Table 1: Projected Climate Changes by Health Authority Under a High Emissions Pathway (*Median Projected Change from 1961-1990 Baseline to 2040-2069*)
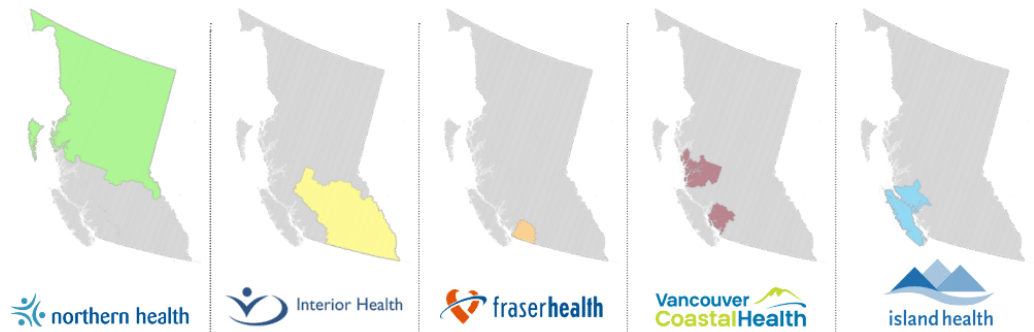
		northern health	Interior Health	fraserhealth	Vancouver CoastalHealth	island health
Temperature (°C)	ANNUAL	+3.3 °C	+3.2 °C	+2.7 °C	+3.1 °C	+3.0 °C
Rain Precipitation (%)	ANNUAL	+10%	+1.2%	+1.6%	-1.4%	+1.8%
	SUMMER	+8.8%	-0.46%	-15%	-12%	-10%
	WINTER	+8.3%	+0.23%	+3.8%	-1.9%	+1.6%
Snow Precipitation (%)	ANNUAL	-25%	-26%	-50%	-50%	-45%
	SUMMER	-16%	-17%	-56%	-47%	-42%
	WINTER	-36%	-41%	-27%	-57%	-45%
Frost-Free Days (Days)	ANNUAL	+40	+45	+49	+52	+50
Growing Degree Days (GDD)*	ANNUAL	+494	+566	+644	+666	+586
Cooling Degree Days (CDD) **	ANNUAL	+39	+77	+57	+115	+43

* **Growing Degree Days (GDD)** is the sum of the daily temperature difference above a constant base temperature, over a typical year in the period. In Plan2Adapt, a base temperature of 5 °C is assumed. GDD can be used to assess the potential growth and development of plants and pests over the course of one growing season as a result of heat accumulation. Positive values indicate faster growth & development over the course of one year. GDD can be used to predict when crops will mature, when plants will flower and when pests might emerge and require treatment.

** **Cooling Degree Days (CDD)** is the sum of temperature difference above a constant base temperature (in this case, 18°C) over a typical year. CDD is a compound measure of both the magnitude and duration of temperature over a threshold, and as such contains both isolated hot days and extended heat waves. It also generally reflects the indoor comfort level over the warm months in the absence of mechanical cooling.

How Growing Degree Days are calculated: A day with an average temperature of 15 °C would contribute (10-5) = 5 GDD. If the next two days were 8 °C and 4 °C, then the total GDD for the 3-day period would be 5 + 3 + 0 = 8 GDD, and so on. Repeating for all days in each calendar year over the 1961-1990 baseline period and taking the average over all 30 years gives the baseline GDD. Doing the same for each future period, then subtracting the baseline GDD from the future GDD gives the values as shown in Plan2Adapt.

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