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PROPERTY REPORT

Wangaratta - Benalla, Benalla

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Overview

Property Details

Property address	Wangaratta - Benalla, Benalla
Planning Zone	FZ
District (SA2)	Benalla
Shire/Local Authority	Benalla (RC)
Agroecological Region	Central and South West Slopes and Plains
Parcels	1/TP813128~////, /~2037////PP2113
Land Area	13.42 ha / 33 ac
Primary Land Use	Grazing
Primary Soil Types	Shallow sand/loam over intractable clay
Arable Area	12.6 ha / 31 ac
Average Annual Rainfall	702.28 mm/year
Growing Season	Winter
Potential Carrying Capacity	17.00 DSE/ha

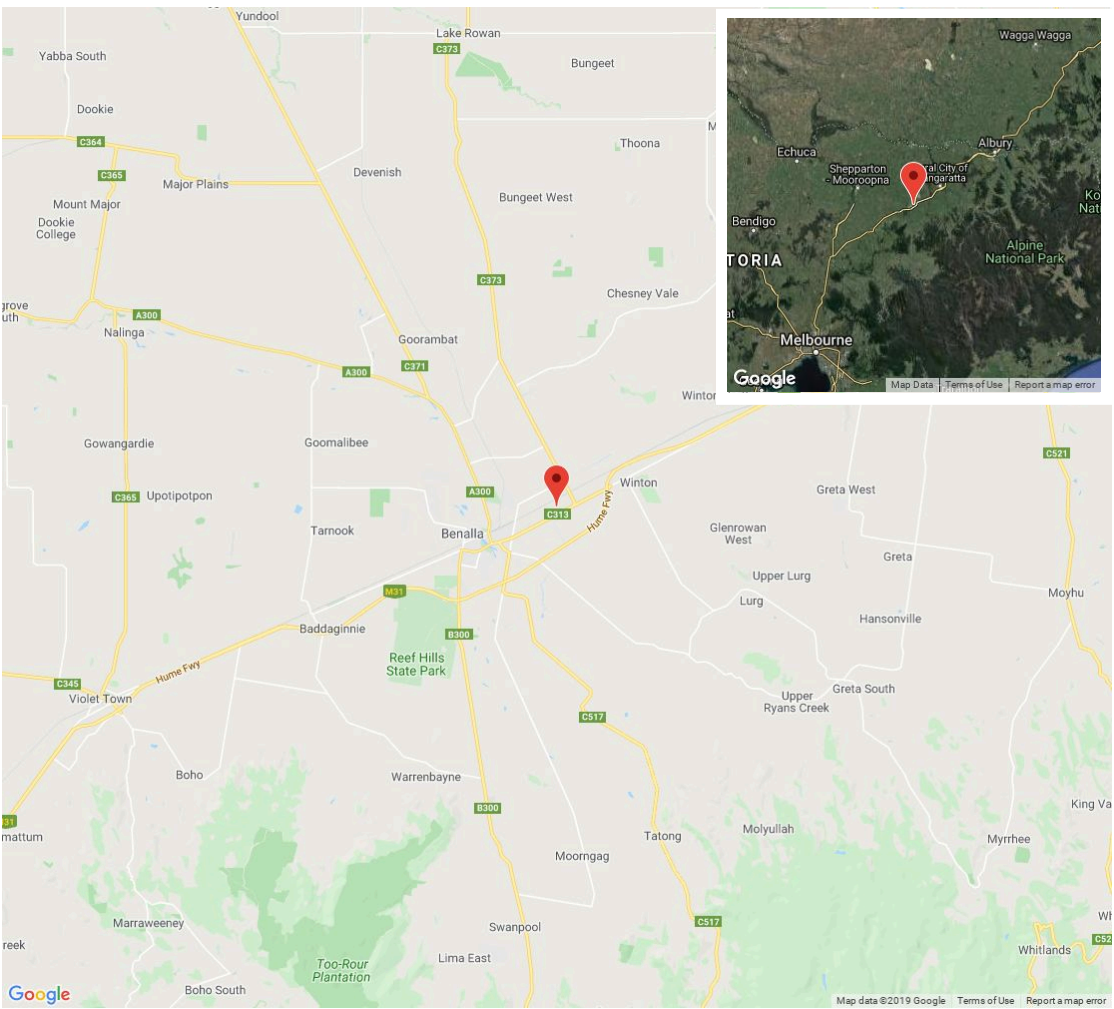
Location

Nearest Population Centers

Benalla (4.1km)
Wangaratta (31.7km)
Euroa (47.6km)

Nearest Major Urban Center

Melbourne (173.5km)

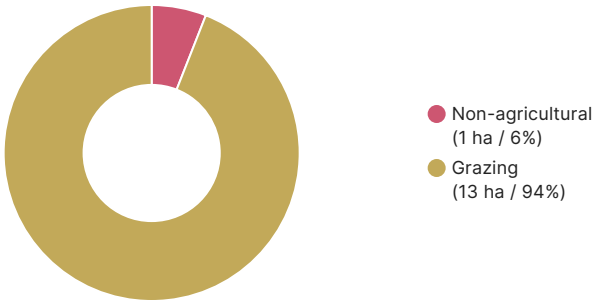


Land Use

Agricultural Land Uses

Land use information is derived from the latest version of the Australian Collaborative Land Use and Management Program (ACLUMP) catchment scale land use data. This data was collected between 2003 and 2017, with the exact time of data collection varying by locality, and method of data capture split between satellite remote sensing and on-the-ground survey.

