Southeast Conservation Blueprint Summary

for Florida

Created 01/23/2023

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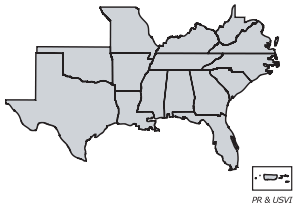
The Southeast Conservation Adaptation Strategy

SECAS



The Southeast Conservation Blueprint 2022

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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.

Across 15 states of the Southeast, 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. This portion of the Southeast Blueprint is referred to as the "Base Blueprint".

To provide more complete coverage of the SECAS geography, the Blueprint incorporates two additional input plans: the Florida Marine Blueprint for marine areas in Florida and the Caribbean Landscape Conservation Design for inland areas in Puerto Rico.

For more information:

- Visit the Blueprint webpage
- Review the Blueprint 2022 Development Process
- View and download the Blueprint data and make maps on the Blueprint page of the SECAS Atlas

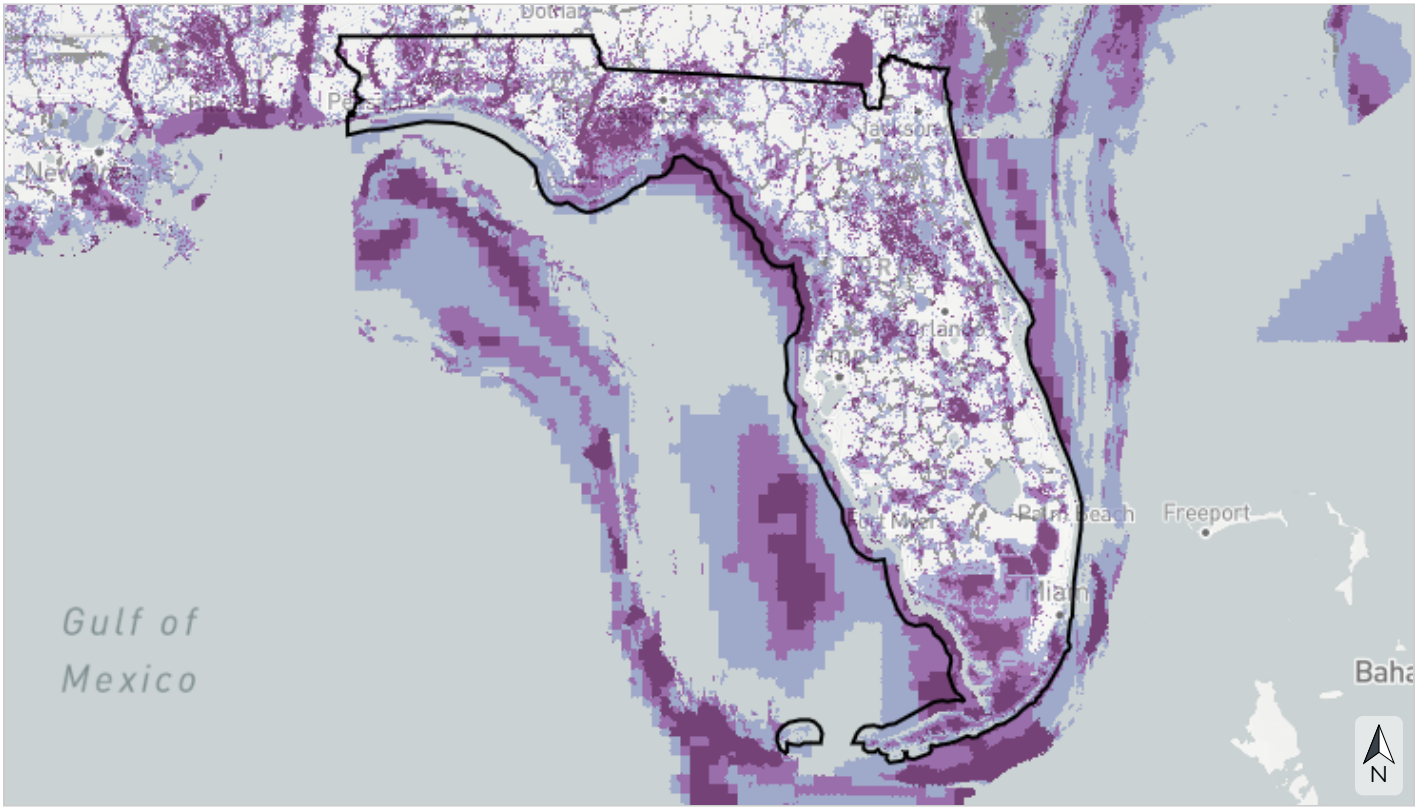
We're here to help!

- 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 Simple Viewer 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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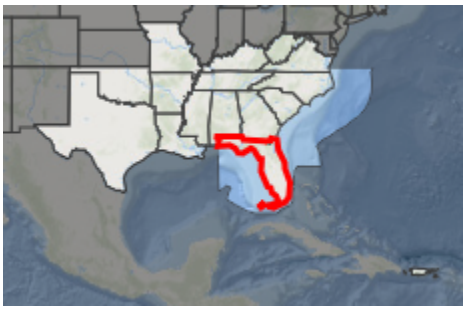


Priorities for a connected network of lands and waters

- 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

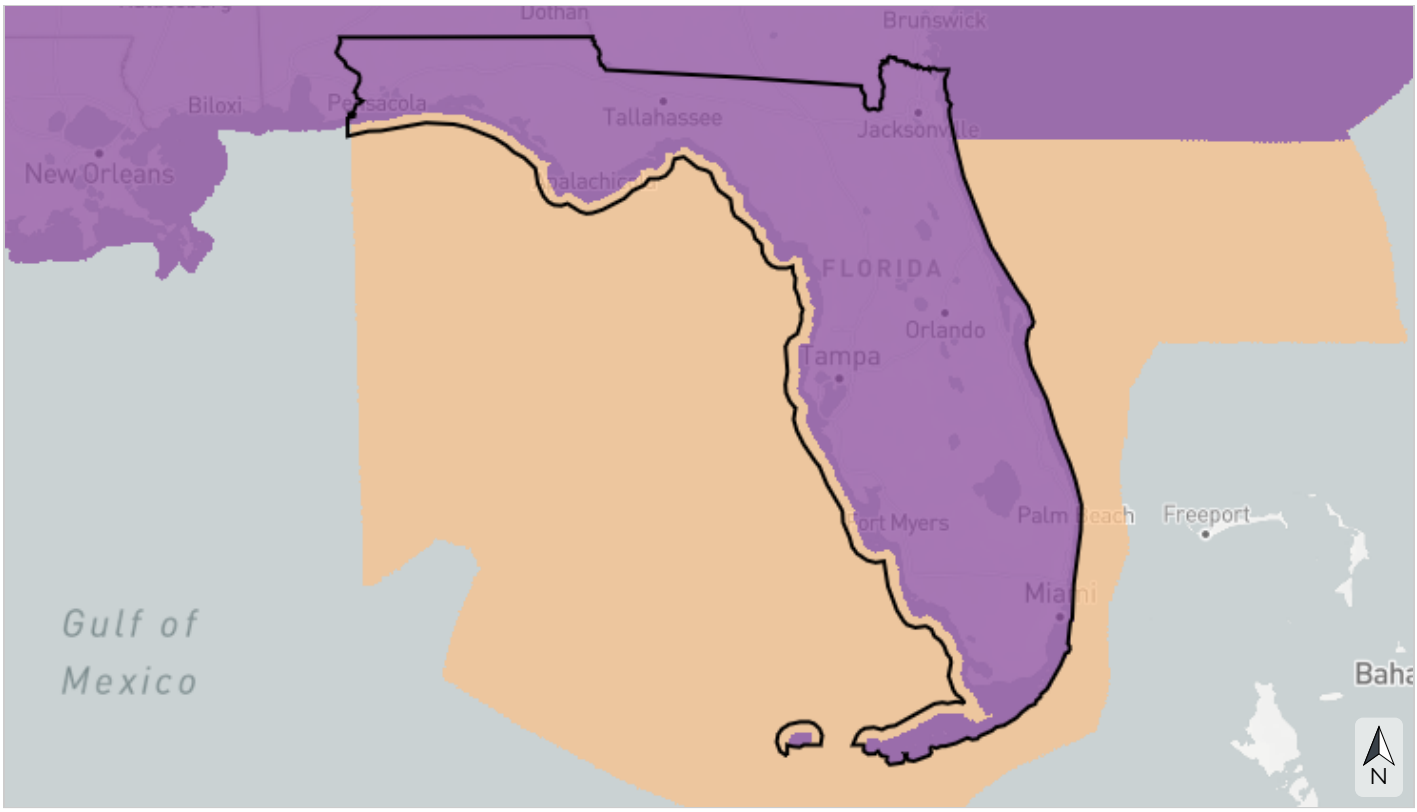
Connections between priority areas that cover the shortest distance possible while routing through as much Blueprint priority as possible. This class covers roughly 5% of the Southeast Blueprint geography.

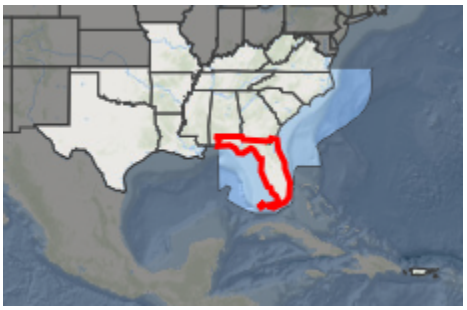
Table 1: Extent of each Blueprint priority category.

Priority Category	Acres	Percent of Area
Highest priority	5,659,875	12.4%
High priority	8,117,849	17.8%
Medium priority	10,531,709	23.0%
Priority connections	1,727,085	3.8%
Lower priority	19,655,111	43.0%
Outside Southeast Blueprint	*6,536*	*<0.1%*
Total area	**45,698,166**	**100%**

Southeast Blueprint Input Areas

This area spans multiple distinct inputs to the Southeast Blueprint.





Southeast Blueprint Input Areas

- Base Blueprint
- Florida Marine Blueprint

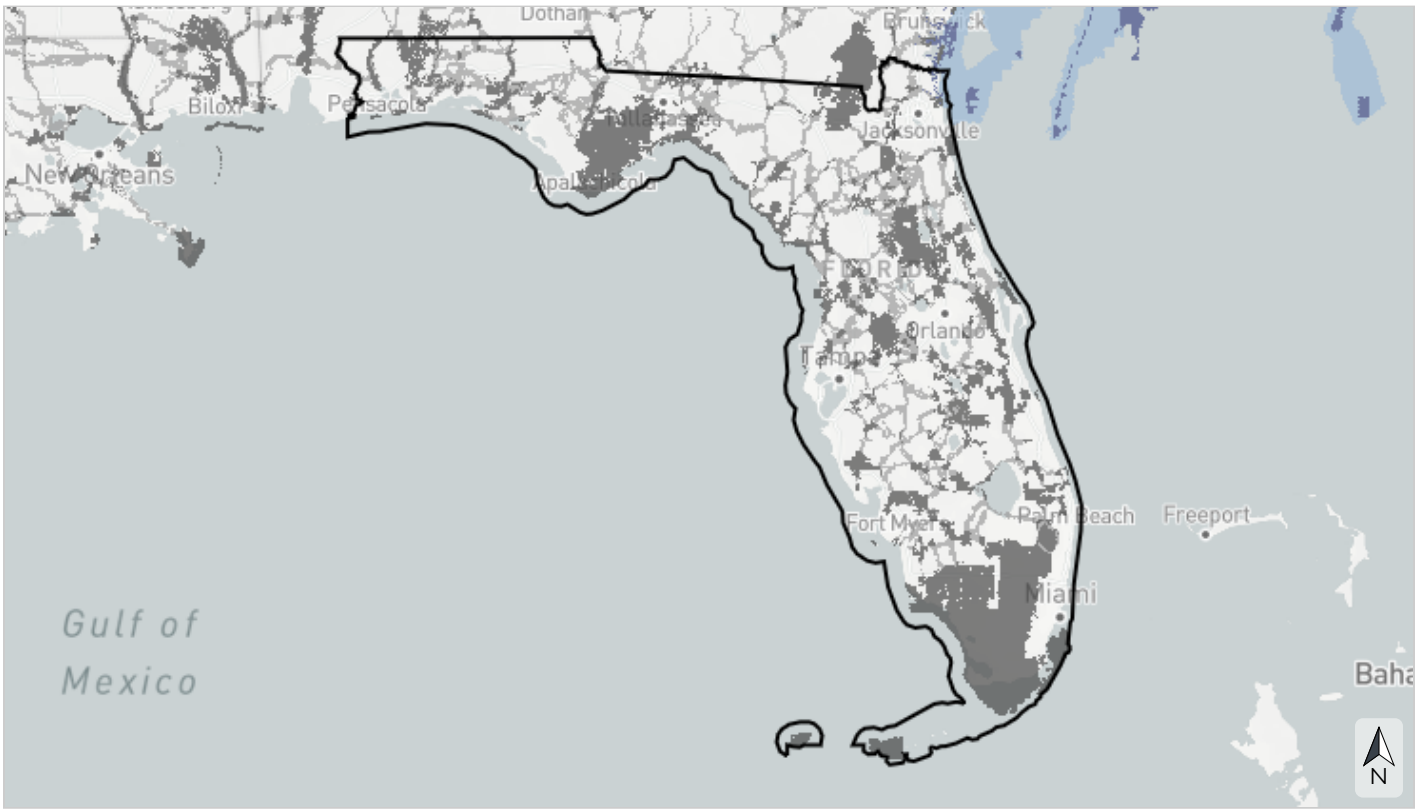
Table 2: Extent of each Southeast Blueprint input area category.

Southeast Blueprint Input Area	Acres	Percent of Area
Base Blueprint	42,043,137	92.0%
Florida Marine Blueprint	3,648,492	8.0%
Outside Southeast Blueprint	*6,536*	*<0.1%*
Total area	**45,698,166**	**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.

Inland hubs are large patches (~5,000+ acres) of highest priority Blueprint areas and/or protected lands, connected by inland corridors. Marine and estuarine hubs are large estuaries and large patches (~5,000+ acres) of highest priority Blueprint areas. Marine and estuarine corridors connect those hubs within broad marine mammal movement areas.



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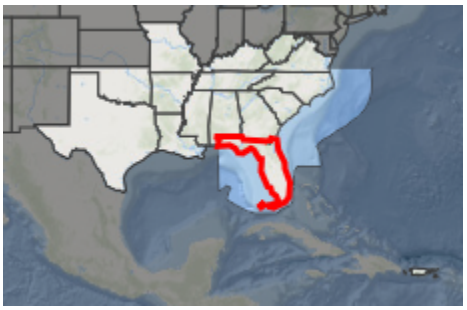


- Inland hubs
- Inland corridors
- Marine & estuarine hubs
- Marine & estuarine corridors
- Not a hub or corridor

Table 3: Extent of hubs and corridors.

Type	Acres	Percent of Area
Inland hubs	10,947,372	24.0%
Inland corridors	4,762,272	10.4%
Marine & estuarine hubs	22,501	<0.1%
Marine & estuarine corridors	54,533	0.1%
Not a hub or corridor	26,256,459	57.5%
Outside Base Blueprint input area	*3,648,492*	*8.0%*
Outside Southeast Blueprint	*6,536*	*<0.1%*
Total area	**45,698,166**	**100%**

Indicator Summary

Table 4: Terrestrial indicators.

Indicator	Present
East Coastal Plain open pine birds	✓
Equitable access to potential parks	✓
Fire frequency	✓
Great Plains perennial grasslands	-
Greenways & trails	✓
Intact habitat cores	✓
Interior Southeast grasslands	✓
Mississippi Alluvial Valley forest birds (protection)	-
Mississippi Alluvial Valley forest birds (reforestation)	-
Playas	-
Resilient terrestrial sites	✓
South Atlantic amphibian & reptile areas	✓
South Atlantic forest birds	✓
South Atlantic low-urban historic landscapes	✓
Urban park size	✓
West Coastal Plain & Ouachitas forested wetland birds	-
West Coastal Plain & Ouachitas open pine birds	-
West Gulf Coast mottled duck nesting	-

Table 5: Freshwater indicators.

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

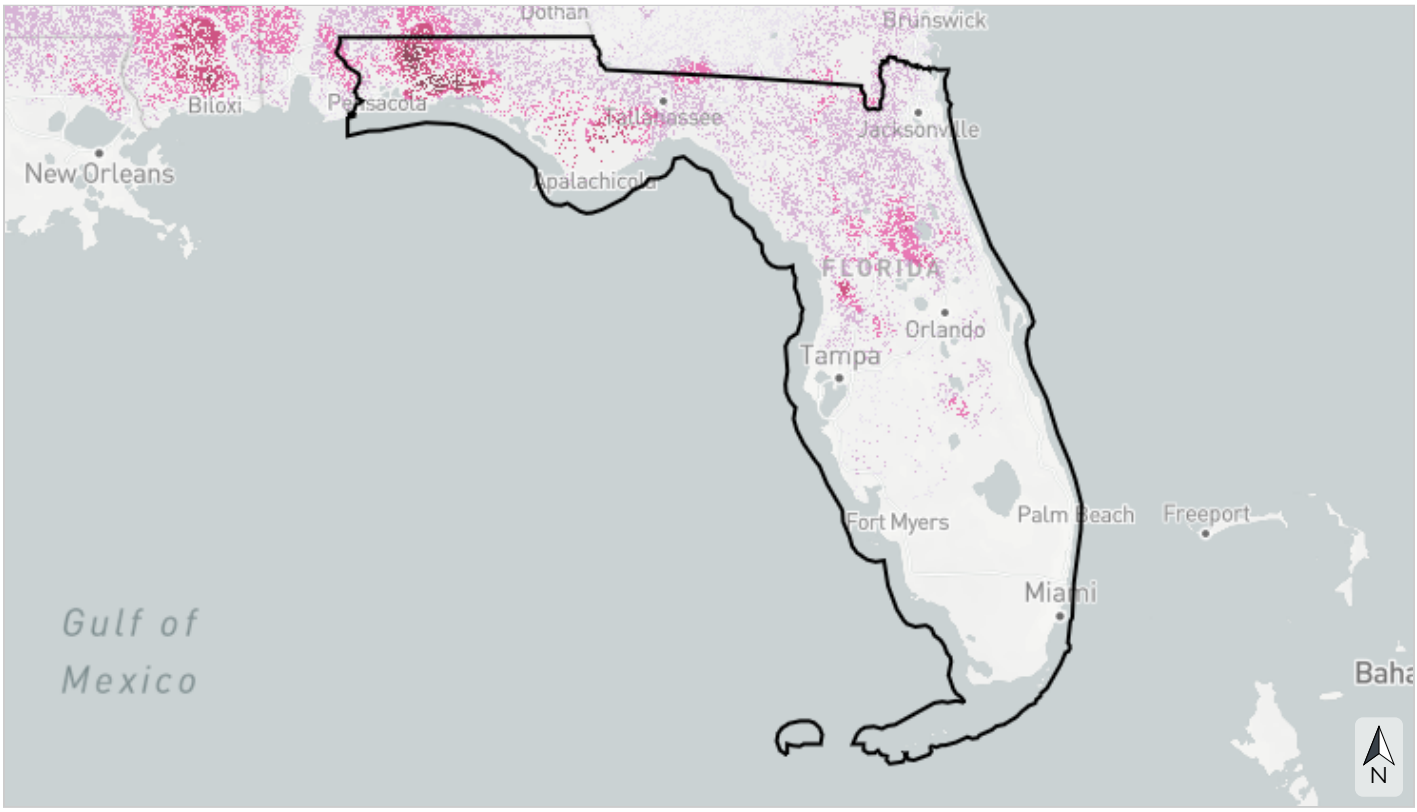
Table 6: Coastal & marine indicators.

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

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 source bird populations. It originates from the East Gulf Coastal Plain Joint Venture's prioritization of areas for open pine ecosystem restoration.



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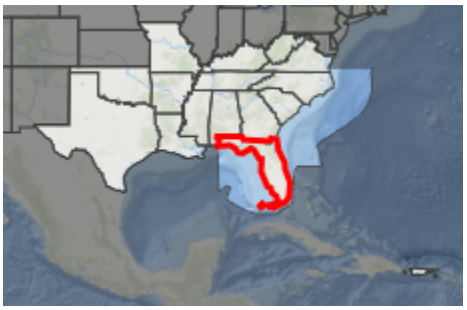


- High priority for open pine conservation for focal bird species (Bachman's sparrow, red-cockaded woodpecker, Henslow's sparrow, red-headed woodpecker, Northern bobwhite, and brown-headed nuthatch) (score >80-100)
- Medium-high priority (score >60-80)
- Medium priority (score >40-60)
- Medium-low priority (score >20-40)
- Low priority for open pine conservation for focal bird species (score 0-20)

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

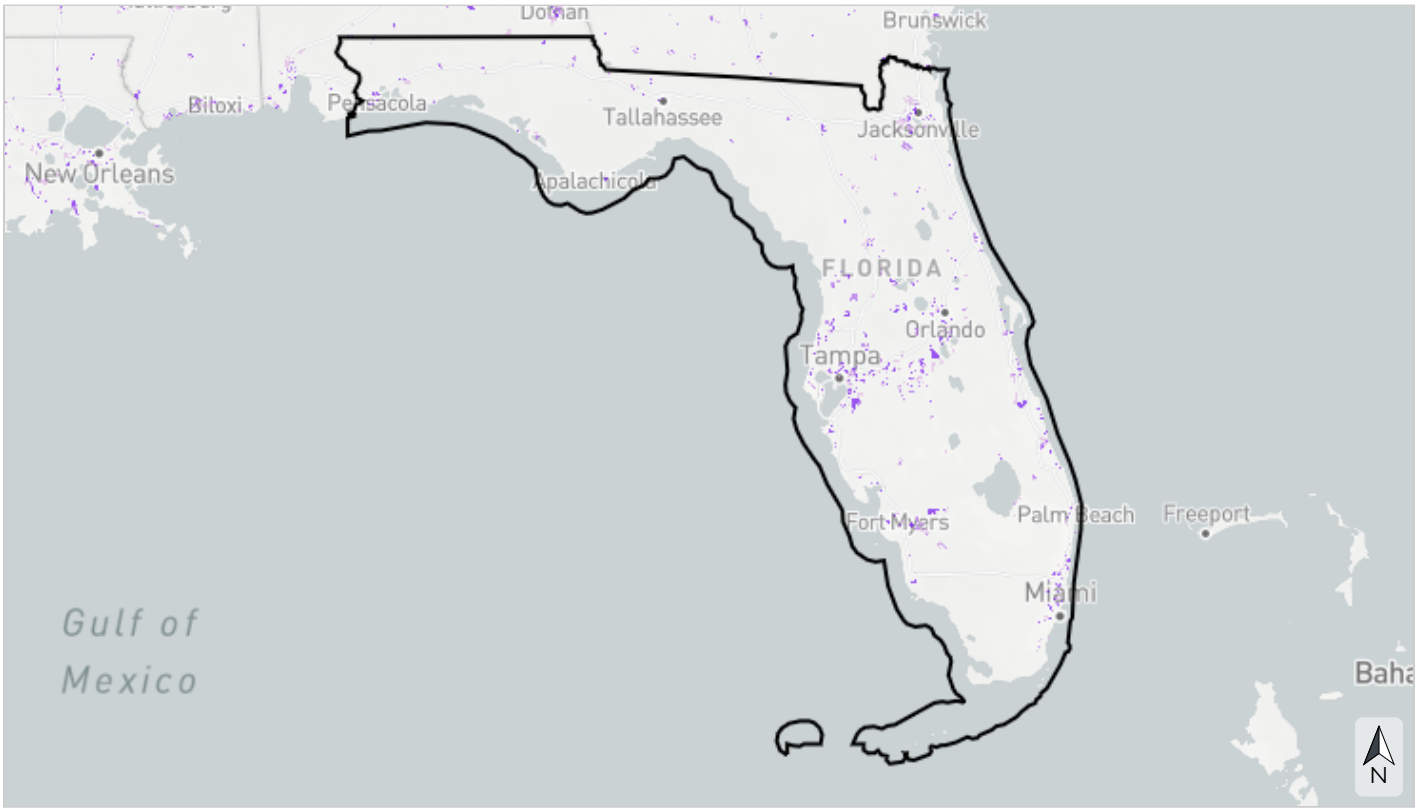
	Indicator Values	Acres	Percent of Area
↑ High	High priority for open pine conservation for focal bird species (Bachman's sparrow, red-cockaded woodpecker, Henslow's sparrow, red-headed woodpecker, Northern bobwhite, and brown-headed nuthatch) (score >80-100)	141,076	0.3%
	Medium-high priority (score >60-80)	401,386	0.9%
	Medium priority (score >40-60)	1,227,550	2.7%
	Medium-low priority (score >20-40)	3,593,119	7.9%
↓ Low	Low priority for open pine conservation for focal bird species (score 0-20)	564,675	1.2%
	Area not evaluated for this indicator	*36,115,330*	*79.0%*
	Outside Base Blueprint input area	*3,648,492*	*8.0%*
	Outside Southeast Blueprint	*6,536*	*<0.1%*
	Total area	**45,698,166**	**100%**

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

Terrestrial

Equitable access to potential 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. 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.



