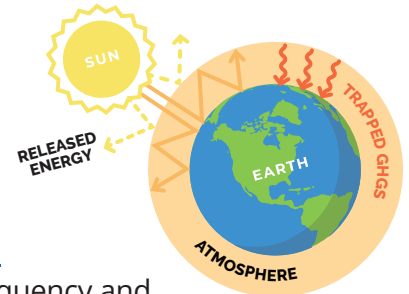


SUSTAINABLE BROOME

THINK GLOBALLY, ACT LOCALLY

Climate Change? What's the Issue?

The Earth's climate is changing. A buildup of greenhouse gases (GhGs) in our atmosphere has caused the planet to rapidly warm resulting in impacts felt throughout society, our economies, and the environment with disproportionate effects on our most socially vulnerable populations.

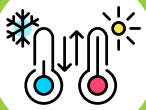


How are we experiencing Climate Change in Broome County?

Our region is already facing increased temperatures, higher frequency and intensity of precipitation events, and higher risks of natural disasters. We will continue to experience greater environmental, economic, and social impacts from climate change unless mitigation and adaptation efforts are ramped up.

EXTREME WEATHER

It is anticipated that our County will continue to experience increasing temperatures annually that could coincide with or induce secondary hazards, such as snow, hail, ice or windstorms, thunderstorms, drought, flash floods, extreme hot and cold days, human health impacts, and utility failures. Over the past 20 years, nearly 30 natural disasters have been declared by the county, most of which relate to severe storm incidents.



By 2048, Broome County is expected to have a 3°F increase (from 48°F to 51°F) in average annual temperatures.

Number of Cooling Centers (2022): 26 **Number of Warming Centers (2019): 13**

FLOODING

Historic flood events and climate projections, show more frequent and intense flooding events for the region exposing new neighborhoods to flood risks. Communities may experience impacts such as infrastructure deterioration and failure, utility failures, power outages, water quality and supply concerns, and transportation delays, accidents, severe storms, and winter storms.



15,314 Broome County residents are located within the 100-year floodplain leaving them at high risk of flooding.

SHIFTING SEASONS

Growing seasons are shifting across the region. Spring is arriving earlier, winters are shorter, and the number of freezing days is declining. These changes affect the timing of many life cycle events, such as when flowers bloom or when pollinators emerge. Agriculture is extremely sensitive to these shifts, and Southern Tier production and profitability is being impacted. Crops and livestock may be subject to high temperatures, leading to larger CO2 production and water needs; an earlier spring might lead to longer growing seasons, more abundant invasive species, pests and diseases, and earlier and longer allergy seasons.



Nearly 500 farms provide \$19M to our county annual revenue through the production of dairy products, cropland, and woodland.

ENVIRONMENT

Significant impacts on our ecosystems and natural landscapes will continue to be exacerbated by the effects of a warming climate. Algal blooms and invasive species begin to thrive in warmer temperatures causing beach and park closures, decreased access to natural lands, and increased maintenance costs across the region. The natural areas that make our communities unique are all at risk.

Broome County is home to 133 parks, 8000 acres of state forest, 90 river miles, two lakes, and over 2000 acres of wetlands.



ECONOMY

Our County is experiencing stresses on its agricultural, energy, and transportation sectors. Communities and businesses are facing critical infrastructure failures from increased demand and age of systems. Extreme and unpredictable weather is likely to damage factories, supply chain operations and infrastructure, and disrupt transport, causing a battle with uncertainty in the price of resources for production, energy transport and insurance threatening its economic vitality.

Broome County is Upstate New York's 6th largest economy generating nearly \$7 billion in economic activity per year.



HEALTH

Climate change, together with other natural and human-made health stressors, influences human health many ways. Some existing health threats for our region will intensify, like Lyme Disease, and new health threats will emerge, like wildfire smoke from other regions. Not everyone is equally at risk. Disruption of our systems cause health effects such as, increased lung and heart diseases, seasonal allergies, extreme weather event injuries and deaths, changes in food availability, exposure to toxic substances (mold, lead, hazardous waste) and threats to mental health.

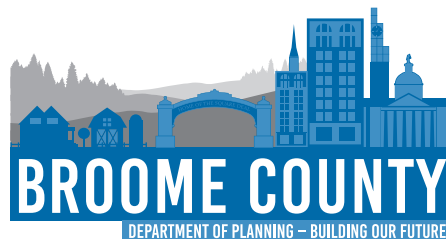
The 3-year estimate (2017-2019) of Lyme disease incidence for Broome County was over three times the rate for the state and higher than any other municipality in the Southern Tier.



SOCIETY

Communities are likely to experience population decline, high mortality rates, food insecurity, and disconnect with each other, especially those located within state designated disadvantaged communities. The greatest impacts fall disproportionately upon underserved communities who are least able to prepare for and recover from these harms. These communities experience higher rates of climate-related risks, such as extreme weather, health vulnerabilities, and emergency department visits, based on several socio-economic factors including race, ethnicity, and income, and their location.

Broome County has over 50 census blocks and tracts of Potential Environmental Justice Areas and Disadvantaged Communities.



Keep up to date on our resiliency activities by scanning the QR code above or visiting:
www.gobroomecounty.com/planning/sustainablebroome

Broome County is currently a NYS Designated Bronze Climate Smart Community and Clean Energy Community - Check out our other infographics to discover how we achieved these climate action designations!