Forbes: A Climate Analogue Town for Sale for the Year 2090

Analogue based on the maximum consensus of models, based on <u>CMIP5</u>, for the year 2090 and a high emissions scenario, (RCP 8.5). Information developed using the CSIRO <u>Climate</u> Change in Australia Analogue Explorer Tool



Southern Slopes Climate Change Adaptation Research Partnership







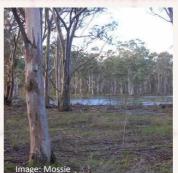
Image: Ray White RE Forbes

Forbes	Av. Annual (1981-2010) Rainfall (mm)	Season Mean Max. Temperature C ⁰			ture C⁰	Mean rainfall (mm)		
	2400 1800		Sale (current)	Sale (projected 2090)*	Forbes (current)	Sale (current)	Sale (projected 2090)*	Forbes (current)
	900	Spring	19.5	23.2	23.8	174.1	132.7	141.3
	600 400	Summer	25.1	28.9	32.3	148.8	134.7	148.8
	300	Autumn	20.6	24.2	24.3	150.2	151.8	124.0
	200	Winter	14.8	17.8	15.5	126.1	114.9	133.9
	50	ANNUAL	20.0	23.5	23.9	599.2	534.1	536.5

Sale (Eastern Victoria)









*This analogue has been further refined to include projected seasonal changes. It assumes an average rainfall decline across the Southern Slopes Region of 11% and average temp. increase of 3.5 C⁰, based on data from the <u>Climate Futures Tool</u>. For Forbes, current mean spring & autumn temp. is within +/-1°C and average annual rainfall is within +/-7% respectively of this future scenario for Sale.

Analogue Logic

Information above was developed using the <u>CSIRO Climate Change in Australia Analogue Explorer Tool</u>* and the <u>Climate Futures Tool</u> The above analogue is based on the average annual rainfall and temperature in the year 2090, maximum consensus of models (CMIP5) and a high emissions scenario (RCP 8.5). Global GHG emissions are currently tracking at the IPCC's RCP 8.5 scenario that leads to the most warming. To gain insight into other potential analogue towns for Sale, (which assumes we achieve the more ambitious target of limiting warming to between 1.1°C to 2.6°C degrees by 2100), run the Analogue Explorer Tool using the RCP 4.5 scenario. This scenario is considered as an achievable, intermediate mitigation scenario where GHG emissions peak earlier (around 2040) and the CO₂ concentration reaches 540 ppm by 2100. Other analogue towns under a range of RCP's can be explored using the <u>Analogue Tool</u>

*NOTE: variables such as seasonality, frost days & other local climate influences, radiation & soil types were not included in developing this analogue.

*RCP (<u>Representative Concentration Pathways</u>) are among those scenarios used in the IPCC Fifth Assessment Report (2013). The Maximum Consensus scenario was chosen. This is a scenario defined using the <u>Climate Futures</u> approach.