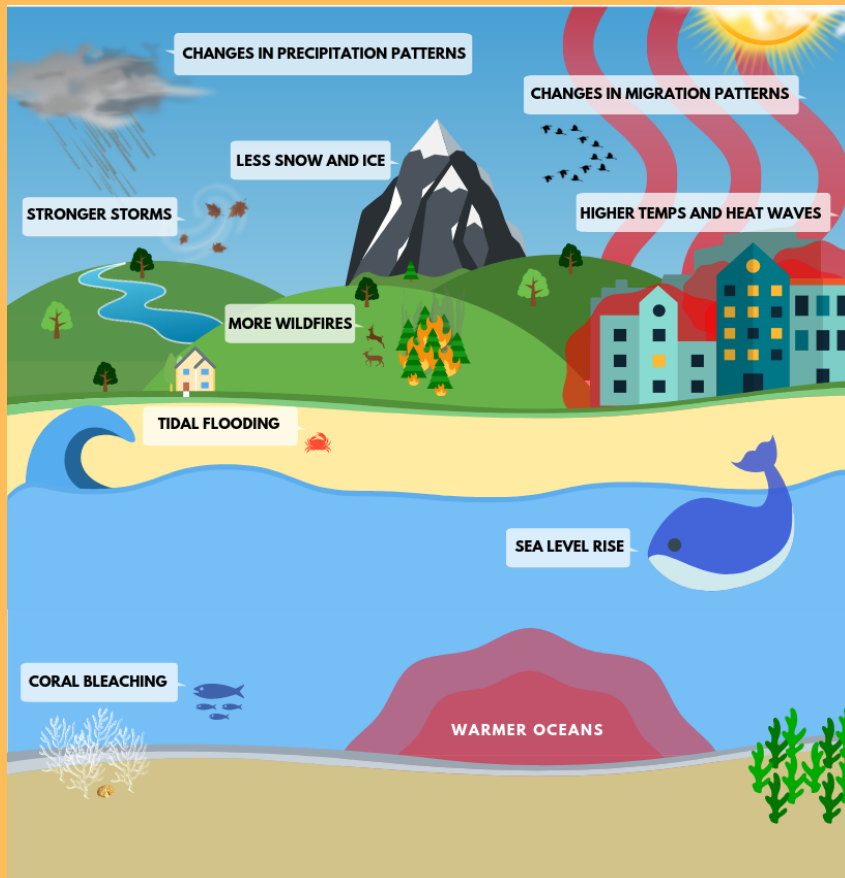## How is the climate changing in New Jersey?

Temperatures are climbing and the sea levels are rising in the Garden State.

Over the past century, the burning of fossil fuels to produce energy has released large amounts of carbon dioxide into the atmosphere. Carbon dioxide (CO_2) is one of several greenhouse gases that trap heat in the atmosphere, causing changing climate patterns. The added carbon dioxide has led New Jersey to experience increased rainfall, more frequent extreme weather events, rising sea levels and climbing temperatures.

Changes in New Jersey's Climate

CHANGES IN PRECIPITATION PATTERNS

CHANGES IN MIGRATION PATTERNS

LESS SNOW AND ICE

STRONGER STORMS

HIGHER TEMPS AND HEAT WAVES

MORE WILDFIRES

TIDAL FLOODING

SEA LEVEL RISE

CORAL BLEACHING

WARMER OCEANS

Increased Rainfall

Annual precipitation in New Jersey has been **8 percent above average** during the last 10 years.[1] The Garden State has experienced an **upward trend of 4.1 inches** (9 percent increase) in precipitation per 100 years.[2]

Extreme Events

New Jersey is experiencing increased intensity, frequency and duration of storm events. Since 1980, the state has sustained **42 extreme weather events,** with nationwide cumulative losses exceeding **$1 billion**.[3]

Sea Level Rise

Sea level along the New Jersey coast has risen by **more than 16 inches since 1911, double the global average.**[1] The state will continue to experience sea level rise, with projections estimating another 1 to 1.8 feet by 2050.[4]
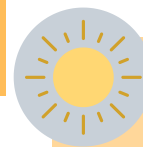
Increased Temperatures

New Jersey's average annual temperatures have **increased by 3 degrees Fahrenheit** since 1900. Nine of the 10 hottest calendar years on record have occurred since 1990.[1]

1. NOAA National Centers for Environmental Information (NCEI). (2017). *State Climate Summaries, New Jersey.* Retrieved from statesummaries.ncics.org/chapter/nj/
2. Office of the New Jersey State Climatologist. (2019). *New Jersey's Extreme Temperature and Precipitation Months.* Retrieved from climate.rutgers.edu/stateclim/NJ_monthly_extremes.pdf
3. NOAA National Centers for Environmental Information (NCEI). (2019). *U.S. Billion-Dollar Weather and Climate Disasters.* Retrieved from www.ncdc.noaa.gov/billions/
4. New Jersey Department of Environmental Protection. (NJDEP). (2018). *Climate Change Trends Report.* Retrieved from www.nj.gov/dep/dsr/trends/Climate%20Change.pdf