

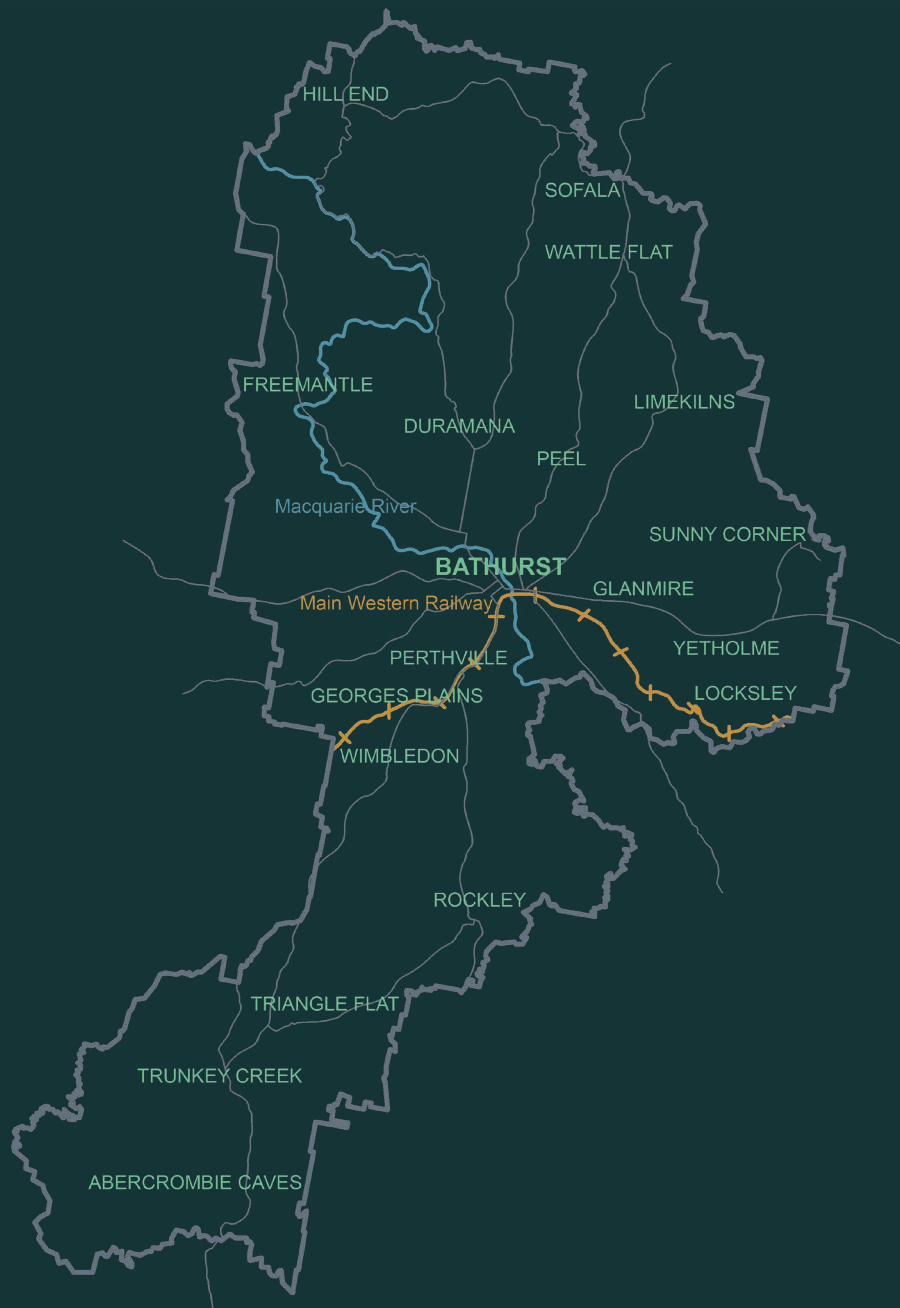


Critically Endangered Grassy Box-gum Woodland at Albens Reserve,
Mount Panorama Wahluu

State of the Environment Snapshot 2020-21



BATHURST
REGIONAL
COUNCIL



Bathurst LGA

The local community helped develop the Bathurst 2040 Community Strategic Plan which is an agreed plan to protect our values.

