

SOUTHERN CALIFORNIA

CLIMATE CHANGE IMPACTS

Counties: Imperial, Los Angeles, Orange, Riverside, San Bernardino, San Diego, Santa Barbara, Ventura



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

ALREADY OBSERVED CHANGES

ANTICIPATED FUTURE CHANGES

RISKS TO SOCIETY



Riverside is the **4th fastest warming city** in the U.S.
The **hottest year on record** in San Diego and Palm Springs occurred during the 2010s.

The number of **dangerous heat days** observed each year are projected to **almost double** in Los Angeles by 2050.

Heat waves in California have already caused hundreds of **deaths**, thousands of **hospital visits**, and billions in **economic costs**.



Higher temperatures intensified the 2011-2016 drought, and led to the **largest 'snow drought' on record** as more precipitation fell as rain.

The severity of widespread **summer drought** in California is projected to **almost triple** by the end of the century.

The increase in heat and reduction of snow have amplified recent **water shortages**.
The recent drought led to 10,000+ **lost jobs** and \$900M of **gross crop revenue lost**.



The number of **fires** and amount of **acres burning** annually in California has **roughly doubled** since the 1970s. In 2018, 400,000+ acres burnt – nearly 3 times the amount in the 1970s.

Without action to curb climate change, there could be a **25% increase** in the frequency of **wildfires** in the Southwest by end of century, along with a **tripling** of very **large fires**.

Wildfires in California in 2017 and 2018 resulted in over **\$42 billion** in damages.



Sea level has risen around 9" in San Diego over past century.
Scientists have found that 60 **coastal flood days** in La Jolla over the past decade are **90% human-caused**.

Projected sea level rise by 2050 could make **100-year floods** in La Jolla, Los Angeles, and San Diego **100 times more likely**, and coastal floods are expected to triple in these cities by 2050.

Sea level rise and storm surge may **erode** two thirds of southern California **beaches** by 2100.

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



EXPECTED DAMAGES

IN CALIFORNIA BY 2100 WITHOUT CLIMATE ACTION

- At least 2,500 additional deaths per year
- San Bernardino county, currently home to 2 million people, expected to see around a 50% decrease in major crop yields relative to 2012 levels
- Imperial, Orange, Riverside, and San Bernardino counties are each expected to spend 10% more on energy relative to 2012 levels