



NATIONAL CLIMATE ASSESSMENT: THE SOUTHEAST

The National Climate Assessment is the most comprehensive report on climate change impacts in the United States. Here are a few things we learned from the assessment about impacts in the Southeast region: Kentucky, Virginia, Arkansas, Tennessee, North Carolina, Louisiana, Mississippi, Alabama, Georgia, South Carolina, and Florida.

Heat

- Climate change is happening now, and is primarily caused by carbon pollution from fossil fuels like coal, oil, and gas. How much the climate changes in the future is up to us.
- If carbon emissions continue to increase, regional temperatures could be up to 8 degrees Fahrenheit higher by 2100 — a dramatic change in the climate likely to bring harmful and unforeseen consequences.
- The Southeast, which is already warm and humid, will see the largest regional increase in the heat index. The higher the heat index, the more dangerous the heat wave.
- As temperature and humidity increase, “bad air” days will also increase — leading to more hospital admissions and deaths in the region’s largest cities.
- Warmer winters will likely increase the risk of some infectious diseases. By the end of the century, the ticks that carry Lyme disease could become far more common in Kentucky, Arkansas, and Tennessee.
- More heat can be harmful to agriculture. Less than a decade from now, increased heat stress could reduce Georgia’s corn yields by 15 percent and wheat yields by 20 percent. Dairy production may become impossible in some areas by the end of the century.

Sea Level Rise

- At the same time sea levels are rising, large parts of the low-lying Southeast coast are actually sinking. This makes the region that much more vulnerable to sea level rise — including iconic cities like New Orleans, Charleston, and Virginia Beach.
- Sea level rise could inundate 2,400 miles of highways across the Gulf Coast by the end of the century. Louisiana State Highway 1, which supports 90 percent of the country’s offshore oil production, already floods during high tide.
- Rising seas will impact water supplies and food production in the Southeast. Saltwater contamination has already forced the closure of water wells in Hallandale Beach, Florida. Two feet of sea level rise would cover 37,500 acres of cropland across the state.

Storms

- Atlantic hurricanes are expected to intensify as carbon pollution increases. Strong hurricanes can displace tens of thousands of people. For instance, 200,000 people migrated to Houston when Hurricane Katrina hit Louisiana.