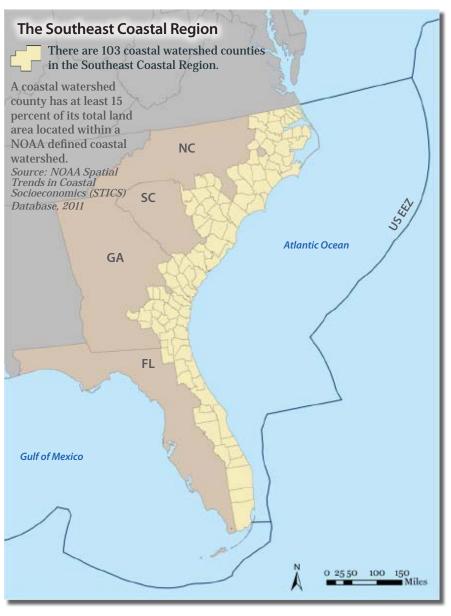
The Southeast Coastal Region

Coastal Communities, Economy, and Ecosystems Highlights

This report provides highlights of the Southeast region's coastal communities, coastal economy, and coastal ecosystems. The Southeast Coastal Region encompasses the 103 coastal watershed counties on the Atlantic Coast of the states of North Carolina, South Carolina, Georgia, and Florida. The total land area of the region is 67,459 square miles and includes 22,382 miles of coastline. The offshore ocean area extending out to the U.S. Exclusive Economic Zone (EEZ) boundary covers 189,615 square miles.



Coastal Communities

15.7 Million

The number of people residing in the Southeast Coastal Region in 2010.

Coastal Economy

\$151 Million

The value of commercial fish and shellfish landed in the Southeast Coastal Region from 2007 - 2009.

Coastal Ecosystems

22,580

The total square miles of freshwater and saltwater wetlands in the Southeast Coastal Region in 2006.

Communities Topics Inside:

Population in the Southeast Coastal Region Population in the Special Flood Hazard Area Population Density

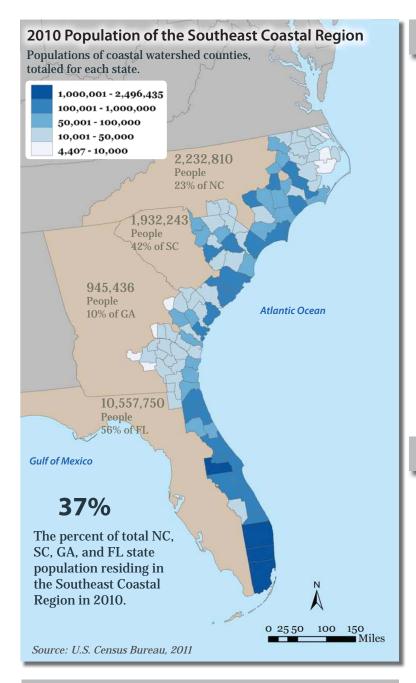
Economy Topics Inside:

Employment
Ports: Waterborne Commerce
Commercial and Recreational Fishing

Ecosystems Topics Inside:

Wetland Change Nutrient Pollution in Estuaries Coastal Vulnerability to Sea Level Rise

Coastal Communities



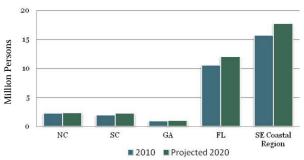
Did You Know?

The FEMA Special Flood Hazard Area (SFHA) is the area where the National Flood Insurance Program's floodplain management regulations must be enforced and where the mandatory purchase of flood insurance applies.

Population of the Southeast Coastal Region

15.7 Million

Number of people residing in the Southeast Coastal Region in 2010 (10% of the total U.S. coastal population of 164 million). This number represents a growth of 128% since 1970. Population is projected to increase to 17.7 million by 2020.



