

CLIMATE CHANGE IN THE OCEAN STATE

What Causes Climate Change?

Human activity, such as transportation, energy production and manufacturing, burn fossil fuels that release carbon and other gases into the atmosphere. These gases form a heat-trapping blanket that warms our air and oceans.

What are the results?

Unstable Climate Patterns



In Rhode Island heavy storms with flooding are on the rise.

- Annual precipitation has increased 6 to 11% since 1970.
- Intense rainfall events have increased 71% since 1958.
- Between the years 2020 and 2099, expect 18 to 20% more precipitation and twice as many extreme weather events with severe flooding will occur.

Air and Water Temperatures Rise



Humans, birds, animals, fish and plants will all struggle with ecosystem change.

- The average annual air temperature in Rhode Island has risen 3.0°F over the past century.
- In Narragansett Bay, the average water temperature has risen 2.5°F over the past 50 years.
- Between the years 2020 and 2099 expect to see warmer winters with 22 to 45 fewer days below freezing and hotter summers with 13 to 44 more days above 90°F.

Rising Sea Levels

Our shores will be impacted by melting ice and thermal expansion of warming water.

- Rhode Island has seen a 9-inch increase in sea level since 1930.
- Loss of salt marshes, habitat and shoreline erosion will result.



What can you do?

- Reduce energy use. Drive less (walk, bike and use public transportation) and create an energy-efficient home.
- Stay informed. Support legislation and community efforts that reduce carbon emissions. Sign up for advocacy emails by contacting Meg Kerr (mkerr@asri.org)
- Purchase green power to heat and cool your home and insulate it well.
- Support land conservation. Forests both emit and remove CO2 to balance the environment and provide critical habitat for birds and wildlife.
- Landscape and garden with native plants that provide food, cover and nesting materials for birds and wildlife.

