NEW YORK

CAPITAL
Albany

AREA
54,555 sq mi

POPULATION
20,002,427

MEDIAN INCOME
$82,100 (household)

Temperature Trends:

New York, the largest state in the Northeast, is dominated by a humid continental climate, resulting in mild summers and relatively consistent precipitation across seasons.[1] Summers are hotter in the coastal part of the state.

Average temperatures have risen nearly 2.5°F since 1900. That trend is not driven by a higher-than-average number of "very hot" days (days with highs 95°F and higher).[2] The number of very hot days each year in New York is lower in recent decades than in the first half of the twentieth century. (See figure below)

The recorded average warming is primarily driven by a decline in the number of "very cold" (minimum of 0°F or lower) nights, which means winter temperatures are less frigid than in the past, and warmer nights in other seasons as well.[3] Milder winters are a benefit, as cold temperatures kill far more people than high temperatures do.[4]

Warmer nighttime temperatures, while summer highs are not likewise increasing, suggests the Urban Heat Island (UHI) effect is a significant factor. The UHI effect describes the warming effect of man-made surfaces like concrete, asphalt, and metal often tied to population growth, densification, and urban expansion. These surfaces absorb heat from the sun during the day, and slowly release it at night, resulting in higher average local temperatures.[5]

KEY TAKEAWAYS

- The number of extremely hot days in New York has declined in recent decades, fewer now than in the first half of the twentieth century.
- Precipitation has modestly improved since the 1960s, and drought has become less frequent and severe.
- Water levels in Lakes Erie and Ontario are stable.
- Relative sea level rise is slow and shows no acceleration.
- Agricultural production for apples and maple syrup has increased.

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Precipitation:

Total annual precipitation in New York has gradually increased, especially since the 1970s, compared to previous decades. The all-time low for monthly precipitation occurred in August 1965, and the high in September 2011.[6] Sixty years ago, in 1965, severe and lasting drought conditions occurred, the likes of which have not occurred since.[7] Drought has become much less frequent and severe across New York in recent decades.

State-Specific Issues:

Great Lakes Water Levels, Erie and Ontario

New York is supplied with crucial water from Lakes Erie and Ontario. While lake levels vary from year to year and especially decade to decade, levels in Lake Erie have been mostly around or above average since the 1960s drought period ended and are generally higher in recent decades than the early twentieth century.[8] (See figure below) The same is true for Lake Ontario, which has far more stable water levels today than in the past.

Figure 1: Observed Number of Very Hot Days

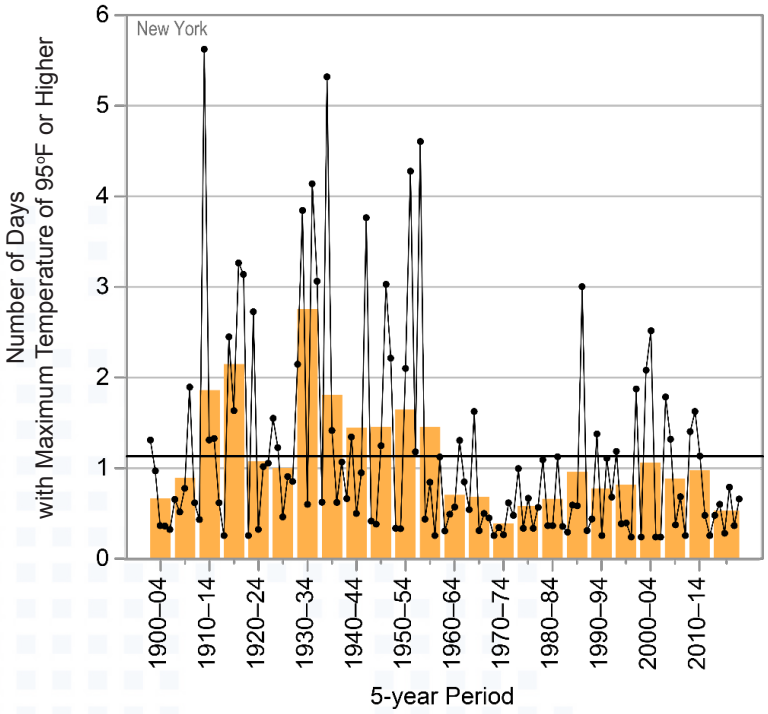

Figure 1: Observed number of very hot days in New York since 1900. Dots are annual values. Orange bars show averages over a 5-year period, the last bar is a 6-year average. The horizontal black line shows the average of the entire period. Chart Source: Frankson, R., et al. New York State Climate Summary 2022.