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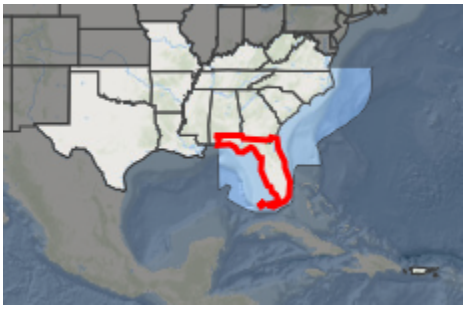


- Very high priority for a new park that would create nearby equitable access
- High priority for a new park that would create nearby equitable access
- Moderate priority for a new park that would create nearby equitable access

Table 8: Indicator values for equitable access to potential parks in this area. A good condition threshold is not yet defined for this indicator.

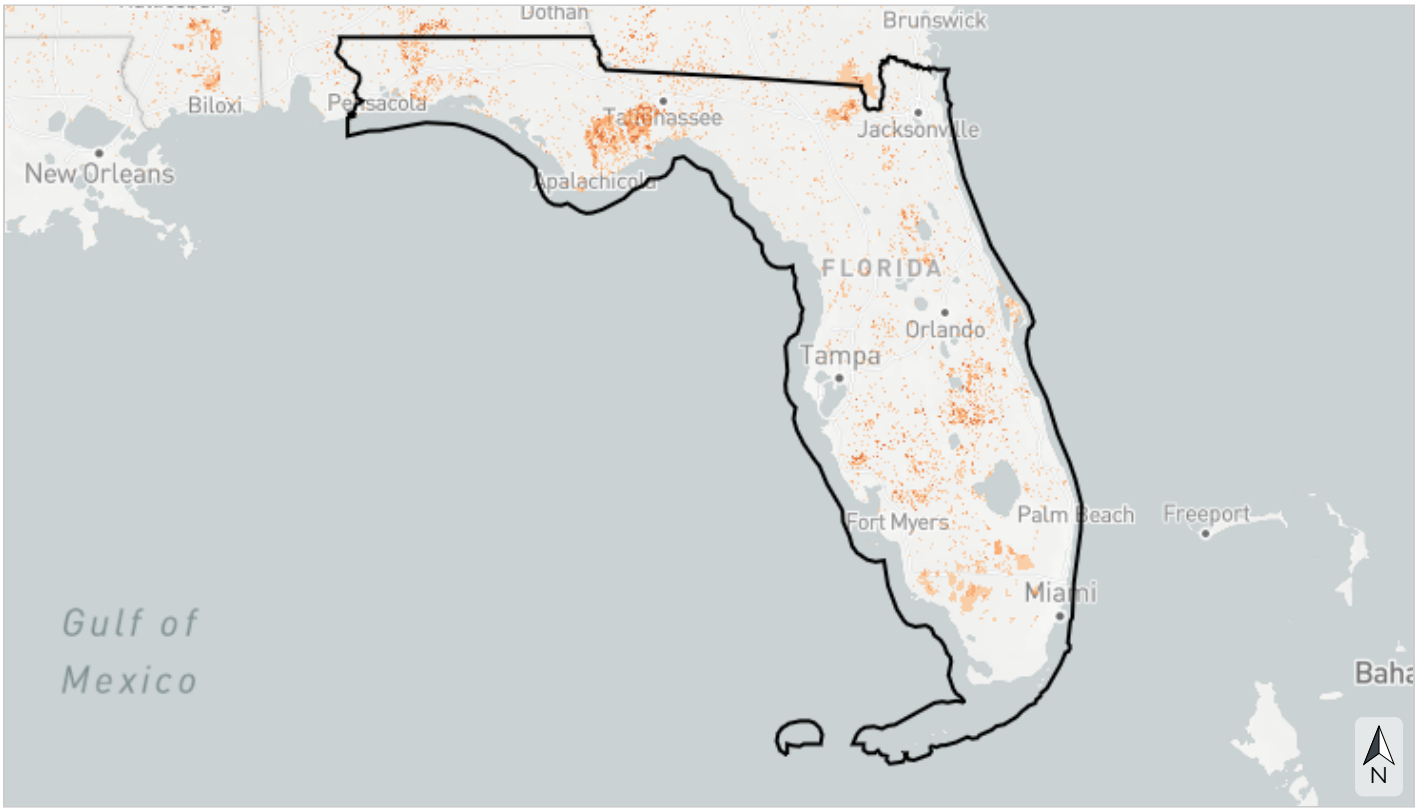
	Indicator Values	Acres	Percent of Area
↑ High	Very high priority for a new park that would create nearby equitable access	242,084	0.5%
	High priority for a new park that would create nearby equitable access	251,217	0.5%
↓ Low	Moderate priority for a new park that would create nearby equitable access	322,143	0.7%
	Area not evaluated for this indicator	*41,227,693*	*90.2%*
	Outside Base Blueprint input area	*3,648,492*	*8.0%*
	Outside Southeast Blueprint	*6,536*	*<0.1%*
	Total area	**45,698,166**	**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 both 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.



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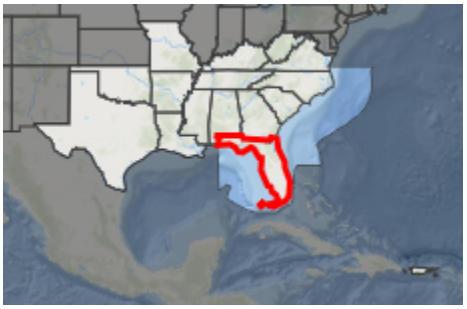


- Burned 3+ times from 2013-2021
- Burned 2 times from 2013-2021
- Burned 1 time from 2013-2021
- Not burned from 2013-2021 or row crop

Table 9: Indicator values for fire frequency in this area. Good condition thresholds reflect the range of indicator values that occur in healthy, functioning ecosystems.

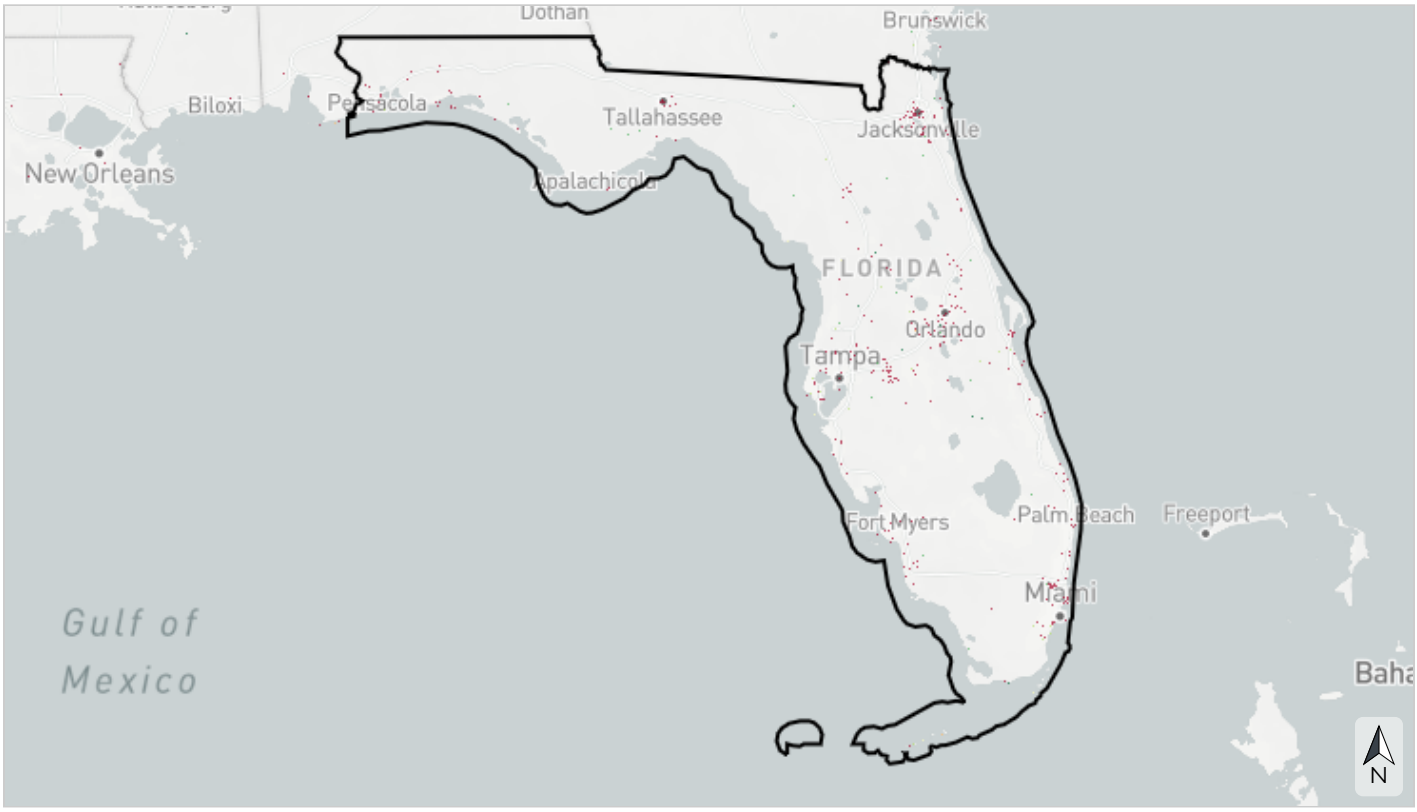
	Indicator Values	Acres	Percent of Area	
↑ High	Burned 3+ times from 2013-2021	233,686	0.5%	
	Burned 2 times from 2013-2021	798,439	1.7%	↑ In good condition
	Burned 1 time from 2013-2021	2,400,843	5.3%	↓ Not in good condition
↓ Low	Not burned from 2013-2021 or row crop	38,608,849	84.5%	
	Area not evaluated for this indicator	*1,320*	*<0.1%*	
	Outside Base Blueprint input area	*3,648,492*	*8.0%*	
	Outside Southeast Blueprint	*6,536*	*<0.1%*	
	Total area	**45,698,166**	**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.



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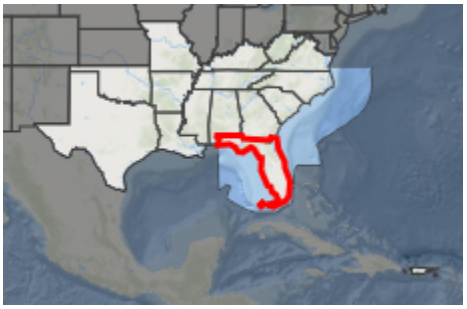


- Mostly natural and connected for ≥40 km
- Mostly natural and connected for 5 to <40 km or partly natural and connected for ≥40 km
- Mostly natural and connected for 1.9 to <5 km, partly natural and connected for 5 to <40 km, or developed and ≥40 km
- Mostly natural and connected for <1.9 km, partly 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 or other path

Table 10: Indicator values for greenways & trails in this area. Good condition thresholds reflect the range of indicator values that occur in healthy, functioning ecosystems.

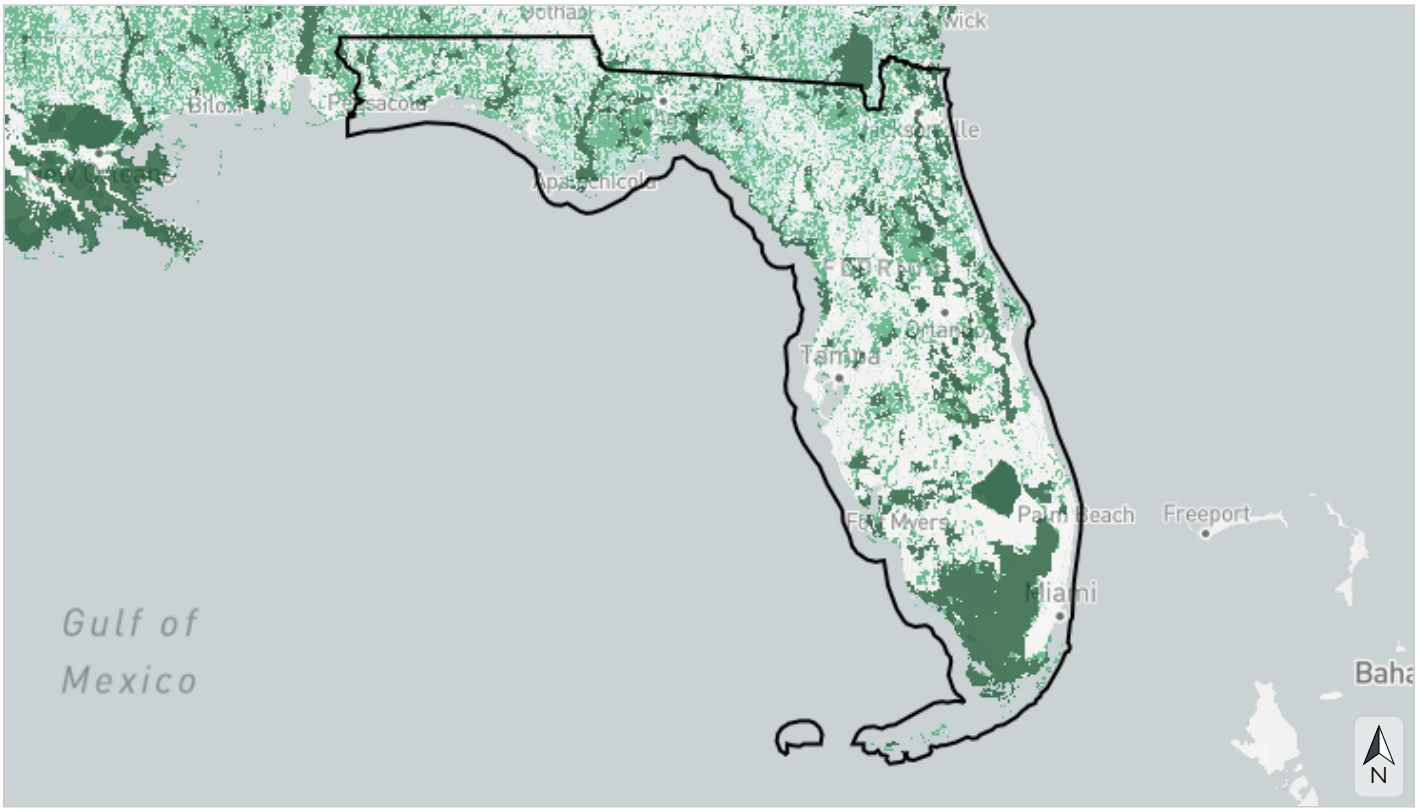
	Indicator Values	Acres	Percent of Area	
↑ High	Mostly natural and connected for ≥40 km	7,245	<0.1%	
	Mostly natural and connected for 5 to <40 km or partly natural and connected for ≥40 km	12,909	<0.1%	
	Mostly natural and connected for 1.9 to <5 km, partly natural and connected for 5 to <40 km, or developed and ≥40 km	11,506	<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	3,613	<0.1%	↑ In good condition
	Partly natural and connected for <1.9 km or developed and connected for 1.9 to <5 km	2,244	<0.1%	↓ Not in good condition
	Developed and connected for <1.9 km	805	<0.1%	
↓ Low	Sidewalk or other path	250,651	0.5%	
	Area not evaluated for this indicator	*41,754,166*	*91.4%*	
	Outside Base Blueprint input area	*3,648,492*	*8.0%*	
	Outside Southeast Blueprint	*6,536*	*<0.1%*	
	Total area	**45,698,166**	**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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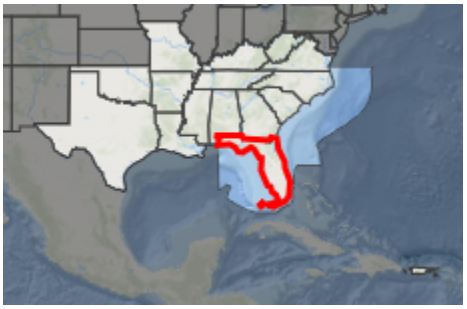


- Large core (>10,000 acres)
- Medium core (>1,000-10,000 acres)
- Small core (>100-1,000 acres)
- Not a core

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

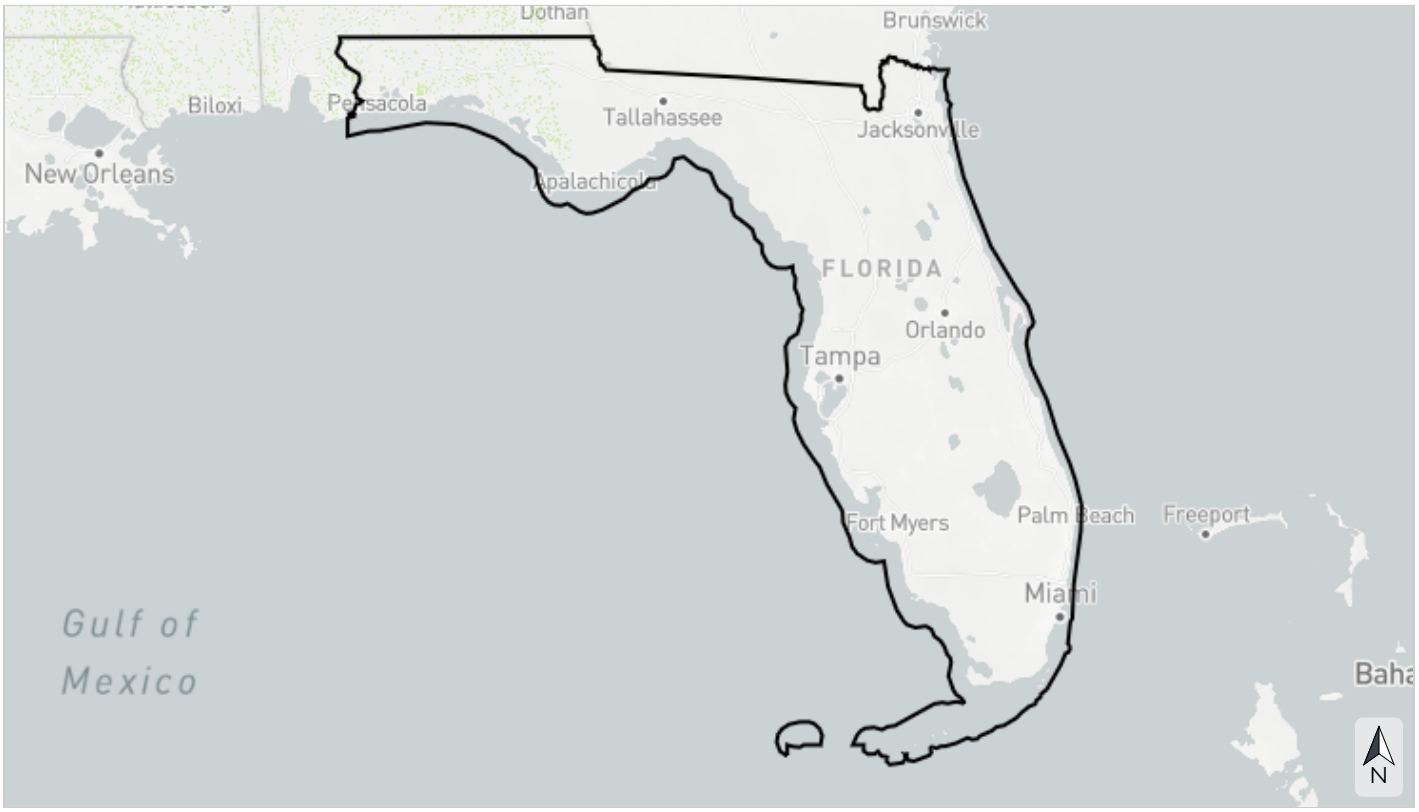
	Indicator Values	Acres	Percent of Area	
↑ High	Large core (>10,000 acres)	7,882,144	17.2%	
	Medium core (>1,000-10,000 acres)	7,476,883	16.4%	
	Small core (>100-1,000 acres)	4,272,359	9.3%	↑ In good condition
↓ Low	Not a core	22,410,432	49.0%	↓ Not in good condition
	Area not evaluated for this indicator	*1,320*	*<0.1%*	
	Outside Base Blueprint input area	*3,648,492*	*8.0%*	
	Outside Southeast Blueprint	*6,536*	*<0.1%*	
	Total area	**45,698,166**	**100%**	

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

Terrestrial

Interior Southeast grasslands

This indicator represents grasslands in the interior southeastern United States, which support important plants, birds, and pollinators. It includes grasslands with and without trees that are historically maintained by geology (e.g., outcrops, glades, and barrens), fire (e.g., Piedmont prairies), and/or the regular violent flooding on the banks of high-energy rivers known as “riverscour” (e.g, riverscour prairies). Known grasslands receive the highest scores, followed by bumble bee habitat buffers around known sites, areas in potentially compatible management, and restoration opportunities within grassland geology. This indicator combines data from multiple sources, including the Southeastern Grasslands Initiative, the Central Hardwoods Joint Venture, the Rangeland Analysis Platform, and The Nature Conservancy.



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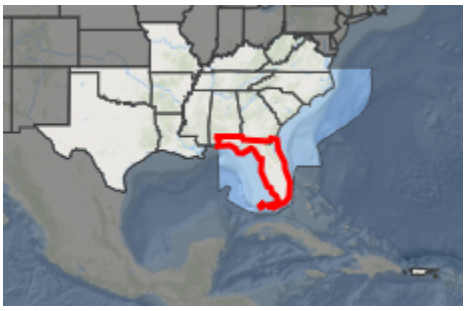


- Known grassland
- Known grassland buffer
- Potentially compatible management within grassland geology (undeveloped powerline right-of-way or perennial forbs and grasses)
- Potentially compatible management outside of grassland geology (undeveloped powerline right-of-way or perennial forbs and grasses)
- Grassland geology
- Grassland less likely

Table 12: Indicator values for Interior Southeast grasslands in this area. A good condition threshold is not yet defined for this indicator.

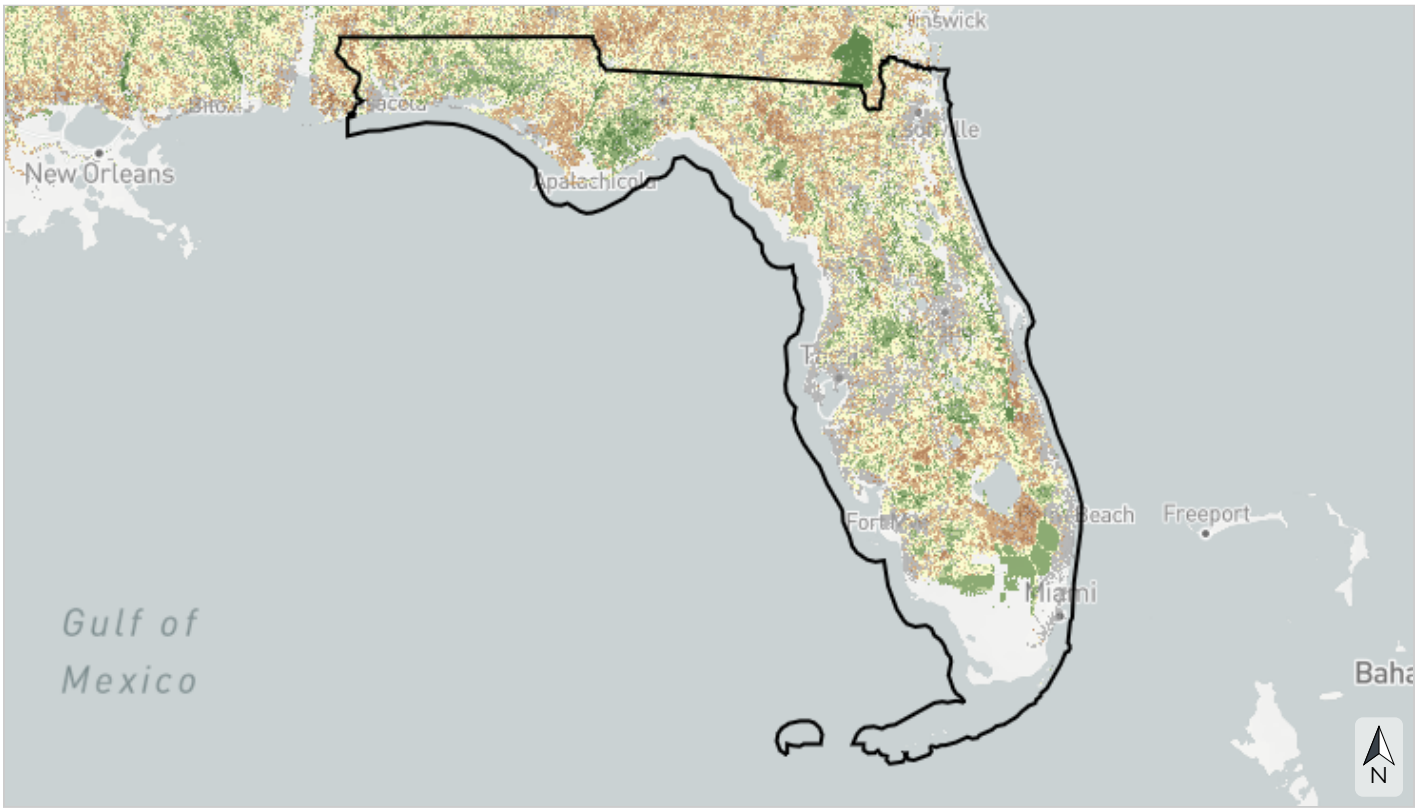
	Indicator Values	Acres	Percent of Area
↑ High	Known grassland	0	0%
	Known grassland buffer	0	0%
	Potentially compatible management within grassland geology (undeveloped powerline right-of-way or perennial forbs and grasses)	67	<0.1%
	Potentially compatible management outside of grassland geology (undeveloped powerline right-of-way or perennial forbs and grasses)	338,117	0.7%
	Grassland geology	316	<0.1%
↓ Low	Grassland less likely	4,161,358	9.1%
	Area not evaluated for this indicator	*37,543,279*	*82.2%*
	Outside Base Blueprint input area	*3,648,492*	*8.0%*
	Outside Southeast Blueprint	*6,536*	*<0.1%*
	Total area	**45,698,166**	**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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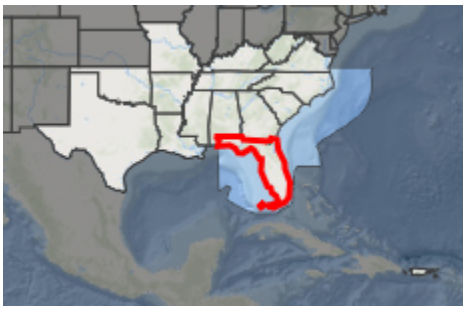


- Most resilient
- More resilient
- Slightly more resilient
- Average/median resilience
- Slightly less resilient
- Less resilient
- Least resilient
- Developed

Table 13: Indicator values for resilient terrestrial sites in this area. A good condition threshold is not yet defined for this indicator.

