

# Climate Change Impacts in Durham Region

The impacts of climate change are already being felt by communities in Durham Region. Updated climate modeling projections for Durham Region indicate that these impacts will become more intense and severe over the coming decades.

## Ecosystems and biodiversity

Loss of wildlife habitat and biodiversity from changing climate conditions and cumulative impacts (e.g., the increase in invasive species such as the LDD moth)



## Vector-borne disease

Increase in the spread of vector-borne diseases (e.g., Lyme Disease) due to changes in precipitation, temperatures, and humidity



## Agriculture

The benefits of a longer growing season can be outweighed by an increase in the spread of invasive species, pests, and diseases affecting crops, more variable and intense precipitation, and more extreme weather



## Extreme heat

More extreme heat poses health risks to everyone, especially seniors, young children, people with pre-existing conditions, and people who spend long hours outdoors



## Flooding

Increase in flooding and erosion pose risks to public safety, property, and infrastructure (e.g., flooded basements, roads, and trails)



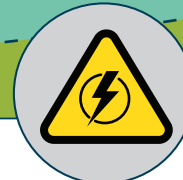
## Urban heat island effect

In urban areas, extreme heat can be worsened by the urban heat island effect, which makes these areas hotter than surrounding areas with more natural cover



## Power outages

Potential for more power outages as electricity grids are overwhelmed due to extreme weather events, flooding, and increases in the use of air conditioning to keep cool during the summer



## Winter recreation

Less snow and ice cover will reduce opportunities for traditional outdoor winter recreation but may increase opportunities for other types of recreation



## Food

Potential food security impacts if any component of the food system (e.g., production, transportation, processing/packaging, and distribution) is impacted by extreme weather or other climatic changes



## Transportation

Potential negative impacts on regional transportation or freight movement due to extreme weather events, resulting in impacts on industry