Figure 2: Lake Erie Water Levels

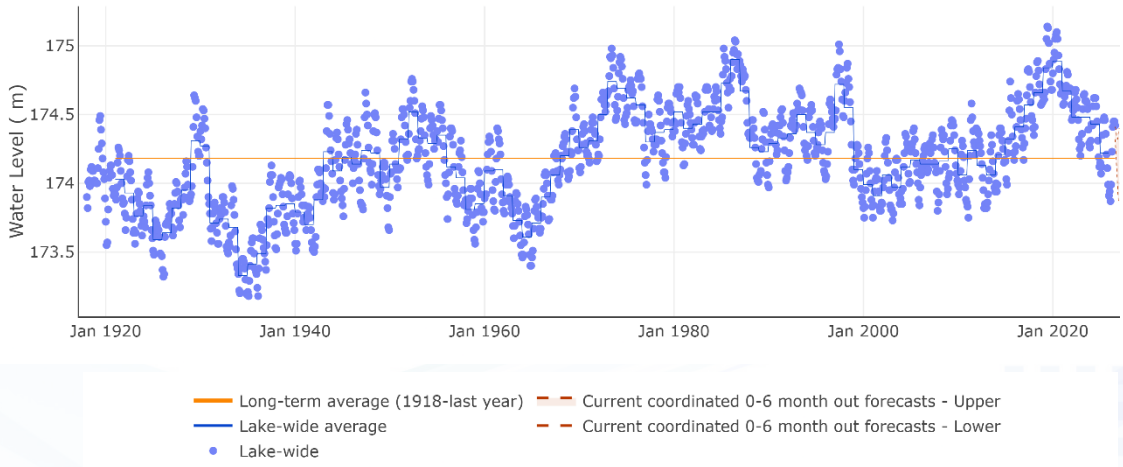

Figure 2: Lake Erie water levels since 1918. Chart from NOAA Great Lakes Environmental Research Laboratory "Great Lakes Water Level Dashboard." Accessed August 14, 2026.

Figure 3: New York Apple Production and Yield, 1980-2025

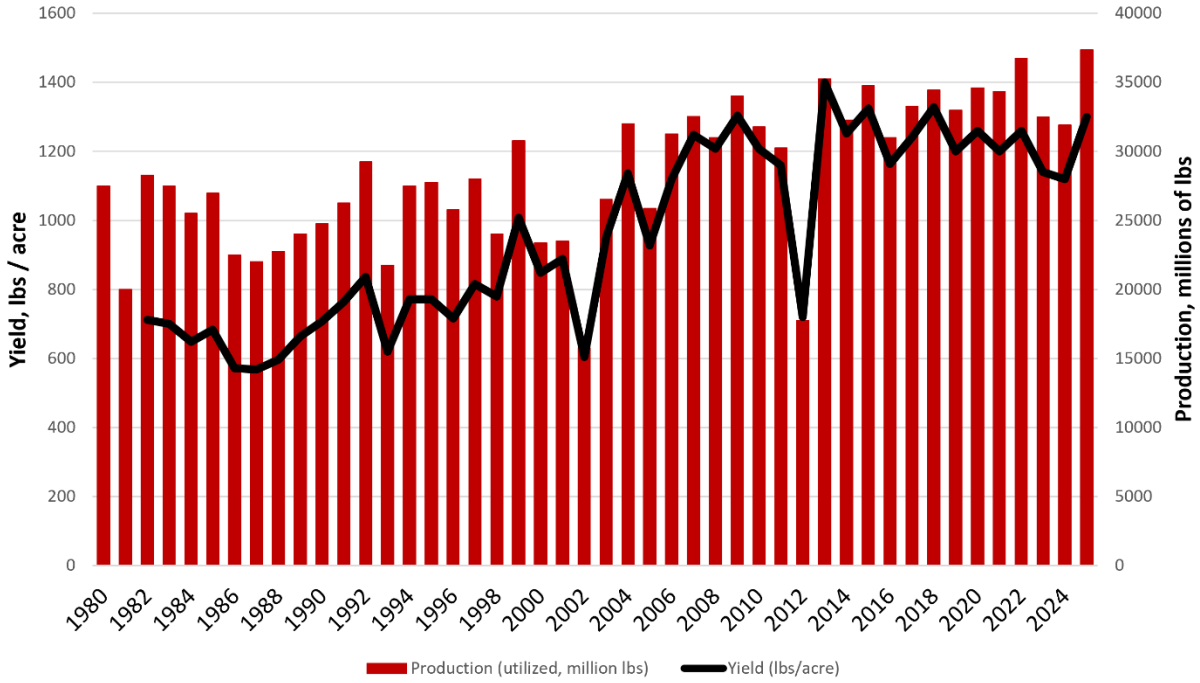

Figure 3: New York state apple production and yield, 1980-2025. Data from USDA Economic Research Service for 1980-2010, and National Agricultural Statistics Service for 2011-2025.