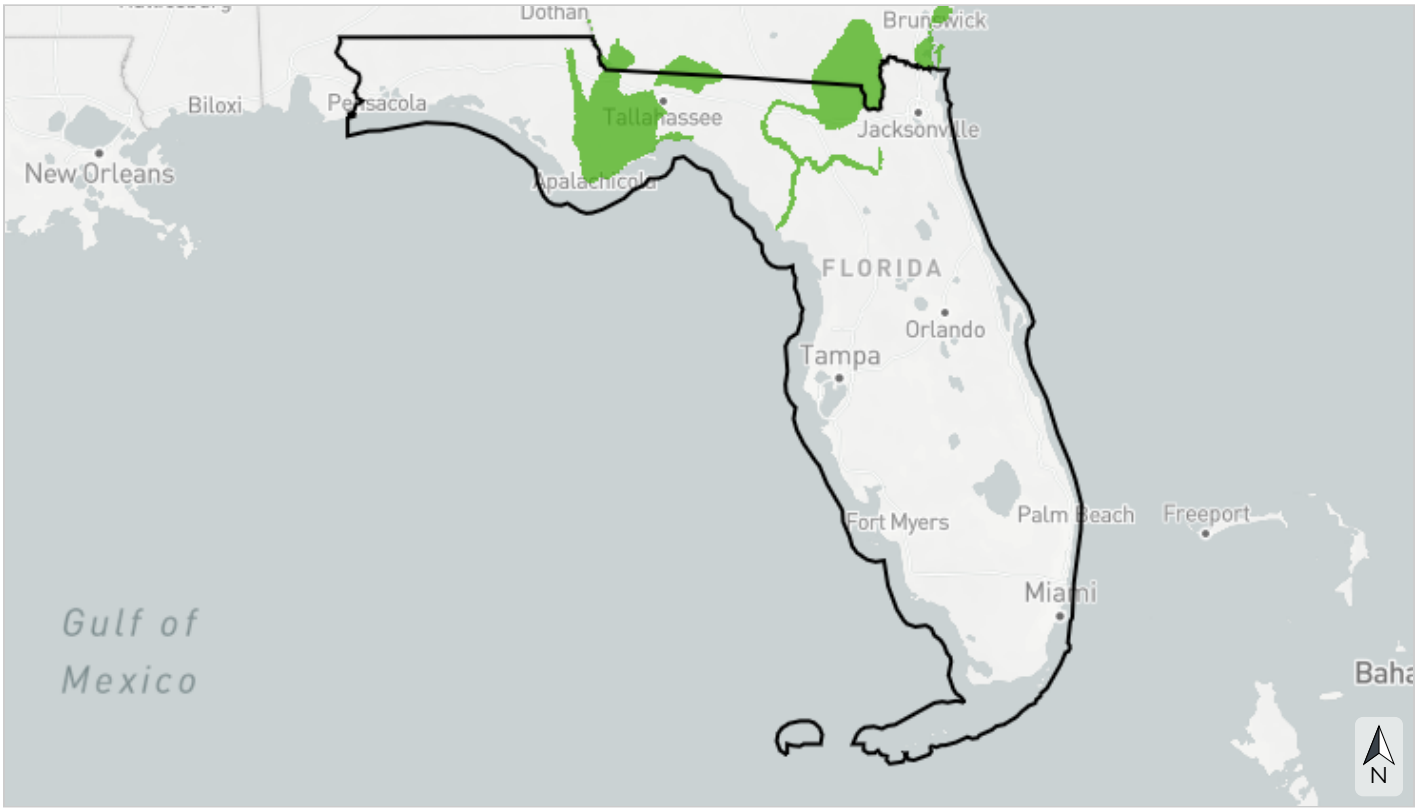
	Indicator Values	Acres	Percent of Area
↑ High	Most resilient	540,595	1.2%
	More resilient	4,110,579	9.0%
	Slightly more resilient	3,773,682	8.3%
	Average/median resilience	8,189,379	17.9%
	Slightly less resilient	3,179,043	7.0%
	Less resilient	3,497,260	7.7%
	Least resilient	866,993	1.9%
↓ Low	Developed	5,375,658	11.8%
	Area not evaluated for this indicator	*12,509,948*	*27.4%*
	Outside Base Blueprint input area	*3,648,492*	*8.0%*
	Outside Southeast Blueprint	*6,536*	*<0.1%*
	Total area	**45,698,166**	**100%**

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

Terrestrial

South Atlantic amphibian & reptile areas

This indicator represents Priority Amphibian and Reptile Conservation Areas (PARCAs) in the South Atlantic. 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).



Basemap credits: Esri, HERE, Garmin, (c) OpenStreetMap contributors, and the GIS user community

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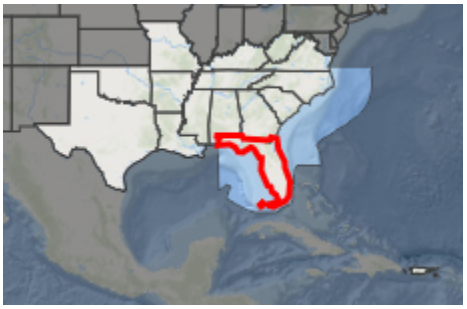


Priority Amphibian and Reptile Conservation Area (PARCA)

Not a Priority Amphibian and Reptile Conservation Area (PARCA)

Table 14: Indicator values for South Atlantic amphibian & reptile areas in this area. 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)	2,809,854	6.1%
↓ Low	Not a Priority Amphibian and Reptile Conservation Area (PARCA)	7,202,824	15.8%
	Area not evaluated for this indicator	*32,030,459*	*70.1%*
	Outside Base Blueprint input area	*3,648,492*	*8.0%*
	Outside Southeast Blueprint	*6,536*	*<0.1%*
	Total area	**45,698,166**	**100%**

Priority Amphibian and Reptile Conservation Areas:

Apalachicola
Extensive areas of longleaf pine savannas and sandhill habitat with a variety of wetlands, rivers, and streams; frosted flatwoods salamander (largest population with ca. 60 ponds), gopher frog, striped newt (once known from 20 ponds, but populations have seriously declined), gopher tortoise, Apalachicola dusky salamander, Barbour's map turtle, alligator snapping turtle, coal skink, Apalachicola kingsnake, southern copperhead.

Camp Blanding
Extensive sandhill habitat with assorted wetlands; species of note include striped newt, gopher frog, gopher tortoise, Florida pine snake, eastern indigo snake.

Florida Red Hills
Upland pine forest with gopher tortoises, primarily on quail plantations. It's not clear what is important about this area – no indigo records, one extinct striped newt pond, no gopher frog records; it is good for diamondback rattlesnakes, but they occur almost everywhere in Florida.

Georgia Barrier Islands and Marshes
Nesting (island beaches) and/or foraging habitat (estuaries and nearshore waters) for four marine turtles (green, loggerhead, Kemp's ridley, and leatherback). Estuaries and embedded marsh islands are habitat for diamondback terrapins. Other rare species found in upland areas in this region include island glass lizards and dense populations of eastern diamondback rattlesnakes.

Lake Seminole Region
Longleaf pine communities and embedded isolated wetlands provide habitat for gopher tortoises and eastern diamondback rattlesnakes. The Lower Chattahoochee and Flint Rivers, as well as Spring Creek, are inhabited by good populations of Barbour's map and alligator snapping turtles. Apalachicola dusky and Chamberlain's dwarf salamanders are found in seepages in this region. This area is underlain by the

Floridan aquifer, which is home to the Georgia blind salamander.

Okefenokee Swamp
This is the largest wetland in Georgia and includes both embedded (islands) and adjacent upland habitats. Striped crayfish snakes and Florida red-bellied turtles, found in very few other places in Southeast Georgia, thrive here. Frosted flatwoods salamanders, striped newts, gopher frogs, many-lined salamanders, dwarf sirens, carpenter Frogs, gopher tortoises, spotted turtles, eastern indigo snakes, eastern diamondback rattlesnakes, Florida green watersnakes, and perhaps mimic glass lizards all occur here.

St. Marks
Pine flatwoods, sandhills, and coastal habitats that support the second largest population of the frosted flatwoods salamander (>40 breeding ponds), but striped newts and gopher frogs were last recorded here in 1979. Species of note include the one-toed amphiuma, gopher tortoise, eastern kingsnake, Gulf salt marsh snake, and the westernmost record of the spotted turtle.

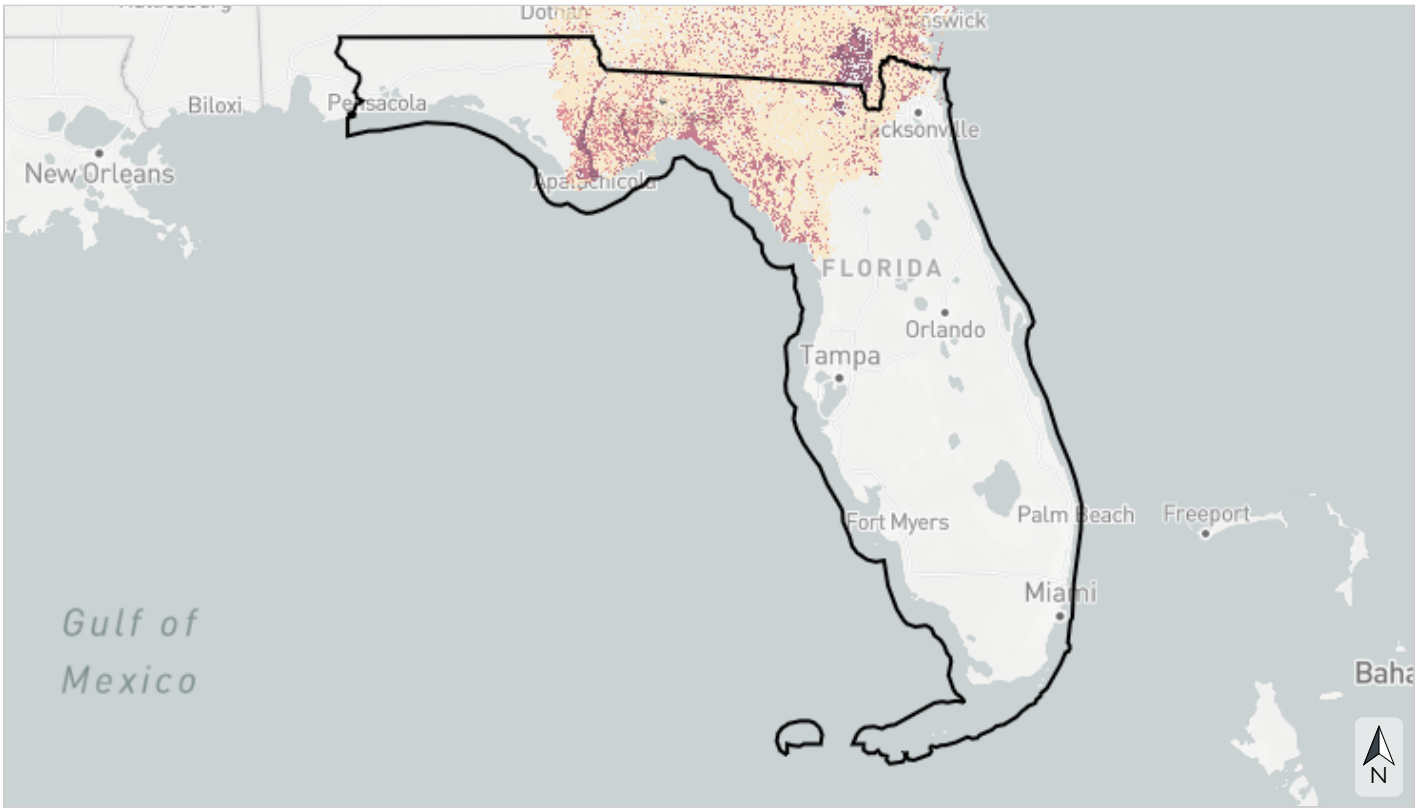
Suwannee/Santa Fe/Osceola
Extensive pine flatwoods and swamps (Osceola) and sandhill habitat (along the Suwannee and Santa Fe Rivers). Species of note include the easternmost population of the alligator snapping turtle (may be a separate taxon), Suwannee cooter, indigo snake, tiger salamander, gopher tortoise, southern hognose snake, and Florida pine snake along the Suwannee and Santa Fe rivers, in addition to the many-lined salamander, carpenter frog, timber rattlesnake, spotted turtle, and possibly the last remaining population of the frosted flatwoods salamander on public land in the peninsula (Osceola).

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. This indicator originates from Southeast Gap Analysis Program and Designing Sustainable Landscapes bird habitat models.



Basemap credits: Esri, HERE, Garmin, (c) OpenStreetMap contributors, and the GIS user community

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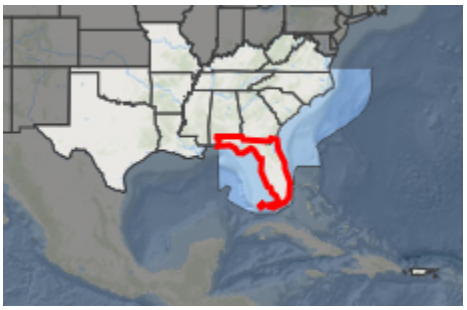


- Very large patches near water (potential for presence of Swainson's warbler)
- Large patches often near water (potential for presence of Northern parula, black-throated green warbler, or Prothonotary warbler)
- Medium patches (potential for presence of Acadian flycatcher)
- Small patches often near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

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

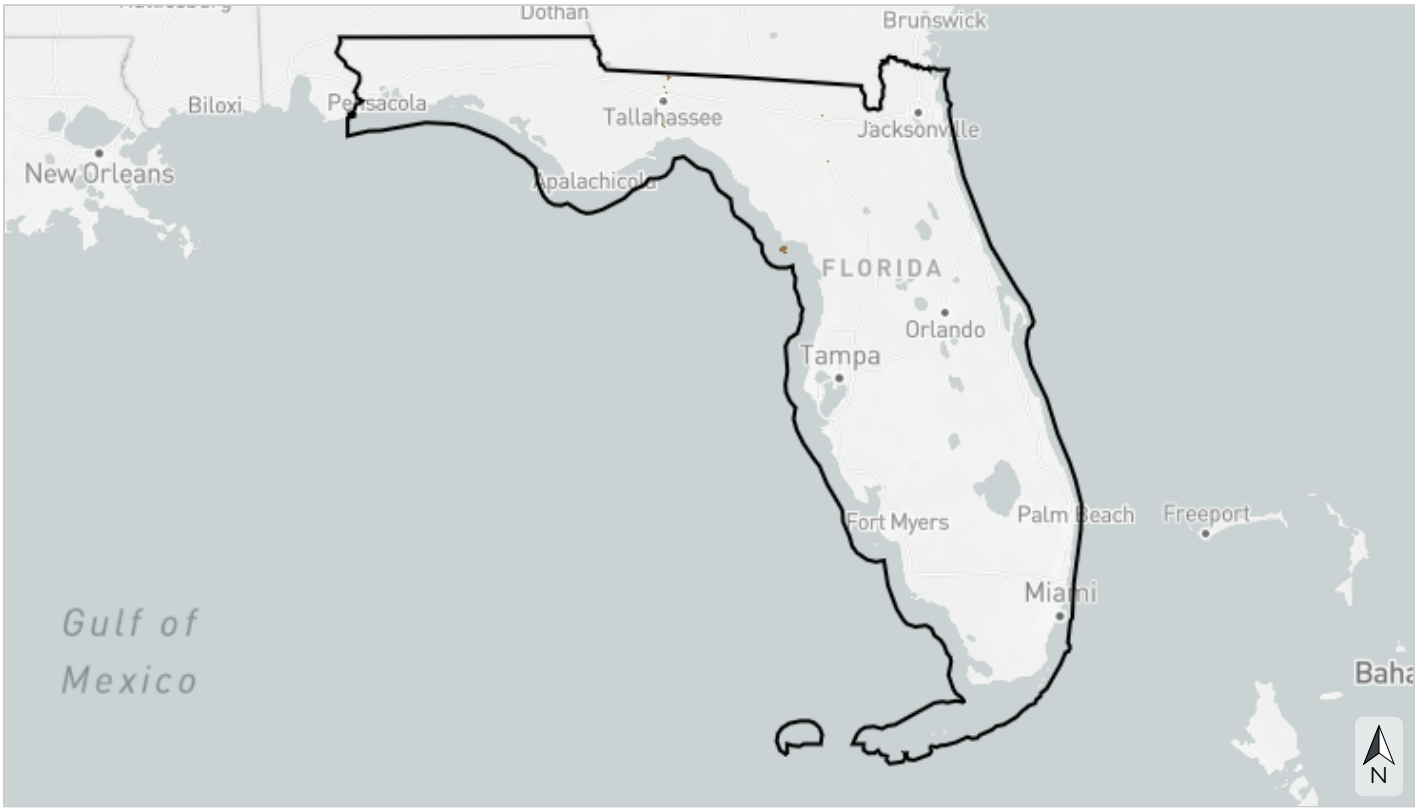
	Indicator Values	Acres	Percent of Area	
↑ High	Very large patches near water (potential for presence of Swainson's warbler)	184,698	0.4%	
	Large patches often near water (potential for presence of Northern parula, black-throated green warbler, or Prothonotary warbler)	1,618,897	3.5%	
	Medium patches (potential for presence of Acadian flycatcher)	421,114	0.9%	
	Small patches often near water (potential presence of hooded warbler or Kentucky warbler)	100,454	0.2%	↑ In good condition
	Very small patches or near open areas (potential for presence of wood thrush, whip-poor-will, red-headed woodpecker, Chuck-will's widow, or American woodcock)	5,742,186	12.6%	↓ Not in good condition
↓ Low	Less potential for presence of forest bird index species	1,935,081	4.2%	
	Area not evaluated for this indicator	*32,040,706*	*70.1%*	
	Outside Base Blueprint input area	*3,648,492*	*8.0%*	
	Outside Southeast Blueprint	*6,536*	*<0.1%*	
	Total area	**45,698,166**	**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. This indicator originates from the National Park Service and various state historic resource agencies.



Basemap credits: Esri, HERE, Garmin, (c) OpenStreetMap contributors, and the GIS user community

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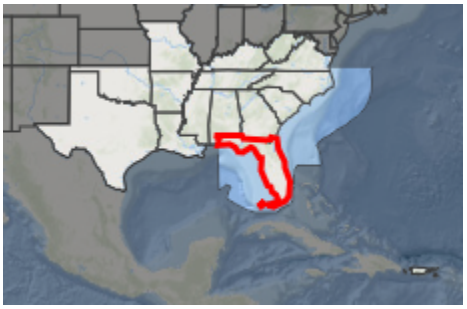


- Historic place with nearby low-urban buffer
- Historic place with nearby high-urban buffer
- Not in the National Register of Historic Places

Table 16: Indicator values for South Atlantic low-urban historic landscapes in this area. Good condition thresholds reflect the range of indicator values that occur in healthy, functioning ecosystems.

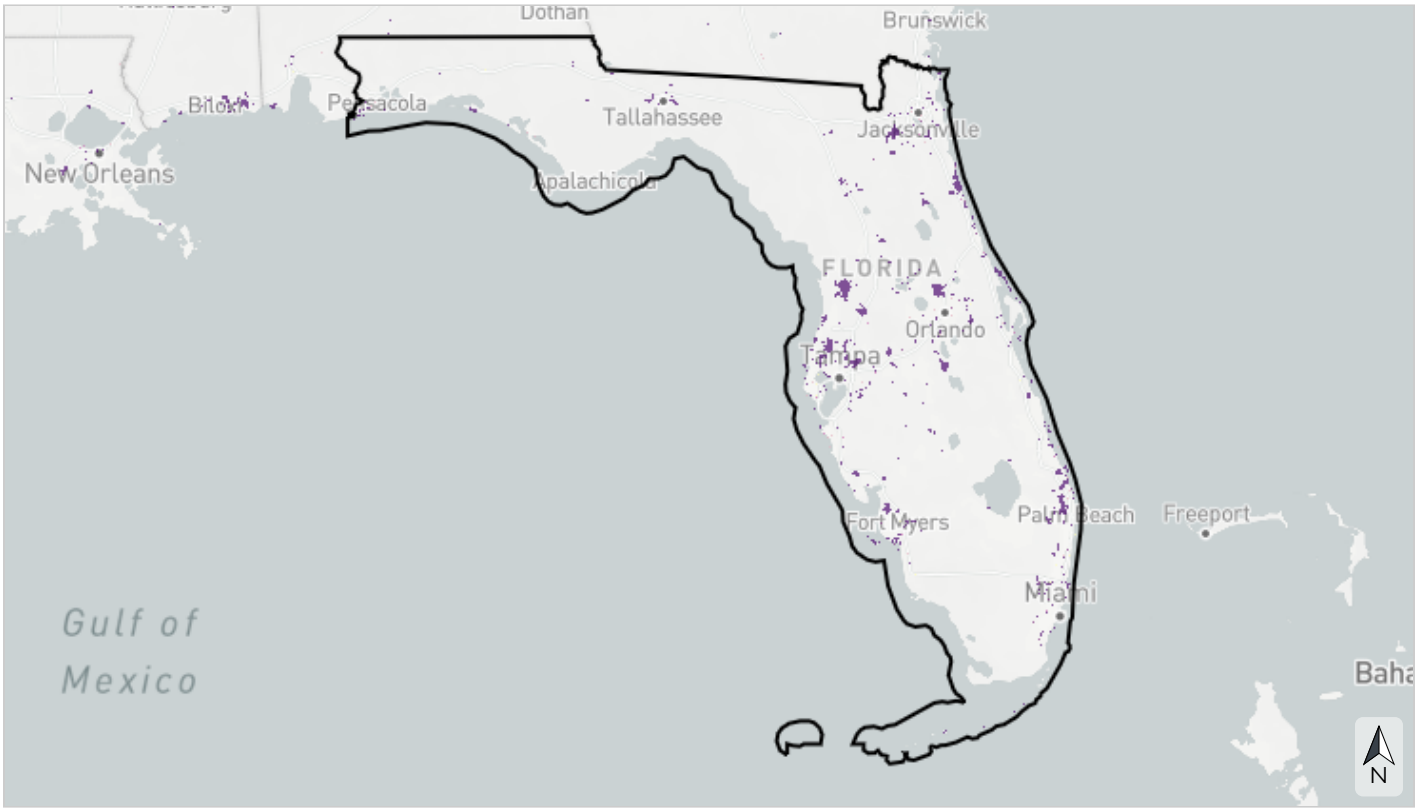
	Indicator Values	Acres	Percent of Area	
↑ High	Historic place with nearby low-urban buffer	23,523	<0.1%	↑ In good condition
	Historic place with nearby high-urban buffer	2,915	<0.1%	↓ Not in good condition
↓ Low	Not in the National Register of Historic Places	9,965,648	21.8%	
	Area not evaluated for this indicator	*32,051,051*	*70.1%*	
	Outside Base Blueprint input area	*3,648,492*	*8.0%*	
	Outside Southeast Blueprint	*6,536*	*<0.1%*	
	Total area	**45,698,166**	**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 U.S. Geological Survey's Protected Areas Database and 2019 National Land Cover Database percent developed impervious layer.