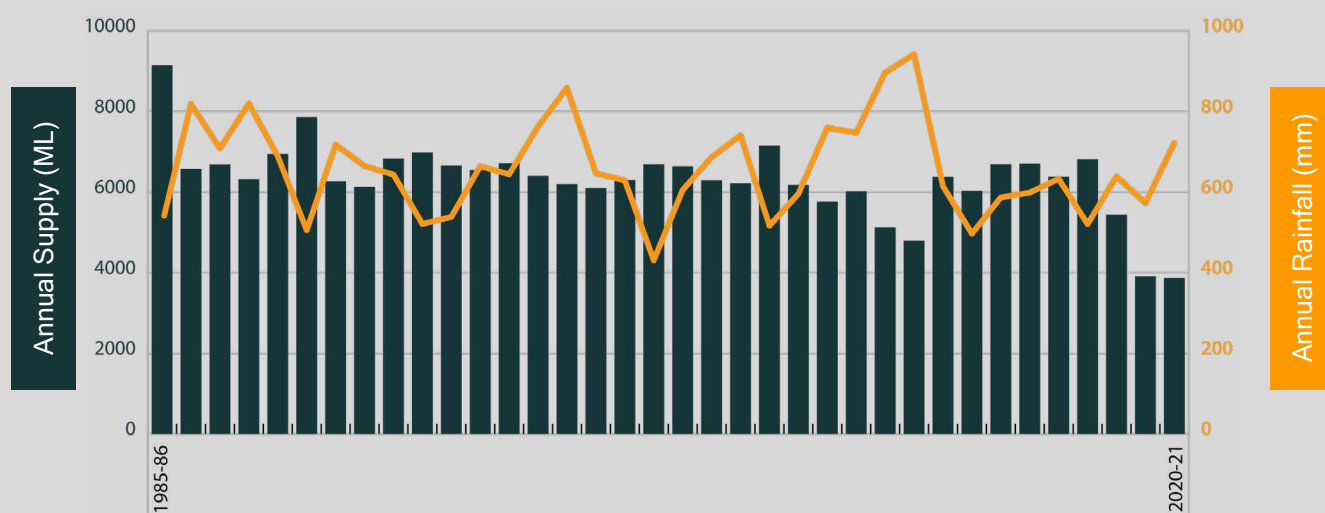
The Community Strategic Plan identifies five strategies which underpin the objective to be good environmental stewards:

- Protect and improve natural areas and ecosystems, including the Macquarie River and other waterways
- Protect the City's water supply
- Minimise the City's environmental footprint, live more sustainably and use resources more wisely
- Protect and improve the region's biodiversity
- Increase resilience to natural hazards and climate change

The 2020/21 State of the Environment Report helps us track our progress towards this objective.



Water



The 'Let's Make it Last' education campaign focused on helping residents and businesses maintain a reduction in water use during and after the drought.

Bathurst town water supply comes from Chifley Dam. At the end of the reporting period Chifley Dam was at **100%**, up from **38.7%** at June 2020.

Water use by households is strongly correlated to rainfall.

level 3
(High level) water restrictions since 28 August 2020

130
average litres per person per day

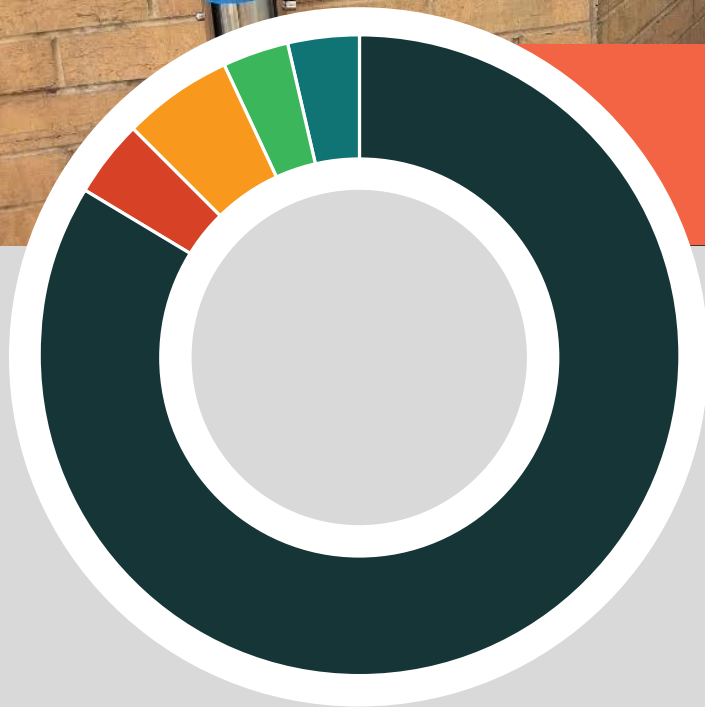
7.8%
more domestic water used than previous year

1
litre per person per day increase since the previous June

182
thousand litres of water used per household



Waste



- 50042 tonnes of General Waste to Landfill (Kerbside and delivered to WMC)
- 2370 tonnes of Green Waste delivered to WMC
- 2278 tonnes of Organics kerbside collection
- 1917 tonnes of material collected kerbside for recycling
- 2101 tonnes of recycled material at WMC

18 thousand cigarette butts littered in the CBD each week.

