

LOCAL IMPACTS OF CLIMATE CHANGE IN THE METRO VANCOUVER REGION



BACKGROUNDER

Climate change impacts are already evident in Metro Vancouver and are predicted to become more severe in the near future. Projections estimate that by 2050, the average day will be 3°C hotter across the region. Warming will likely be even more intense in northern regions of Canada. If we can dramatically reduce our emissions over the next decade, we might be able to slow and stop some of these impacts.

How will warmer temperatures from climate change impact our local ecosystems? How will these impacts affect our communities? This backgrounder supports learning about how climate change will impact Metro Vancouver’s local ecosystems and communities.



BY 2050, METRO VANCOUVER WILL HAVE:

WARMER TEMPERATURES:

With increasing daytime and nighttime temperatures, there will be triple the number of hot summer days and 75% fewer winter days with frost or ice by 2050.

LONGER SUMMER DRY SPELLS:

Summer rainfall will decline by nearly 20% by 2050, with increased likelihood of extended drought periods and larger, more severe wildfires.

More Frequent Hot Summer Days

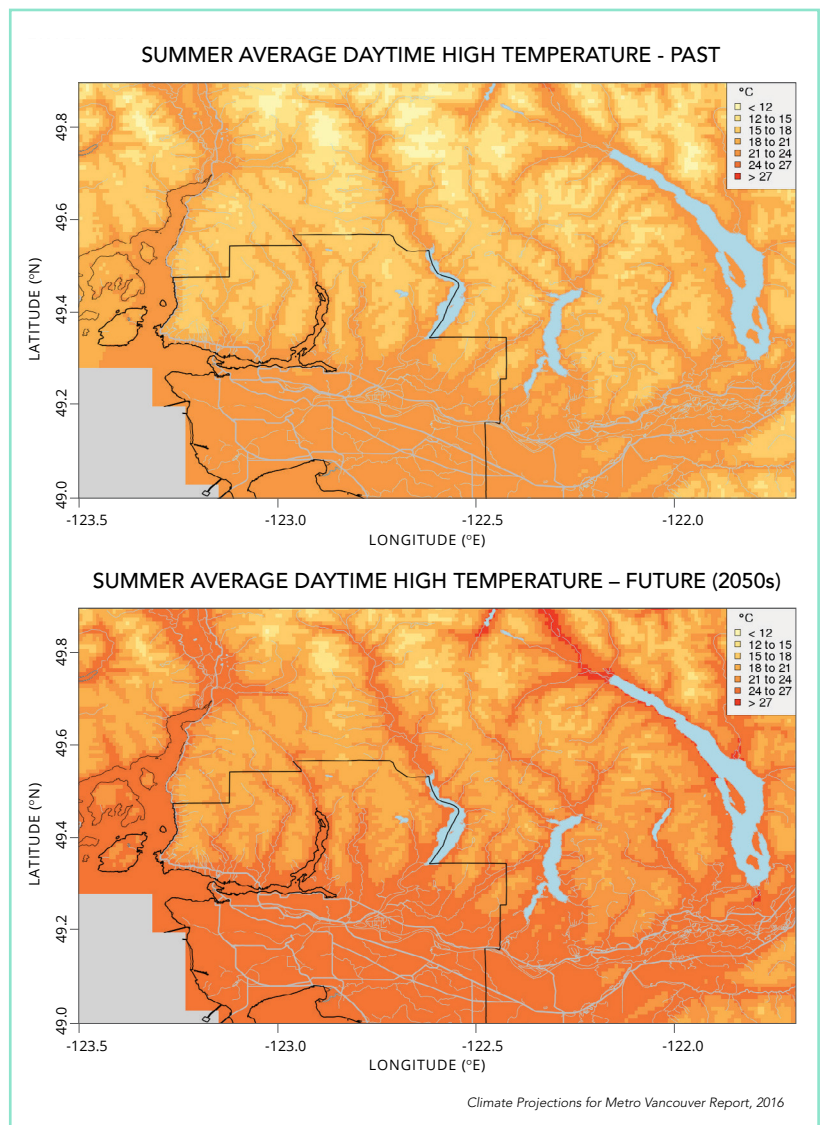


Hot Summer Indicators

Indicator	Past (1971 - 2000)	2050s	Change
Summer days (# of days ≥ 25°C)	22	55	+ 33 days
Tropical Nights (# of nights > 20°C)	0	2	+ 2 nights
High Heat Days (# of days > 30°C)	2	14	+12 days
Average Hottest Day (°C)	31	35	+ 4°C

