**	**100%**	

To learn more and explore the GIS data, view this indicator in the SECAS Atlas.

Coastal & marine

Island habitat

This indicator represents important habitat for coastal island-dependent species across the Southeast. Because the isolation of islands can make them ecologically unique and protect them from disturbance and mainland predators, they often serve as important habitat for many species of mammals, plants, and insects, as well as breeding coastal birds and sea turtles. The highest scores go to island critical habitat for six threatened and endangered animal and plant species: piping plover, loggerhead sea turtle, Cape Sable thoroughwort, Florida semaphore cactus, silver rice rat, and Bartram's hairstreak butterfly. This indicator uses U.S. Fish and Wildlife Service critical habitat data and island boundaries from the U.S. Geological Survey and Esri.



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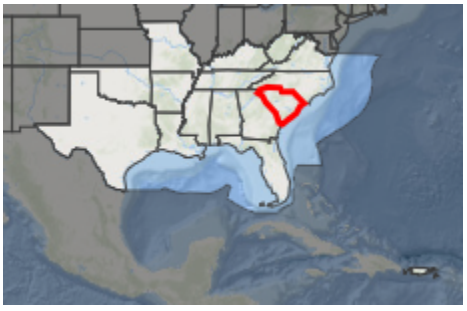


- Island critical habitat for any of six threatened and endangered species (piping plover, loggerhead sea turtle, Cape Sable thoroughwort, Florida semaphore cactus, silver rice rat, or Bartram's hairstreak butterfly)
- Other island area
- Not a coastal island

Table 29: Indicator values for island habitat within South Carolina. A good condition threshold is not yet defined for this indicator.

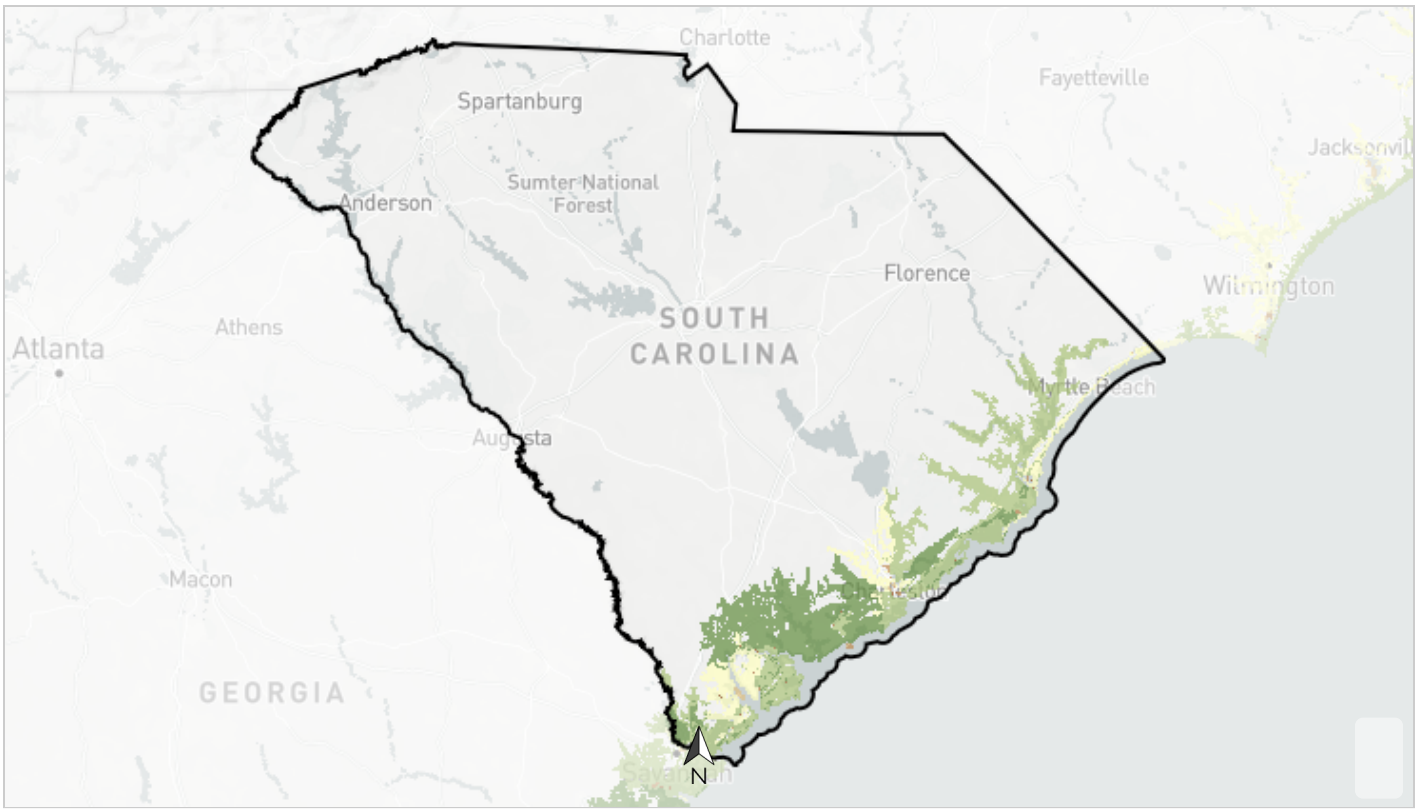
	Indicator Values	Acres	Percent of Area
↑ High	Island critical habitat for any of six threatened and endangered species (piping plover, loggerhead sea turtle, Cape Sable thoroughwort, Florida semaphore cactus, silver rice rat, or Bartram's hairstreak butterfly)	5,612	<0.1%
	Other island area	391,010	1.9%
↓ Low	Not a coastal island	4,971,899	24.3%
	Area not evaluated for this indicator	*15,126,506*	*73.8%*
	Total area	**20,495,027**	**100%**