Data collected 2003-2017

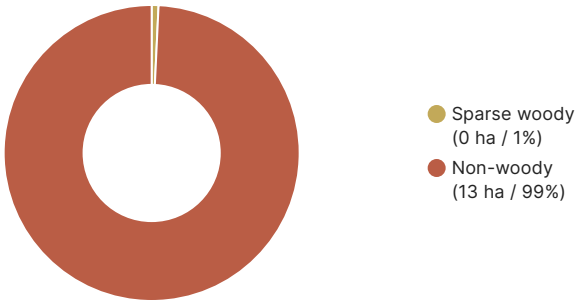


Land Use

Remnant Vegetation

Remnant vegetation data is based on satellite imagery from 2016. Land is classified into three categories: forest, sparse-woody and non-woody. Forest has minimum 20% canopy cover and a minimum area of 0.2 hectares. Sparse-woody has canopy cover between 5-19%. Data processed by the Department of Environment and Energy, Australia.

Data collected in 2016

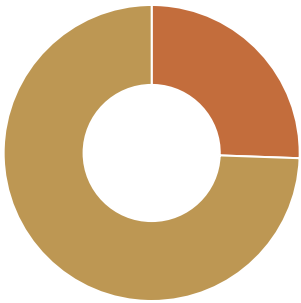


Land Use

Soil Types

This soil map was developed by the CSIRO using over 240,000 soil samples complied by the Terrestrial Ecosystem Research Network (TERN). CSIRO climate and topographic data was applied to these soil samples, and machine learning processes were used to classify land into one of 18 generic soil types at a resolution of 90m.

Data collected in 2016



- Deep sand/loam over intractable clay (3 ha / 26%)
- Shallow sand/loam ov intractable clay (10 ha / 74%)

Land Use

Average Slope

0.15%

Slope relates to the inclination of the land surface from the horizontal. Percent slope represents this inclination as the ratio of change in height to distance. Average slope represents the mean value across this property. 0% is flat, 100% is 45 degrees. Properties with high average slope are generally less suited to cropping.

Slope in degrees

0.01% 0.27%

Average Elevation

165m

Elevation refers to the height above sea level of a point. The average elevation is derived by taking the mean of these values across the full area of this property.

Height above sea level, in m

164.41m 166.16m

Production

Potential Carrying Capacity

Potential carrying capacity measures a farm's ability to sustain animals under optimal management conditions, which could include pasture composition, rotation rate, and fertiliser application. Using potential carrying capacity allows farms to be easily compared by standardising land management practices. Potential carrying capacity is distinct from actual carrying capacity, which measures a farm's actual ability to sustain animals over time.

To calculate potential carrying capacity, actual climate and soil data, feed availability and typical pasture compositions (on a per area basis) are applied to an economic model of grazing enterprises. This data is processed and generated by the CSIRO.

Non-forested area on property

13 ha

Dry Wethers (DSE)

One DSE (Dry Sheep Equivalent) is the amount of feed required to maintain the weight of a 45 kg, two-year-old Merino sheep. It follows that carrying capacity is fundamentally a measure of energy produced over time, where one DSE is equivalent to roughly 7.6 megajoules (MJ) per day.

17.0
DSE / ha

228
DSE Total

Steer (AE)

AE (Adult Equivalent) is the corresponding standardised measure for beef cattle. This measure is for a 450kg Bos Taurus steer maintained at that weight.

2.1
AE / ha

28
AE Total

Production

Plant Productivity

Plant Productivity measures the biomass productivity of a farm based on its net primary productivity (NPP), allowing comparisons between farms growing different species of crops, in different places around Australia, over many years. Plant productivity is distinct from crop yield as it includes all plant growth.

NPP refers to the carbon absorbed by plants through photosynthesis and is measured using satellite observations of photosynthetic activity on this farm, collected every 16 days since 2001. This data is used in a biophysical model to estimates plant growth at a resolution of 250m by DAS and the CSIRO.

