# TEXAS CLIMATE CHANGE IMPACTS



Heat waves, drought, wildfires, and rising seas have already impacted Texas, and pose growing challenges to many aspects of life. Water resources, human health, crops, and infrastructure will be increasingly compromised.

### ALREADY OBSERVED CHANGES

## ANTICIPATED FUTURE CHANGES

### RISKS TO SOCIETY



Austin now observes almost 40 more days above 100 °F than in 1970, and Big Bend National Park has warmed almost 3 °F since the 1900s.

El Paso is the 9<sup>th</sup> fastest warming city in the country.

By 2050, Texas is projected to experience almost twice as many dangerous or extremely dangerous heat days per year.

Summer temperatures in Big Bend National Park may increase by 13 °F by 2100. **Mosquito season** in Lubbock is about 18 days longer than it was in the 1980s.

Texas has **840,000 people** especially vulnerable to extreme heat.



The Southern Great Plains region is prone to **periods of drought** punctuated by heavy rainfall events, with evidence that these events are occurring more frequently.

By 2050, the severity of widespread summer drought is projected to almost double in Texas.

The severity of widespread summer drought in Texas ranks first among U.S. states.

The Texas State Water Plan predicts that a growing population will yield a **17% increase in water demand** by 2050.



Periods of abundant precipitation followed by drought and high temperatures are linked to increased wildfire activity in Texas

By 2050, the average number of days with high wildfire potential in Texas is projected to double (the greatest increase of wildfire threat in any US state) and Texas will be the worst wildfireaffected state in the U.S.

Nearly 18 million people in Texas (over 70% of the state population) are at elevated vulnerability to wildfire.

The Bastrop Fire, which took place during the drought of 2011, destroyed over 1,500 homes.



Port Isabel has experienced 121 coastal flood days since 2005, 85% of which were human caused.

Along the Texas coastline, **sea level has risen 5 to 17 inches** over the last 100 years.

By 2050, Texas coastal flooding threat is projected to increase by about 60%, with an additional 115,000 people in the 100-year coastal floodplain. By 2050, a 100-year flood at Corpus Christi will be 9 times more likely.

**192,000 people** in Texas are currently at risk of a 100-year coastal flood.

If sea level were to rise by 10 feet, 110,000 people living in Galveston would be affected.

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



# **EXPECTED DAMAGES**

IN TEXAS BY 2100 WITHOUT CLIMATE ACTION

- · At least 7,000 additional deaths per year.
- As many as 80,000 homes valued at nearly \$20 billion at risk of chronic inundation, and nearly \$1.6 billion of annual coastal damages.
- 15 counties, home to nearly 5 million people, will experience a 50-80% reduction in crop yields.
- All counties, home to over 25 million people, will experience over a 10% increase in energy expenditures.