Basemap credits: Esri, HERE, Garmin, (c) OpenStreetMap contributors, and the GIS user community

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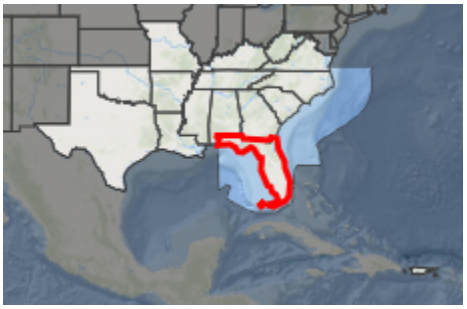


- >75 acre urban park
- >50-75 acre urban park
- >30-50 acre urban park
- >10-30 acre urban park
- 5-10 acre urban park

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

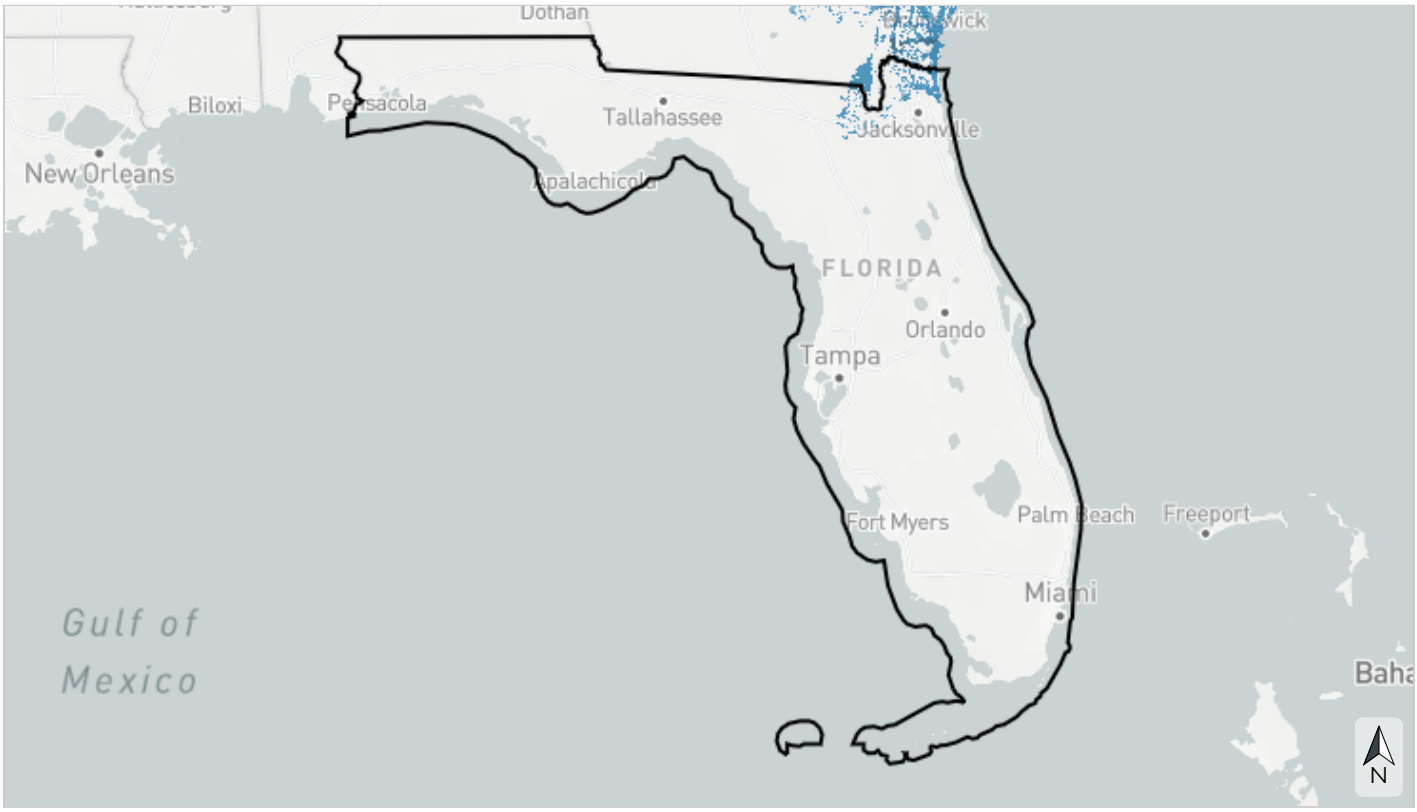
	Indicator Values	Acres	Percent of Area
↑ High	>75 acre urban park	705,486	1.5%
	>50-75 acre urban park	16,090	<0.1%
	>30-50 acre urban park	17,906	<0.1%
	>10-30 acre urban park	25,724	<0.1%
↓ Low	5-10 acre urban park	10,406	<0.1%
	Area not evaluated for this indicator	*41,267,524*	*90.3%*
	Outside Base Blueprint input area	*3,648,492*	*8.0%*
	Outside Southeast Blueprint	*6,536*	*<0.1%*
	Total area	**45,698,166**	**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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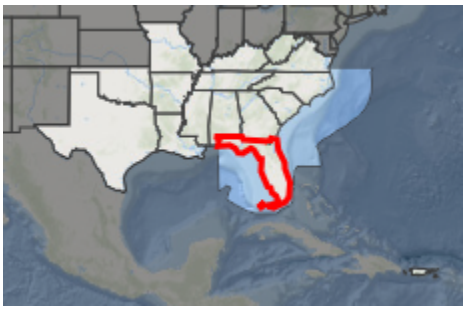


- Final score of 80 (areas of excellent fish habitat)
- Final score of 70 (areas of excellent fish habitat)
- Final score of 60 (restoration opportunity areas)
- Final score of 50 (restoration opportunity areas)
- Final score of 40 (restoration opportunity areas)
- Final score of 30 (restoration opportunity 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 in this area. Good condition thresholds reflect the range of indicator values that occur in healthy, functioning ecosystems.

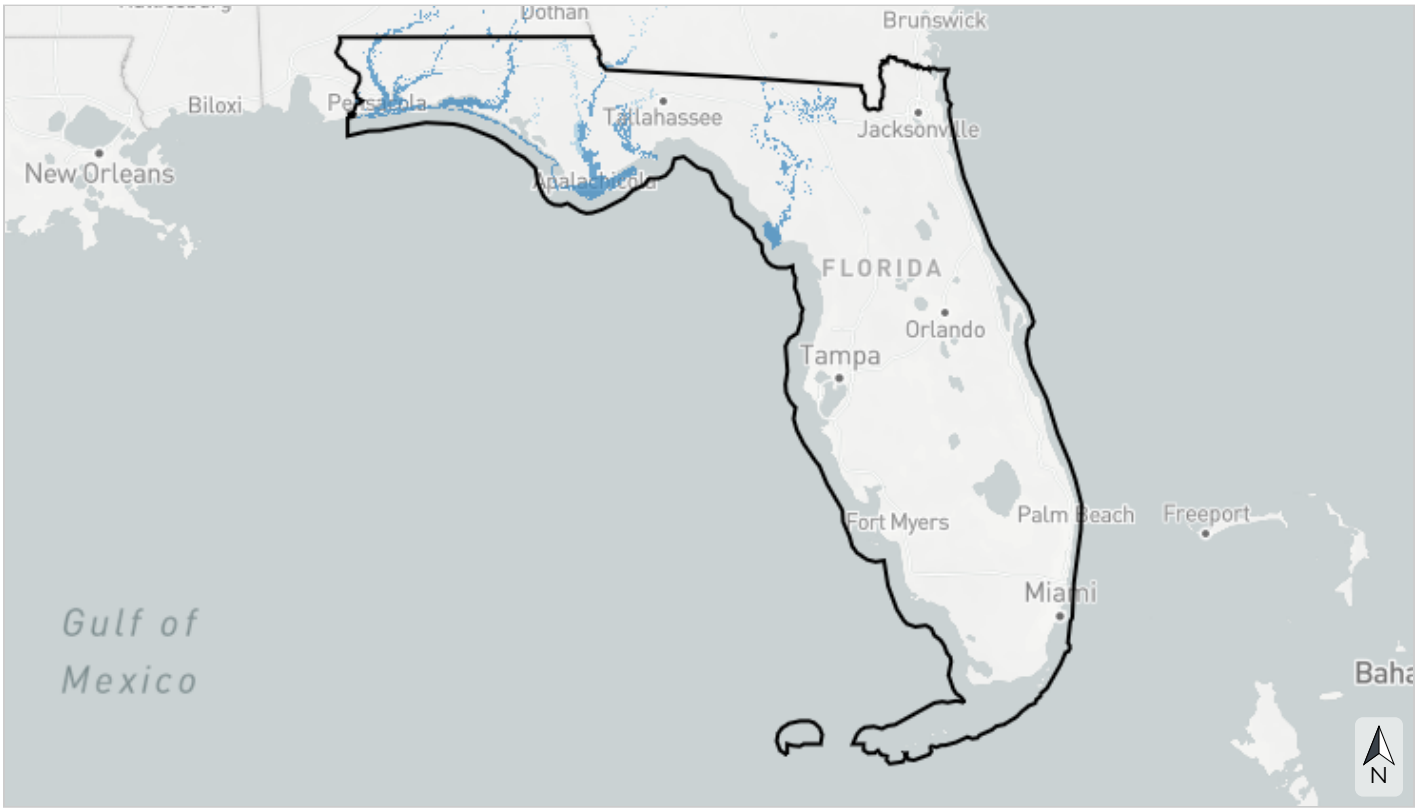
	Indicator Values	Acres	Percent of Area	
↑ High	Final score of 80 (areas of excellent fish habitat)	12,580	<0.1%	
	Final score of 70 (areas of excellent fish habitat)	4,184	<0.1%	↑ In good condition
	Final score of 60 (restoration opportunity areas)	191,658	0.4%	↓ Not in good condition
	Final score of 50 (restoration opportunity areas)	39,648	<0.1%	
	Final score of 40 (restoration opportunity areas)	23,875	<0.1%	
	Final score of 30 (restoration opportunity areas)	4,835	<0.1%	
	Final score of 20 (restoration opportunity areas)	178	<0.1%	
	Final score of 10 (degraded areas of opportunity)	0	0%	
↓ Low	Final score of 0 (degraded areas of opportunity)	0	0%	
	Area not evaluated for this indicator	*41,766,179*	*91.4%*	
	Outside Base Blueprint input area	*3,648,492*	*8.0%*	
	Outside Southeast Blueprint	*6,536*	*<0.1%*	
	Total area	**45,698,166**	**100%**	

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

Freshwater

Gulf migratory fish connectivity

This indicator captures how far upstream migratory fish in the Gulf of Mexico have been observed. How far upstream migratory fish can travel reflects not just the presence of dams and other barriers, but also the presence of measures like fish ladders that allow specific species to access habitat upstream of dams. This indicator originates from The Nature Conservancy's Southeast Aquatic Connectivity Assessment Project 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.



Basemap credits: Esri, HERE, Garmin, (c) OpenStreetMap contributors, and the GIS user community

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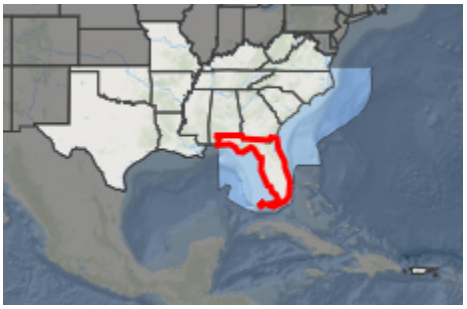


Presence of Gulf sturgeon

Presence of Alabama shad, American shad, or striped bass

Table 19: Indicator values for Gulf migratory fish connectivity in this area. Good condition thresholds reflect the range of indicator values that occur in healthy, functioning ecosystems.

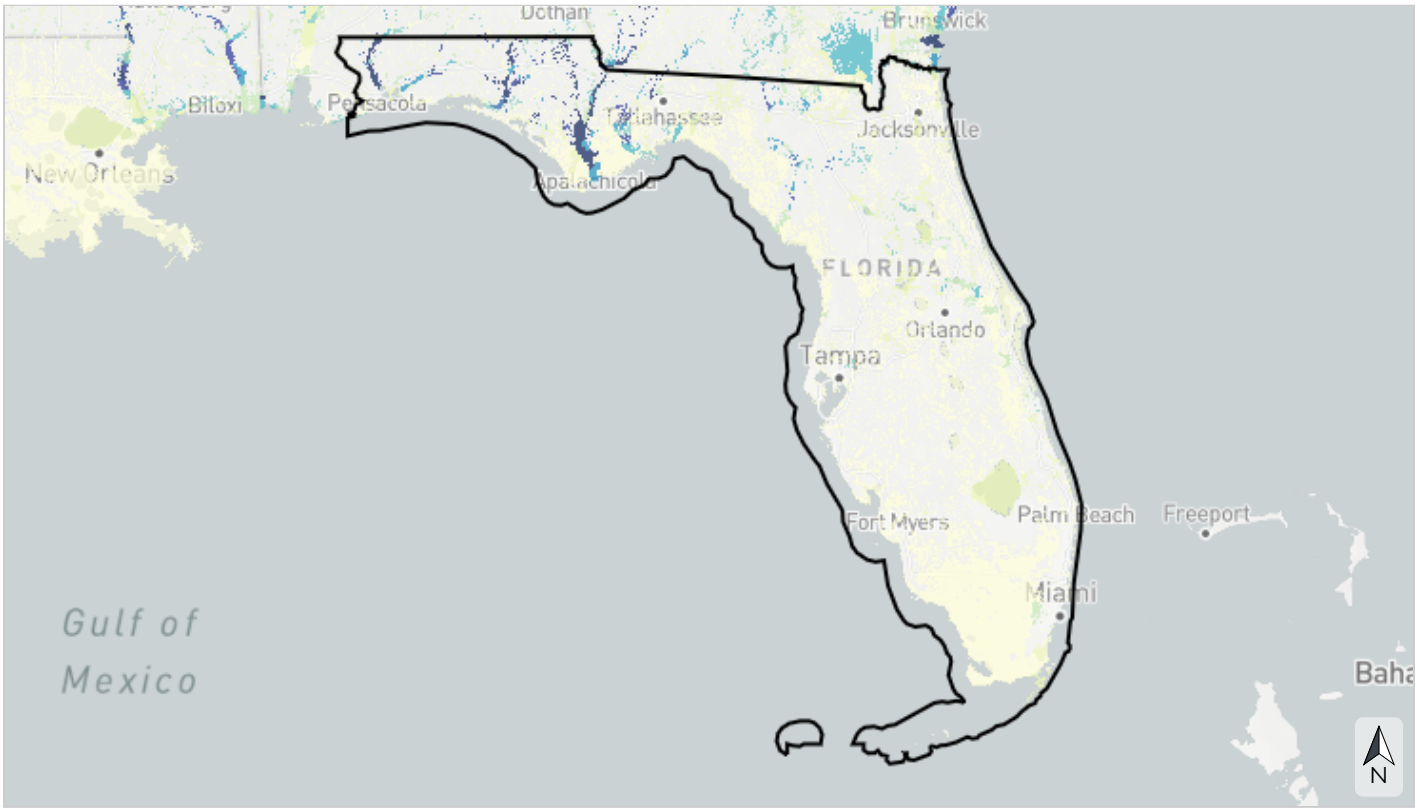
	Indicator Values	Acres	Percent of Area	
↑ High	Presence of Gulf sturgeon	1,353,893	3.0%	
↓ Low	Presence of Alabama shad, American shad, or striped bass	132,387	0.3%	↑ In good condition
	Area not evaluated for this indicator	*40,556,857*	*88.7%*	
	Outside Base Blueprint input area	*3,648,492*	*8.0%*	
	Outside Southeast Blueprint	*6,536*	*<0.1%*	
	Total area	**45,698,166**	**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 Species of Greatest Conservation Need (SGCN) observed within each 12-digit HUC subwatershed, including fish, mussels, snails, crayfish, and amphibians. SGCN are identified in State Wildlife Action Plans as most in need of conservation action. This indicator captures patterns of rare and endemic species diversity not well-represented by other freshwater aquatic indicators. It 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.



Basemap credits: Esri, HERE, Garmin, (c) OpenStreetMap contributors, and the GIS user community

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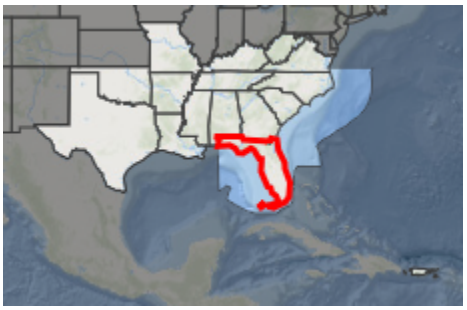


- 8+ aquatic Species of Greatest Conservation Need (SGCN) observed
- 7 aquatic SGCN observed
- 6 aquatic SGCN observed
- 5 aquatic SGCN observed
- 4 aquatic SGCN observed
- 3 aquatic SGCN observed
- 2 aquatic SGCN observed
- 1 aquatic SGCN observed
- No aquatic SGCN observed

Table 20: Indicator values for imperiled aquatic species in this area. A good condition threshold is not yet defined for this indicator.

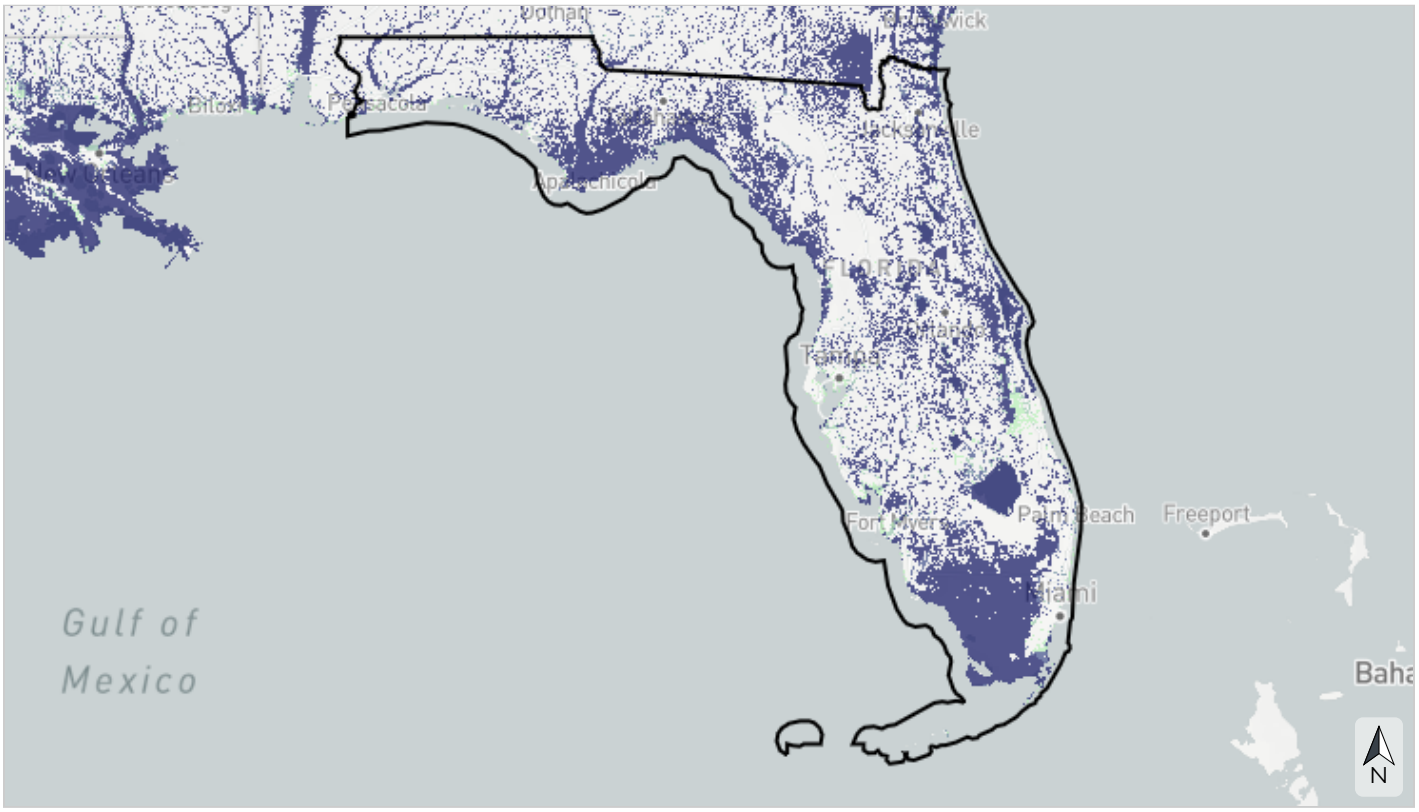
	Indicator Values	Acres	Percent of Area
↑ High	8+ aquatic Species of Greatest Conservation Need (SGCN) observed	357,385	0.8%
	7 aquatic SGCN observed	105,034	0.2%
	6 aquatic SGCN observed	49,484	0.1%
	5 aquatic SGCN observed	165,830	0.4%
	4 aquatic SGCN observed	101,130	0.2%
	3 aquatic SGCN observed	208,531	0.5%
	2 aquatic SGCN observed	440,656	1.0%
	1 aquatic SGCN observed	1,461,743	3.2%
↓ Low	No aquatic SGCN observed	10,559,630	23.1%
	Area not evaluated for this indicator	*28,593,715*	*62.6%*
	Outside Base Blueprint input area	*3,648,492*	*8.0%*
	Outside Southeast Blueprint	*6,536*	*<0.1%*
	Total area	**45,698,166**	**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 2019 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.



Basemap credits: Esri, HERE, Garmin, (c) OpenStreetMap contributors, and the GIS user community

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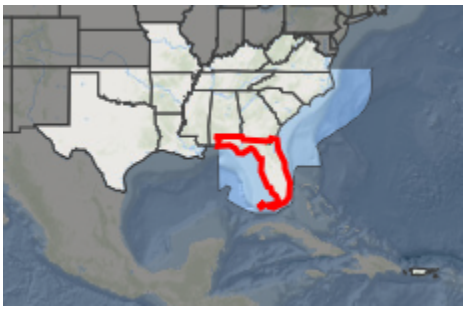


- >90% natural habitat within the estimated floodplain, by catchment
- >80-90%
- >70-80%
- >60-70%
- ≤60% natural habitat within the estimated floodplain, by catchment

Table 21: Indicator values for natural landcover in floodplains in this area. Good condition thresholds reflect the range of indicator values that occur in healthy, functioning ecosystems.

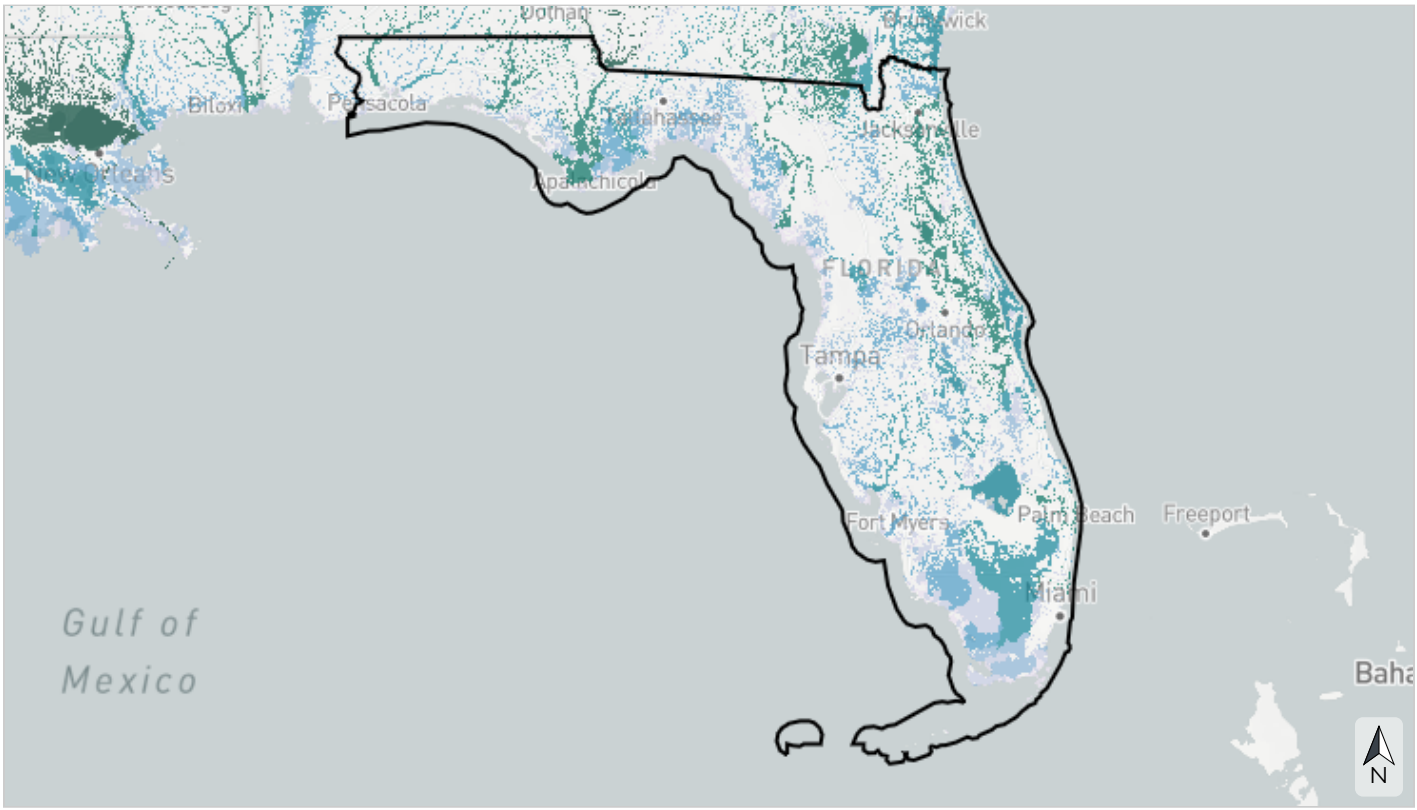
	Indicator Values	Acres	Percent of Area	
↑ High	>90% natural habitat within the estimated floodplain, by catchment	11,951,129	26.2%	↑ In good condition
	>80-90%	748,147	1.6%	
	>70-80%	200,620	0.4%	↓ Not in good condition
	>60-70%	154,221	0.3%	
↓ Low	≤60% natural habitat within the estimated floodplain, by catchment	395,342	0.9%	
	Area not evaluated for this indicator	*28,593,678*	*62.6%*	
	Outside Base Blueprint input area	*3,648,492*	*8.0%*	
	Outside Southeast Blueprint	*6,536*	*<0.1%*	
	Total area	**45,698,166**	**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 different stream size classes in a river network not separated by 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.



