

State of the Environment Report

A State of the Environment (SoE) Report is an important management tool which aims to provide the community and Local Council with information on the condition of the environment in the local area to assist in decision-making.

Since 2007, the Councils of the Greater Central West Region of NSW (see map) have joined to produce Regional SoE Reports as part of Council reporting requirements.

NSW legislation means that Councils are not required to produce SoE reports each year, but in the year of the Council election. However, the participating Councils have decided to continue reporting on an annual basis so that they can provide a detailed SoE report that covers trends in the intervening years.

The 2020 Council elections were postponed until 2021 due to the COVID-19 pandemic. Being the year of the Council election, this SoE report responds to the requirement in the *Local Government Act 1993* that Councils measure and report on the progress of the environmental objectives or strategies in their Community Strategic Plan (CSP).

This report lists Council's environmental strategies, identifies appropriate indicators to measure them and briefly reports on trends in these indicators since the last Council election (2016). It also discusses any major environmental impacts on the environmental strategies between 2016 and 2021.

Environmental Strategies

In the Bathurst 2040 CSP, there are five strategies under Objective 3: Environmental stewardship:

Strategy 3.1 Protect and improve our natural areas and ecosystems, including the Macquarie River and other waterways

Strategy 3.2 Protect the City's water supply

Strategy 3.3 Minimise the City's environmental footprint, live more sustainably and use resources more wisely

Strategy 3.4 Protect and improve the region's biodiversity

Strategy 3.5 Increase resilience to natural hazards and climate change

Environmental Indicators

Over 100 indicators have been identified and used to measure the state of the environment across the Greater Central West region using data compiled over the past five years. The indicators are categorised into five themes:

1. Land
2. Biodiversity
3. Water and Waterways
4. People and Communities
5. Towards Sustainability

The table below shows how Council's Environmental Strategies are measured by the Environmental Indicators detailed in the remainder of the report.

ENVIRONMENTAL STRATEGY	ENVIRONMENTAL INDICATORS
Strategy 3.1 Protect and improve our natural areas and ecosystems, including the Macquarie River and other waterways	Land, Biodiversity, Water and Waterways
Strategy 3.2 Protect the City's water supply	Land, Water and Waterways
Strategy 3.3 Minimise the City's environmental footprint, live more sustainably and use resources more wisely	People and Communities, Towards Sustainability
Strategy 3.4 Protect and improve the region's biodiversity	Biodiversity
Strategy 3.5 Increase resilience to natural hazards and climate change	Water and Waterways, Towards Sustainability

Trends/Environmental Impacts

Land There was an increase in the number of potentially contaminated sites due to ongoing monitoring. The number of land use conflict complaints to Council also rose in the last five years. With increasing urbanisation particularly around Bathurst, there was an increase in the number of development applications submitted to Council. The extent of mining increased significantly in the past five years, although the number of exploration titles declined in the past two years.

Biodiversity There was a slight increase in the extent of protected land (national park estate) in the last five years. Council improved its roadside vegetation management plan and the number of complaints it received related to clearing declined from last year. The stocking of native fish was at its highest level for four years. The number of priority weeds continued to rise across the LGA.

Water and Waterways Some indicators showed a decline in water quality in local streams possibly attributed to the drought experienced in the past five years. However, there was increased community effort to improve riparian corridors. Commercial irrigation activity rose slightly, although the amount of water used by Council to irrigate its sports fields generally fell. The

consumption of town water decreased over the past five years in concert with high levels of water restrictions.

People and Communities The number of hours of environmental volunteering fell over the past five years due to COVID-19 restrictions, although the number of environmental programs rose. The air quality was worse in 2019-20 due to the bushfires in the area. Council maintained a high level of

activity in the management of indigenous and non-indigenous heritage.

Towards Sustainability The total amount of waste sent to landfill gradually rose over the past five years, although the amount of recovered garden organics and e-waste also increased. Council's greenhouse gas emissions declined mainly due to its reduction in electricity use and uptake of renewable alternatives e.g. solar.