Source: U.S. Census Bureau, 2011 and Woods and Poole Economics, 2010

Population in the Special Flood Hazard Area

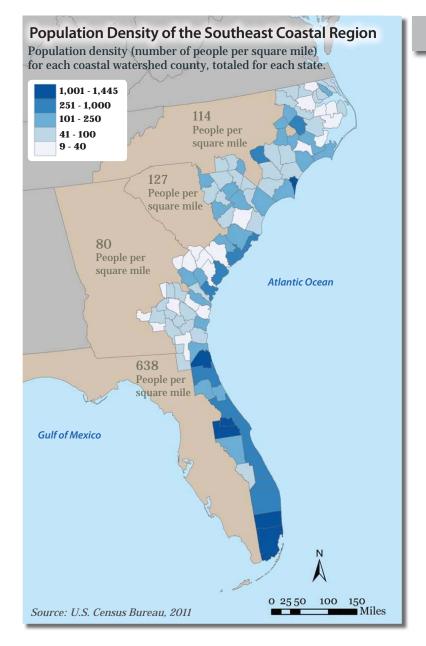
4.4 Million

Estimated number of people living in FEMA Special Flood Hazard Areas. The majority (80%) of all higher-risk sub-populations reside in Florida.

| | | Percent of SFHA Population | | | |
|--------------------------------|-----------------------------|----------------------------|----------------|---------------------------|--|
| Southeast Coastal Region | Total SFHA Population | Over Age 65 | Under Age 5 | Below Poverty Level | |
| North Carolina | 243,198 | 15% | 6% | 13% | |
| South Carolina | 368,700 | 15% | 6% | 13% | |
| Georgia | 211,336 | 12% | 8% | 12% | |
| Florida | 3,606,528 | 15% | 7% | 12% | |
| Total | 4,429,762 | 15% | 7% | 12% | |

Source: U.S. Census Bureau, American Community Survey, 2010

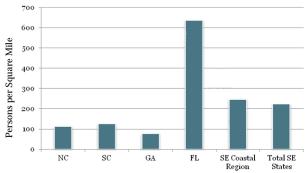
Coastal Communities



Population Density

248

Number of people per square mile living in the Southeast Coastal Region in 2010. More than double the U.S. density (excluding Alaska) of 104 people per square mile.



Source: U.S. Census Bureau, 2011



South Carolina sunset. Credit: NOAA

Coastal Watershed Counties with Densest Population by State (number of people per square mile)

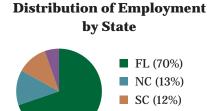
| North Carolina | | South Caro | lina | Georgia | | Florida | |
|----------------|-------|------------|----------|-------------|-----|-------------|---------|
| 1 New Hanover | 1,058 | 1 Charles | ton 382 | 1 Chatham | 622 | 1 Broward | 1,445 |
| 2 Cumberland | 490 | 2 Beaufor | t 282 | 2 Glynn | 190 | 2 Seminole | 1,367 |
| 3 Pitt | 258 | 3 Dorches | ster 238 | 3 Liberty | 130 | 3 Miami-Dad | e 1,315 |
| 4 Onslow | 233 | 4 Horry | 237 | 4 Effingham | 109 | 4 Orange | 1,268 |
| 5 Wayne | 222 | 5 Florence | e 171 | 5 Bulloch | 104 | 5 Duval | 1,134 |

Source: U.S. Census Bureau, 2011

Coastal Economy

Employment

There were over 5.9 million people employed, yielding over \$236 billion in wages paid in the Southeast Coastal Region, contributing \$600 billion to the U.S. Gross Domestic Product (GDP) in 2010.

