

COLORADO

CLIMATE CHANGE IMPACTS



Excess heat, drought, and wildfires have already impacted Colorado, and pose growing challenges to many aspects of life. Water resources, human health, energy generation, and tourism will be increasingly compromised.

ALREADY OBSERVED CHANGES

ANTICIPATED FUTURE CHANGES

RISKS TO SOCIETY



Colorado has warmed 2.6°F since the 1970s and over 3.5°F during the fall. Fort Collins is **9th-fastest warming city** in the U.S.

The number of **days above 95°F** each summer has approximately **doubled** in Denver since the 1970s.

By midcentury, Colorado is projected to experience **five times** as many **heatwaves** each year and the number of **dangerous heat days** is projected to **increase** by **50%**.

The length of **mosquito season** has more than tripled in Grand Junction, CO since the 1980s.

By midcentury, several cities in Colorado could see up to a 30% reduction in electricity generation capacity during summers and are at risk of **electricity shortages**.



Increasing heat and decreasing snow have exacerbated recent droughts in the Colorado River Basin.

High temperatures are responsible for up to half of the record-setting Colorado River **streamflow reductions** between 2000 and 2014.

By 2050, widespread summer **drought severity** in Colorado is projected to be **among the worst** in the country, **tripling** its severity compared to today.

Declining snowpacks and runoff, along with a shift of spring runoff to earlier in the season, may **reduce hydroelectric power** potential by up to 15% by 2050.

During a low snow season, Colorado can observe a **loss** of over \$150 million in **ski resort revenue**.



The **number of fires** burning annually in Colorado has more than **quadrupled** since the 1970s. An average year in the 2010s experienced **30 times more acres burned** by large wildfires than in the 1970s.

By end of the century in the Southwest U.S., fire frequency could increase by 25% and the **frequency of large fires could triple** without efforts to curb greenhouse gas emissions.

Wildfires have previously **degraded drinking water** in Fort Collins with sediment and cancer precursors, requiring a multi-month switch to alternative water supplies.

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



EXPECTED DAMAGES

IN COLORADO BY 2100
WITHOUT CLIMATE ACTION

8 counties currently home to over 200,000 people are each expected to spend over 10% more on energy relative to 2012 levels