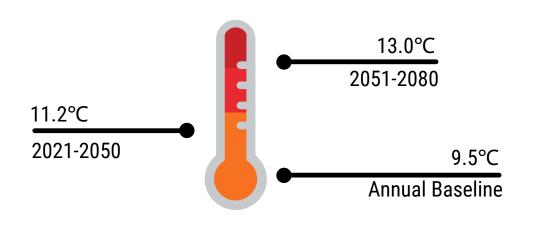
Sunshine Coast Regional District

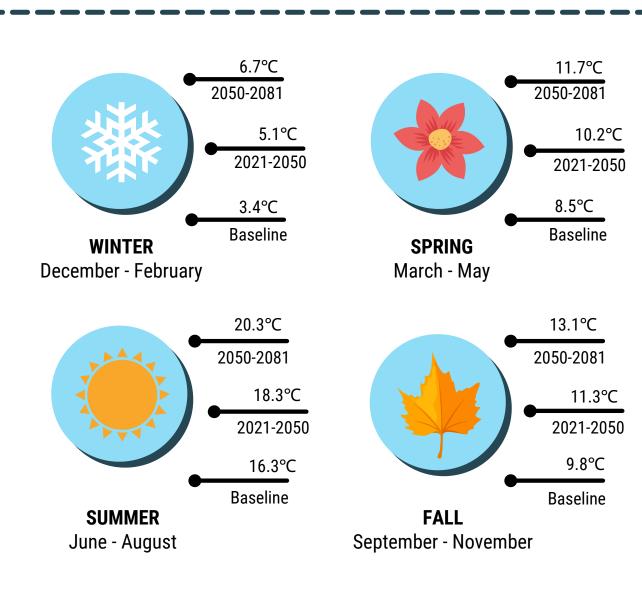
FUTURE CLIMATIC PROJECTIONS

December 2021



ANNUAL MEAN TEMPERATURES

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





TEMPERATURE Days Above 30°C Days Below -5°C **EXTREMES** More hot days, 13.2 2080s 2080s 1.2 less cold days expected. 2050s 4.6 3.1 2050s 1.3 **Baseline** 7 **Baseline Frost Days Icing Days**

46.4

Baseline

20.7

2050s



0.9

2080s

4.7

Baseline

2.1

2050s

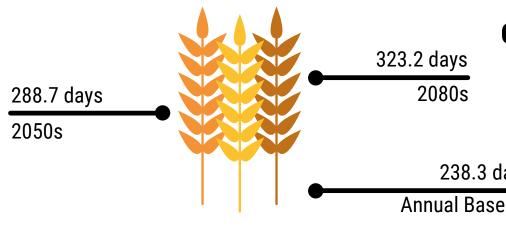


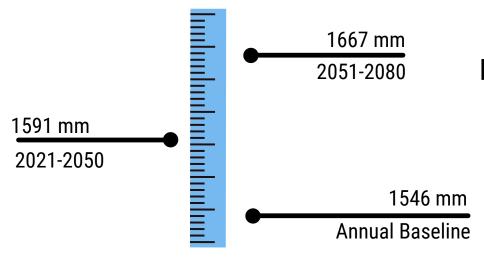
FREEZE-THAW CYCLES

9.1

2080s

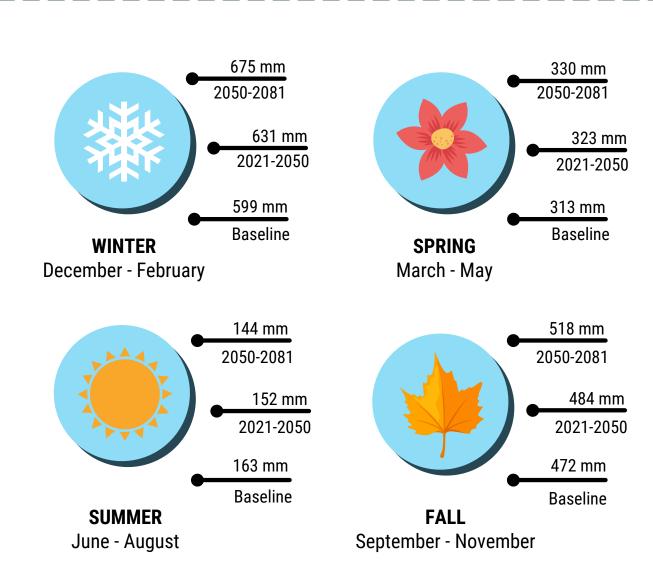
There will be a decrease in freeze-thaw cycles, where the daily max. temperature is higher than 0°C and the daily min. temperature is less than or equal to -1°C



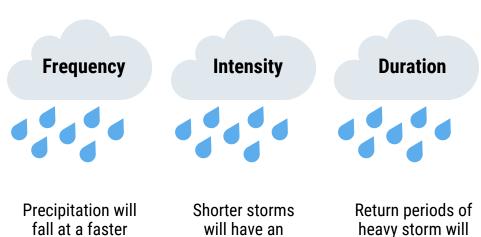


ANNUAL MEAN PRECIPITATION

Annual precipitation is expected to increase. Winter and Spring are projected to get significantly wetter, with a slight decline in the Summer.



SEASONAL MEAN PRECIPITATION



increasingly high

intensity

heavy storm will shorten, meaning increased frequency

PRECIPITATION EVENTS

Precipitation events in general are projected to become more intense and extreme

Days with precipitation over 20mm

rate (mm/h)



Days with precipitation over 10mm and 20mm are considered Heavy Rainfall days, and are projected to increase.

Sea Level Rise

The IPCC Special Report on the Ocean and Cryosphere in a Changing Climate estimates that sea level rise could increase as much as 15 cm/year by 2100 or an increase of 0.61-1.1m relative to a 1984-2005 baseline



The British Columbia Ministry of Environment suggests preparing for 0.5 m by 2050, and 1.0 m by 2100

* Baseline period: 1990s (1976-2005); Projection periods: 2030s (2021-2050), 2060s (2051-2080)

Sources:

Canadian Climate Data and Scenarios Network.

Climate Atlas of Canada Tool.

IPCC Special Report on the Ocean and Cryosphere in a Changing Climate