



Cooks Creek

Medium Carbon Emissions (RCP4.5)

Climate Variable	Season	1981-2010 (Baseline)	2021-2050			2051-2080		
			L	M	H	L	M	H
Mean Temperature	Annual	2.7 °C	4.0 °C	4.5 °C	5.3 °C	5.1 °C	5.7 °C	6.1 °C
	Winter	-15.2 °C	-14.1 °C	-12.9 °C	-11.6 °C	-12.2 °C	-11.2 °C	-10.1 °C
	Spring	2.7 °C	3.6 °C	4.4 °C	5.3 °C	4.6 °C	5.3 °C	6.0 °C
	Summer	18.3 °C	19.1 °C	19.7 °C	20.3 °C	20.3 °C	20.8 °C	21.3 °C
	Fall	4.7 °C	5.8 °C	6.4 °C	7.0 °C	6.9 °C	7.4 °C	8.0 °C
Precipitation	Annual	523.2 mm	520.5 mm	555.8 mm	587.2 mm	534.5 mm	554.3 mm	585.8 mm
	Winter	67.8 mm	70.3 mm	76.8 mm	85.4 mm	72.1 mm	80.1 mm	87.6 mm
	Spring	109.5 mm	104.4 mm	119.4 mm	135.0 mm	103.7 mm	123.5 mm	138.0 mm
	Summer	227.1 mm	205.0 mm	228.9 mm	252.0 mm	202.1 mm	219.1 mm	237.0 mm
	Fall	118.8 mm	120.3 mm	130.8 mm	141.6 mm	120.9 mm	131.8 mm	140.9 mm
Days ≥ 30 °C	Annual	8.9 days	11.6 days	18.2 days	24.2 days	20.2 days	27.5 days	34.6 days
Days ≤ -30 °C	Annual	10.6 days	2.1 days	5.5 days	8.9 days	0.3 days	2.9 days	5.2 days
Frost-Free Period	Annual	126.7 days	126.0 days	142.0 days	157.8 days	135.5 days	148.6 days	163.1 days
Date of First Fall Frost		Sep 24	Sep 20	Sep 29	Oct 12	Sep 25	Oct 03	Oct 13
Date of Last Spring Frost		May 20	May 01	May 10	May 24	Apr 28	May 08	May 18
5 °C Degree Days	Annual	17387.7	17420.0	17435.5	17445.9	17441.1	17451.0	17461.6
10 °C Degree Days	Annual	973.9	1101.3	1184.6	1266.1	1269.6	1355.2	1434.1
Freeze-Thaw Cycles	Annual	59.4 cycles	45.4 cycles	54.0 cycles	64.9 cycles	48.0 cycles	56.7 cycles	66.3 cycles
Days Precip ≥ 10 mm	Annual	12.9 days	11.9 days	14.1 days	16.2 days	12.4 days	14.1 days	15.4 days
Days Precip ≥ 20 mm	Annual	3.6 days	2.7 days	4.0 days	5.2 days	3.0 days	4.0 days	4.9 days

High Carbon Emissions (RCP8.5)

Climate Variable	Season	1981-2010 (Baseline)	2021-2050			2051-2080		
			L	M	H	L	M	H
Mean Temperature	Annual	2.7 °C	4.1 °C	4.9 °C	5.5 °C	5.8 °C	7.0 °C	8.2 °C
	Winter	-15.3 °C	-13.6 °C	-12.3 °C	-11.2 °C	-11.3 °C	-9.6 °C	-7.8 °C
	Spring	2.7 °C	3.6 °C	4.4 °C	5.3 °C	5.0 °C	6.1 °C	7.3 °C
	Summer	18.3 °C	19.7 °C	20.2 °C	20.8 °C	21.3 °C	22.3 °C	23.3 °C
	Fall	4.7 °C	6.0 °C	6.8 °C	7.6 °C	7.8 °C	9.0 °C	10.0 °C
Precipitation	Annual	526.1 mm	512.5 mm	553.6 mm	589.8 mm	530.7 mm	566.9 mm	598.7 mm
	Winter	69.5 mm	67.3 mm	76.1 mm	87.1 mm	71.6 mm	84.2 mm	95.2 mm
	Spring	109.4 mm	104.2 mm	121.3 mm	135.5 mm	116.2 mm	137.8 mm	155.4 mm
	Summer	227.3 mm	207.7 mm	224.1 mm	245.2 mm	188.8 mm	215.0 mm	238.5 mm
	Fall	120.0 mm	114.8 mm	132.0 mm	144.5 mm	115.2 mm	129.8 mm	145.1 mm
Days ≥ 30 °C	Annual	8.8 days	14.4 days	21.5 days	30.6 days	30.5 days	41.5 days	53.1 days
Days ≤ -30 °C	Annual	10.9 days	1.1 days	4.6 days	9.2 days	0.0 days	1.5 days	3.3 days
Frost-Free Period	Annual	126.9 days	131.4 days	146.3 days	162.2 days	146.6 days	162.6 days	179.7 days
Date of First Fall Frost		Sep 24	Sep 24	Oct 03	Oct 17	Oct 01	Oct 10	Oct 23
Date of Last Spring Frost		May 20	May 01	May 10	May 21	Apr 20	May 01	May 11
5 °C Degree Days	Annual	17388.5	17418.3	17437.6	17459.0	17469.1	17489.2	17509.6
10 °C Degree Days	Annual	972.3	1177.3	1253.0	1352.4	1438.6	1586.8	1772.0
Freeze-Thaw Cycles	Annual	59.1 cycles	45.4 cycles	54.0 cycles	62.3 cycles	46.3 cycles	53.5 cycles	61.9 cycles
Days Precip ≥ 10 mm	Annual	13.0 days	12.3 days	14.1 days	16.3 days	12.2 days	14.6 days	16.7 days
Days Precip ≥ 20 mm	Annual	3.6 days	2.8 days	4.0 days	5.0 days	2.9 days	4.1 days	5.3 days