

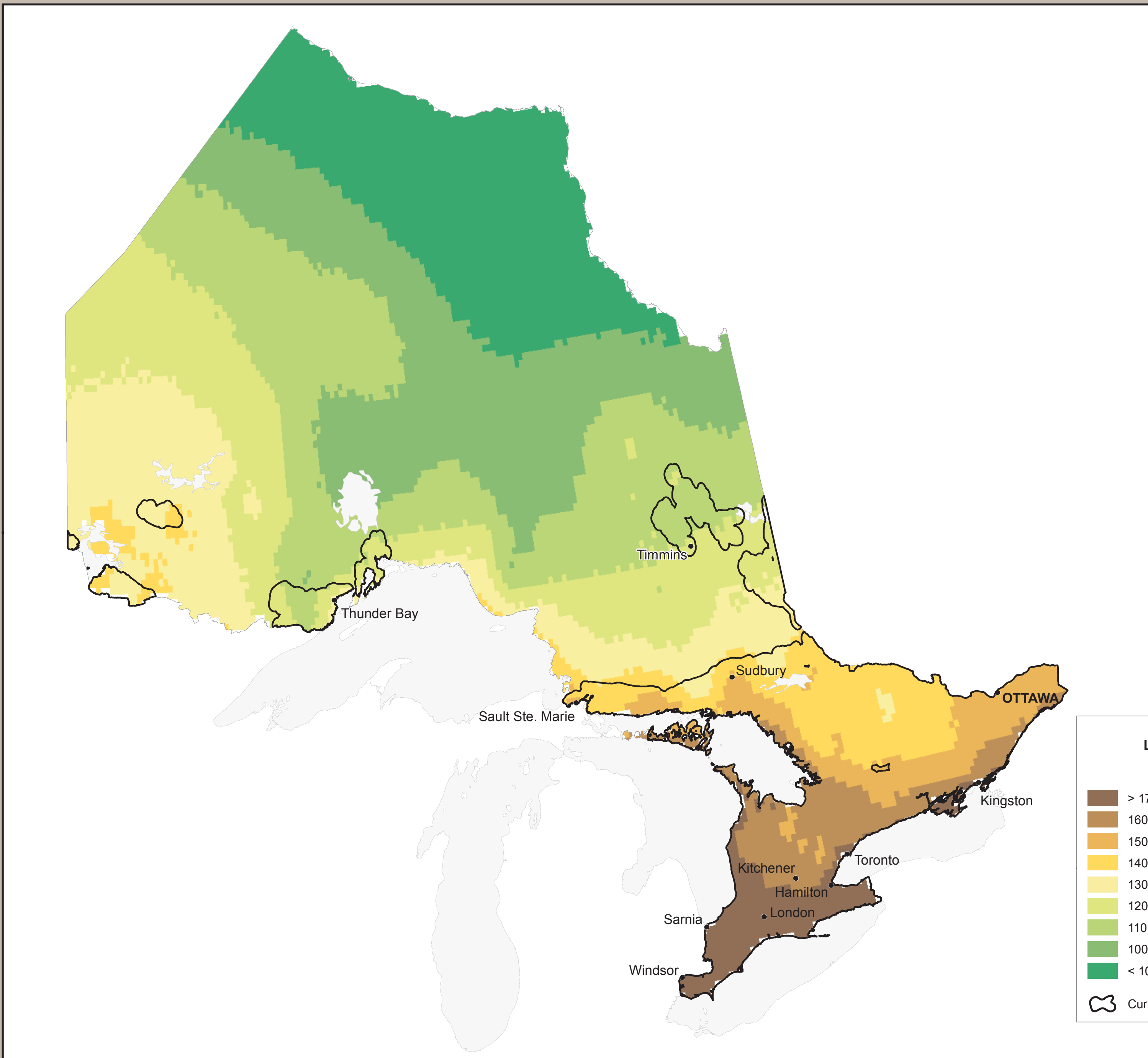


Ontario

Length of Growing Season:

- Measured in days starting from the estimated seeding date (10 days after average daily temperature is above 5 °C) until fall frost (minimum daily temperature is 0 °C) or until October 31, whichever comes first.
- This is the same time period used to calculate effective growing degree days