Five-year average productivity

5.79

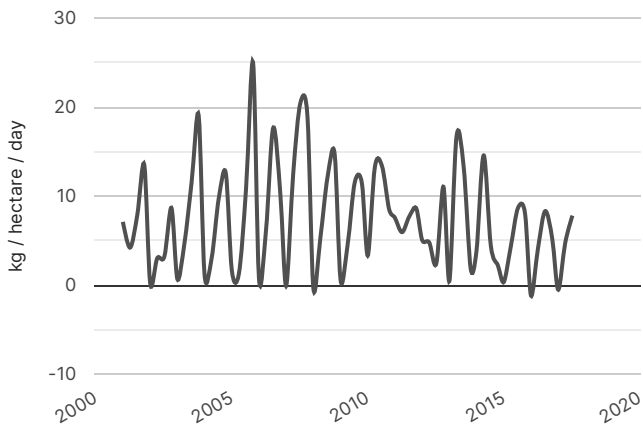
tons / hectares

Long-term average productivity

7.39

tons / hectare

Biomass growth rate over time



Climate

Average Annual Rainfall

702

mm /year

Growing Season

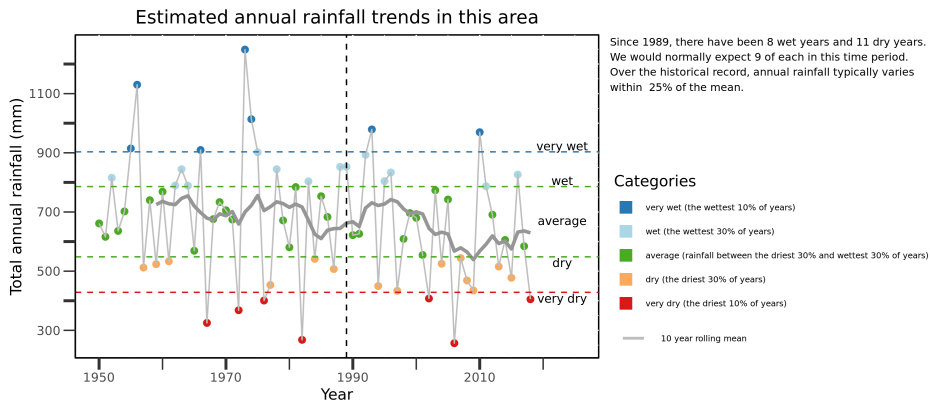
Winter

Nearest Weather Station

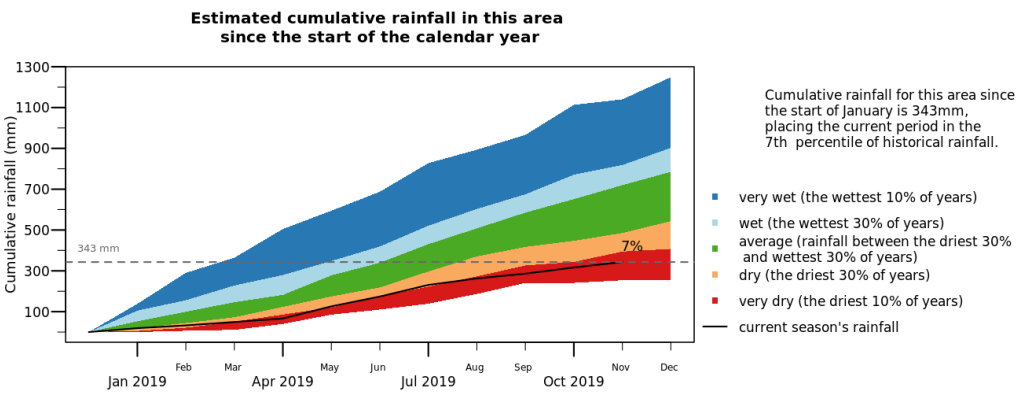
6 km

BENALLA (SHADFORTH STREET)

Annual Rainfall Deciles



Monthly Rainfall to Date



Risk

Drought Stress

Currently in 1 in 20 year deficit

Rainfall deficit is used to describe situations where rainfall has been lower over a given period (12-24 months) when compared with similar periods over the whole historical record (since 1900). If a property is currently experiencing a deficit, this will be given with comparison to the historical record, e.g. '1 in 10 year deficit'. This means that this level of rainfall deficit has historically occurred once every 10 years on average in this region. If a property is not currently experiencing a deficit, this value will read 'No deficit'. (Source: CSIRO)

Flood

No inundation detected over period

0

This CSIRO index is based on the number of years in the 2001-2015 period a location has been inundated. A zero score does not mean zero risk of floods, just that a flood has likely not occurred in that location within the last 15 years. (Source: CSIRO)

Bushfire

Low to medium risk

0.4

Relative measure of the the intensity of a potential bushfire on this property on a catastrophic fire weather day. No properties have a zero value as there is never no risk. The index values are from highest (1) to lowest (0).

Water

Medium to high risk

2.2

Identifies areas with higher exposure to water-related risks, as an aggregated measure of 12 global indicators. (Source: World Resources Institute)

Frost

18.7 Frost Days

per year

The average (mean) frost days per year where the minimum temperature is < 0 degrees Celsius. The mean frost days per year is calculated over the period 1950-2016. (Source: Australian Bureau of Metereology)