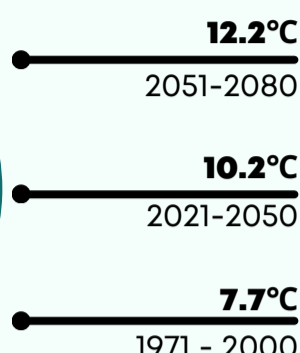


# Future Climate Projections Northumberland County

November 2024

## Annual Mean Temperatures

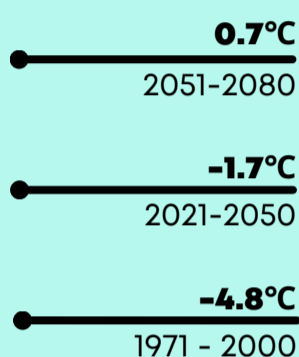
Mean temperatures are projected to increase annually and in every season.



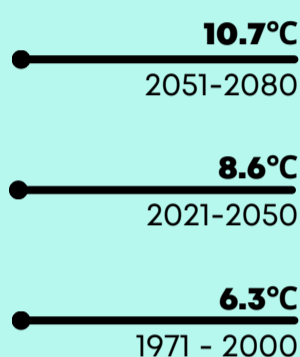
## Seasonal Mean Temperatures



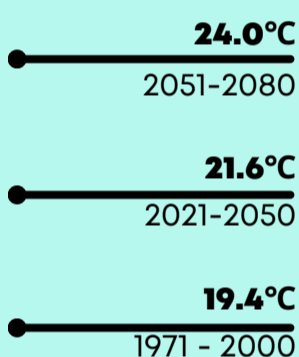
Winter  
Dec - Feb



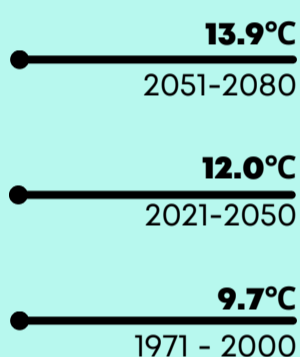
Spring  
Mar - May



Summer  
Jun - Aug



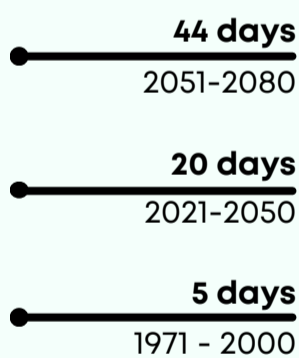
Fall  
Sep - Nov



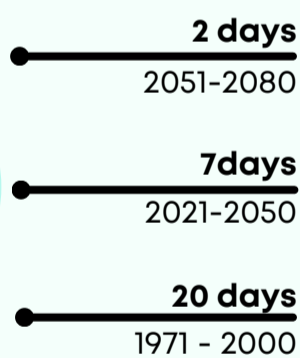
## Temperature Extremes



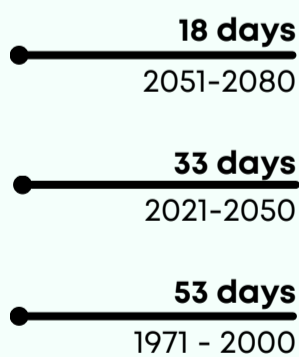
Days Above  
30°C



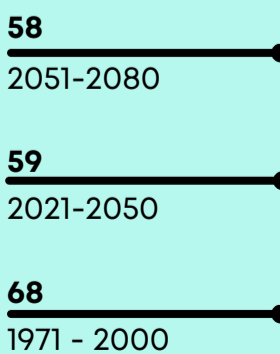
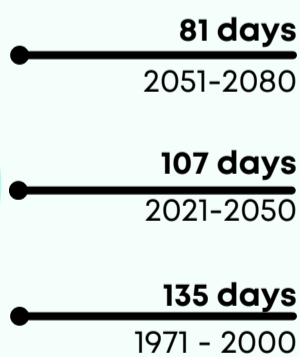
Days Below  
-15°C



Icing Days



Frost Days



## Freeze-Thaw Cycles

There will be a decrease in freeze-thaw cycles, where the daily temperature goes above 0°C and below -1°C.