Hail

New York is prone to severe thunderstorms, especially in the spring and summer, which can bring damaging hail. Severe hail, classified as 1 or more inches, has not become more common, and shows no concerning trend.[9]

Sea Level

New York has one of the longest relative sea-level measurement records in the country, recorded at The Battery at the southern tip of Manhattan, which shows a steady rise with no acceleration since 1856.[10] The rate is approximately 2.95 mm/year, which is less than a foot of rise per century.

Agriculture:

New York's major agricultural products are dairy (especially yogurt, cream, and cottage cheese), apples, and maple syrup.

New York is one of the top five dairy-producing states, and milk production has risen 49 percent since just 1990, clearly not hampered by climate change.[11]

Apple production increased about 35 percent from 1980 through 2025.[12,13] With a rise of 82 percent, New York's apple yields have risen even faster than production.[14,15] (See figure below)

Maple Syrup production in New York has increased 121 percent since 1992, and yield in gallons per tap increased 104 percent since just 2001.[16]

Conclusion:

New York has experienced a mild climate in recent decades. Fewer extreme heat days per year and milder winters mean less threat to human health. Water levels in the Great Lakes are stable, sea level rise is not accelerating, drought has declined, and agricultural production has improved.

Endnotes

1 "United States Koppen-Geiger Climate Classification Map," plantmaps.com, January 20, 2024, https://www.plantmaps.com/koppen-climate-classification-map-united-states.php#google_vignette

2 "New York State Climate Summary 2022," National Oceanic and Atmospheric Administration, https://statesummaries.ncics.org/chapter/ny/

3 *Ibid*.

4 "Temperature Related Deaths," Climate at a Glance, The Heartland Institute, accessed August 14, 2026, https://climateataglance.com/climate-at-a-glance-temperature-related-deaths/

5 "Urban heat islands," Climate at a Glance, The heartland Institute, accessed August 14, 2026, https://climateataglance.com/climate-at-a-glance-urban-heat-islands/

6 "Statewide Time Series, New York precipitation 12-month period," NOAA National Centers for Environmental Information, accessed August 14, 2026, https://www.ncei.noaa.gov/access/monitoring/climate-at-a-glance/statewide/time-series/30/pcp/12/0/1900-2026

7 "Historical Drought Data and Conditions," National Integrated Drought Information System, accessed August 14, 2026, https://www.drought.gov/historicalinformation?dataset=1&selectedDateUSDM=20260609&selectedDatePaleo=20120101&selectedDateSpi=20260501&state=New-York

8 "NOAA Great Lakes Environmental Research Laboratory Great Lakes Dashboard," NOAA Great Lakes Environmental Research Laboratory, accessed August 14, 2026, https://www.glerl.noaa.gov/data/wlevels/dashboard/

9 "Severe Weather Report Database, severe hail," NOAA/NWS Storm Prediction Center, accessed August 14, 2026, https://www.spc.noaa.gov/climo/summary/

10 "Relative Sea Level Trend, The Battery, New York," National Oceanic and Atmospheric Administration, accessed August 17, 2026, https://tidesandcurrents.noaa.gov/sltrends/sltrends_station.shtml?id=8518750

11 "Milk production, New York," U.S. Department of Agriculture, USDA/NASS, Quick Stats, https://quickstats.nass.usda.gov/results/6C25F9D1-C424-3375-9E7B-E0F7A8213BEB

12 "Apple Production, Utilized, and Yield, 2007-2025, New York," USDA National Agricultural Statistics Service, NASS Quick Stats database, accessed August 7, 2026, https://quickstats.nass.usda.gov/results/9D0080F6-B2B1-3308-9DCD-9A76A65B441E

13 "U.S. Apple Statistics," USDA Economic Research Service, Fruit and Tree Nuts Data - Fruit and Tree Nuts Historical Data, Table 3, accessed August 7, 2026, https://www.ers.usda.gov/data-products/fruit-and-tree-nuts-data/fruit-and-tree-nuts-historical-data

14 "U.S. Apple Statistics," USDA Economic Research Service, Fruit and Tree Nuts Data - Fruit and Tree Nuts Historical Data, Table 7, accessed August 7, 2026, https://www.ers.usda.gov/data-products/fruit-and-tree-nuts-data/fruit-and-tree-nuts-historical-data

15 "Apple Production, Utilized, and Yield, 2007-2025, New York," USDA National Agricultural Statistics Service, NASS Quick Stats database, accessed August 7, 2026, https://quickstats.nass.usda.gov/results/9D0080F6-B2B1-3308-9DCD-9A76A65B441E

16 "Maple Syrup Production and Yield, New York," USDA National Agricultural Statistics Service, NASS Quick Stats database, accessed August 14, 2026, https://quickstats.nass.usda.gov/results/733F8926-9329-3B0A-BCA0-566903C2761C