To learn more and explore the GIS data, view this indicator in the SECAS Atlas.

Coastal & marine

Resilient coastal sites

This indicator depicts the capacity of coastal habitats to migrate to adjacent lowlands in order to sustain biodiversity and natural services under increasing inundation from sea-level rise. It is based on the physical and condition characteristics of current tidal complexes, their predicted migration space, and surrounding buffer areas. These characteristics include marsh complex size, shared edge with migration space, sediment balance, water quality, natural landcover, landform diversity, and more. This indicator originates from The Nature Conservancy's Resilient Coastal Sites project.



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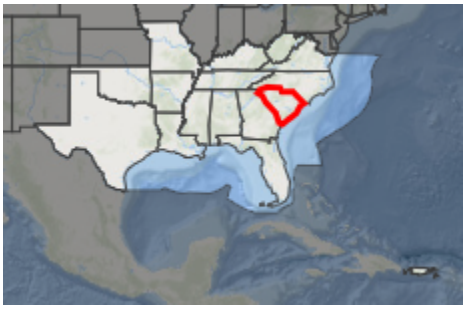

- Most resilient
- More resilient
- Slightly more resilient
- Average/median resilience
- Slightly less resilient
- Less resilient
- Least resilient

Table 30: Indicator values for resilient coastal sites within South Carolina. A good condition threshold is not yet defined for this indicator.

	Indicator Values	Acres	Percent of Area
↑ High	Most resilient	0	0%
	More resilient	470,185	2.3%
	Slightly more resilient	449,879	2.2%
	Average/median resilience	124,782	0.6%
	Slightly less resilient	2,906	<0.1%
	Less resilient	1,482	<0.1%
↓ Low	Least resilient	270	<0.1%
	Area not evaluated for this indicator	*19,445,522*	*94.9%*
	Total area	**20,495,027**	**100%**

To learn more and explore the GIS data, view this indicator in the SECAS Atlas.

Coastal & marine

South Atlantic beach birds

This indicator is an index of habitat suitability for four shorebird species (American oystercatcher, Wilson's plover, least tern, piping plover) in the South Atlantic, based on observed abundance. It assesses beaches and nearby onshore habitats. Shorebirds' relative use of beaches and neighboring habitats for nesting, foraging, and breeding is an indicator of ecosystem health and quality. This indicator combines bird data from the U.S. Geological Survey and state waterbird biologists in FL, GA, SC, and NC.

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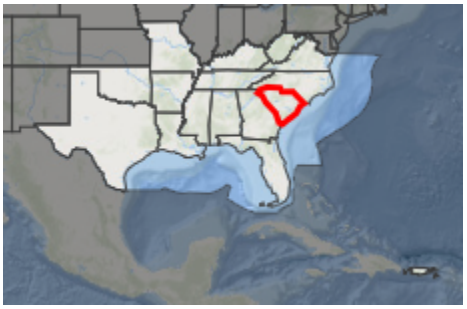


Percentile of importance for beach bird index species

- >80th percentile
- >60th-80th percentile
- >40th-60th percentile
- >20th-40th percentile
- ≤20th percentile
- Open water or not identified as a priority

Table 31: Indicator values for South Atlantic beach birds within South Carolina. A good condition threshold is not yet defined for this indicator.