93.7% reduction after Council anti-littering campaign

1 cigarette butt can pollute up to 1,000 litres of river water

Cigarette butt littering

Littering impacts on waterways as toxins from cigarette butts and plastics enter rivers and creeks via stormwater systems.

15% of kerbside collected material and waste delivered to the Waste Management and Transfer stations was diverted from landfill

The reporting period saw an 18% increase over the previous 8 years in the amount of general waste delivered to landfill, which may be attributed to a 148% increase in development activity.

Council works with other agencies including the NSW Environment Protection Authority, Forestry Corporation and NSW Police and the local community to **monitor** activity, and to **identify** and **penalise** illegal dumpers or litterers.

Illegal dumping is a **costly issue** for Bathurst ratepayers. In **2020/21** Council Officers investigated **81 illegal dumping matters** and issued **several** penalty infringements.

15

Council facilities
with Solar Panels

593.6

kW installed

748

tonnes CO₂e in
avoided greenhouse
gas emissions

42.3

kW
average system
size

6.4%

of Council's electricity
consumption derived
from its own solar

Council's Renewable Energy profile



Energy

RENEWABLE ENERGY ACTION PLAN

Adopted June 2020

- Target of 15% improved electricity efficiency 2018/19 to 2023 with a 14% improvement achieved by 2020/21
- 25% of Council operations powered by Renewable Energy by 2023 and 50% by 2025

0.93 tonnes

annual carbon dioxide
(equivalent) emissions
per resident

Did you know?

0.93 tonnes is close to the carbon emissions of a 6,300km flight from Sydney to Singapore.

Total electricity use for the whole of the Bathurst Regional Council Local Government Area has been relatively stable 2013-14 to 2019-20. Business use has declined but this has been offset by increasing energy use in homes as house numbers have grown. Energy exported to the grid from small scale solar continues to increase.

Council participated in a regional electric vehicle infrastructure program to identify the best locations to install charging stations to meet the growing demand through the region. The report means that Council is project ready when grants are open as part of the \$490 million NSW Electric Vehicle Strategy. Did you know? An electric vehicle that receives its electricity from the grid, which includes coal power stations, still results in half the carbon emissions of an equivalent sized petrol car! An electric vehicle charged from green power has zero carbon emissions.

This year it was 1,464 Megajoules per resident. Council spend on electricity and gas was \$2.97 million. The 2020-21 decline can be partly attributed to reduced water pumping due to water restrictions and increased rainfall, the continued deployment of energy efficient LED Street Lights, other efficiency projects and additional solar installations.

National energy use | COVID-19 restrictions

(The Australia Institute 2020)

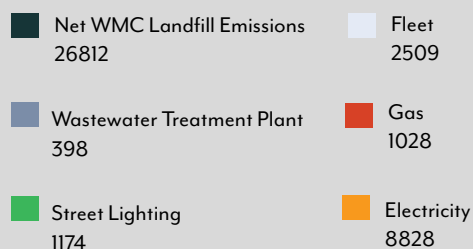
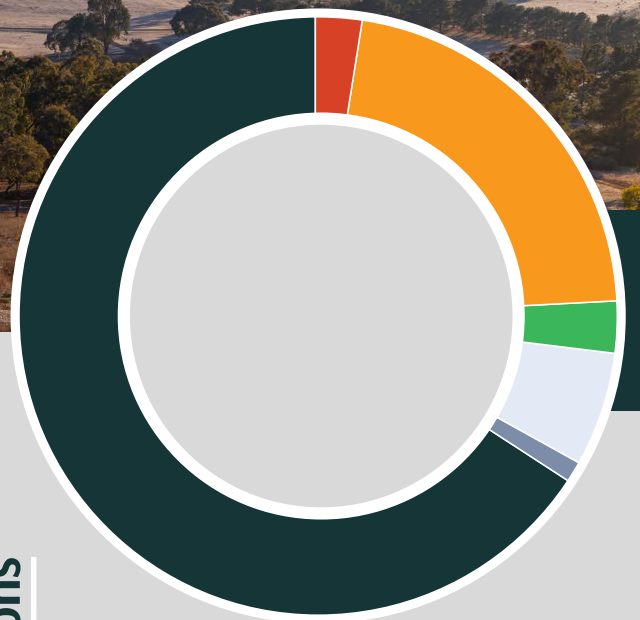
Weather
conditions
(cold and hot
temperatures
and drought)
influence
energy use
of Council
operations by the
need to pump
the town water
supply and to
heat and
cool Council
facilities.





