State of the Climate

New Jersey 2022

RUTGERS

Temperatures are climbing

The mid-Atlantic region is one of the most rapidly warming locations in the continental U.S.

Summer 2022 was the

3rd warmest summer

on record in NJ

Average annual temperatures in NJ increased nearly

4°F since 1900, roughly twice the global average CO₂ levels in the atmosphere are the highest in at least

> 800,000 years



by 2100 in a higher emissions scenario

Sea-level rise is accelerating

And the trend is expected to continue well beyond the 21st century.

Sea level at Atlantic City rose about

18.2 inches

since 1911, more than double the global average Average annual tidal flooding days in Atlantic City 1950s: <1 2007-16: 8 projected {2030: 17-75 2060: 85-315 with moderate emissions Tidal flooding in Atlantic City is expected to occur at least 240 days a year with moderate emissions by 2100 to increase 0.5–1.1 ft by 2030 and 0.9–2.1 ft by 2050 relative to the year 2000

Sea level is projected

A hot, dry summer ... and a possible glimpse of the future

Though New Jersey is experiencing more extreme rainfall, much drier conditions are expected between storms. Climate change is likely to increase the frequency and severity of short-term summer droughts.

Hottest 31 days

on record in many places in New Jersey (i.e., New Brunswick, Hightstown, Long Branch-Oakhurst, Freehold-Marlboro, Newark Liberty Int'l Airport) 53 days from May to Sept saw max temperatures of

more than 90 °F

4th driest summer

Summer rainfall was 5.75 inches below the normal of 13.58 inches Annual precipitation is projected to increase

<10% by 2100

but summer rainfall is not expected to change substantially.

Combined with higher temperatures, this may contribute to more dry summers like in 2022.

What's at stake for New Jersey?

Warmer temperatures are producing more severe heat waves. Sea-level rise and heavy rains are causing more intense flooding. These and other climate-related hazards are projected to escalate through the 21st century and will fall heaviest on NJ's most vulnerable residents.



- Increased heat-related illness
- Degraded air quality
- Spread of vector-borne disease
- Storm-related injury and death



- Damage to infrastructure
- Damage to homes and businesses
- Economic disruption
- Potential decrease in agricultural yields



Environment

- Greater wildfire risk
- Habitat loss
- More short-term droughts
- Potential freshwater salinization

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