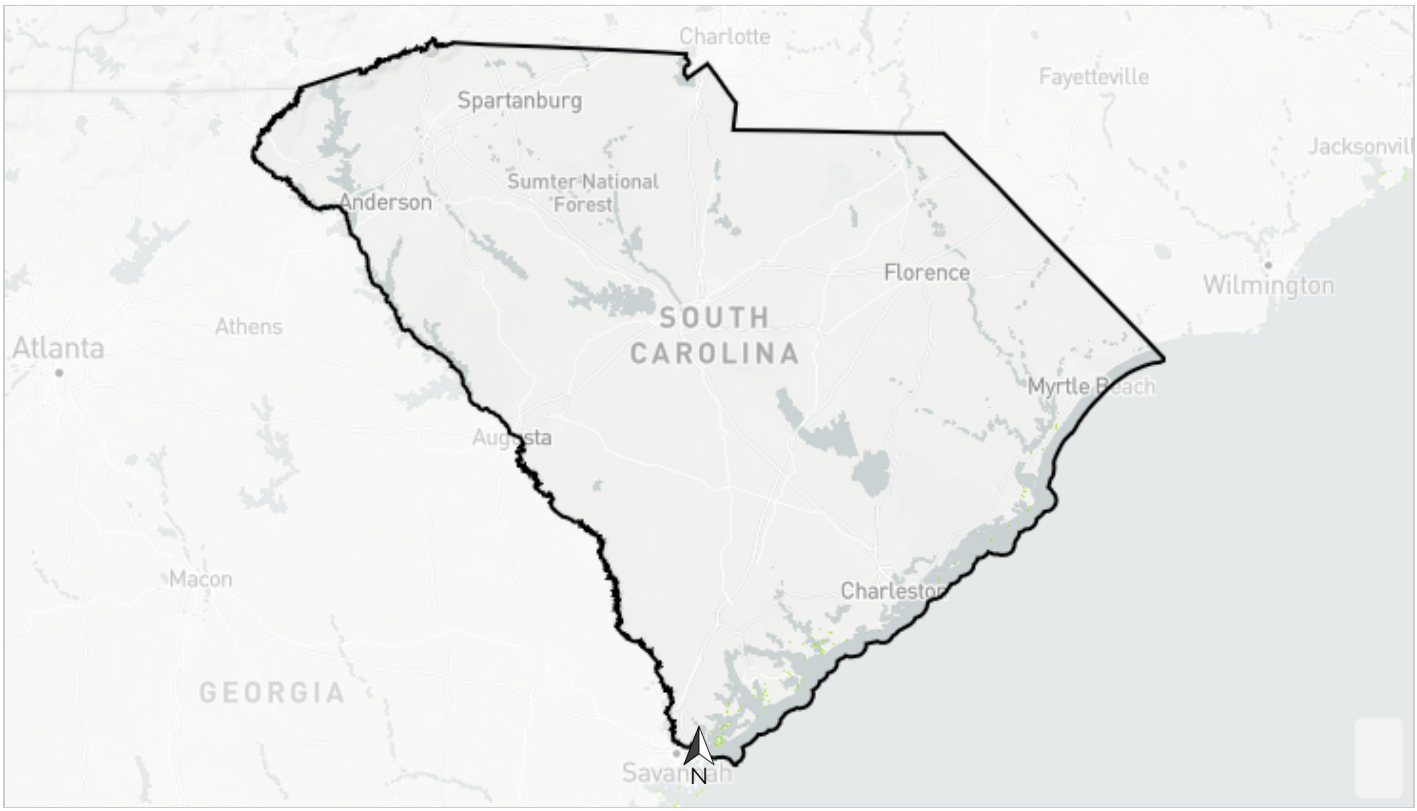
	Indicator Values: Percentile of importance for beach bird index species	Acres	Percent of Area
↑ High	>80th percentile	10,273	<0.1%
	>60th-80th percentile	4,400	<0.1%
	>40th-60th percentile	4,942	<0.1%
	>20th-40th percentile	11,943	<0.1%
	≤20th percentile	4,300	<0.1%
↓ Low	Open water or not identified as a priority	2,653,067	12.9%
	Area not evaluated for this indicator	*17,806,102*	*86.9%*
	Total area	**20,495,027**	**100%**

To learn more and explore the GIS data, view this indicator in the SECAS Atlas.

Coastal & marine

South Atlantic maritime forest

This indicator depicts the maritime forest currently present in the South Atlantic. Since maritime forest has been substantially reduced from its historic extent, protecting the remaining acreage is particularly important. This ecosystem supports a unique suite of plants that tolerate wind, salt, and flooding, as well as many species of birds, mammals, and reptiles. It also helps buffer the coastline from storms. This indicator originates from LANDFIRE landcover.



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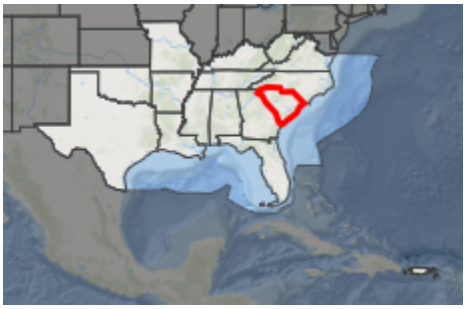

Maritime forest

Not identified as maritime forest

Table 32: Indicator values for South Atlantic maritime forest within South Carolina. A good condition threshold is not yet defined for this indicator.

	Indicator Values	Acres	Percent of Area
↑ High	Maritime forest	39,571	0.2%
↓ Low	Not identified as maritime forest	1,892,965	9.2%
	Area not evaluated for this indicator	*18,562,491*	*90.6%*
	Total area	**20,495,027**	**100%**

To learn more and explore the GIS data, view this indicator in the SECAS Atlas.

Coastal & marine

Stable coastal wetlands

This indicator uses remote sensing to calculate the unvegetated-vegetated ratio of tidal wetlands, which compares how much of a wetland is not covered by plants (e.g., sediment, rocks, open water) to how much is covered by plants. Marshes that maintain a higher proportion of vegetation tend to be more stable and resilient to threats like sea-level rise, erosion, and coastal development. This ratio, and how it changes over time, is a good surrogate for salt marsh degradation processes like sediment loss and conversion to open water. This indicator originates from a U.S. Geological Survey project on an unvegetated to vegetated ratio for coastal wetlands.