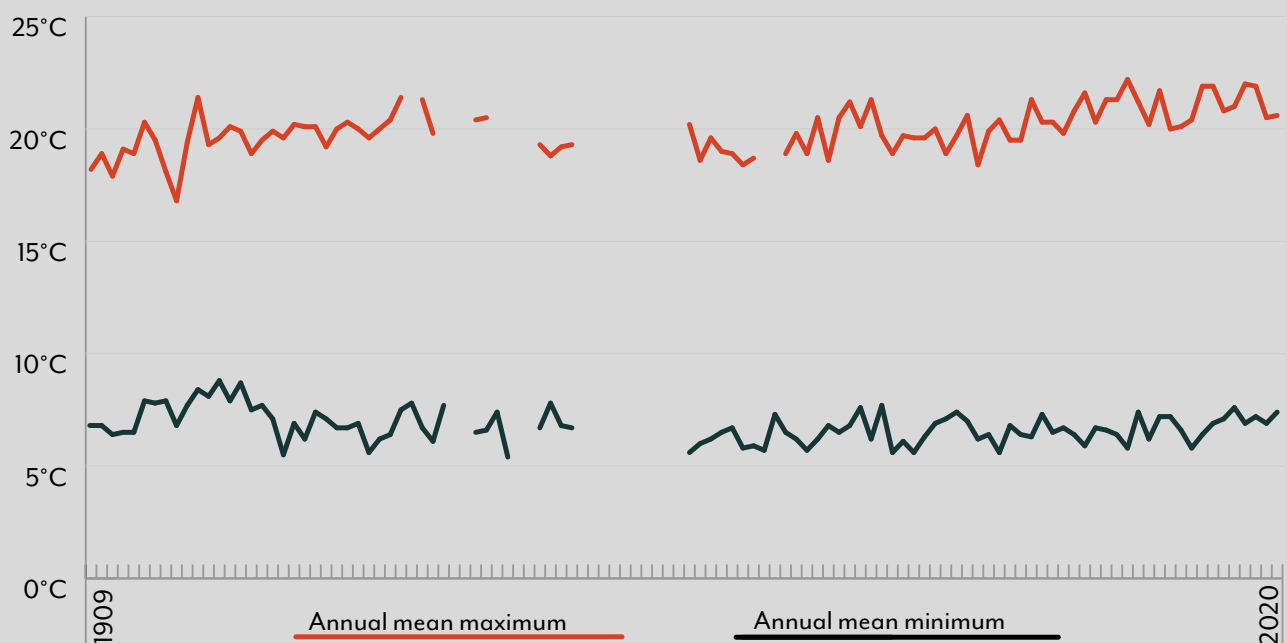
Climate

BRC Co₂ emissions



Weather is the daily temperature, wind, rain that we experience.

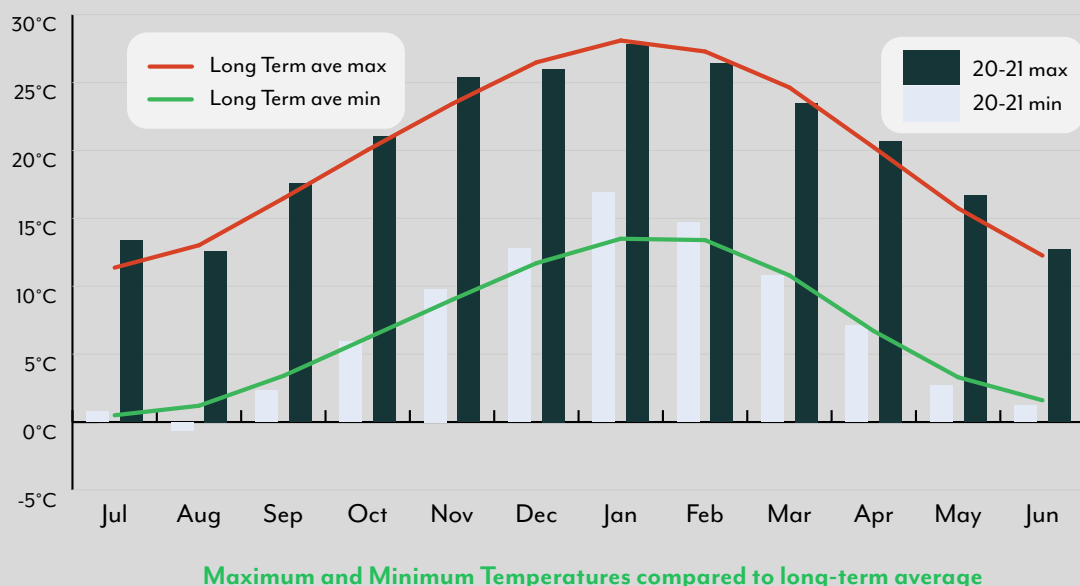
Climate is the trend or average over a long period of time.