Basemap credits: Esri, HERE, Garmin, (c) OpenStreetMap contributors, and the GIS user community

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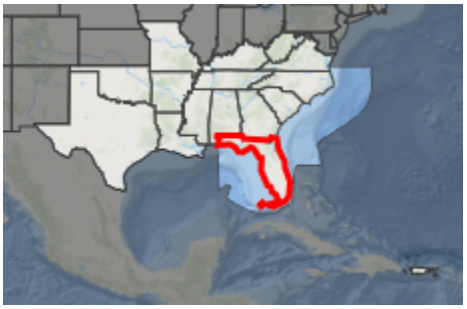


- 7 connected stream classes
- 6 connected stream classes
- 5 connected stream classes
- 4 connected stream classes
- 3 connected stream classes
- 2 connected stream classes
- 1 connected stream class

Table 22: Indicator values for network complexity in this area. Good condition thresholds reflect the range of indicator values that occur in healthy, functioning ecosystems.

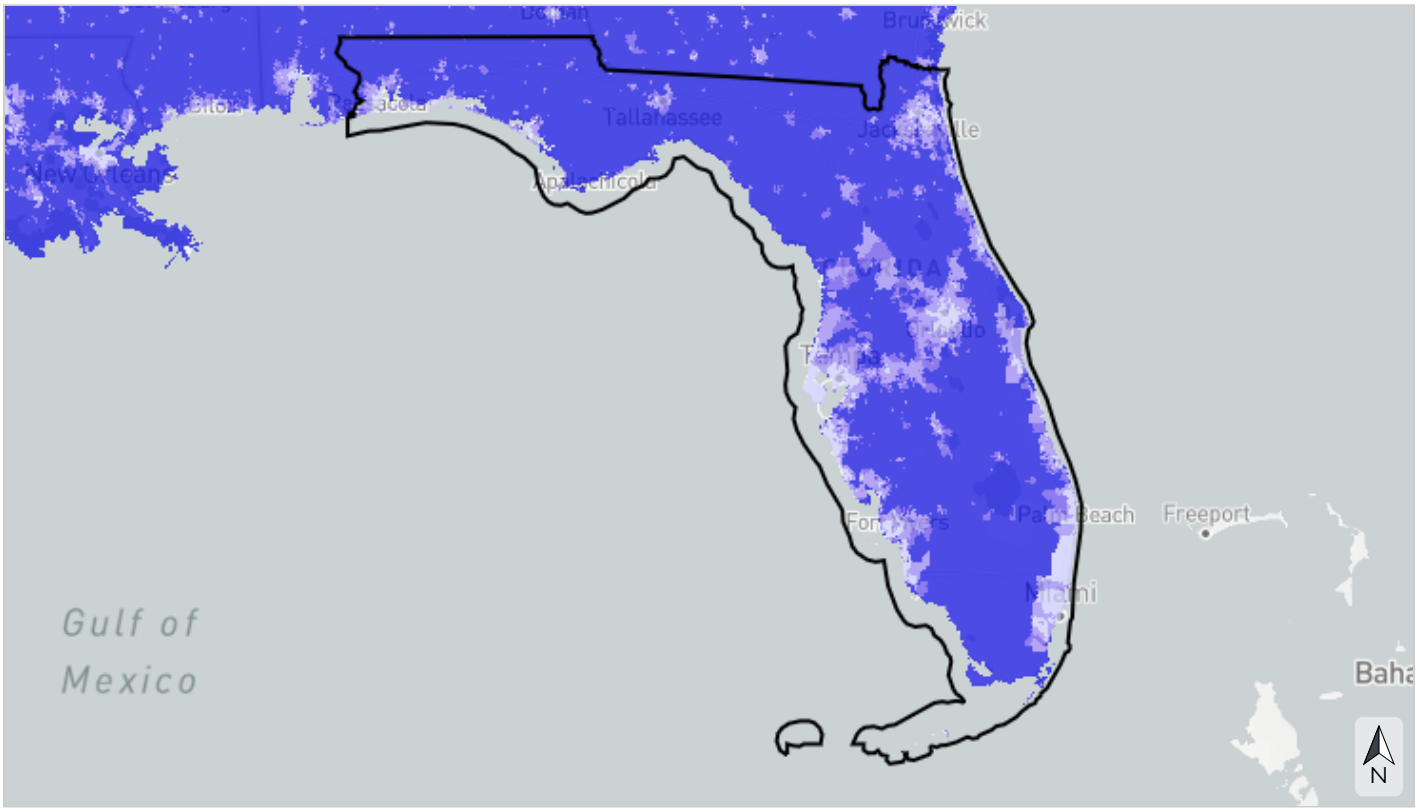
	Indicator Values	Acres	Percent of Area	
↑ High	7 connected stream classes	29,685	<0.1%	
	6 connected stream classes	2,342,759	5.1%	
	5 connected stream classes	3,171,397	6.9%	
	4 connected stream classes	2,640,901	5.8%	↑ In good condition
	3 connected stream classes	1,586,032	3.5%	↓ Not in good condition
	2 connected stream classes	1,965,267	4.3%	
↓ Low	1 connected stream class	1,092,781	2.4%	
	Area not evaluated for this indicator	*29,214,315*	*63.9%*	
	Outside Base Blueprint input area	*3,648,492*	*8.0%*	
	Outside Southeast Blueprint	*6,536*	*<0.1%*	
	Total area	**45,698,166**	**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 2019 National Land Cover Database percent developed impervious layer.



Basemap credits: Esri, HERE, Garmin, (c) OpenStreetMap contributors, and the GIS user community

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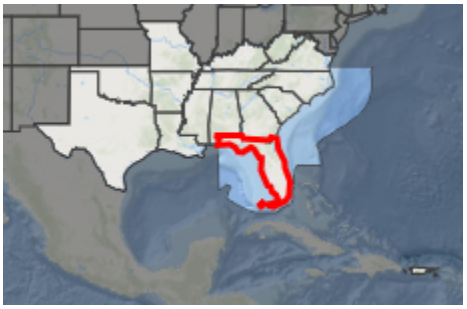


- >95% of catchment permeable (likely high water quality and supporting most sensitive aquatic species)
- >90-95% of catchment permeable (likely declining water quality and supporting most aquatic species)
- >70-90% of catchment permeable (likely degraded water quality and not supporting many aquatic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

Table 23: Indicator values for permeable surface in this area. Good condition thresholds reflect the range of indicator values that occur in healthy, functioning ecosystems.

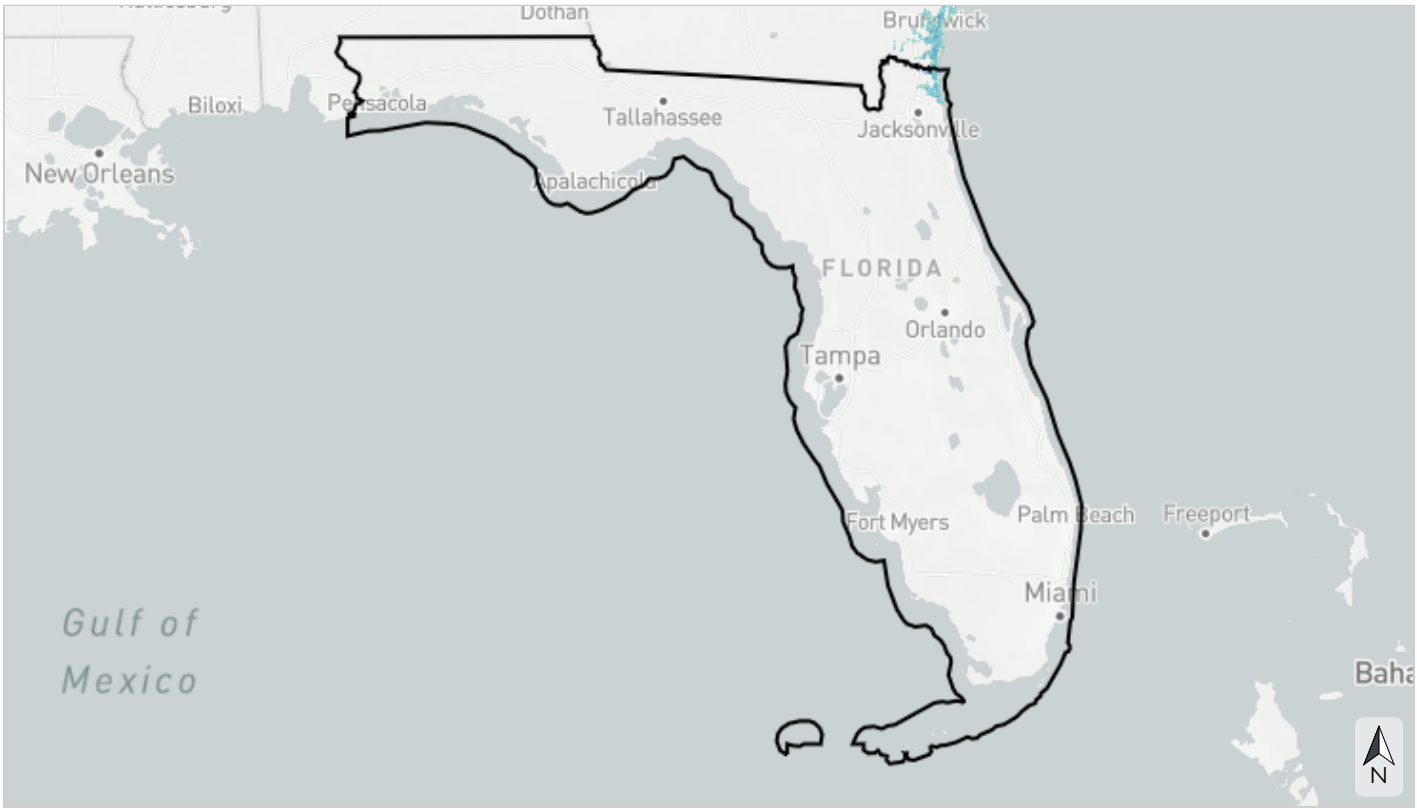
	Indicator Values	Acres	Percent of Area	
↑ High	>95% of catchment permeable (likely high water quality and supporting most sensitive aquatic species)	28,484,809	62.3%	↑ In good condition
	>90-95% of catchment permeable (likely declining water quality and supporting most aquatic species)	2,401,914	5.3%	↓ Not in good condition
	>70-90% of catchment permeable (likely degraded water quality and not supporting many aquatic species)	3,781,797	8.3%	
↓ Low	≤70% of catchment permeable (likely degraded instream flow, water quality, and aquatic species communities)	1,640,128	3.6%	
	Area not evaluated for this indicator	*5,734,489*	*12.5%*	
	Outside Base Blueprint input area	*3,648,492*	*8.0%*	
	Outside Southeast Blueprint	*6,536*	*<0.1%*	
	Total area	**45,698,166**	**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.



Basemap credits: Esri, HERE, Garmin, (c) OpenStreetMap contributors, and the GIS user community

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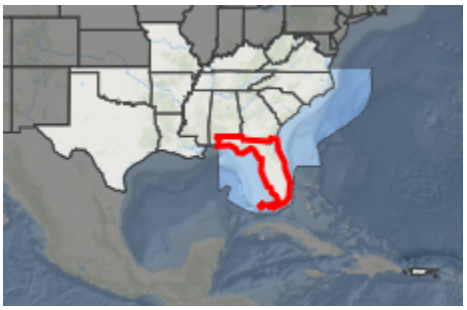


- Final score of 80 (areas of excellent fish habitat)
- Final score of 70 (areas of excellent fish habitat)
- Final score of 60 (restoration opportunity areas)
- Final score of 50 (restoration opportunity areas)
- Final score of 40 (restoration opportunity areas)
- Final score of 30 (restoration opportunity 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 in this area. Good condition thresholds reflect the range of indicator values that occur in healthy, functioning ecosystems.

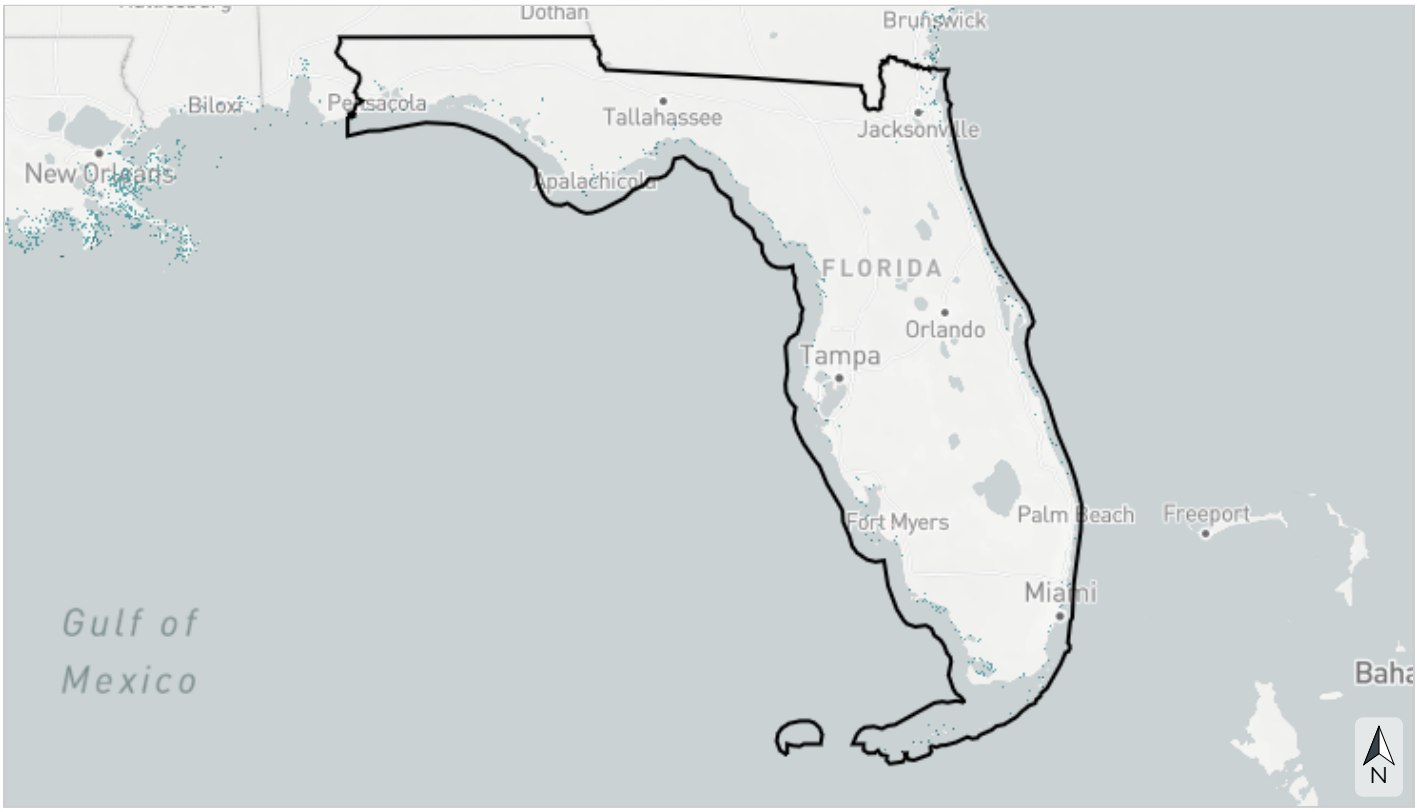
	Indicator Values	Acres	Percent of Area	
↑ High	Final score of 80 (areas of excellent fish habitat)	0	0%	
	Final score of 70 (areas of excellent fish habitat)	0	0%	↑ In good condition
	Final score of 60 (restoration opportunity areas)	1,239	<0.1%	↓ Not in good condition
	Final score of 50 (restoration opportunity areas)	22,354	<0.1%	
	Final score of 40 (restoration opportunity areas)	40,803	<0.1%	
	Final score of 30 (restoration opportunity areas)	24,906	<0.1%	
	Final score of 20 (restoration opportunity areas)	7,452	<0.1%	
	Final score of 10 (degraded areas of opportunity)	744	<0.1%	
↓ Low	Final score of 0 (degraded areas of opportunity)	0	0%	
	Area not evaluated for this indicator	*41,945,640*	*91.8%*	
	Outside Base Blueprint input area	*3,648,492*	*8.0%*	
	Outside Southeast Blueprint	*6,536*	*<0.1%*	
	Total area	**45,698,166**	**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.



Basemap credits: Esri, HERE, Garmin, (c) OpenStreetMap contributors, and the GIS user community

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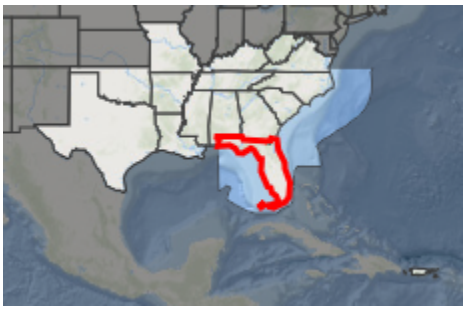


- Natural and harder to develop
- Natural
- Partially armored and harder to develop
- Partially armored
- Armored

Table 25: Indicator values for coastal shoreline condition in this area. Good condition thresholds reflect the range of indicator values that occur in healthy, functioning ecosystems.

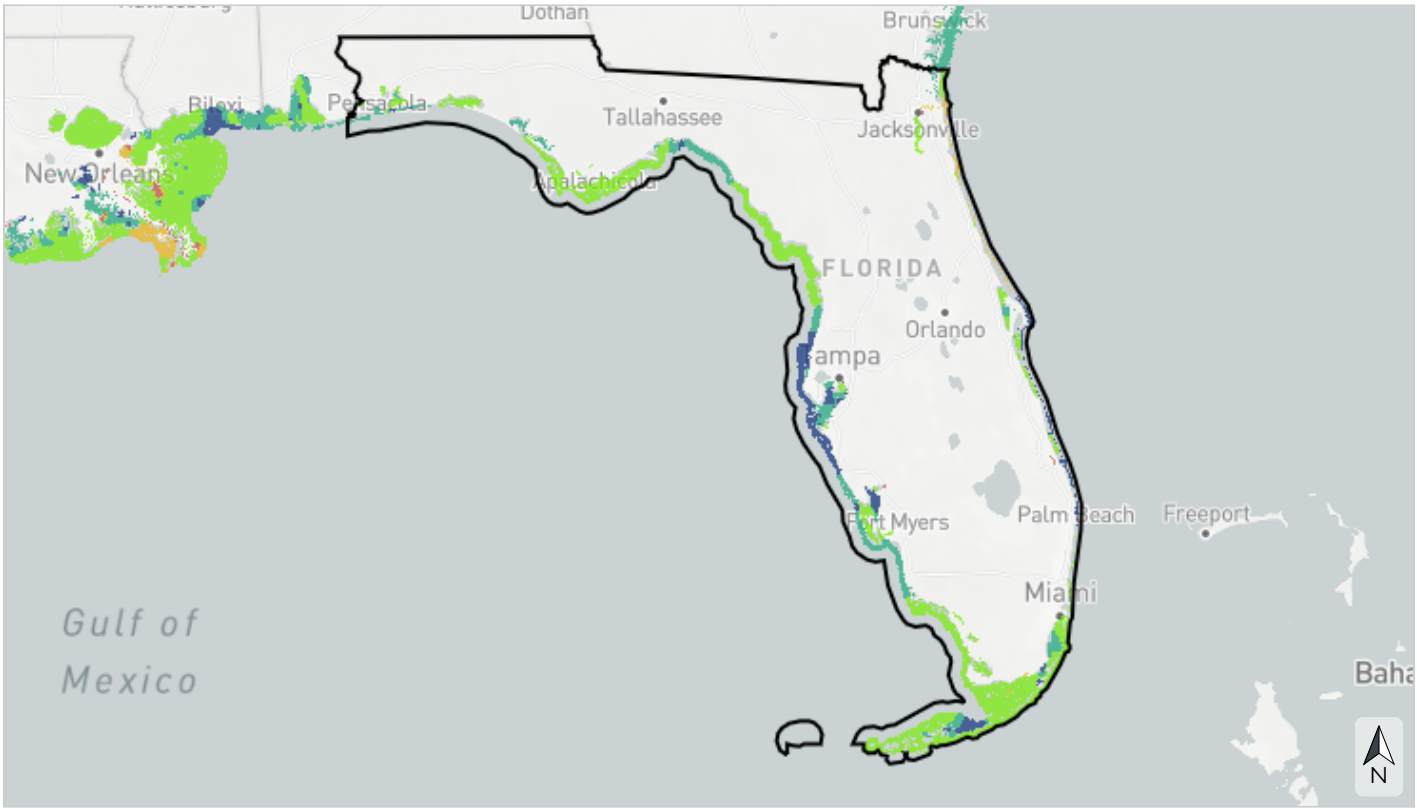
	Indicator Values	Acres	Percent of Area	
↑ High	Natural and harder to develop	45,534	<0.1%	
	Natural	231,129	0.5%	↑ In good condition
	Partially armored and harder to develop	306	<0.1%	↓ Not in good condition
	Partially armored	5,768	<0.1%	
↓ Low	Armored	55,014	0.1%	
	Area not evaluated for this indicator	*41,705,386*	*91.3%*	
	Outside Base Blueprint input area	*3,648,492*	*8.0%*	
	Outside Southeast Blueprint	*6,536*	*<0.1%*	
	Total area	**45,698,166**	**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.



Basemap credits: Esri, HERE, Garmin, (c) OpenStreetMap contributors, and the GIS user community

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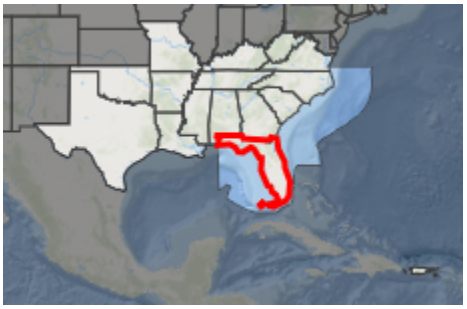


- Good
- Good to fair
- Fair
- Fair to poor
- Poor

Table 26: Indicator values for estuarine coastal condition in this area. Good condition thresholds reflect the range of indicator values that occur in healthy, functioning ecosystems.