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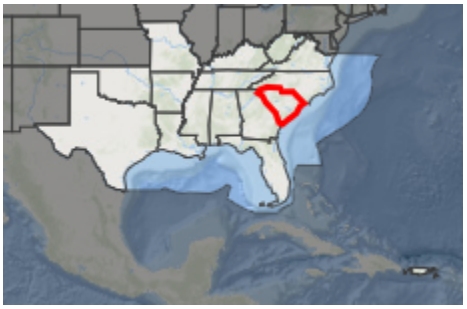


Stable coastal wetlands
Other coastal wetlands
Not identified as coastal wetlands

Table 33: Indicator values for stable coastal wetlands within South Carolina. Good condition thresholds reflect the range of indicator values that occur in healthy, functioning ecosystems.

	Indicator Values	Acres	Percent of Area	
↑ High	Stable coastal wetlands	296,332	1.4%	
	Other coastal wetlands	316,768	1.5%	↑ In good condition
↓ Low	Not identified as coastal wetlands	2,371,870	11.6%	↓ Not in good condition
	Area not evaluated for this indicator	*17,510,058*	*85.4%*	
	Total area	**20,495,027**	**100%**	

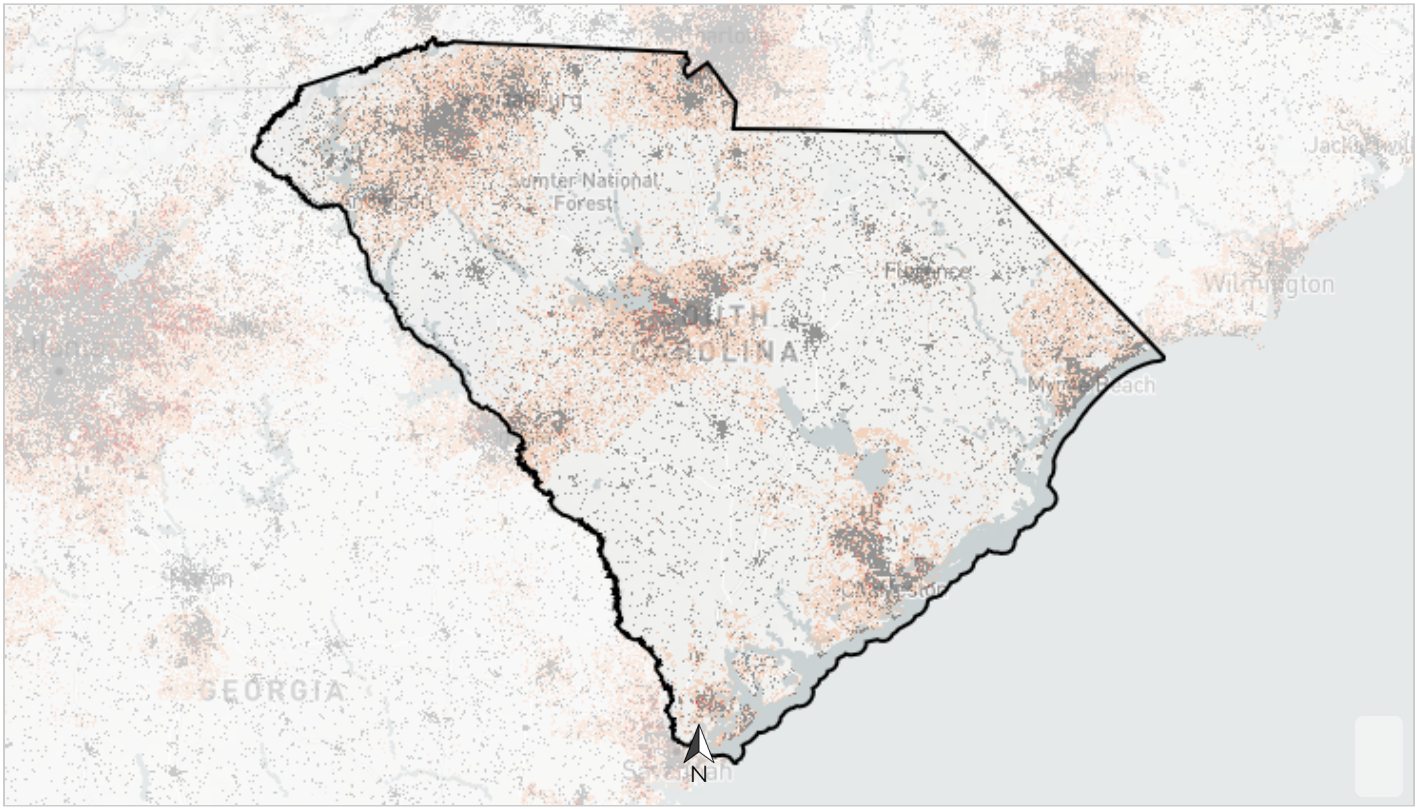
To learn more and explore the GIS data, view this indicator in the SECAS Atlas.

