

PENNSYLVANIA

CLIMATE CHANGE IMPACTS



Excess heat and coastal and inland flooding have already impacted Pennsylvania, 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



Compared to 1970, Pennsylvania is more than 2°F hotter on average and Pittsburgh experiences over **5 additional days above 90°F** each year.

Erie is the 15th fastest warming city in the U.S., and Philadelphia is the 17th.

By midcentury, the number of extremely dangerous heat days observed in Pennsylvania is projected to triple and the number of **heat wave days may increase by five-fold**.

Summers in Harrisburg are expected to be **11°F hotter** by the end of the century.

Mosquito season in Pittsburgh and Harrisburg is currently about a month longer than in the 1980s.

Harrisburg has experienced an almost 4°F increase in dew point temperature since the 1980s and the additional moisture in the air increases risk of **heatstroke** and **heat exhaustion**.



Philadelphia has experienced **304 coastal flood days** since 1950, **53%** of which are attributed to human activities.

This is **6 times as many coastal flood days** experienced by the city compared to 1955-1964.

By 2050, Pennsylvania's **coastal flood risk** is expected to almost double, putting an additional **6,000 people at risk** of a 100-year flood.

Although Pennsylvania is not generally considered as a coastal state, areas bordering the tidal waters of the Delaware Bay pose risk for coastal flooding.

Pennsylvania has about **7,000 people** at risk of a **100-year coastal flood**.



On average, Philadelphia has experienced a **360% increase in heavy downpours** since 1950, the third most of any U.S. city.

By 2050, Pennsylvania's **coastal flood threat** may increase by **roughly 40%**, one of the top 10 greatest in the U.S.

More than **430,000 people** in Pennsylvania are living in **flood prone** areas.

During Hurricane Sandy, Pennsylvania experienced over **56 million gallons of sewage overflow** associated with the storm surge.

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

*Anticipated future changes are for scenarios without climate action



EXPECTED DAMAGES

IN PENNSYLVANIA BY 2100 WITHOUT CLIMATE ACTION

- As many as 4,400 homes valued at about \$1 billion at risk of chronic inundation, and about \$50 million in annual coastal damages.
- 10 counties, home to about 5 million people, will experience about a 10% increase in energy expenditures.
- 20 counties, home to 4.6 million people, will experience between a 25-55% decrease in crop yields.