



CLIMATE QUICK REFERENCE GUIDE | Rhode Island

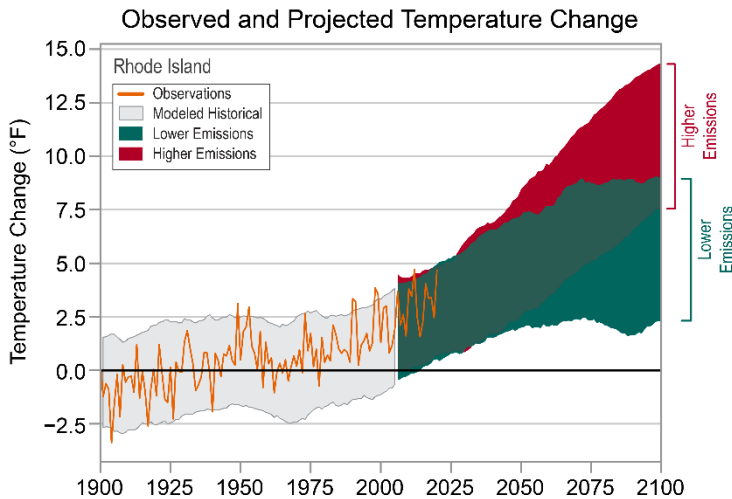
Historic Changes 1900-2020

- Average temperatures have risen 2.8°F since 1970, while the winter average has increased 4°F. RI has experienced the most overall warming of any other state in the continental US.
- From 1950 - 2021, average rainfall has increased 16% and the number of 2-inch extreme precipitation events in a 24-hour period has increased 116%.
- Since 1930, sea level has risen more than 9" at Newport, higher than the global average.

Projected Changes 2042-2070

- Temperatures, precipitation (especially in winter and spring), and occurrences of large storms are projected to rise. Droughts are projected to be more intense because higher temperatures increase the rate of soil moisture loss during dry periods.
- Sea level is projected to rise 1.4 - 2.3 ft in the next 40 years.

Observed and Projected Temperature Change



Source: statesummaries.ncics.org

State Summary

State Max Temperature (Fahrenheit)

Season	Current	2040-2070	Change
Spring	57.2	62.2	+5
Summer	79.1	84.8	+5.66
Fall	62.4	67.9	+5.5
Winter	39.2	44.4	+5.15
Annual	59.5	64.8	+5.33

State Max Precipitation (Inches)

Season	Current	2040-2070	Change
Spring	12.6	13.9	+1.31
Summer	11.2	12.2	+0.98
Fall	12.5	13.3	+0.74
Winter	12.4	14.2	+1.8
Annual	48.8	53.6	+4.84

Current data comes from PRISM Climate Group 30-year normal data for the 1971-2000 time period. Future is derived from the CMIP5 data using the mid-century time period and higher emissions scenario (RCP 8.5).

Source: swclimatehub.info/data/interactive-maps

State Top Causes of Crop Loss

Cause of Loss	Indemnity(\$)	Acres
Frost	165,074	136
Hail	124,398	73
Drought	101,836	239
Wildlife	59,045	122
Excess Wind	58,044	56

Source: RMA crop loss data by state 1989-2020.

swclimatehub.info/rma/rma-data-viewer.html

Climate Resources

Climate change adaptation and information:

climatehubs.usda.gov

Current and predicted drought conditions:

drought.gov

Climate Mapping for Resilience and Application:

resilience.climate.gov/#assessment-tool

USDA Climate Resources:

usda.gov/climate-solutions

Climate changes and projections by location:

climatetoolbox.org/tool/Future-Climate-Dashboard

NOAA Sea Level Rise Viewer:

coast.noaa.gov/digitalcoast/tools/slr.html