More Information

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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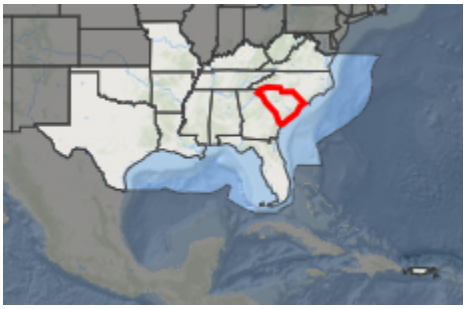


Probability of urbanization by 2060

- 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 34: Extent of projected urbanization by decade within South Carolina. 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	2,307,151	11.3%
2030 projected extent	2,386,129	11.6%
2040 projected extent	2,441,509	11.9%
2050 projected extent	2,486,145	12.1%
2060 projected extent	2,524,287	12.3%
2070 projected extent	2,558,544	12.5%
2080 projected extent	2,585,450	12.6%
2090 projected extent	2,602,876	12.7%
2100 projected extent	2,612,708	12.7%
Not projected to urbanize by 2100	*17,876,955*	*87.2%*
No urbanization data available	*5,364*	*<0.1%*
Total area	**20,495,027**	**100%**

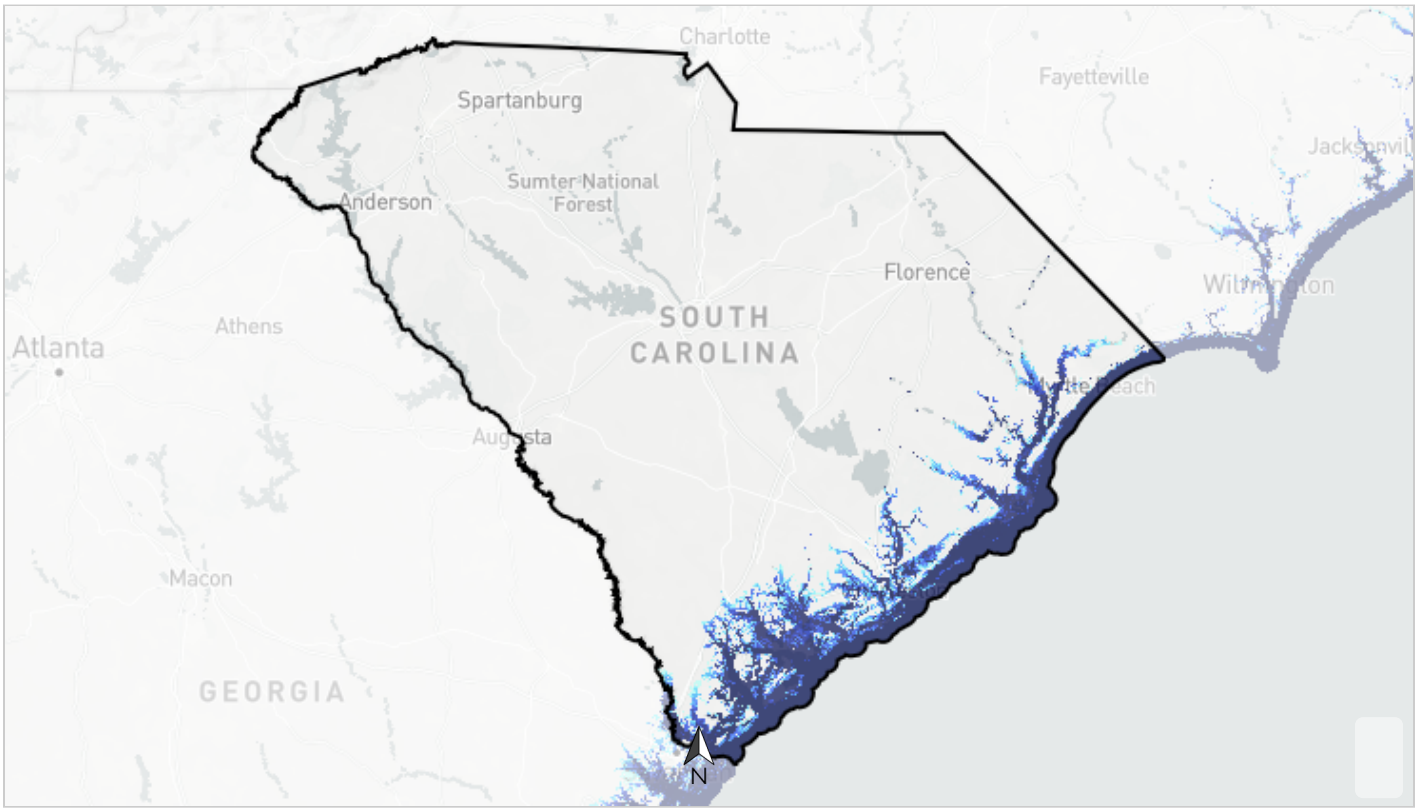
11.3% of this area is already urban in 2021, and an additional 16.6% has at least a moderate probability of urbanizing by 2060.

By 2060, the size of the urban footprint is projected to increase **9.4%** over 2021 levels.