## Growing Season

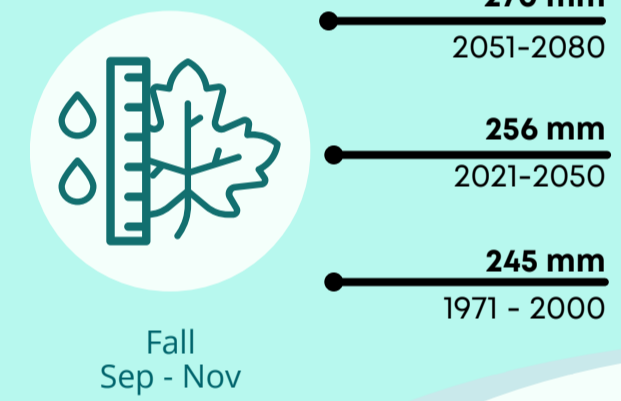
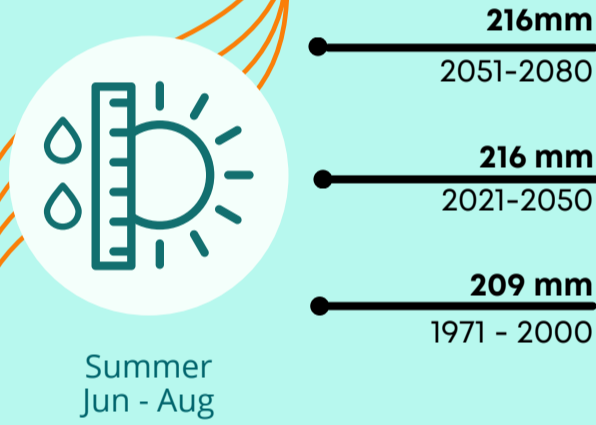
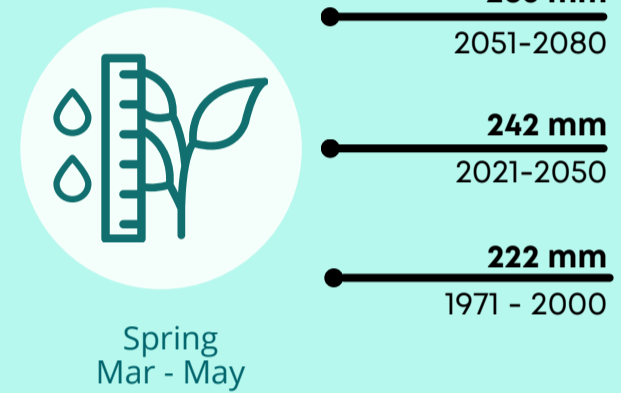
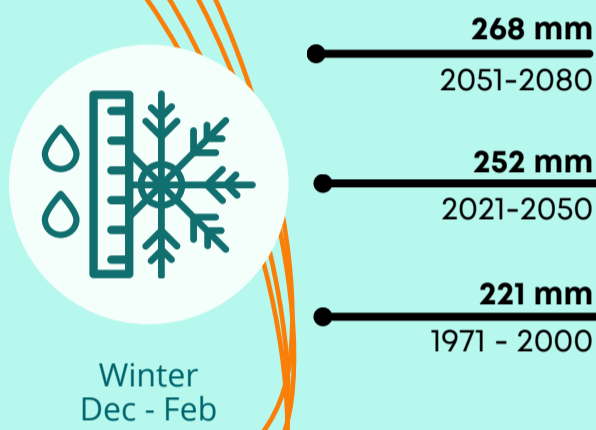
First frost dates will be later, and last frost dates will be earlier resulting in a longer growing season.



## Annual Mean Precipitation

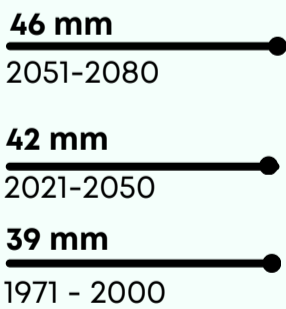
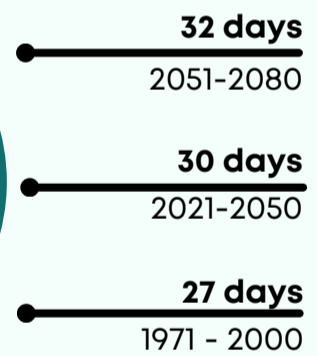
Annual precipitation is expected to increase. Winter and spring are projected to get significantly wetter, with a only a slight increase in the summer.

## Seasonal Mean Precipitation



## Heavy Rainfall Days

Heavy rainfall days, or days with over 10 mm of precipitation are projected to increase.



## Maximum 1-Day Precipitation

The amount of maximum precipitation that falls in a single day, also known as the "wettest day of the year", is projected to increase.

## Precipitation Events

Storms will not only be heavier but will reach their peak intensity quicker.



- Frequency**  
 Extreme storms, previously expected every 25, 50, or 100 years, will occur more often.
- Intensity (mm/hr)**  
 High volumes of rain will fall in short periods.
- Duration**  
 Downpours will be higher intensity for a longer period of time.

These projections highlight the critical importance of climate change adaptation in reducing the risk of negative impacts and ensuring long-term resilience.