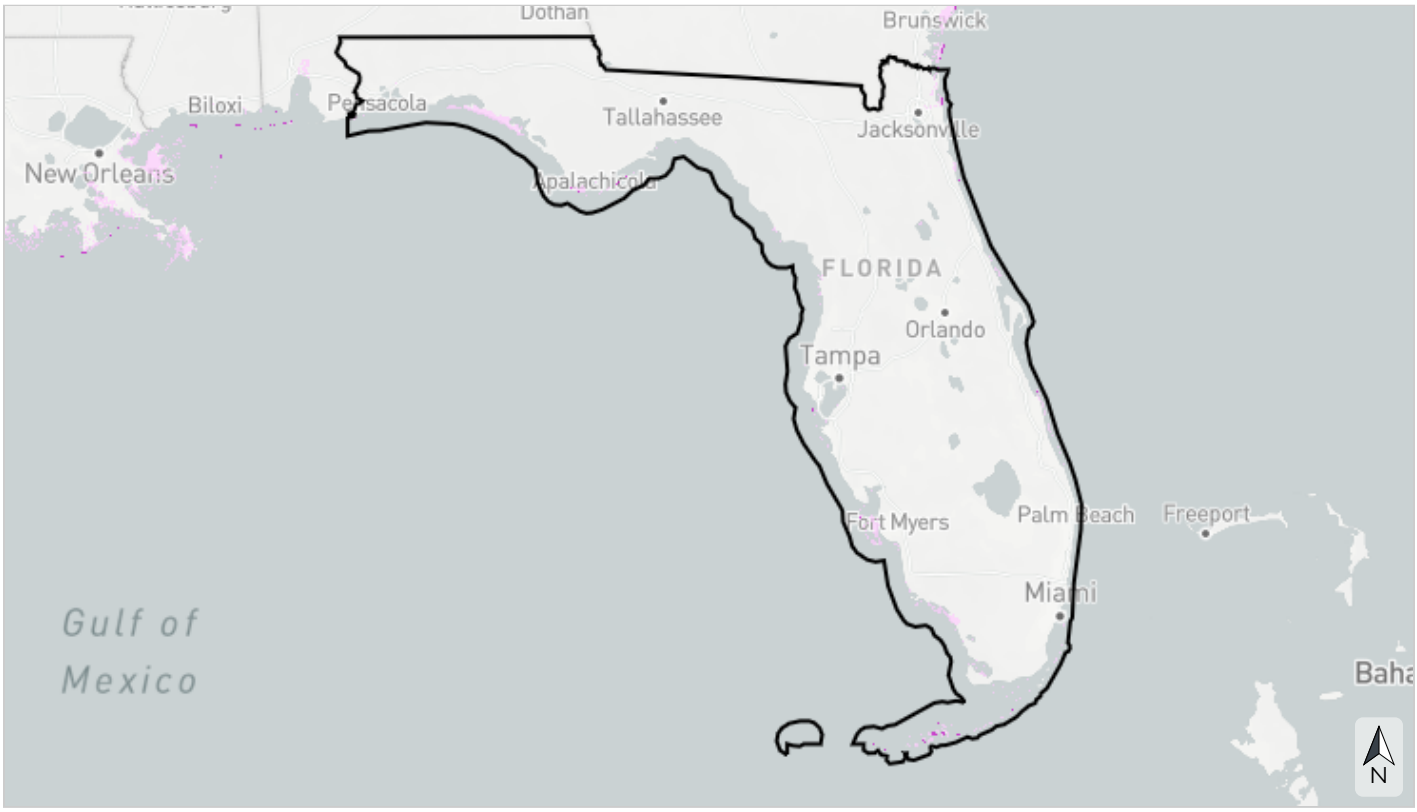
	Indicator Values	Acres	Percent of Area	
↑ High	Good	597,942	1.3%	
	Good to fair	801,724	1.8%	↑ In good condition
	Fair	2,810,189	6.1%	↓ Not in good condition
	Fair to poor	69,338	0.2%	
↓ Low	Poor	7,377	<0.1%	
	Area not evaluated for this indicator	*37,756,566*	*82.6%*	
	Outside Base Blueprint input area	*3,648,492*	*8.0%*	
	Outside Southeast Blueprint	*6,536*	*<0.1%*	
	Total area	**45,698,166**	**100%**	

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

Coastal & marine

Islands

This indicator represents important habitat for 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 originates from U.S. Fish and Wildlife Service critical habitat data and island boundaries from the U.S. Geological Survey and Esri.



Basemap credits: Esri, HERE, Garmin, (c) OpenStreetMap contributors, and the GIS user community

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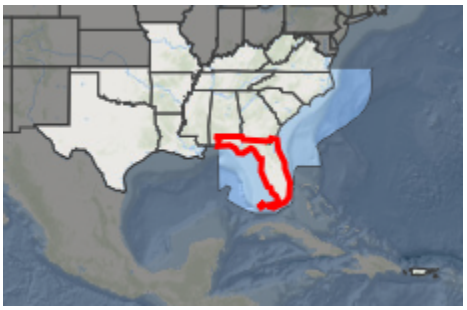


Island critical habitat for any of six threatened and endangered species (piping plover, loggerhead sea turtle, Cape Sable thoroughwort, Florida semaphore cactus, silver rice rat, or Bartram's hairstreak butterfly)

Island

Table 27: Indicator values for islands in this area. A good condition threshold is not yet defined for this indicator.

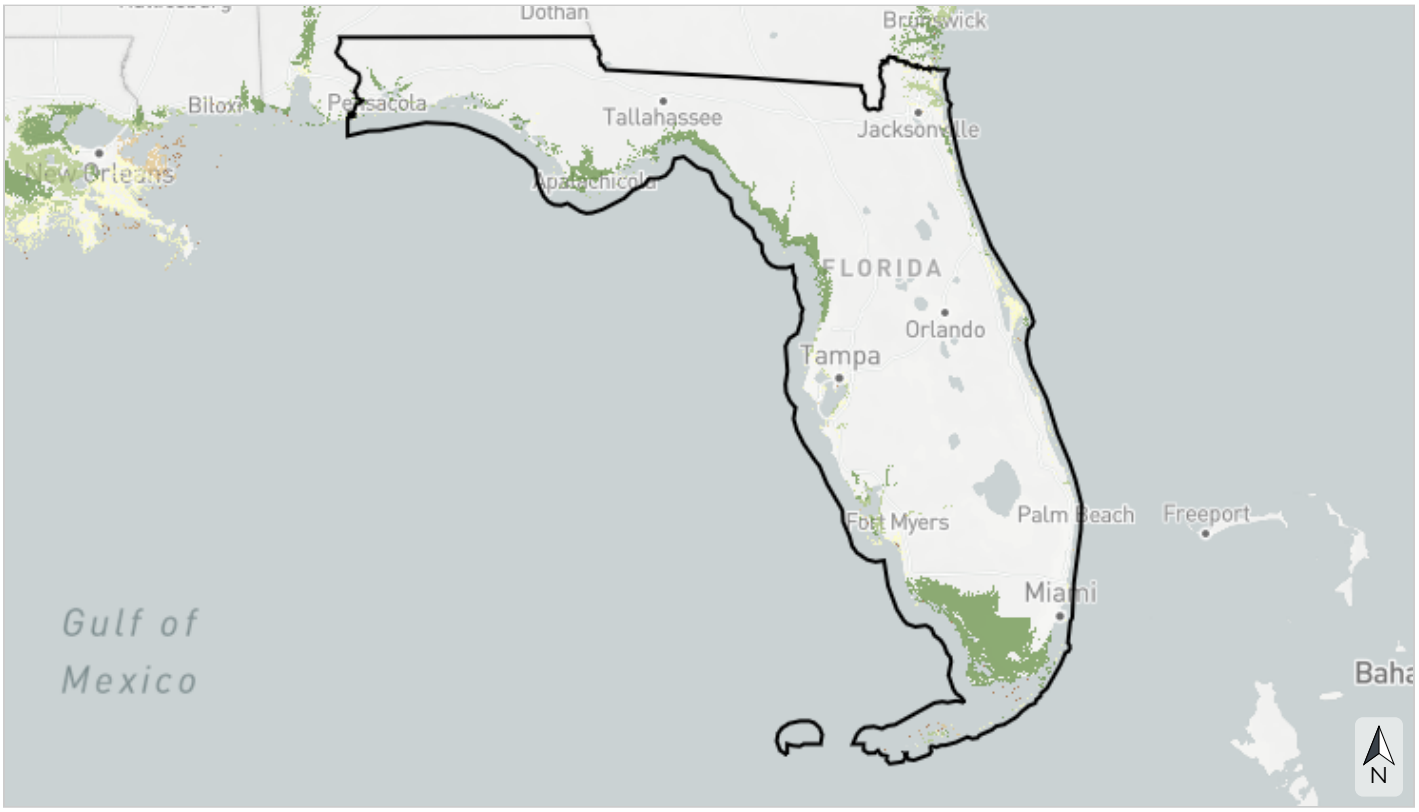
	Indicator Values	Acres	Percent of Area
↑ High	Island critical habitat for any of six threatened and endangered species (piping plover, loggerhead sea turtle, Cape Sable thoroughwort, Florida semaphore cactus, silver rice rat, or Bartram's hairstreak butterfly)	23,647	<0.1%
↓ Low	Island	413,836	0.9%
	Area not evaluated for this indicator	*41,605,654*	*91.0%*
	Outside Base Blueprint input area	*3,648,492*	*8.0%*
	Outside Southeast Blueprint	*6,536*	*<0.1%*
	Total area	**45,698,166**	**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 many others. This indicator originates from The Nature Conservancy's Resilient Coastal Sites project.



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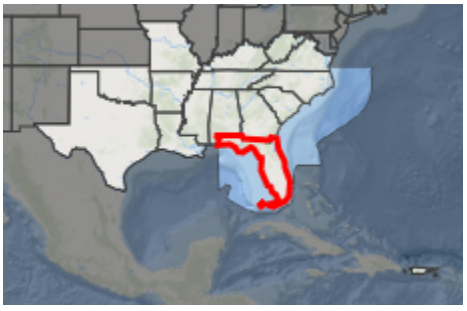


- Most resilient
- More resilient
- Slightly more resilient
- Average/median resilience
- Slightly less resilient
- Less resilient
- Least resilient

Table 28: Indicator values for resilient coastal sites in this area. A good condition threshold is not yet defined for this indicator.

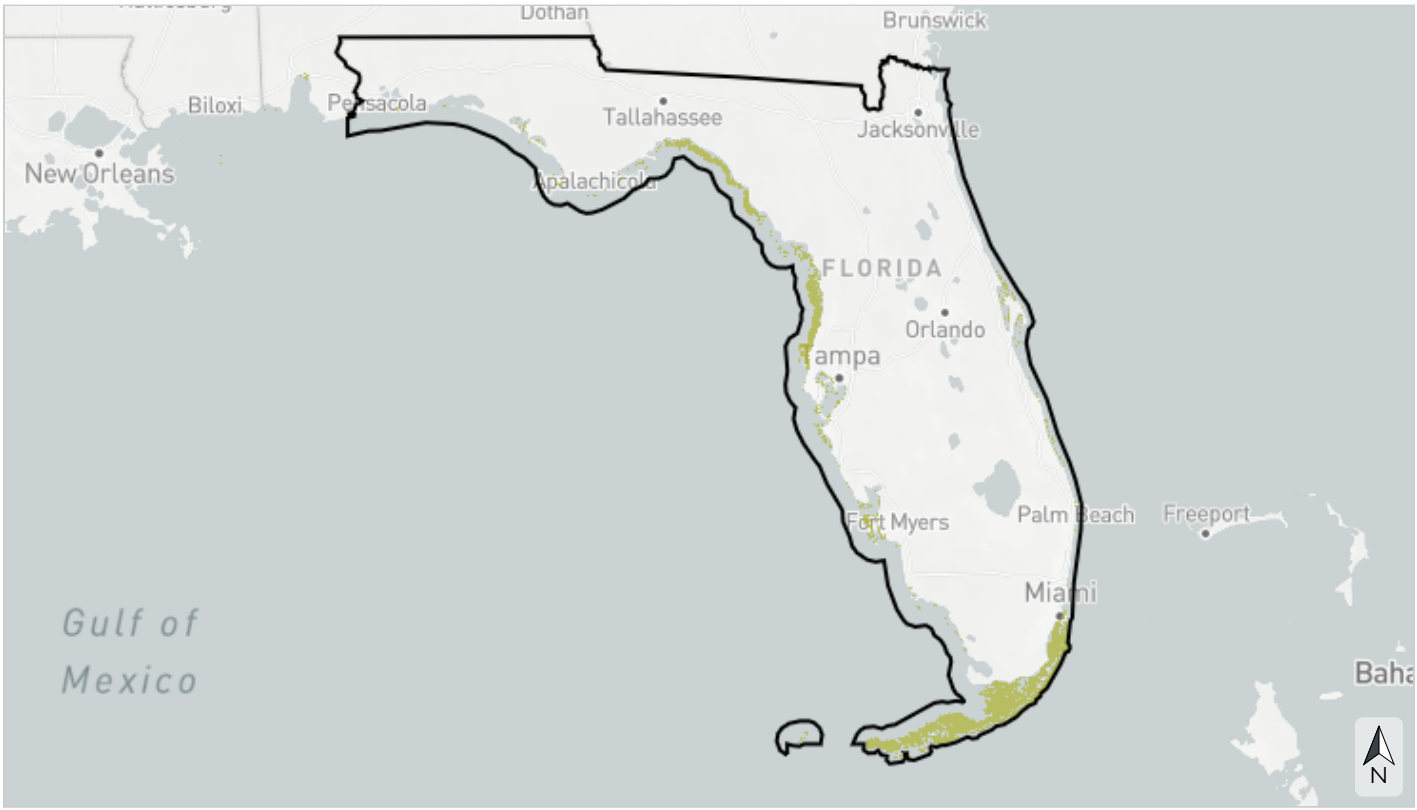
	Indicator Values	Acres	Percent of Area
↑ High	Most resilient	0	0%
	More resilient	2,768,618	6.1%
	Slightly more resilient	258,699	0.6%
	Average/median resilience	349,437	0.8%
	Slightly less resilient	19,317	<0.1%
	Less resilient	7,934	<0.1%
↓ Low	Least resilient	21,751	<0.1%
	Area not evaluated for this indicator	*38,617,380*	*84.5%*
	Outside Base Blueprint input area	*3,648,492*	*8.0%*
	Outside Southeast Blueprint	*6,536*	*<0.1%*
	Total area	**45,698,166**	**100%**

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

Coastal & marine

Seagrasses

This indicator represents the presence of seagrass in the Atlantic Ocean and Gulf of Mexico. Seagrasses provide food and habitat for a range of marine and estuarine wildlife, including fish, sea turtles, shrimp, crabs, oysters, and more. They also produce oxygen, filter water, control erosion, and buffer storms. Seagrasses serve as an important indicator of the overall health of coastal ecosystems because they are sensitive to water quality and require sufficiently clear water for sunlight to penetrate. This indicator originates from the National Oceanic and Atmospheric Administration's Marine Cadastre.



Basemap credits: Esri, HERE, Garmin, (c) OpenStreetMap contributors, and the GIS user community

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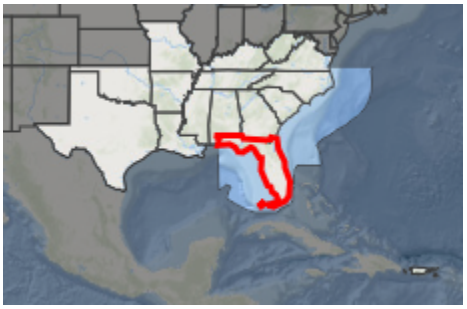


Seagrasses present

Table 29: Indicator values for seagrasses in this area. A good condition threshold is not yet defined for this indicator.

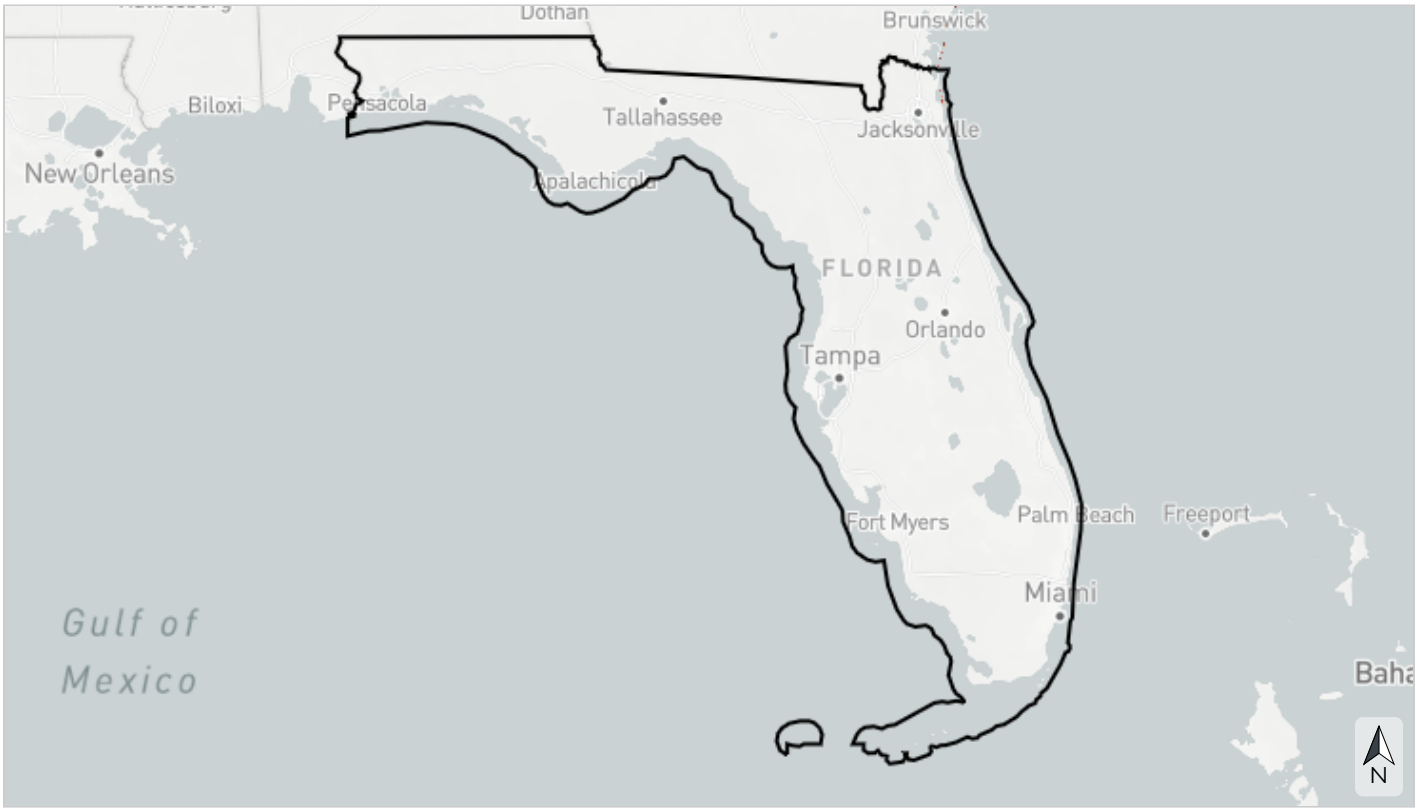
	Indicator Values	Acres	Percent of Area
↑ High	Seagrasses present	1,917,874	4.2%
	Area not evaluated for this indicator	*40,125,263*	*87.8%*
	Outside Base Blueprint input area	*3,648,492*	*8.0%*
	Outside Southeast Blueprint	*6,536*	*<0.1%*
	Total area	**45,698,166**	**100%**

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. The relative use of beach habitat by shorebirds for nesting, foraging, and breeding is an indicator of beach health and quality. It originates from data collected by waterbird biologists from the U.S. Fish and Wildlife Service and state wildlife agencies in Florida, Georgia, South Carolina and North Carolina.



Basemap credits: Esri, HERE, Garmin, (c) OpenStreetMap contributors, and the GIS user community

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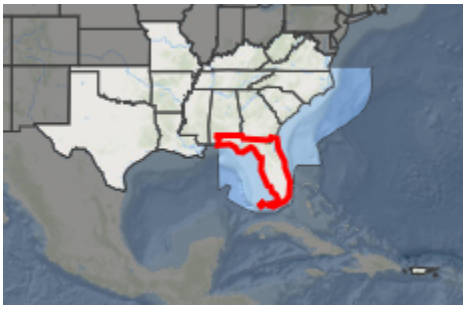


- >80th percentile of importance for bird index species (American oystercatcher, Wilson's plover, least tern, and piping plover)
- >60th-80th percentile of importance
- >40th-60th percentile of importance
- >20th-40th percentile of importance
- ≤20th percentile of importance for bird index species

Table 30: Indicator values for South Atlantic beach birds in this area. A good condition threshold is not yet defined for this indicator.

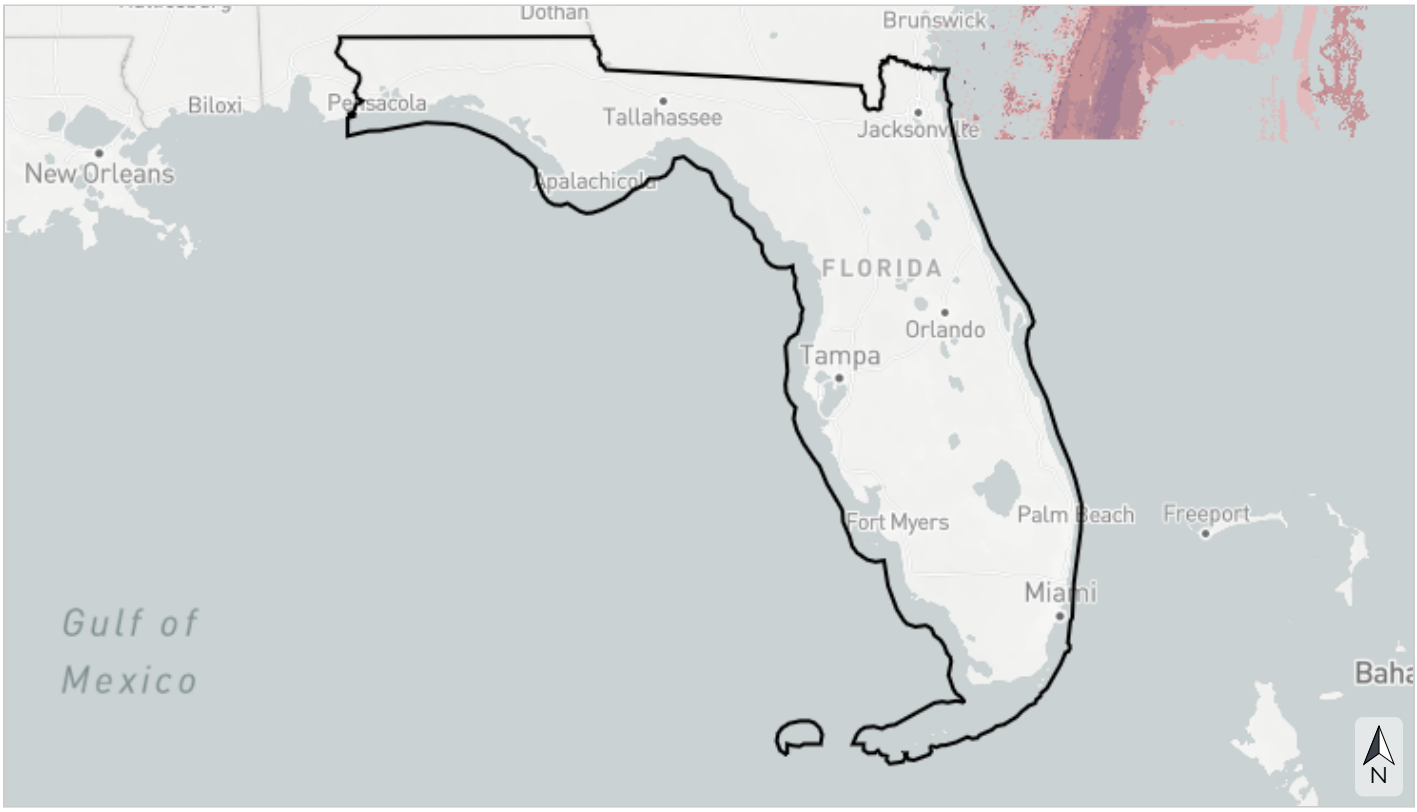
	Indicator Values	Acres	Percent of Area
↑ High	>80th percentile of importance for bird index species (American oystercatcher, Wilson's plover, least tern, and piping plover)	1,036	<0.1%
	>60th-80th percentile of importance	907	<0.1%
	>40th-60th percentile of importance	108	<0.1%
	>20th-40th percentile of importance	406	<0.1%
↓ Low	≤20th percentile of importance for bird index species	1,339	<0.1%
	Area not evaluated for this indicator	*42,039,342*	*92.0%*
	Outside Base Blueprint input area	*3,648,492*	*8.0%*
	Outside Southeast Blueprint	*6,536*	*<0.1%*
	Total area	**45,698,166**	**100%**

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

Coastal & marine

South Atlantic hardbottom & deep-sea coral

This indicator measures known and predicted suitable locations of hardbottom habitat and deep-sea corals. Hardbottom provides an anchor for important seafloor habitats such as deep-sea corals, plants, and sponges. Hardbottom and associated deep-sea coral communities provide valuable habitat structure that supports a wide range of invertebrate and fish species. This indicator combines multiple datasets from the National Oceanic and Atmospheric Administration and The Nature Conservancy.



Basemap credits: Esri, HERE, Garmin, (c) OpenStreetMap contributors, and the GIS user community

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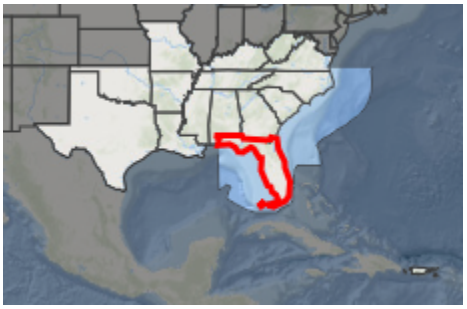


- Observed coral or hardbottom
- Very high suitability for coral or hardbottom
- High suitability for coral or hardbottom
- Medium suitability for coral or hardbottom
- Low suitability for coral or hardbottom

Table 31: Indicator values for South Atlantic hardbottom & deep-sea coral in this area. A good condition threshold is not yet defined for this indicator.

