CANADA'S **CHANGING CLIMATE**

PROJECTED CHANGES THIS CENTURY FOR BRITISH COLUMBIA

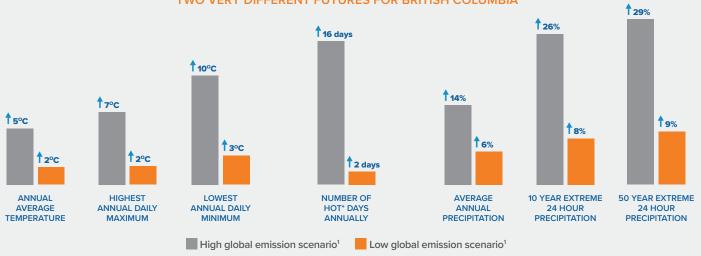


Canada's climate has warmed and will warm further in the future, driven by human influence.

Global emissions of carbon dioxide from human activities will largely determine how much warming the country—and the world—will experience in the future.

HIGH VS LOW EMISSION PROJECTIONS

TWO VERY DIFFERENT FUTURES FOR BRITISH COLUMBIA



Median values. Changes are for 2081-2100 relative to the 1986-2005 reference period

High and low global emission scenarios. The high emission scenario RCP 8.5 is associated with an increase in global average temperature of about 3.7 °C by late century relative to the 1986-2005 reference period.

The low emission scenario RCP 2.6 is associated with an increase in global average temperature of about 1.0 °C by late century relative to the 1986-2005 reference period.

"Hot day = daily maximum temperature is above 30°C

THE EFFECTS OF WARMING ARE EVIDENT IN BRITISH COLUMBIA

EFFECTS ARE PROJECTED TO INTENSIFY IN THE FUTURE



Extreme warm temperatures have become hotter and even hotter temperatures are projected for the future. This will increase the severity of heatwaves, and contribute to increased drought and wildfire risk.



Future droughts and deficits in soil moisture are projected to be more frequent and intense in the interior of British Columbia during summer and to be more prominent at the end of the century under a high emission scenario.



Glaciers in the coastal mountains have declined substantially and are projected to lose most of their ice by late century. Snow cover and seasonal snow accumulation are projected to decrease across British Columbia.



Local sea level is projected to increase for the northern coast and Vancouver area by more than 50 cm by 2100 for a high emission scenario. Other areas where land uplift is occurring will have smaller increases in local sea level.



In snowmelt-dominated river systems, annual peak streamflow will be earlier in spring, due to earlier seasonal snowmelt.

Summer streamflow is projected to decrease due to decreasing snow and ice cover in headwater regions.



Warming and loss of oxygen in the northeast Pacific Ocean are projected.

Ocean waters along the British Columbia coast are expected to become more acidic.

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