Baseline: 1971-2000



Climate Change Scenario: 2010-2039

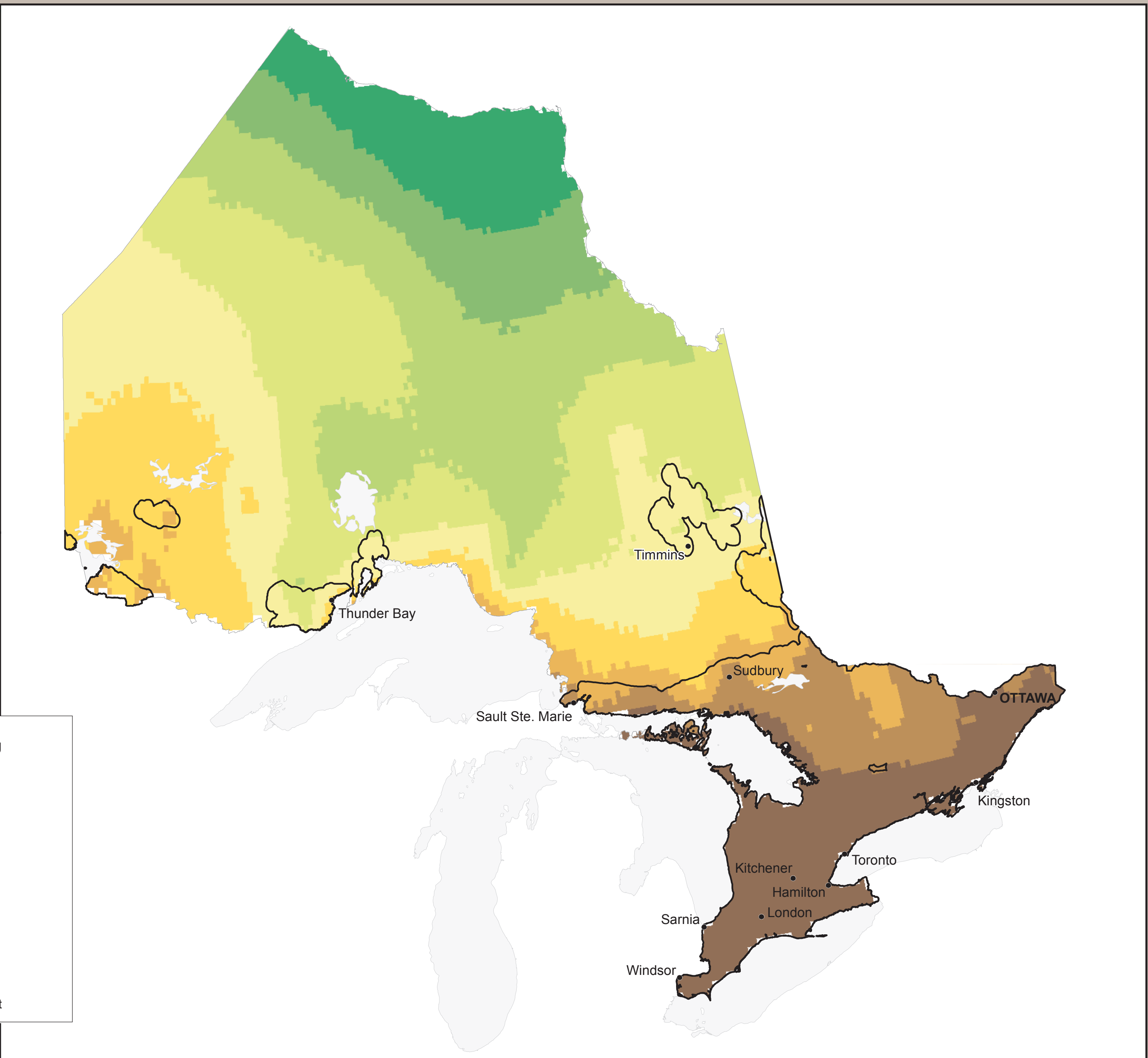


Table 1: Summary of Length of Growing Season comparing 1971-2000 to projected climate change in 2010-2039

Length of Growing Season (days)	1971 - 2000 Baseline	2010 - 2039 CGCM 3.1
	Percent of total area	
> 170	2.5	8.2
160 - 170	3.5	4.6
150 - 160	3.4	3.6
140 - 150	6.0	11.7
130 - 140	12.3	17.2
120 - 130	14.6	21.3
110 - 120	20.3	17.7
100 - 110	19.2	7.8
< 100	18.2	7.8

- The CGCM 3.1 model predicts a 1 to 2 degree Celsius increase in monthly average temperatures by 2010-2039, resulting in earlier crop seeding dates, and later fall frost dates.

Climate Data and Future Scenario:

- 30 year average monthly climate data (Tmax, Tmin, ppt) was used to calculate:
 - Effective Growing Degree Days,
 - Moisture Deficits (P-PE) and
 - Length of Growing Season (seeding date until fall frost).
- Baseline data (1971-2000) provided by Natural Resources Canada (Great Lakes Forestry Centre).
- Climate Change Scenario (2010-2039)
 - Global Climate Change Model (GCM) used: Canada's Coupled Global Climate Model (CGCM3.1) developed by the Canadian Centre for Climate Modelling and Analysis.
 - Climate data was spatially interpolated using ANUSPLIN software (2.5° grid interpolated to ~10km grid).

Limitations:

- Represents only a single climate change model result, using the A2 climate change scenario from the Intergovernmental Panel on Climate Change (IPCC).
- Seasonal and inter-seasonal variability in the 30 year average monthly climate data was not considered (e.g. extreme events such as drought and excess spring moisture).