

# MINNESOTA

## CLIMATE CHANGE IMPACTS



Extreme heat, drought, and inland flooding have already impacted Minnesota, and pose growing challenges to many aspects of life. Water resources, human health, infrastructure, crops, and ecosystems will be increasingly compromised.

### ALREADY OBSERVED CHANGES

### ANTICIPATED FUTURE CHANGES

### RISKS TO SOCIETY



Voyageurs National Park has **warmed more than 2 °F** over the past century.

Summers are muggier as the dewpoint temperature rises. In Duluth, the **dewpoint temperature has risen by over 2 °F** since 1980.

Minneapolis is projected to experience more than **7 times more dangerous heat days** by midcentury and the number of **heat wave days** is projected to increase by more than **five-fold**.

Summers in St. Paul are projected to be **12 °F hotter** by the end of the century.

**Mosquito season** in Minneapolis is currently about a month longer than in the 1980s, the 3<sup>rd</sup> largest increase of any U.S. city.

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



Summer precipitation has slightly declined in Northeast Minnesota since 1970.

By 2050, the severity of **widespread summer drought** in Minnesota is projected to nearly **triple**. This is the fourth greatest increase of any U.S. state and would make it **one of the five worst drought-affected states**.

Rapid increases in air and water temperature and increasing drought risk will likely accelerate the rate of **species declines and extinctions** in the Midwest.



In the Midwest, **billion-dollar floods** have occurred three times in the last 25 years.

Climate projections suggest an **increased risk of inland flooding** in the Midwest under both high and low emissions scenarios.

The average annual damages from increased flooding risk in the Midwest are projected to be more than **\$500 million** by midcentury.

For sources of information, please visit: [www.edf.org/climateimpactsources](http://www.edf.org/climateimpactsources)  
\*Anticipated future changes are for scenarios without climate action



### EXPECTED DAMAGES

IN MINNESOTA BY 2100  
WITHOUT CLIMATE ACTION

- 20 counties, home to about 2 million people, will experience a 20-30% decrease in crop yields.
- 15 counties, home to about 2.3 million people, will experience about an 8% increase in energy expenditures.