Climate and Land

As a major agricultural region in Australia, the Mildura region has great climate and soil conditions, which combined with irrigated crop land offer opportunities for agricultural and horticultural development.

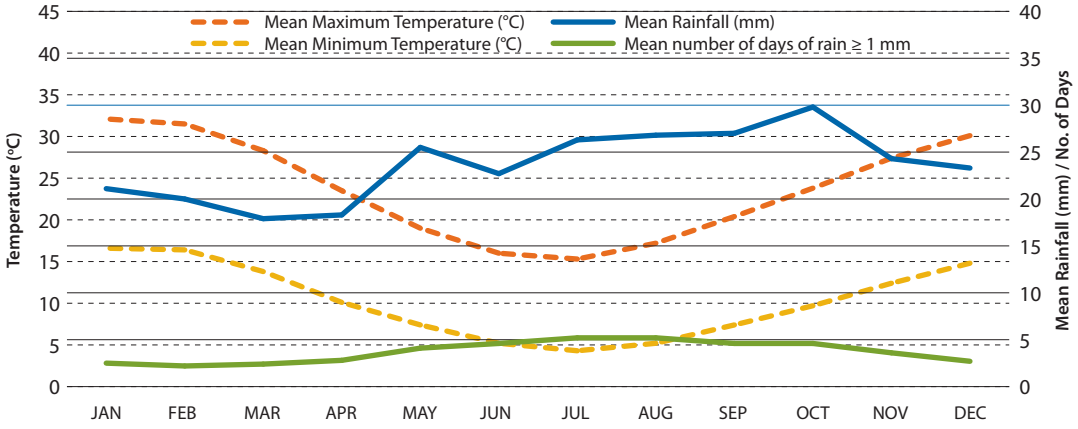
Temperature and Rainfall

Annual Mean Temperature Readings, Mildura Region

Year	Mildura Rural City Council	Wentworth Shire Council	Mildura Region
Temperature [(a)]			
Mean maximum temperature (°C)	23.7	24.3	**24.0**
Mean minimum temperature (°C)	10.3	11	**10.7**
Rainfall			
Mean rainfall (mm) [(b)]	284.5	283	**283.8**
Median (decile 5) rainfall (mm) [(c)]	275.8	277.8	**276.8**
Mean no. of days of rain ≥ 1 mm [(d)]	42.6	44.5	**43.6**

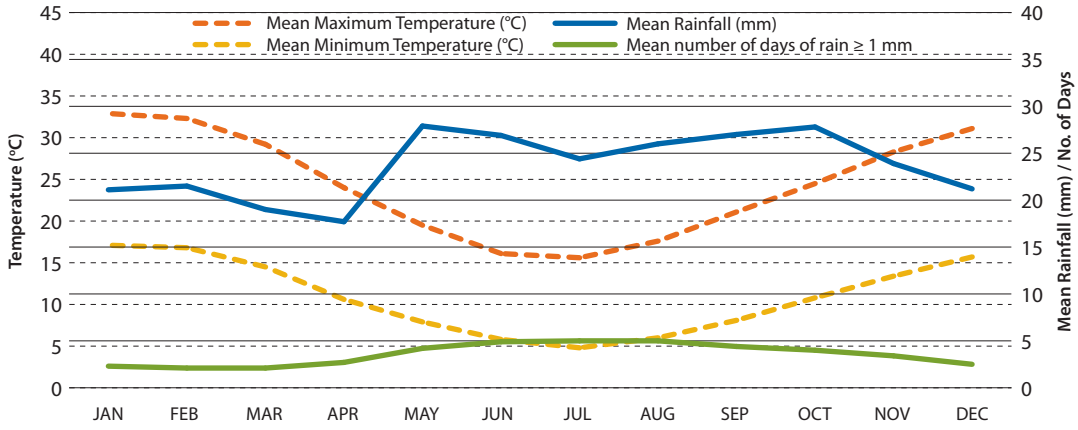
Source: AEC*group*; Bureau of Meteorology (2009)
Note: The data reported for the Mildura region represents a mean of the median values for Mildura Rural City Council and Wentworth Shire Council. The medians for the climate data have been compiled over different periods of time: (a) Collated over 61 years. (b) Collated over 141 years. (c) Collated over 127 years (d) Collated over 135 years.

Mean Temperature Readings, Mildura Rural City Council, 62 Years of Reading



Source: AEC*group*; Bureau of Meteorology (2009)

Median Temperature Readings, Wentworth Shire Council, More Than 61 Years of Reading



Source: AEC*group*; Bureau of Meteorology (2009)

Soil in the Mildura Region

The Mildura region has a great diversity of soil types that reflect differences in parent material, topography, climate, organic activity and age. There are five main soil categories:

- Calcareous Soils
- Sandy Soils
- Texture Contrast Soils
- Cracking Clay Soils
- Wet Soils

Calcareous Soils

The most common calcareous soils are formed on calcareous, aeolian sediments of variable texture. These soils can be calcareous throughout, and often have accumulations of calcium carbonate (lime) in the soil profile.

Generally with a gradual increase in clay content with depth, the pH tends to be highly alkaline in the subsoil. Sodicity and salinity levels are usually high in the heavier subsoils.

Crops: dryland cereals and grazing, irrigated viticulture, stone fruit and nuts.

Sandy Soils

Characteristic of the upper slopes and crests of the dunes, these soils are thought to have originated as coastal sands when the seas retreated westwards from the Murray Gulf. There is little soil development apart from weak surface accumulation of organic matter. These loose sands have low fertility and a high wind erosion hazard.

Crops: irrigated citrus and avocados.

Texture Contrast Soils

Texture contrast soils display strong texture contrast between the surface (A horizons) and the subsoil (B horizons) e.g. sand or loam over clay. They have subsoils which are not strongly acid but are sodic. Their surface texture ranges from sandy loam to clay loam over medium to heavy clay.

On the higher terraces near the River Murray, texture contrast soils support shrublands of saltbush and bluebush. Erosion has frequently removed the surface horizons to expose red, somewhat saline clays that seal over on wetting. These sites are difficult to reclaim on dryland farms and are known as "scalded country".

Crops: dryland pasture and grazing, irrigated viticulture and stonefruit.

Cracking Clay Soils

These soils occur on alluvium and associated lake bed deposits, along creeks and rivers, as well as on broad low-lying plains. They are cracking clay soils that display significant shrinking and swelling during wetting and drying cycles. They exhibit strong cracking when dry, and at depth have slickensides and/or lenticular peds. Profiles are typically gilgaied, coarsely structured, sodic, gypseous and somewhat saline.

Crops: irrigated viticulture and stonefruit.

Wet Soils

Hydrosols are soils which are seasonally or permanently saturated (for at least 2-3 months per year) occur naturally in low-lying parts of the Mildura region where saline regional groundwater reaches the surface. Soil surfaces are variably saline, depending largely on depth to the watertable.

Soils which are saline to the surface are commonly red clay loams overlying gypsum. They may be bare or support extremely salt tolerant low bushes such as samphire. Soils which are non-saline at the surface but highly saline at depth usually have a sandy surface and support shrubs such as saltbush.

The area of Hydrosols is increasing in both dryland and irrigated areas because of changed hydrological conditions since European settlement.

Crops: not suitable for commercial crops.

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