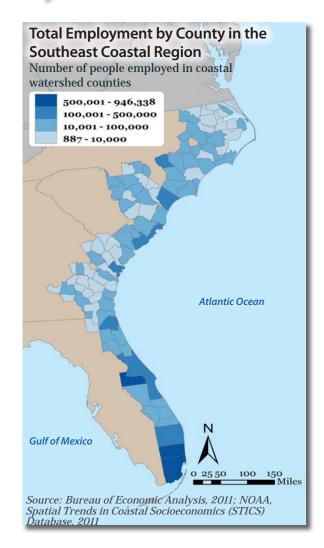


■ GA (5%)

Jobs by Major Economic Sector in 2010

| Industry | Employment (Thousands) | | |
|---------------------------|------------------------|--|--|
| Trade, Transportation, an | d Utilities 1,251 | | |
| Education and Health Ser | rvices 1,143 | | |
| Leisure and Hospitality | 803 | | |
| Professional and Business | s Services 766 | | |
| Public Administration | 373 | | |
| Financial Activities | 353 | | |
| Manufacturing | 344 | | |
| Construction | 263 | | |
| Other Services | 187 | | |
| Information | 102 | | |
| Natural Resources and M | ining 58 | | |

Source: Bureau of Economic Analysis, 2011; NOAA, Spatial Trends in Coastal Socioeconomics (STICS) Database, 2011



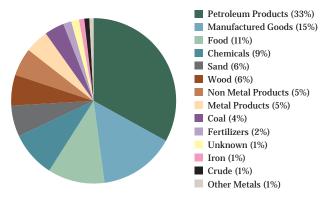
Ports: Waterborne Commerce

The Southeast Coastal Region Contained 10 of the Nation's Top 150 Ports for Tonnage in 2009

| U.S. Rank | Port | Short Tons (Million) |
|-----------|---------------------|-------------------------|
| 21 | Savannah, GA | 32 |
| 35 | Port Everglades, FL | 20 |
| 38 | Jacksonville, FL | 18 |
| 40 | Charleston, SC | 16 |
| 61 | Miami, FL | 7 |
| 62 | Wilmington, NC | 7 |
| 85 | Morehead City, NC | 3 |
| 91 | Palm Beach, FL | 2 |
| 93 | Port Canaveral, FL | 2 |
| 101 | Brunswick, GA | 2 |

Source: U.S. Army Corps of Engineers Navigation Data Center, 2011

Primary Commodities of the 10 Leading Ports in the Southeast Coastal Region



Source: U.S. Army Corps of Engineers Navigation Data Center, 2011

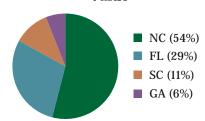
Coastal Economy

Commercial Fishing

\$151 Million

Value of commercial fish and shellfish landed in the Southeast Coastal Region, average annual value from 2007-2009.

Distribution of Fishing Landings by Value



Species Landings by Value

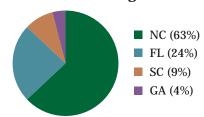
| Rank | Species | Value (million) |
|------|--------------------|-----------------|
| 1 | Blue crab | 33 |
| 2 | White shrimp | 26 |
| 3 | Brown shrimp | 10 |
| 4 | King and Cero mack | erel 8 |
| 5 | Summer flounder | 6 |

The top five species by value in the Southeast Coastal Region, a three year average from 2007-2009. Source: National Marine Fisheries Service, 2011a

108 Million

Pounds of commercial fish and shellfish landed in the Southeast Coastal Region, average annual pounds from 2007-2009.

Distribution of Fishing Landings by Poundage



Species Landings by Poundage

| Rank | Species | Pounds (million) |
|------|--------------------|------------------|
| 1 | Blue crab | 38 |
| 2 | White shrimp | 12 |
| 3 | Atlantic Croaker | 6 |
| 4 | Brown shrimp | 6 |
| 5 | King and Cero mack | erel 4 |
| | | |

The top five species landings by poundage in the Southeast Coastal Region, a three-year average from 2007-2009. Source: National Marine Fisheries Service, 2011a

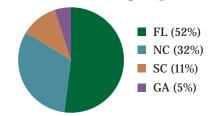
Recreational Fishing

84 Million

Number of fish caught by recreational fishers in the Southeast Coastal Region in 2010.

