

## Information resources related to climate change impacts for the southeastern United States

Below is a partial list of resources related to research on climate impacts. Many other resources exist that are not listed here.

### Introductory Information

Title	Source	Description
<a href="#">Climate Indicators Report</a>	EPA	With help from their partners, the Environmental Protection Agency (EPA) compiles a set of indicators tracking signs of climate change. These indicators represent a selected set of key measures of climate change and are not an exhaustive group of all climate change indicators.
<a href="#">What We Know</a>	AAAS	An American Association for the Advancement of Science (AAAS) compilation of “what we know” about climate science.
<a href="#">Climate Basics</a>	USFS	This U.S. Forest Service site provides several resources that introduce the topic of climate change and discuss some of its implications for natural resource managers.
<a href="#">State of the Climate in 2020</a>	American Meteorological Society	The state of many monitored climate variables and the 2020 climate conditions of regions around the world.

### Climate Projections for the Southeast

USGS Open-File Report 2014–1190: Downscaled Climate Projections for the Southeast United States: Evaluation and Use for Ecological Applications

<https://pubs.usgs.gov/of/2014/1190/>

An evaluation of 20th century climate for the Southeastern United States as simulated by Coupled Model Intercomparison Project Phase 5 (CMIP5) global climate models (usgs.gov)

<https://pubs.er.usgs.gov/publication/ofr20161047>

Visualize maps and graphs of historical and projected climate trends for several temperature and precipitation variables for any city, zip code, or county in the contiguous United States.

<https://toolkit.climate.gov/tool/climate-explorer-0>

The Climate Toolbox

A collection of web tools for visualizing past and projected climate and hydrology of the contiguous United States.

<https://climatetoolbox.org/>

## **Phenology (seasonal timing)**

USA Phenology Network

<https://www.usanpn.org/usa-national-phenology-network>

Monitoring Climate Change in the Smokies (National Park Service video)

<https://www.nps.gov/media/video/view.htm?id=C28C7793-1DD8-B71C-071F154BB9B43A40>

## **Mapping resources – high priorities for conservation**

The Nature Conservancy – Resilient and Connected Network

<https://www.conservationgateway.org/ConservationPractices/ClimateChange/Pages/RCN-Downloads.aspx>

Southeast Conservation Blueprint

<https://secassoutheast.org/blueprint.html>

## **Impacts on freshwater resources**

Harmful Algal Blooms (HABs)

<https://www.tn.gov/environment/program-areas/wr-water-resources/nutrient-management-in-tennessee/resources/habs.html>

Report: Simulation of Water Availability in the Southeastern United States for Historical and Potential Future Climate and Land-Cover Conditions

<https://doi.org/10.3133/sir20195039>

Fact sheet: Climate Change and Potential Impacts to Wildlife in Tennessee

<https://www.tn.gov/content/dam/tn/twra/documents/habitat/climatefacts.pdf>

## **Urban heat islands**

National Integrated Heat Health Information System

<https://www.heat.gov/pages/urban-heat-islands>

EPA – heat island effects

<https://www.epa.gov/heatislands>

Fourth National Climate Assessment – Chapter 11: Built Environment, Urban Systems, and Cities

<https://nca2018.globalchange.gov/chapter/11/>

Nashville Heat Mapping Campaign

<https://www.nashville.gov/departments/mayor/sustainability-resilience-environment/nashville-heat-mapping>

Summary Report

<https://www.nashville.gov/sites/default/files/2022-10/Summary-Report-Heat-Watch-Nashville-100522.pdf?ct=1666870335>

## **Changing fire regimes and prescribed burn windows**

Southern Fire Exchange

<https://southernfireexchange.org/>

Article: Climate change projected to reduce prescribed burning opportunities in the southeastern United States

<https://www.publish.csiro.au/wf/WF19198>

## **Agricultural impacts**

USDA Southeast Climate Hub

<https://www.climatehubs.usda.gov/hubs/southeast>

Report: McNulty et al., 2015: Southeast Regional Climate Hub Assessment of Climate Change Vulnerability and Adaptation and Mitigation Strategies, T. Anderson, Ed., United States Department of Agriculture, 61 pp.

<https://www.climatehubs.usda.gov/sites/default/files/Southeast%20Vulnerability%20Assessment%20Final%200.pdf>

## **Changing drought conditions**

U.S. Drought Monitor

<https://droughtmonitor.unl.edu/>

National Integrated Drought Information System (NIDIS)

<https://www.drought.gov/about>

Article: Crausbay et al., 2020. Unfamiliar territory: Emerging themes for ecological drought research and management. *One Earth*, 3(3), pp.337-353.

<https://www.sciencedirect.com/science/article/pii/S2590332220304280>

## **Invasive species**

National Invasive Species Information Center

<https://www.invasivespeciesinfo.gov/subject/climate-change>

Invasive Range Expanders Listing Tool

<https://www.eddmaps.org/rangeshiftlisting/>