

# ARIZONA

## CLIMATE CHANGE IMPACTS



Heat waves, drought, and wildfires have already impacted Arizona, and pose growing challenges to many aspects of life. Water resources, human health, infrastructure, and energy generation will be increasingly compromised.

### ALREADY OBSERVED CHANGES

### ANTICIPATED FUTURE CHANGES

### RISKS TO SOCIETY



Arizona is **4<sup>th</sup>-fastest warming state** in U.S.

Phoenix is **2<sup>nd</sup>-fastest** warming city in the U.S., followed by Prescott as the 5<sup>th</sup> and Tucson as the 7<sup>th</sup>.

Average temperatures in Arizona during spring have warmed by **4°F** since 1970.

**Heat wave days** in Arizona are expected to **more than triple** by 2050 from 15 to 50 days a year.

'**Dangerous**' **heat days** are projected to grow from 50 days a year to 80 by 2050.

Number of days **above 100°F** in Phoenix may **nearly double** from 80 to 150 by end of century.

Tucson ranks 6<sup>th</sup> in U.S. cities with the **largest increase** in '**disease danger days**' (risk of disease transmission by mosquitoes), increasing by 29 days since 1970.

By midcentury, Arizona summers could see **20% reduction** in **electricity generation capacity**.



Drought in the southwestern U.S. is declining the western snowpack, and this along with rising temperatures have **reduced water flow** down the Colorado River.

By 2050, the severity of widespread **summer drought** is projected to **more than triple** in Arizona, the second largest increase behind Washington.

Reduced water flow from the Colorado River is impacting Arizona's **water supply**; Tucson gets almost all their water from the River, while Phoenix receives about half its supply.

Higher number of cases of **Valley fever** have occurred in Arizona from drier conditions.



Arizona now sees **three times more fires burning** per year than in the 1970s, which has led to thousands of more acres burned each year.

By 2050, Arizona is projected to see **over one more month of high wildfire potential**, leading to 115 at-risk days each year.

Nearly **3 million people** living in Arizona—45% of the state's population—are at elevated risk of wildfire.

**Infrastructure** is especially vulnerable to increased wildfires.

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 ARIZONA BY 2100  
WITHOUT CLIMATE ACTION

- At least 1,700 additional deaths per year
- A 50 to 70% decrease in major crop yields for several counties, including in Maricopa county, which is home to nearly 4 million people
- Over 15% more spent on energy in half of counties, nearly 20% more spent in Maricopa county