Source: National Marine Fisheries Service. 2011b. 2011c

Distribution of 19 Million Marine Recreational Fishing Trips in 2010



Source: National Marine Fisheries Service, 2011b

24%

The percentage of the total U.S. recreational fish catch that occurred in the Coastal Southeast Region in 2010.

Source: National Marine Fisheries Service, 2011c

Coastal Ecosystems

Wetland Change

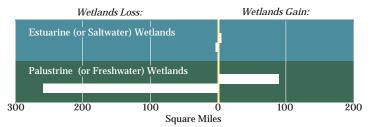
22,580

The total square miles of freshwater and saltwater wetlands in the Southeast Coastal Region in 2006.

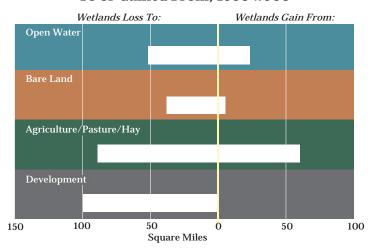
184

The square miles of freshwater and saltwater wetlands converted to open water, bare land, agriculture, and development between 1996 and 2006.

Gross Loss and Gain in Saltwater and Freshwater Wetlands, 1996-2006



Land Cover Types that Wetlands Have Been Lost To or Gained From, 1996-2006



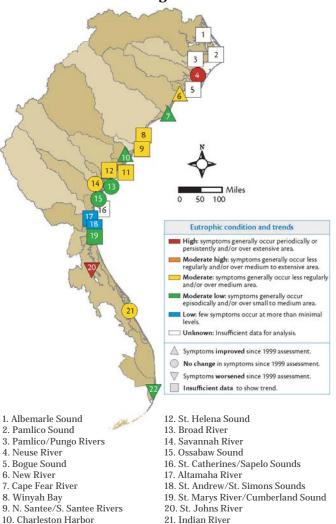
Source: NOAA Coastal Services Center, 2006

Nutrient Pollution in Estuaries

9

The number of estuaries in the Southeast Coastal Region that displayed moderate or worse expression of nutrient pollution (eutrophic) conditions in 2004.

Nutrient Pollution (Eutrophic) Condition of Southeast Coastal Region Estuaries in 2004



22. Biscayne Bay

Source: Bricker, et. al., 2007

11. Stono/North Edisto Rivers

Coastal Ecosystems



Did You Know?

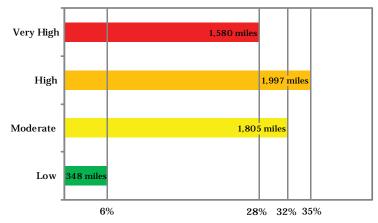
Coastal vulnerability to sea level rise is based on the Coastal Vulnerability Index (CVI) developed by the U.S. Geological Survey. The CVI shows the relative vulnerability of the coast to physical changes due to predicted rise in sea level.

Coastal Vulnerability to Sea Level Rise

62%

Percentage of Coastal Vulnerability Index and mapped shoreline miles of the Southeast Coastal Region that has a high or very high risk rating.

Southeast Coastal Region Coastal Vulnerability



Percentage of mapped shoreline along the U.S. Southeast coast for each Coastal Vulnerability Index risk category and number of miles of each category.

Source: U.S. Geological Survey, 2005

What is Considered When Determining Coastal Vulnerability Index Ratings?

- Shoreline Erosion Rate
- Geomorphology (erodibility of shoreline)
- Historic Sea Level Rise Rate
- Regional Coastal Slope (steepness or flatness)
- Tide Range
- Wave Height

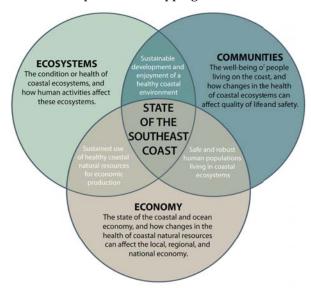


Cape Hatteras, North Carolina. Credit: Julia Brunner, NPS

NOAA'S STATE OF THE COAST

About This Report

This report seeks to inform Regional Ocean Partnerships, like the Governor's South Atlantic Alliance, which have formed across the nation since the release of the U.S. Commission on Ocean Policy and the Pew Oceans Commission reports. These reports called for improved coordination to address issues that cut across jurisdictional boundaries and affect multiple and overlapping watershed, coastal, and offshore uses.