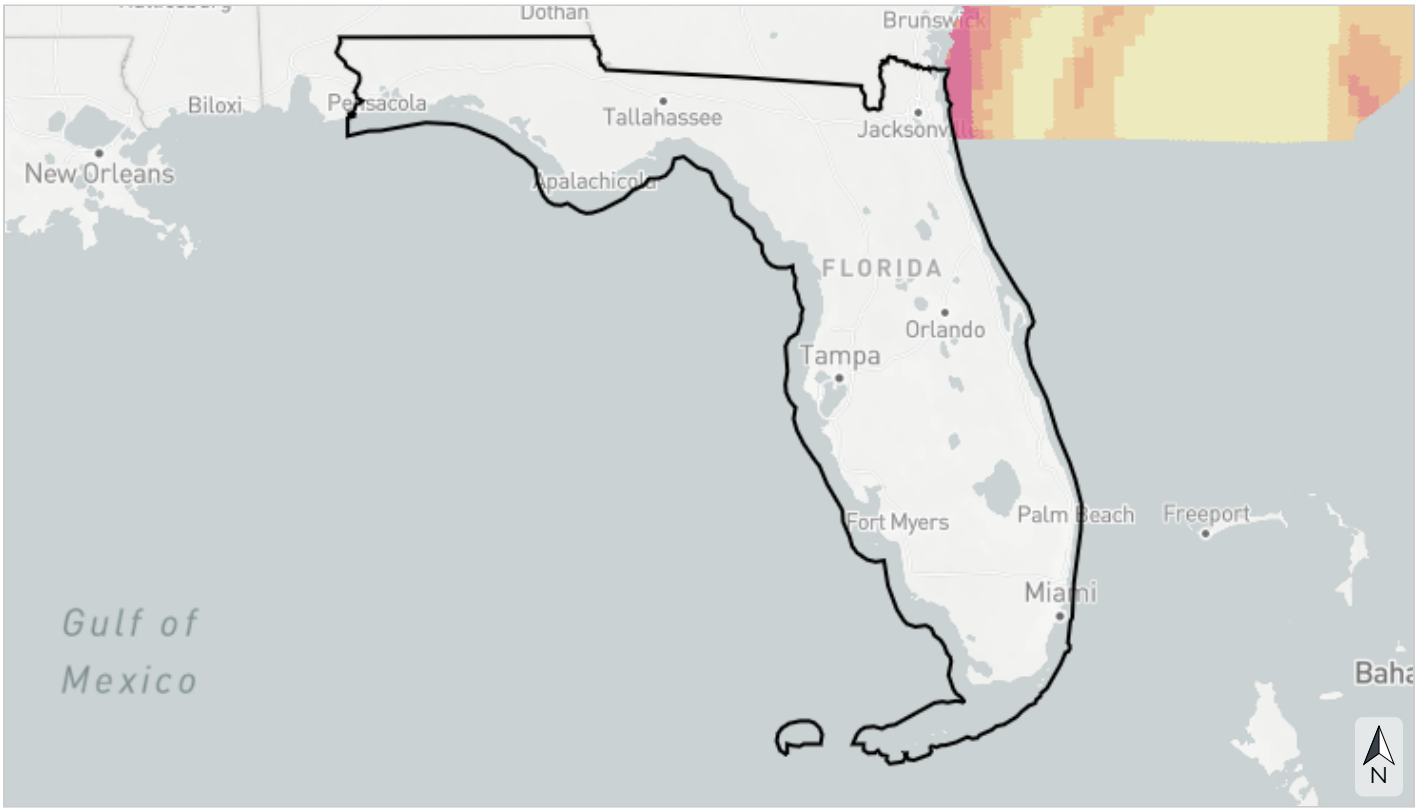
	Indicator Values	Acres	Percent of Area
↑ High	Observed coral or hardbottom	26	<0.1%
	Very high suitability for coral or hardbottom	142	<0.1%
	High suitability for coral or hardbottom	105	<0.1%
	Medium suitability for coral or hardbottom	0	0%
↓ Low	Low suitability for coral or hardbottom	5,179	<0.1%
	Area not evaluated for this indicator	*42,037,684*	*92.0%*
	Outside Base Blueprint input area	*3,648,492*	*8.0%*
	Outside Southeast Blueprint	*6,536*	*<0.1%*
	Total area	**45,698,166**	**100%**

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

Coastal & marine

South Atlantic marine mammals

This indicator is a continuous index of dolphin and whale density based on monthly density predictions for ten species of cetaceans and yearly density predictions for three rarer cetacean species (monthly: North Atlantic right whale, sperm whale, Sei whale, humpback whale, fin whale, bottlenose dolphin, short-beaked common dolphin, Risso's dolphin, harbor porpoise, and Atlantic white-sided dolphin; yearly: pilot whale, beaked whale, striped dolphin). This indicator originates from Duke Marine Lab marine mammal models.



Basemap credits: Esri, HERE, Garmin, (c) OpenStreetMap contributors, and the GIS user community

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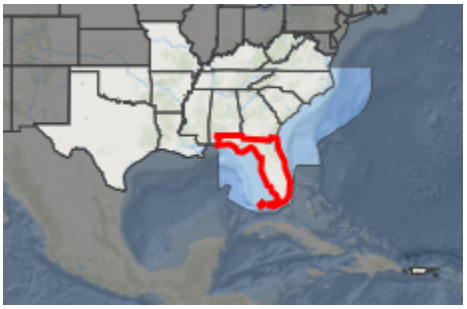


- >80th percentile of importance for marine mammal index species
- >60th-80th percentile of importance
- >40th-60th percentile of importance
- >20th-40th percentile of importance
- ≤20th percentile of importance

Table 32: Indicator values for South Atlantic marine mammals in this area. A good condition threshold is not yet defined for this indicator.

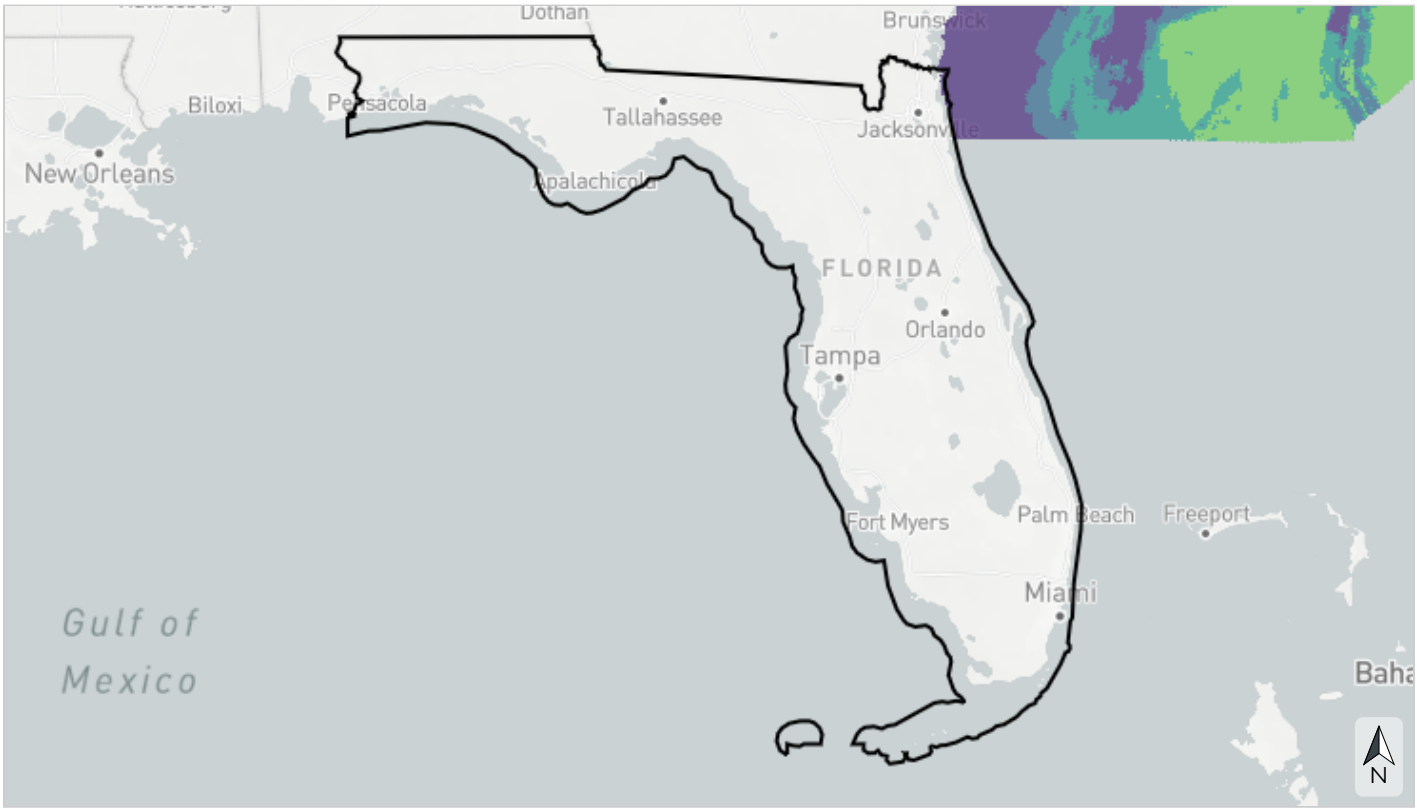
	Indicator Values	Acres	Percent of Area
↑ High	>80th percentile of importance for marine mammal index species	1,323	<0.1%
	>60th-80th percentile of importance	0	0%
	>40th-60th percentile of importance	0	0%
	>20th-40th percentile of importance	0	0%
↓ Low	≤20th percentile of importance	0	0%
	Area not evaluated for this indicator	*42,041,814*	*92.0%*
	Outside Base Blueprint input area	*3,648,492*	*8.0%*
	Outside Southeast Blueprint	*6,536*	*<0.1%*
	Total area	**45,698,166**	**100%**

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

Coastal & marine

South Atlantic marine birds

This indicator is a continuous index of highly productive areas for birds that feed exclusively or mainly at sea. It uses seasonal predictions of relative abundance for seventeen species of marine birds (Audubon's shearwater, white-winged scoter, black scoter, horned grebe, band-rumped storm-petrel, Bermuda petrel, Manx shearwater, black-capped petrel, Northern gannet, Bonaparte's gull. common loon, red-throated loon, Cory's shearwater, royal tern, great shearwater, sooty shearwater, common tern). This indicator originates from Marine-life Data and Analysis Team marine bird models.



Basemap credits: Esri, HERE, Garmin, (c) OpenStreetMap contributors, and the GIS user community

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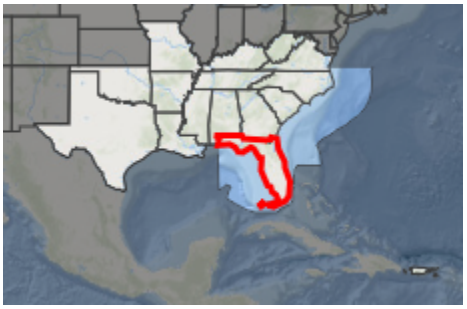


- >80th percentile of importance for marine bird index species
- >60th-80th percentile of importance
- >40th-60th percentile of importance
- >20th-40th percentile of importance
- ≤20th percentile of importance

Table 33: Indicator values for South Atlantic marine birds in this area. A good condition threshold is not yet defined for this indicator.

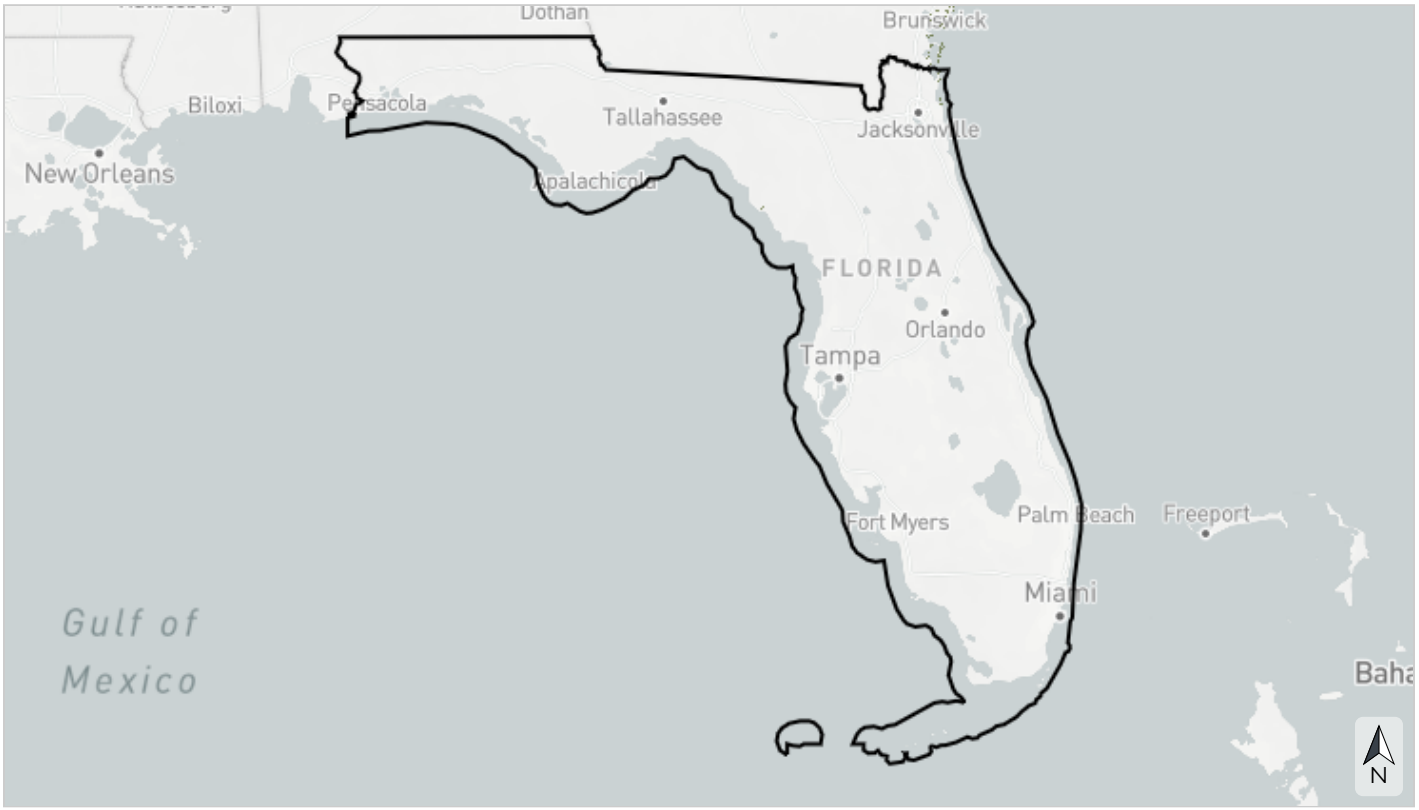
	Indicator Values	Acres	Percent of Area
↑ High	>80th percentile of importance for marine bird index species	51,967	0.1%
	>60th-80th percentile of importance	0	0%
	>40th-60th percentile of importance	0	0%
	>20th-40th percentile of importance	0	0%
↓ Low	≤20th percentile of importance	0	0%
	Area not evaluated for this indicator	*41,991,170*	*91.9%*
	Outside Base Blueprint input area	*3,648,492*	*8.0%*
	Outside Southeast Blueprint	*6,536*	*<0.1%*
	Total area	**45,698,166**	**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 maritime forest currently present in the South Atlantic. Since maritime forest has been substantially reduced from its historic extent, protecting the remaining acreage of existing maritime forest is important. This indicator originates from Landfire Existing Vegetation Type data.



Basemap credits: Esri, HERE, Garmin, (c) OpenStreetMap contributors, and the GIS user community

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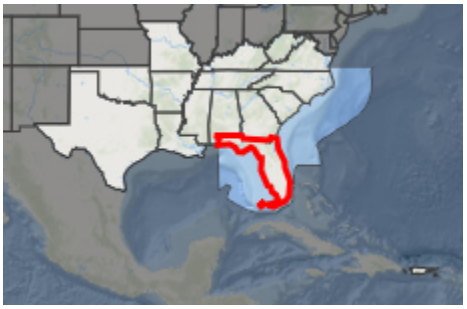


Maritime forest

Table 34: Indicator values for South Atlantic maritime forest in this area. A good condition threshold is not yet defined for this indicator.

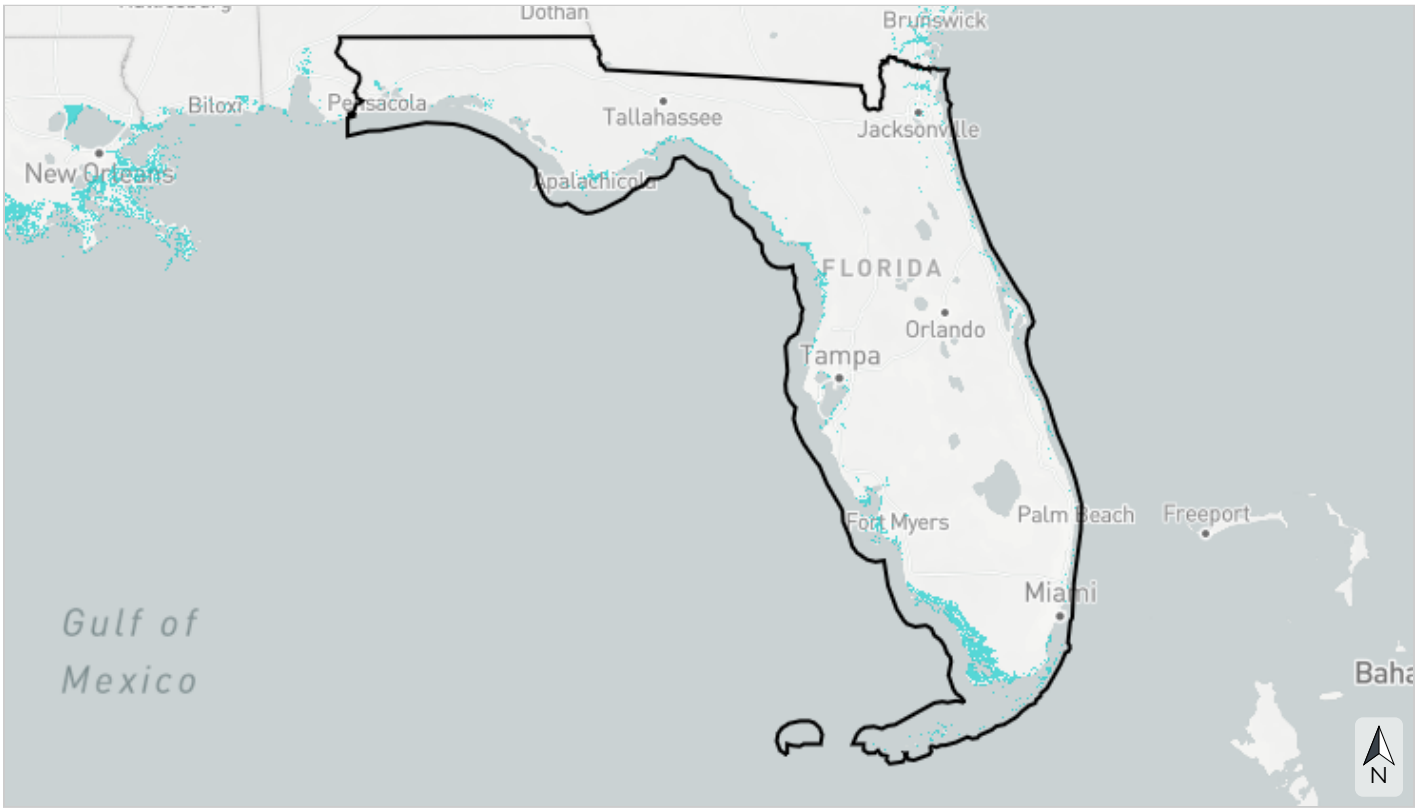
	Indicator Values	Acres	Percent of Area
↑ High	Maritime forest	10,148	<0.1%
	Area not evaluated for this indicator	*42,032,989*	*92.0%*
	Outside Base Blueprint input area	*3,648,492*	*8.0%*
	Outside Southeast Blueprint	*6,536*	*<0.1%*
	Total area	**45,698,166**	**100%**

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. 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. It helps differentiate between stable marshes that are more resilient, and declining marshes that are more vulnerable to threats like sea-level rise, erosion, and coastal development. This indicator originates from a U.S. Geological Survey project on an unvegetated to vegetated ratio for coastal wetlands.



Basemap credits: Esri, HERE, Garmin, (c) OpenStreetMap contributors, and the GIS user community

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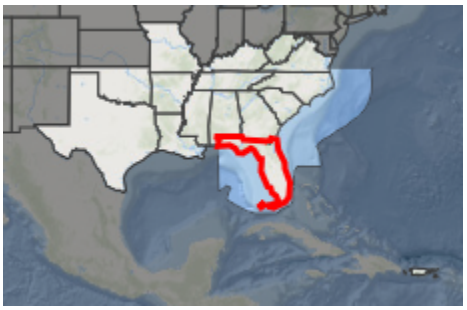


Stable coastal wetlands

Table 35: Indicator values for stable coastal wetlands in this area. Good condition thresholds reflect the range of indicator values that occur in healthy, functioning ecosystems.

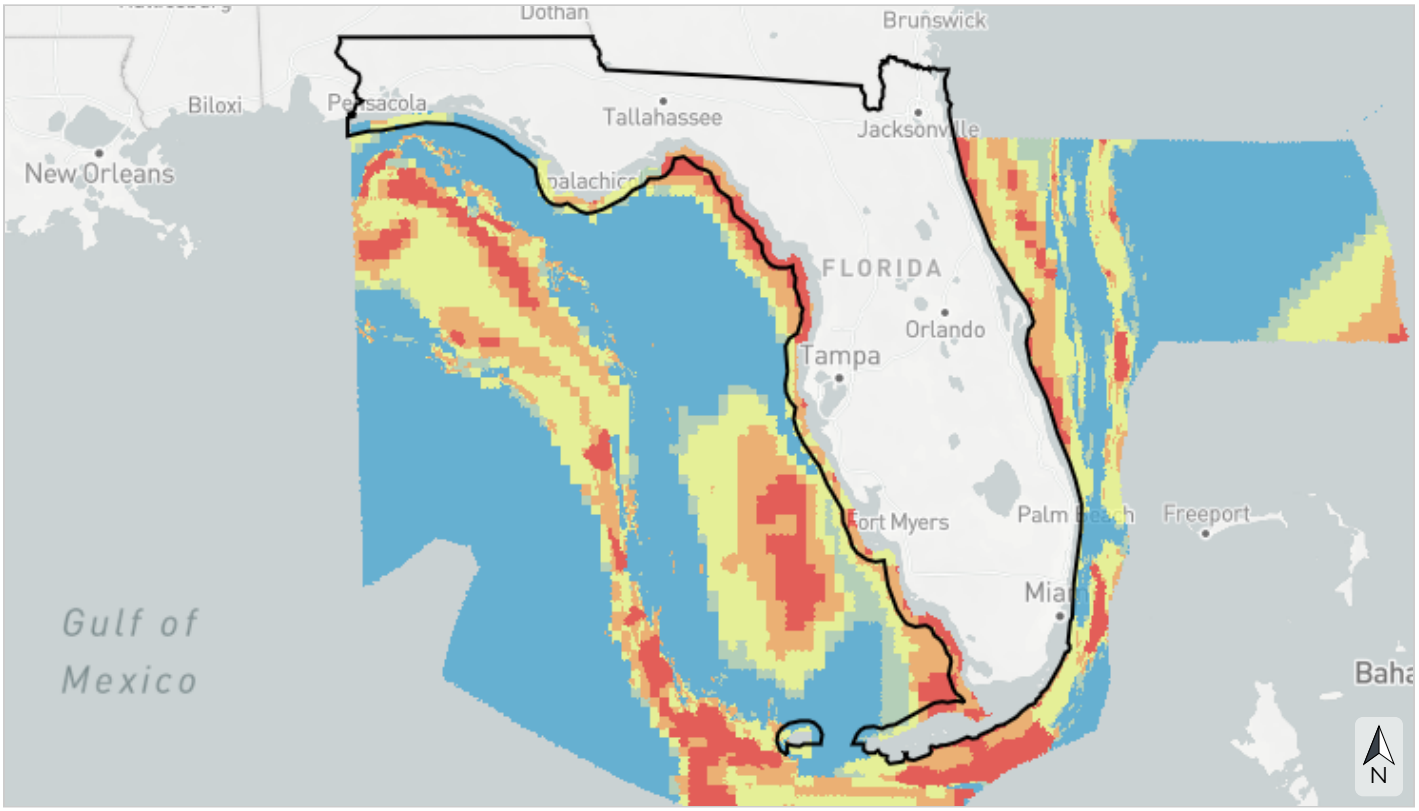
↑ High	Indicator Values	Acres	Percent of Area	↑ In good condition
	Stable coastal wetlands	1,107,564	2.4%	
	Area not evaluated for this indicator	*40,935,573*	*89.6%*	
	Outside Base Blueprint input area	*3,648,492*	*8.0%*	
	Outside Southeast Blueprint	*6,536*	*<0.1%*	
	Total area	**45,698,166**	**100%**	

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

Florida Marine Blueprint 2.0

(8.0% of area)

The Florida Marine Blueprint (v2.0) incorporates species locations, richness, and important habitats identified by multiple organizations across Florida.