Sea-level Rise

NOAA's sea-level rise (SLR) inundation models represent areas likely to experience flooding at high tide based on each foot of SLR above current levels. Darker blue areas will experience flooding first, and at greater depth, compared to lighter blue areas. These models are not linked to a future timeframe; see the projections below. NOAA calculates the inundation footprint at "mean higher high water", or the average highest daily tide. The area covered in each SLR scenario includes areas projected to be inundated at lower levels. For example, the area inundated by 4 ft of SLR also includes areas inundated by 3 ft, 2 ft, 1 ft, and 0 ft of SLR (where 0 ft represents current levels).

To explore additional SLR information, please see NOAA's Sea Level Rise Viewer.



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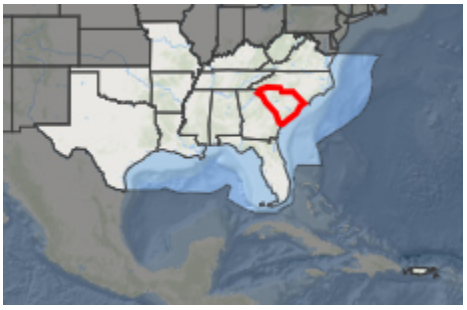
43 86 172 miles



Flooding extent by projected sea-level rise (ft)

0 1 2 3 4 5 6 7 8 9 10

Table 35: Extent of flooding by projected average highest daily tide due to sea level rise within South Carolina. Values from the NOAA sea-level rise inundation data.

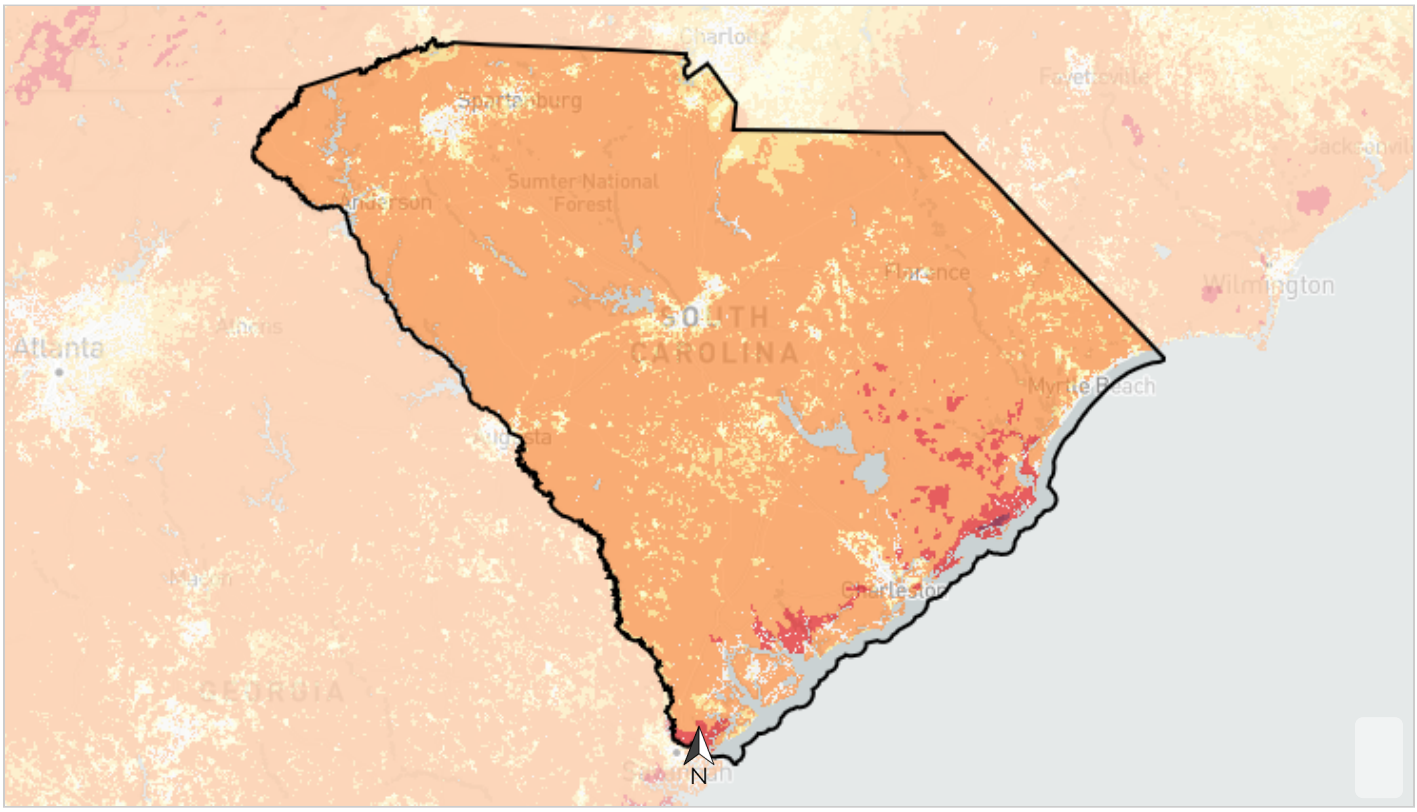
Feet of sea-level rise	Acres	Percent of Area
0 feet	1,245,810	6.1%
1 foot	1,384,993	6.8%
2 feet	1,459,396	7.1%
3 feet	1,534,893	7.5%
4 feet	1,614,840	7.9%
5 feet	1,695,993	8.3%
6 feet	1,776,129	8.7%
7 feet	1,854,189	9.0%
8 feet	1,929,356	9.4%
9 feet	2,008,642	9.8%
10 feet	2,088,650	10.2%
Not projected to be inundated by up to 10 feet	*4,967,713*	*24.2%*
Sea-level rise unlikely to be a threat (inland counties)	*13,438,664*	*65.6%*
Total area	**20,495,027**	**100%**