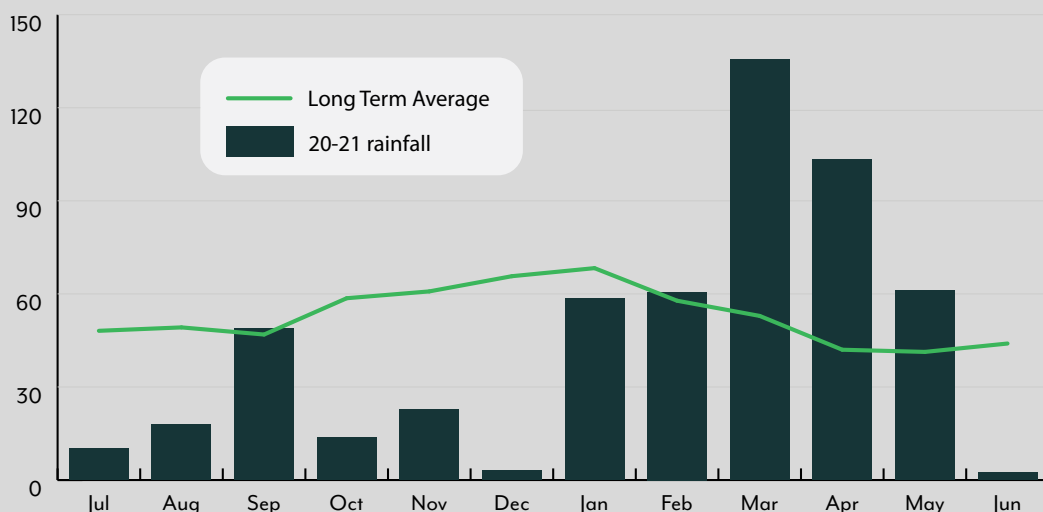
Temperatures during 2020–21, were consistent with the long-term average. July, November and May were the only months that were more than 1°C outside (above) average temperatures. Rainfall was highly variable with records between 1mm (April 2021) and 135.2mm (March 2021). The annual total rainfall was 722.7mm; 87.1mm above the long-term average.

There are large scale or global drivers of climate that influence local weather conditions. The Bureau of Meteorology and other agencies monitor changes in the El Niño–Southern Oscillation, the Indian Ocean Dipole and the Southern Annular Mode, which impact wet and dry patterns, as well as global warming which also impacts rainfall patterns, heat waves and storm intensity.

Weather



The long-term trend is for increasing average temperatures. Temperature data, recorded at the Bathurst Agricultural Research station since 1909, demonstrates that that annual maximum temperatures since around 1996 exceeded the previous fifty year's averages.





Biodiversity

Protecting our Waterways

The NSW Environmental Trust funded Queen Charlotte's Vale Creek Royal Rehabilitation Treatment Project, which commenced in March 2020, aims to establish native riparian vegetation along 700m of Queen Charlotte's Vale Creek by undertaking woody and herbaceous weed control, the installation of 700m wildlife friendly rural fencing, and the planting of 4000 locally occurring native trees, shrubs and grasses.

Habitat restoration

Over twenty community volunteers came together on the eve of National Threatened Species Day (7 September) to plant 72 native riparian trees along the banks of the Macquarie Wambuul River. The environmental rehabilitation project aims to increase roosting habitat for the threatened Grey-headed Flying-fox and improve riparian vegetation condition downstream of the Bathurst Wastewater Treatment Plant and the City of Bathurst.

Backyard Rangers

Council received grant funding from the Federal Government Communities Environment Program to get nest boxes installed in backyards and local parks, and record local species.

220

nest boxes, insect hotels and Backyards for Wildlife books provided to the community

630

local animal, plant and fungi species uploaded to the Backyard Ranger project on iNaturalist

500

local residents, students and Landcare members participated in the project

3000

observations recorded as a result of ongoing participation by local residents