NORTH CAROLINA

CLIMATE CHANGE IMPACTS

Excess heat and coastal and inland flooding have already impacted North Carolina, and pose growing challenges to many aspects of life. Human health, infrastructure, and crops will be increasingly compromised.

	ALREADY OBSERVED CHANGES	ANTICIPATED FUTURE CHANGES	RISKS TO SOCIETY
 HEAT	Summers in North Carolina are now **2°F hotter** on average. Raleigh now experiences almost **20 more days above 95°F** per year than in 1970.	Summers in **Great Smoky Mountains National Park** are expected to be **12°F hotter** by 2100. The number of **dangerous heat days** each year in North Carolina is projected to **increase by almost 6 times** by 2050.	**Mosquito season** in Durham and Raleigh is now more than a month longer than in 1980. Raleigh and Greenville have experienced a 3°F increase in dew point temperature since 1980 and the additional moisture in the air increases risk of **heatstroke** and **heat exhaustion**.
 COASTAL FLOODING	Wilmington has experienced **376 coastal flood days** over the last decade, 82% of which are attributed to **human activities**. In comparison, only 14 coastal flood days were observed from 1955-1965.	2,000 square miles of North Carolina are currently at risk of a **100-year coastal flood**. This is projected to increase to nearly **2,700 square miles** by 2050. By midcentury, a **100-year flood** in the Outer Banks is projected to become **9 times more likely.**	120,000 people living in North Carolina are currently at risk for a **100-year coastal flood**. By midcentury, this is expected to increase by **45,000 additional people.**
 INLAND FLOODING	The Southeast has observed a **27% increase** in the amount of **rain falling** during heavy downpours. Charlotte is among the top 20 cities that have observed the **strongest increase in heavy downpours** since 1950.	By 2050, North Carolina's **inland flooding threat** is projected to **increase by 40%.**	More than **450,000 people** in North Carolina are currently living in **flood prone areas**. Intensifying extreme rainfall events stress **infrastructure** in the Southeast. Many **transportation** and **storm water systems** were not designed to withstand these events.

For sources of information, please visit: www.edf.org/climateimpactsources

*Anticipated future changes are for scenarios without climate action

EDF ENVIRONMENTAL DEFENSE FUND
Finding the ways that work

EXPECTED DAMAGES

IN NORTH CAROLINA BY 2100 WITHOUT CLIMATE ACTION

- At least 1,250 additional deaths per year.
- As many as 100,000 homes valued at nearly $30 billion at risk of chronic inundation, and nearly $800 million in annual coastal damages.
- Nearly all counties, home to about 9.5 million people, will experience about an 8-10% increase in energy expenditures.
- 12 counties, home to 1.5 million people, will experience a 30-67% decrease in crop yields.