Table 36: Projected sea level rise by decade within South Carolina. Values are based on area-weighted averages of decadal projections for 1-degree grid cells that overlap this area based on NOAA's 2022 Sea Level Rise Report. 2060 corresponds to the SECAS goal: a 10% or greater improvement in the health, function, and connectivity of Southeastern ecosystems by 2060.

SLR Scenario	2020 (ft)	2030 (ft)	2040 (ft)	2050 (ft)	2060 (ft)	2070 (ft)	2080 (ft)	2090 (ft)	2100 (ft)
Low	0.36	0.56	0.77	0.97	1.1	1.3	1.4	1.5	1.6
Intermediate-low	0.38	0.61	0.86	1.1	1.3	1.6	1.8	2	2.3
Intermediate	0.39	0.64	0.91	1.2	1.6	2	2.5	3.1	3.8
Intermediate-high	0.39	0.68	1	1.4	2	2.6	3.4	4.2	5.2
High	0.4	0.69	1.1	1.6	2.3	3.3	4.4	5.5	6.8

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.



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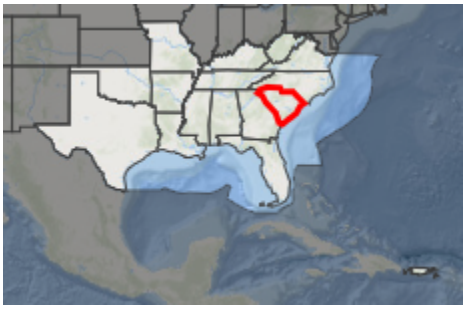


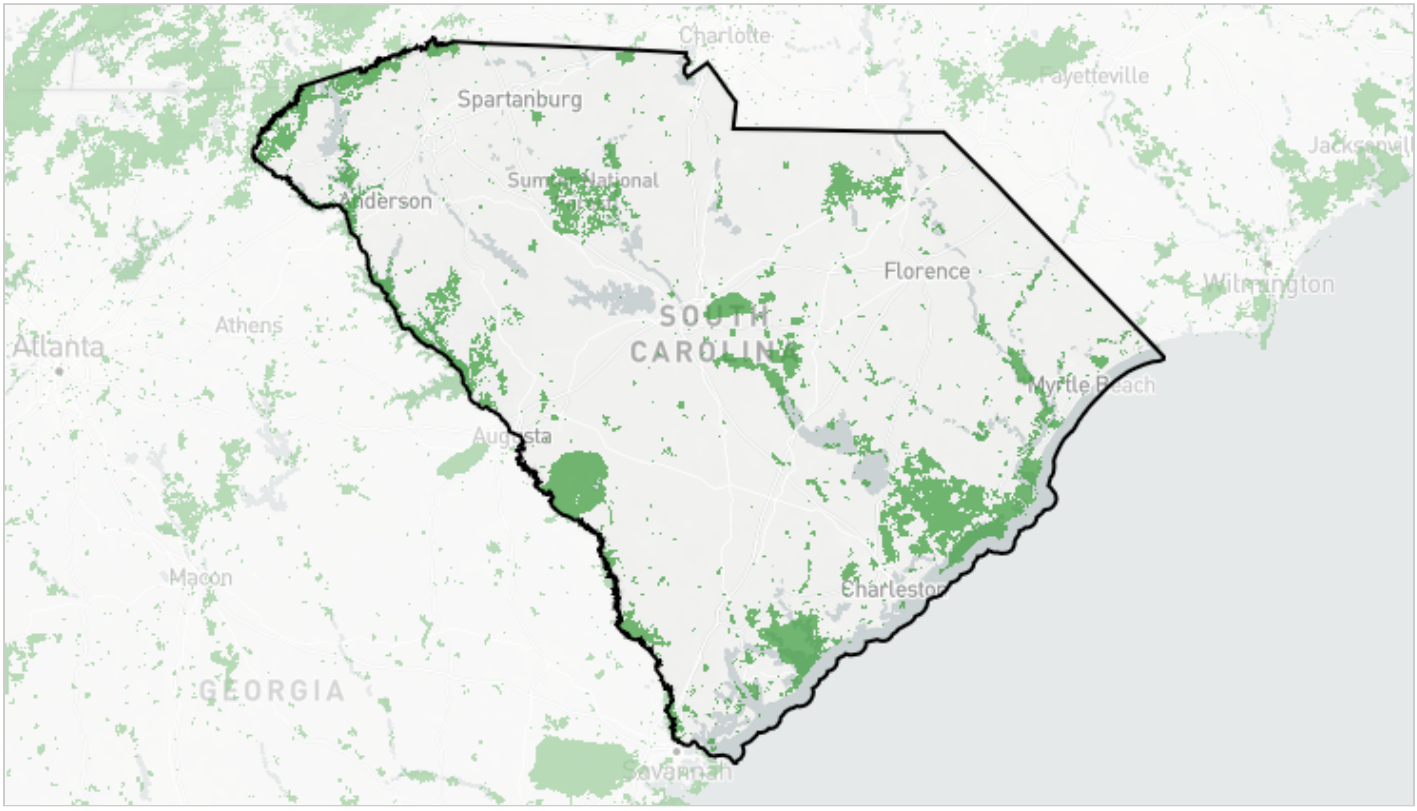
Wildfire likelihood (annual burn probability)

