

Save The Bay's 2022 Climate Change Statement

The climate crisis is the most urgent environmental challenge facing the planet and Narragansett Bay.

Human-induced climate change is a global phenomenon caused by the presence of greenhouse gases (principally carbon dioxide and methane) in the atmosphere. Greenhouse gases are emitted when people burn fossil fuels, such as coal, gasoline, natural gas, and heating oil. In excess, these gases trap heat within the Earth's atmosphere. This trapped heat causes more severe storms, more intense rainfall, the warming of air and water temperatures, the melting of ice caps and glaciers that result in rising sea levels, and prolonged periods of drought and heat waves.

These impacts can already be seen in and around Narragansett Bay, its watershed, and coastal Rhode Island in the form of:

- Increasingly frequent and severe weather, including: heat waves and droughts; intense rain storms and flooding; coastal storms
- Severe coastal erosion and coastal habitat loss, including loss of critically important salt marshes and barrier beaches
- Warming waters, making the Bay and adjacent waters unsuitable for colder water species and more habitable for warmer water species
- Increases in invasive species
- Increased risk of harmful algal blooms in freshwater bodies and marine waters, causing low dissolved oxygen conditions and toxic "red tides"

These impacts threaten coastal communities, the local economy, recreation, and the health of the Narragansett Bay ecosystem. For example:

- Shoreline public recreation resources—parks, beaches, and public access points—are more likely to disappear due to erosion
- Native species are harmed by increased habitat loss, competition from invasive species, and weather-related changes in water quality
- Ocean acidification from greenhouse gas emissions is threatening shellfish species and the viability of aquaculture
- Harmful algae blooms may increase in frequency and severity, degrading water quality, and threatening fisheries and public health

- Environmental Justice* communities in urbanized areas of the Bay watershed suffer from the “heat island” effect related to extensive pavement and a lack of green space and tree canopy
- Low-lying public infrastructure—roads, water and electric utilities, stormwater infrastructure, combined sewer overflow systems, and wastewater treatment and port facilities—and private property are more likely to be damaged by more intense rain events, coastal storms and sea-level rise

The impacts of human-induced climate change will become increasingly severe and will endure for the foreseeable future as the earth continues to warm.

Save The Bay’s Climate Change Response Strategy

In Save The Bay’s role as steward of Narragansett Bay, we recognize the urgency of reducing greenhouse gas emissions and improving the resilience of the natural world around us. Save The Bay’s mission—to protect and improve Narragansett Bay—compels us to act with urgency on climate change. In accordance with our 2027 Strategic Plan, our science-based strategies for addressing human-induced climate change in Narragansett Bay and the watershed include:

- Promoting public policies that reduce greenhouse gas emissions locally
- Supporting the responsible development of renewable energy infrastructure, including solar and offshore wind power generation
- Advocating for investments in resilient wastewater treatment and stormwater infrastructure
- Promoting strategies and implementing projects that increase resilience of coastal habitats and provide migration corridors for salt marshes
- Championing public policies that encourage conservation of open space, forests, and undeveloped shoreline, and promote biodiversity
- Advancing policies that encourage the relocation of homes, businesses, and public facilities and infrastructure away from vulnerable coastal and riverine locations so that natural ecosystems can adapt and thrive
- Protecting public access to and along the shore as shorelines change

* Save The Bay follows the EPA’s definition of environmental justice, and identifies environmental justice communities around the Narragansett Bay watershed in accordance with RIDEM mapping.



- Partnering with environmental justice communities to advocate for programs and policies that address climate change impacts that disproportionately affect these communities
- Developing climate change curricula as a component of our hands-on experiential education programs
- Educating the general public about the cause and effects of rapid climate change through public programs and Aquarium exhibits
- Leading by example in our operations and in the design of our headquarters at Fields Point in Providence and at our Aquarium at the Gateway Center in Newport