As a product of the NOAA State of the Coast Report Series, The Southeast Coastal Region provides highlights of what we know about the Southeast region's coastal communities, coastal economy, and coastal ecosystems, and how climate change might impact the Southeast coast. Information in this report is organized by the interconnected themes of coastal communities, economy, and ecosystems.

This report is an abbreviated continuation of regional State of the Coast reports, which began with the *Gulf of Mexico at a Glance* and the *Gulf of Mexico at a Glance:* A Second Glance.

stateofthecoast.noaa.gov

References

Bricker, S., B. Longstaff, W. Dennison, A. Jones, K. Boicourt, C. Wicks, and J. Woerner. 2007. Effects of Nutrient Enrichment In the Nation's Estuaries: A Decade of Change. NOAA Coastal Ocean Program Decision Analysis Series No. 26. National Centers for Coastal Ocean Science, Silver Spring, MD. 328 pp. http://ian.umces.edu/neea

Bureau of Labor Statistics. 2011. 2010 Census of Employment and Wages. http://www.bls.gov/cew/ (accessed August 2011)

National Marine Fisheries Service, National Oceanic and Atmospheric Administration. 2011a. Annual Commercial Landing Statistics. http://www.st.nmfs.noaa.gov/st1/commercial/landings/annual_landings.html (accessed April 2011)

National Marine Fisheries Service, National Oceanic and Atmospheric Administration. 2011b. Fisheries of the United States 2010 report. http://www.st.nmfs.noaa.gov/st1/fus/fus10/index.html (accessed April 2011)

National Marine Fisheries Service, National Oceanic and Atmospheric Administration. 2011c. Recreational Fishery Statistics Catch Snapshot Queries http://www.st.nmfs.noaa.gov/st1/recreational/queries/catch/snapshot.html (accessed April 2011)

National Marine Fisheries Service, National Oceanic and Atmospheric Administration. 2011d. Total Commercial Fishery Landings at Major U.S. Ports http://www.st.nmfs.noaa.gov/st1/commercial/landings/lport_yearp.html (accessed April 2011)

NOAA Coastal Services Center, Coastal Change Analysis Program. 2006. http://www.csc.noaa.gov/digitalcoast/data/ccapregional/ (accessed July 2011)

NOAA. Spatial Trends in Coastal Socioeconomics (STICS) Database. 2011. http://coastalsocioeconomics.noaa.gov/ (accessed August 2011)

U.S. Army Corps of Engineers Navigation Data Center, U.S. Waterway Data. http://www.ndc.iwr.usace.army.mil/data/data1.htm (accessed August 2011)

U.S. Census Bureau. American Community Survey (2005-2009). 2010. Data estimated for FEMA's Special Flood Hazard Areas. http://coastalsocio-economics.noaa.gov (accessed August 2011)

U.S. Census Bureau. 2011. Census 2010. http://factfinder2.census.gov/faces/nav/jsf/pages/index.xhtml (accessed August 2011)

U.S. Geological Survey. 2005. Coastal Vulnerability to Sea-Level Rise: A Preliminary Database for the U.S. Atlantic, Pacific and Gulf of Mexico Coasts, U.S. Geological Survey Digital Data Series - 68. http://pubs.usgs.gov/dds/dds68/htmldocs/data.htm. (accessed April 2011)

Woods and Poole Economics, Inc. 2010. Complete Economic and Demographic Dataset. http://www.woodsandpoole.com/main.php?cat=country. Data processed by NOAA to determine coastal county summary totals and absolute and percent change. (accessed August 2011)