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

Table 37: Area in each wildfire probability category within South Carolina. Values from the Wildire 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)	1,545,431	7.5%
Low (>0 - 0.01% probability)	425,257	2.1%
Low-moderate (>0.01 - 0.02154% probability)	321,637	1.6%
Low-moderate (>0.02154 - 0.04642% probability)	1,313,262	6.4%
Moderate (>0.04642 - 0.1% probability)	9,061,258	44.2%
Moderate (>0.1 - 0.21544% probability)	5,632,653	27.5%
Moderate (>0.21544 - 0.46416% probability)	1,726,900	8.4%
Moderate-high (>0.46416 - 1% probability)	381,376	1.9%
Moderate-high (>1 - 2.15443% probability)	72,718	0.4%
High (>2.15443 - 4.64159% probability)	9,008	<0.1%
High (>4.64159% probability)	0	0%
No wildfire risk data available	*5,526*	*<0.1%*
Total area	**20,495,027**	**100%**

Protected Areas



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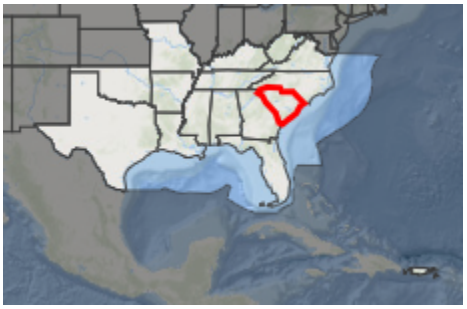

Within a protected area

Not within a protected area

Table 38: Extent of protected areas within South Carolina. Protected areas are derived from the Protected Areas Database of the United States (PAD-US v4.0 and v3.0) and include Fee, Designation, Easement, Marine, and Proclamation (Dept. of Defense lands only) boundaries.

Protected area status	Acres	Percent of Area
Not within a protected area	18,156,489	88.6%
Within a protected area	2,338,538	11.4%
Total area	**20,495,027**	**100%**

Protected areas at this location:

- Sumter National Forest (USDA Forest Service; 374,231 acres)
- Francis Marion National Forest (USDA Forest Service; 262,712 acres)
- Savannah River Site (195,398 acres)
- Ashepoo-Combahee-Edisto (ACE) Basin National Estuarine Research Reserve (140,789 acres)
- Cape Romain National Wildlife Refuge (61,285 acres)
- Francis Marion National Wildlife Refuge (53,207 acres)
- Hartwell Recreation Area (52,107 acres)
- Fort Jackson (51,356 acres)
- Sand Hills State Forest (South Carolina Forestry Commission; 47,036 acres)
- Carolina Sandhills National Wildlife Refuge (US Fish and Wildlife Service; 45,935 acres)
- J. Strom Thurmond Recreation Area (44,110 acres)
- Hartwell Lake (38,223 acres)
- Cape Romain National Wildlife Refuge (US Fish and Wildlife Service; 35,204 acres)
- Jocassee Gorges (South Carolina Department of Natural Resources; 32,600 acres)
- Cape Romain National Wildlife Refuge (Wilderness Area) (29,716 acres)
- Manchester State Forest (South Carolina Forestry Commission; 28,746 acres)
- Richard B. Russell Recreation Area (27,763 acres)
- Congaree National Park (National Park Service; 26,442 acres)
- Woodbury Wildlife Management Area (South Carolina Department of Natural Resources; 25,928 acres)
- Santee Coastal Reserve Wildlife Management Area (South Carolina Department of Natural Resources; 25,766 acres)
- Sparkleberry Swamp (South Carolina Public Service Authority; 23,608 acres)
- J. Strom Thurmond Lake (22,446 acres)
- Tom Yawkey Wildlife Center Heritage Preserve (South Carolina Department of Natural Resources; 20,304 acres)
- Joint Base Charleston (20,074 acres)
- Tom Yawkee Wildlife Center (19,779 acres)
- ... and 2,706 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.

Credits

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.

Data credits

Protected areas information is derived from the Protected Areas Database of the United States (PAD-US v4.0 and v3.0).

Future urban growth estimates derived from FUTURES model projections for the contiguous United States developed by the Center for Geospatial Analytics, NC State University.

Sea level rise data are derived from the National Oceanic and Atmospheric Administration's Sea Level Rise Inundation Depth Data and the 2022 Sea Level Rise Technical Report.

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