Metro Vancouver, 2016

Higher Average Summer Temperatures



Climate Projections for Metro Vancouver Report, 2016

LOCAL IMPACTS OF CLIMATE CHANGE IN THE METRO VANCOUVER REGION



BACKGROUNDER

DECREASED SNOWPACK:

The deep spring snowpack in our mountainous watersheds is expected to decrease by over 50% compared to present day, with less freshwater available in the summer for our drinking and cleaning, and our local wildlife.

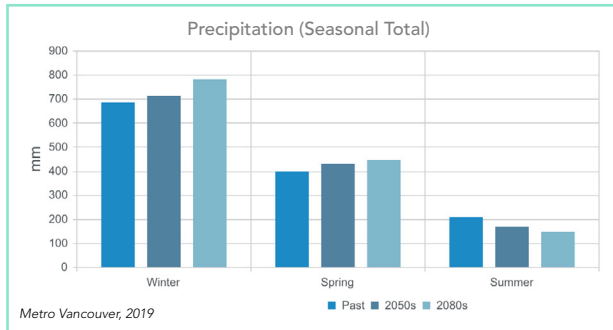
Coquitlam Glacier, the last in Metro Vancouver



WETTER FALL AND WINTERS:

Although on average the total annual rainfall is expected to increase by only 5%, there will be an 11% increase in rainfall during the fall months, with this rain falling on fewer days.

Increased Precipitation in Fall and Winter Months



MORE EXTREME PRECIPITATION EVENTS:

30% more rain will fall during the wettest days of the year and the frequency of rare, extreme rainfall events will increase significantly, increasing the frequency of severe flooding events.

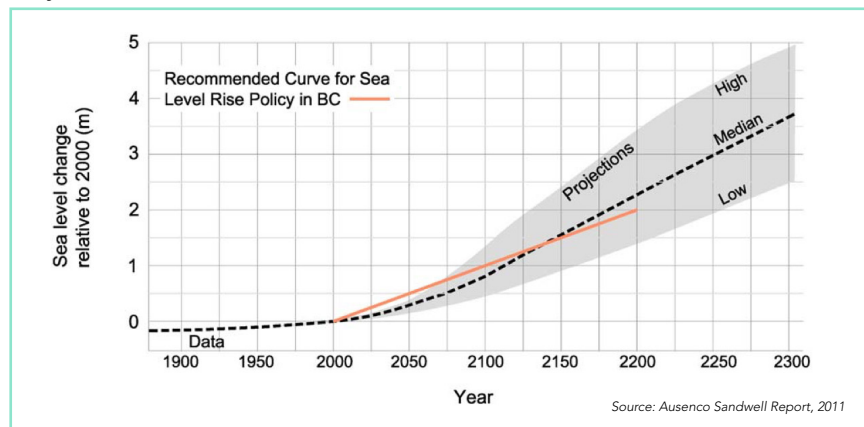
Increase in Severe Flooding Events



SEA LEVEL RISE:

The warming global temperature is projected to bring at least one meter of sea level rise by 2100, which will impact many coastal communities in our region.

Projected Sea Level Rise



LOOKING FOR MORE INFORMATION? CHECK OUT THESE SOURCES:

- Metro Vancouver Climate 2050
- Metro Vancouver's Climate 2050 Strategic Framework, 2019
- Climate Projections for Metro Vancouver, 2016
- Learn About Climate Change

Find resources for teachers, students, and youth leaders to explore sustainability concepts and topics
 Metro Vancouver School and Youth Leadership Programs