Basemap credits: Esri, HERE, Garmin, (c) OpenStreetMap contributors, and the GIS user community

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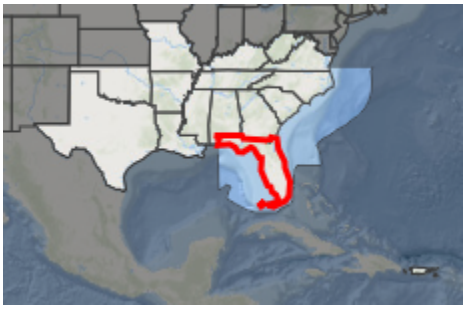


Conservation Priority

- P1: Highest priority
- P2: High priority
- P3: Medium priority
- P4: Secondary priority
- P5: Tertiary priority

Table 36: Extent of each Blueprint input priority category.

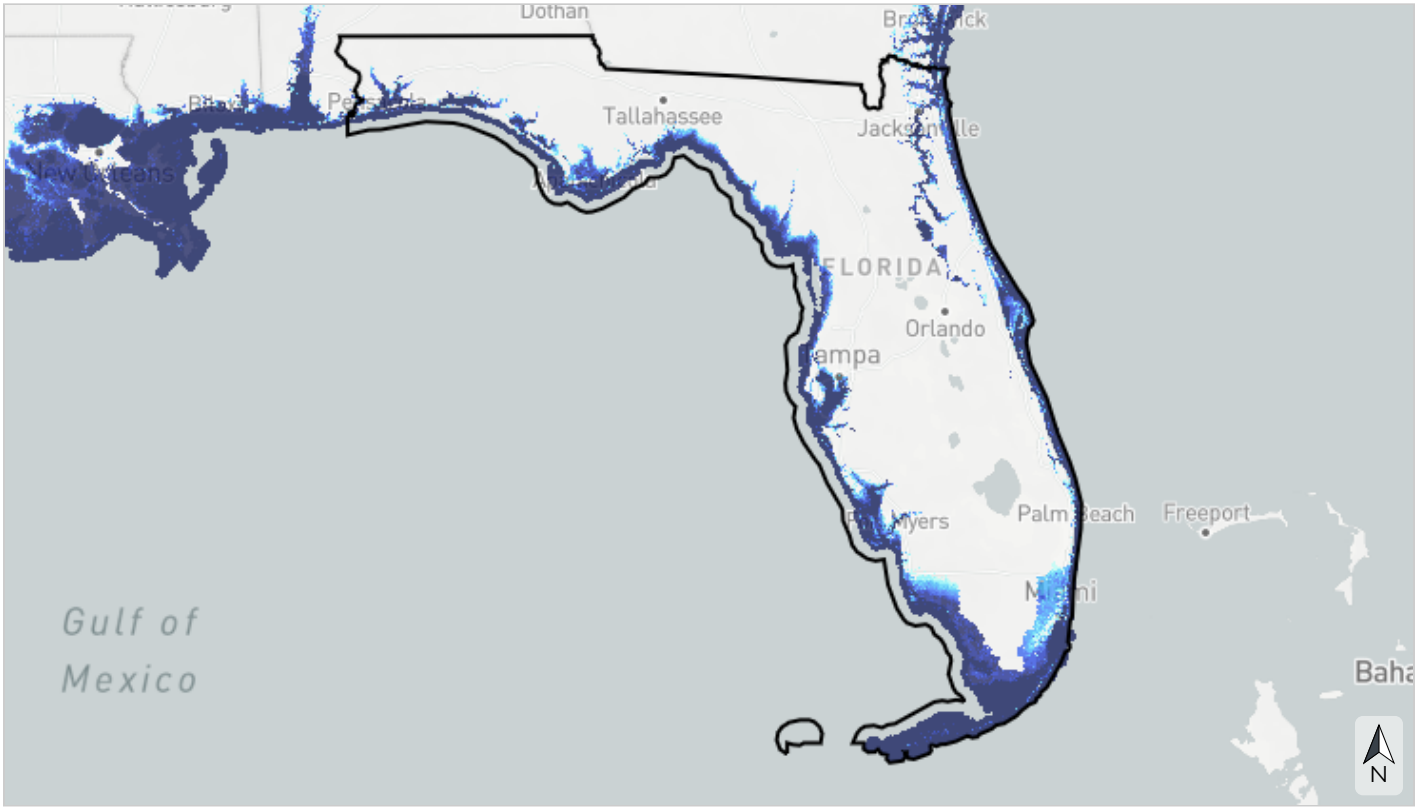
Conservation Priority	Acres	Percent of Area
P1: Highest priority	996,965	2.2%
P2: High priority	1,041,263	2.3%
P3: Medium priority	930,380	2.0%
P4: Secondary priority	169,498	0.4%
P5: Tertiary priority	510,387	1.1%
Not a priority	0	0%
Outside Florida Marine Blueprint input area	*42,043,137*	*92.0%*
Outside Southeast Blueprint	*6,536*	*<0.1%*
Total area	**45,698,166**	**100%**

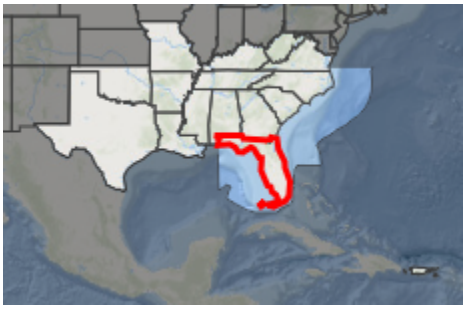
Threats

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 inundation depth above current levels. These inundation depth models are not linked to a future timeframe; see the projections below. NOAA calculates the inundation depth at "mean higher high water", or the average highest daily tide. The area covered by each inundation depth level includes areas projected to be inundated at lower levels. For example, areas inundated by 4 ft of SLR also includes areas inundated by 3 ft, 2 ft, 1 ft, and current inundation levels.

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





Flooding extent by projected sea-level rise (ft)

0 1 2 3 4 5 6 7 8 9 10

Table 37: Extent of flooding by projected average highest daily tide due to sea level rise in this area. Values from the NOAA sea-level rise inundation data.

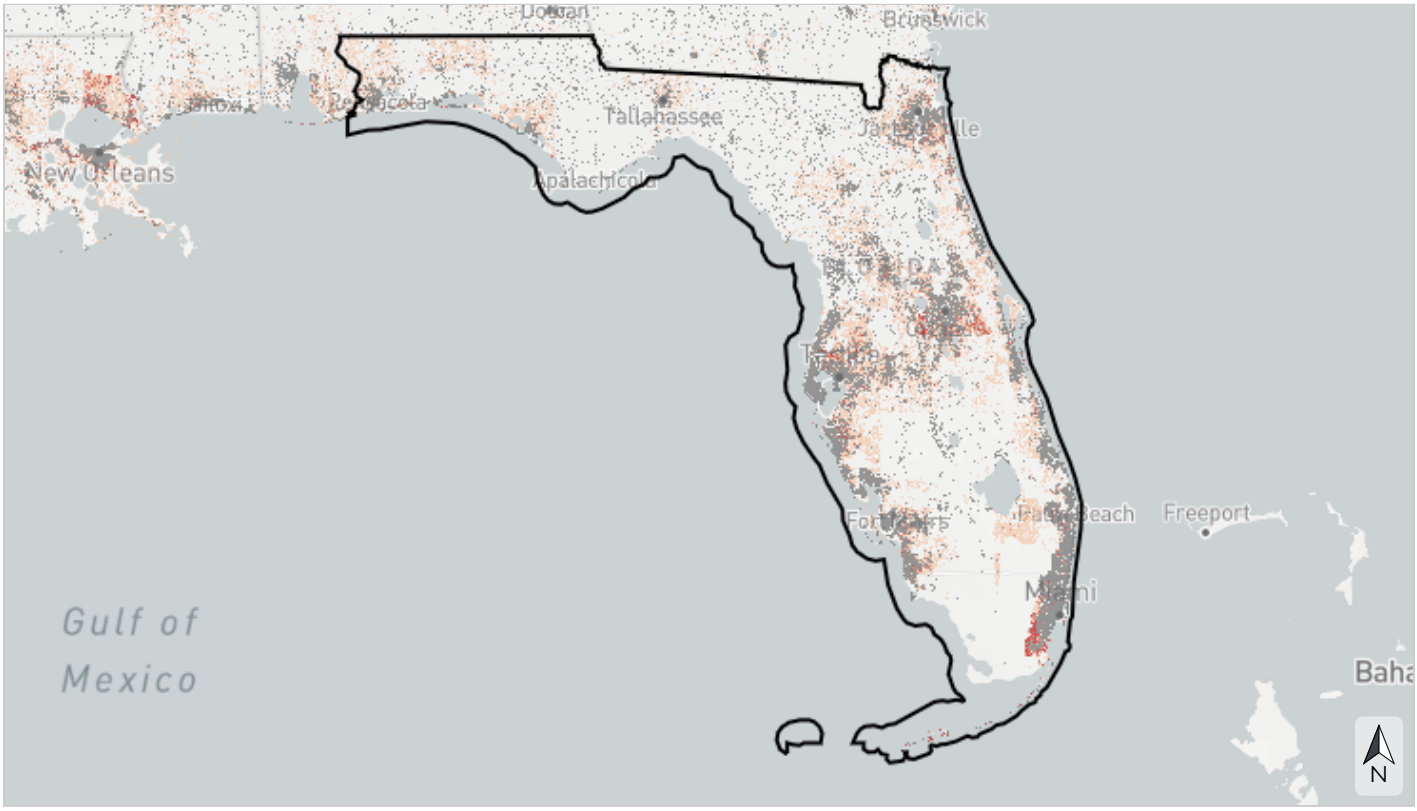
Feet of sea-level rise	Acres	Percent of Area
0 feet	6,351,484	13.9%
1 foot	7,111,112	15.6%
2 feet	7,572,819	16.6%
3 feet	7,872,004	17.2%
4 feet	8,154,176	17.8%
5 feet	8,455,225	18.5%
6 feet	8,827,345	19.3%
7 feet	9,213,726	20.2%
8 feet	9,523,413	20.8%
9 feet	9,804,334	21.5%
10 feet	10,079,386	22.1%
Not projected to be inundated by up to 10 feet	*12,937,128*	*28.3%*
Sea-level rise data unavailable	*9,006,918*	*19.7%*
Sea-level rise unlikely to be a threat (inland counties)	*13,668,198*	*29.9%*
Outside Southeast Blueprint	*6,536*	*<0.1%*
Total area	**45,698,166**	**100%**

Table 38: Projected sea level rise by decade in this area. 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	0.31	0.48	0.66	0.82	0.97	1	1.1	1.2	1.4
Intermediate-low	0.34	0.54	0.75	0.96	1.1	1.3	1.6	1.8	2
Intermediate	0.35	0.56	0.81	1	1.4	1.8	2.2	2.8	3.5
Intermediate-high	0.35	0.59	0.9	1.3	1.8	2.5	3.2	4.1	5.1
High	0.35	0.62	0.98	1.5	2.2	3.1	4.3	5.5	6.7

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 2019 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.



Basemap credits: Esri, HERE, Garmin, (c) OpenStreetMap contributors, and the GIS user community

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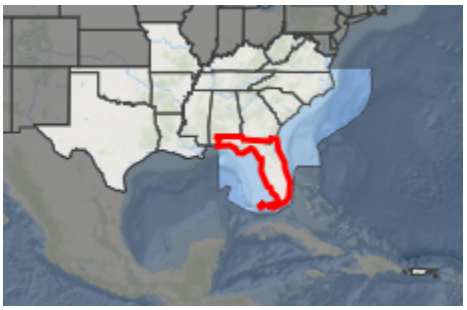


Probability of urbanization by 2060

- Urban in 2019
- Not likely to urbanize
- Moderate likelihood of urbanization (2 - 25% probability)
- High likelihood of urbanization (25 - 50% probability)
- Very high likelihood of urbanization (>50% probability)

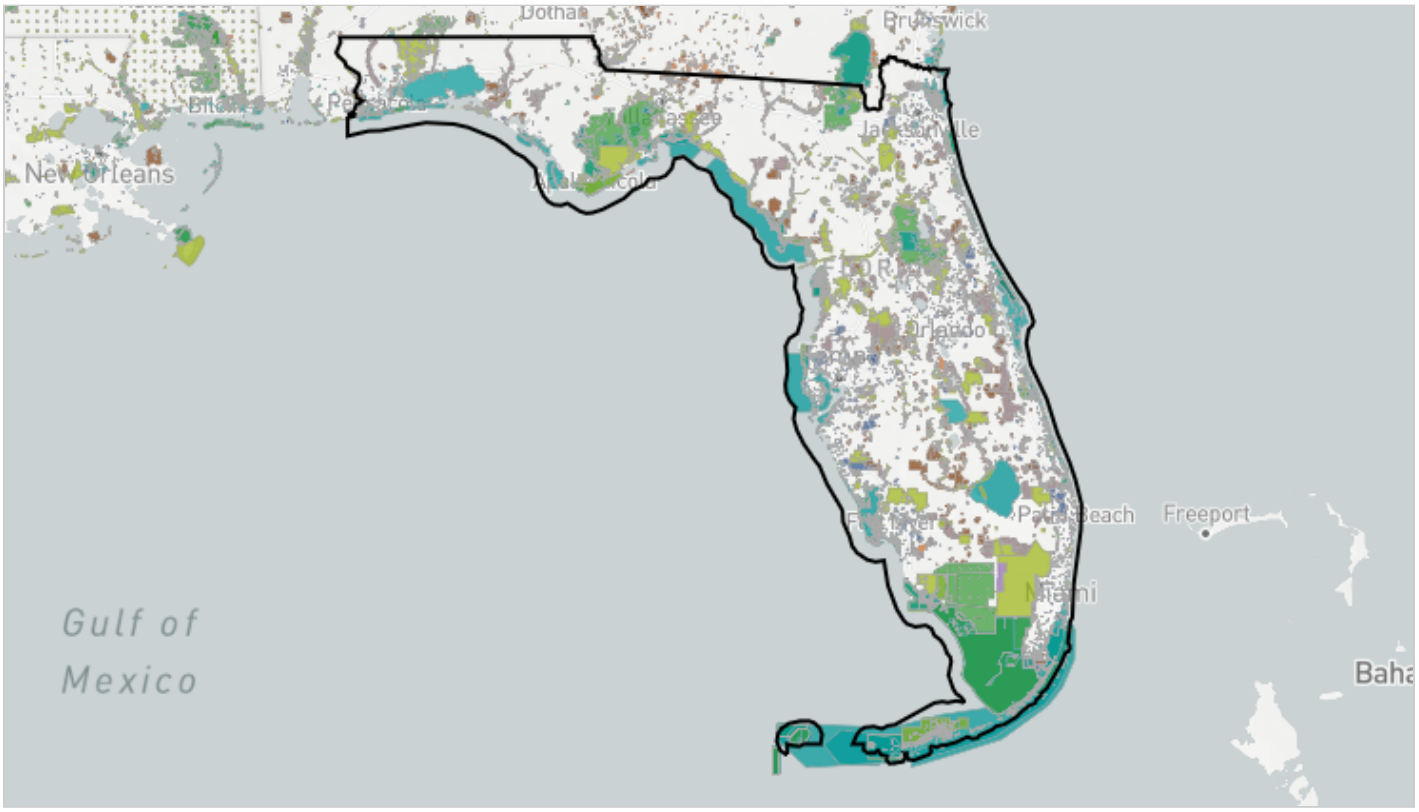
12.5% of this area is already urban in 2019, and an additional 12.4% has at least a moderate probability of urbanizing by 2060.

Table 39: Extent of projected urbanization by decade in this area. Values from the FUTURES urban growth model. Data provided 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 2019	5,720,013	12.5%
2020 projected extent	5,745,164	12.6%
2030 projected extent	5,924,302	13.0%
2040 projected extent	6,068,436	13.3%
2050 projected extent	6,181,591	13.5%
2060 projected extent	6,278,408	13.7%
2070 projected extent	6,360,868	13.9%
2080 projected extent	6,418,194	14.0%
2090 projected extent	6,452,084	14.1%
2100 projected extent	6,468,291	14.2%
Not projected to urbanize by 2100	*29,942,500*	*65.5%*
Outside Southeast Blueprint	*6,536*	*<0.1%*
Total area	**45,698,166**	**100%**

Ownership and Partners

Conserved lands ownership



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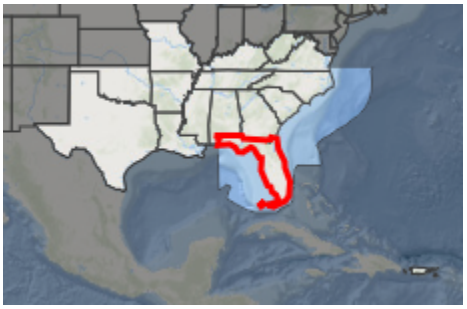
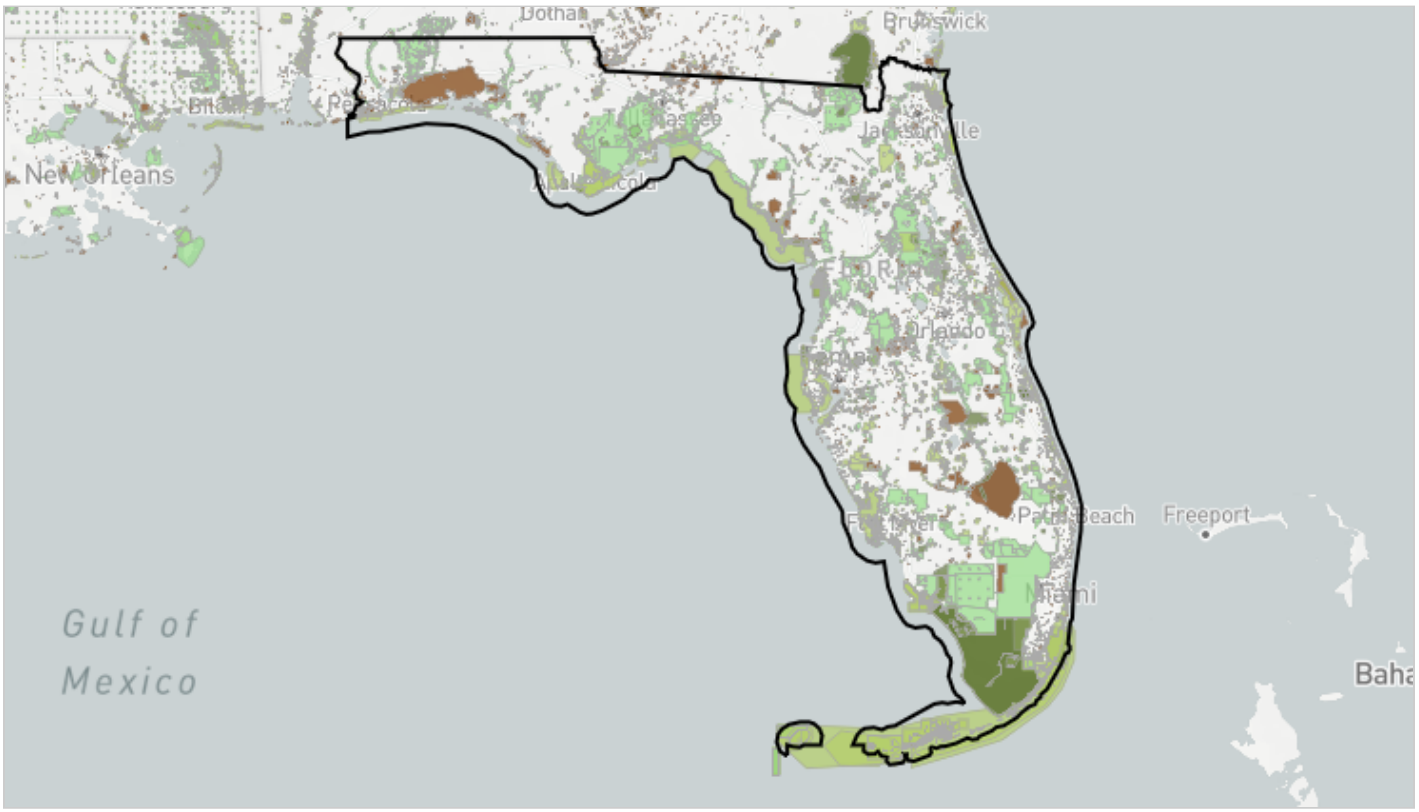


- Federal
- State/province
- Territorial
- Regional
- Local
- Joint
- Private non-profit conserved lands
- Private conservation land
- Tribal
- Designation
- Ownership unknown

Table 40: Extent of ownership class in this area. Protected areas are derived from the Protected Areas Database of the United States (PAD-US v3.0). Note: areas are based on the polygon boundary of this area compared to protected area polygons, rather than pixel-level analyses used elsewhere in this report.

Ownership	Acres	Percent of Area
Federal	4,053,137	8.9%
State/province	4,081,260	8.9%
Regional	1,701,923	3.7%
Local	553,203	1.2%
Joint	1,201	<0.1%
Private non-profit conserved lands	74,185	0.2%
Private conservation land	1,087,114	2.4%
Tribal	46,199	0.1%
Designation	10,496,950	23.0%
Ownership unknown	36,251	<0.1%
Not conserved	*23,566,768*	*51.6%*
Total area	**45,698,192**	**100%**

Land protection status



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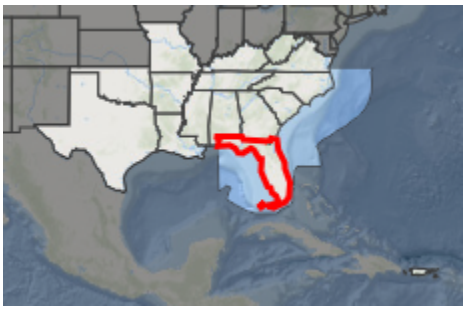

- Managed for biodiversity (disturbance events proceed or are mimicked)
- Managed for biodiversity (disturbance events suppressed)
- Managed for multiple uses (subject to extractive uses such as mining or logging, or OHV use)
- No known mandate for biodiversity protection

Table 41: Extent of land protection status in this area. Protected areas are derived from the Protected Areas Database of the United States (PAD-US v3.0). Note: areas are based on the polygon boundary of this area compared to protected area polygons, rather than pixel-level analyses used elsewhere in this report.

Land Protection Status	Acres	Percent of Area
Managed for biodiversity (disturbance events proceed or are mimicked)	3,885,994	8.5%
Managed for biodiversity (disturbance events suppressed)	9,833,424	21.5%
Managed for multiple uses (subject to extractive uses such as mining or logging, or OHV use)	6,370,492	13.9%
No known mandate for biodiversity protection	2,041,516	4.5%
Not conserved	*23,566,767*	*51.6%*
Total area	**45,698,192**	**100%**

Protected Areas

- Everglades National Park (Unknown; 1,538,630 acres)
- EVER (NPS; 1,532,380 acres)
- Florida Keys National Marine Sanctuary (Unknown; 1,403,774 acres)
- Marjory Stoneman Douglas Wilderness (1,338,506 acres)
- National Forests in Florida (USDA FOREST SERVICE; 1,203,406 acres)
- BICY (NPS; 683,630 acres)
- Big Bend Seagrasses Aquatic Preserve (Unknown; 680,739 acres)
- Everglades and Francis S. Taylor Wildlife Management Area (Trustees of the Internal Improvement Trust Fund; 669,448 acres)
- Eglin Air Force Base (452,797 acres)
- Lake Okeechobee (440,465 acres)
- Florida Keys Areas to be Avoided (Unknown; 390,961 acres)
- Pinellas County Aquatic Preserve (Unknown; 351,938 acres)
- Apalachicola National Estuarine Research Reserve (Unknown; 235,675 acres)
- Blackwater River State Forest (Trustees of the Internal Improvement Trust Fund; 206,191 acres)
- Tate's Hell State Forest (Trustees of the Internal Improvement Trust Fund; 204,575 acres)
- Great White Heron National Wildlife Refuge (Trustees of the Internal Improvement Trust Fund; 203,810 acres)

- Key West National Wildlife Refuge (Trustees of the Internal Improvement Trust Fund; 188,974 acres)
- Key West National Wildlife Refuge (Unknown; 187,836 acres)
- Withlacoochee State Forest (Trustees of the Internal Improvement Trust Fund; 165,562 acres)
- Biscayne National Park (Unknown; 157,164 acres)
- BISC (NPS; 155,762 acres)
- Great White Heron National Wildlife Refuge (Unknown; 134,231 acres)
- Merritt Island National Wildlife Refuge (Unknown; 129,419 acres)
- Biscayne Bay-Card Sound Spiny Lobster Sanctuary (Unknown; 125,475 acres)
- Apalachicola National Estuarine Research Reserve (Trustees of the Internal Improvement Trust Fund; 114,615 acres)
- ... and 8,486 more protected areas ...

Nearby land trusts

Click here to search for land trusts within 500 miles of this area on the Land Trust Alliance website.

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

Urbanization data are derived from the FUTURES urban growth model. Data provided by the Center for Geospatial Analytics, NC State University (June 2022).

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.

Land ownership and conservation status is derived from the Protected Areas Database of the United States (PAD-US v3.0).