Land

Issue	Indicator	2016-17	2017-18	2018-19	2019-20	2020-21	Trend
Contamination	Contaminated land sites - Contaminated Land Register (number)	0	0	0	0	0	→
	Contaminated land sites - potentially contaminated sites (number)	398	500	635	642	643	↓
	Contaminated sites rehabilitated (number)	4	3	2	3	4	↑
Erosion	Erosion affected land rehabilitated (ha)	0		0		0	→
Land use planning and management	Number of development consents and building approvals	662	675	661	599	892	↓
	Landuse conflict complaints (number)	5	1	0	8	8	↓
	Loss of primary agricultural land through rezoning (ha)	29	0	0	0	0	↑
Minerals & Petroleum	Number of mining and exploration titles				163	92	↑
	Area covered by mining and exploration titles (ha)	110,000	106,000	93,955	140,000	192,000	↓

↑ improvement → no or little change ↓ worsening trend

Note - the trend is based on comparing the average of the four previous years of reporting with 2020-21

Biodiversity

Issue	Indicator	2016-17	2017-18	2018-19	2019-20	2020-21	Trend
Habitat Loss	Total area in the National Parks Estate (ha)	16,677	16,677	16,676	16,676	17,285	↑
	Total area of State Forests (ha)	12,276	12,276	12,276	12,276	12,316	→
	Total area protected in Wildlife Refuges (ha)				8,262	6,691	↓
	Area protected in conservation reserves & under voluntary conservation agreements (ha)	1,937	1,996	2,050	1,861	1,902	↓
	Extent of Traveling Stock Reserves in LGA (ha)			324	340	315	→
	Proportion of Council reserves that is bushland/remnant vegetation	45%	20%	19%	19%	0%	↓
	Habitat areas revegetated (Ha)	15	2	2	4	1	↓
	Clearing complaints (number)	1	1	2	10	9	↓
	Roadside vegetation management plan (Yes//No)	Yes	Yes	Yes	Yes	Yes	→
	Roadside vegetation rehabilitated (ha)	0	1	4	9	8	↑
Threatened Species	State Threatened species listed (number)				102	102	→
	Threatened species actions implemented (e.g. PAS, recovery plans) (number)	4	5	5	7	5	↓
	Fish restocking activities: native species (number)	77,612	22,755	38,000	7,000	46,500	↑
Priority weeds and feral animals	Fish restocking activities: non-native species (number)	67,334	26,667	20,825	28,000	35,950	↓
	Number of declared priority weeds	95	95	96	98	104	↓
	Invasive species under active management (number)	13	13	14	15	19	↑

People and Communities

Issue	Indicator	2016-17	2017-18	2018-19	2019-20	2020-21	Trend
Active community involvement	Environmental volunteers working on public open space (hours)	3,224	2,734	2,260	2,116	2,167	↓
	Number of environmental community engagement programs	12	12	12	11	13	↑
	Number of growers markets/local food retailers specialising in local food	5	5	5	6	6	↑
Community Impacts	Number of days that air pollution maximum goals for particulate matter were exceeded*	0	3	12	84	0	↑
Indigenous Heritage	Number of Indigenous sites on AHIMS register	275	300	328	341	366	↑
	Inclusion in DCPs & rural strategies (Yes/No)	Yes	Yes	Yes	Yes	Yes	→
	Extent of liaison with Indigenous communities (self-assessed from 0 = none to 3 = High)	3.0	3.0	3.0	3.0	3.0	→
	Development approvals on listed Indigenous sites (number)	1	1	1	1	1	→
	Number of Indigenous heritage management actions/responses	0	0	0	8	1	↓
Non-Indigenous Heritage	NSW Heritage Items (number)	34	34	34	34	35	↑
	Locally listed heritage items (number)	341	342	342	344	353	↑
	Actions to protect non-indigenous heritage (including management plans) (number)	6	6	8	8	8	↑
	Heritage buildings on statutory heritage lists demolished/degraded in past year (number)	0	1	0	2	0	↑
	Heritage buildings on statutory heritage lists renovated/improved in past year (number)	10	6	22	11	19	↑

Water and Waterways

Issue	Indicator	2016-17	2017-18	2018-19	2019-20	2020-21	Trend
Riparian	E.coli remote from wastewater treatment plants (per 100ml)	810	1,200	890	1,106	298	↑
	Riparian vegetation recovery actions (number)	10	9	8	15	18	↑
	Riparian vegetation recovery area (ha)	10	1.7	3	12	21	↑
Industrial/Agricultural Pollution	Load Based Licencing Volume (kg)	62,439	47,068	46,197	45,930	55,586	↓
	Exceedances of license discharge consent recorded (number)	0	2	2	0	1	→
	Erosion & Sediment Control complaints received by Council (number)	16	20	44	15	35	↓
Stormwater Pollution	Number of gross pollutant traps installed	7	7	7	7	7	→
	Total catchment area of GPTs (ha)	863	863	863	863	863	→
	Water pollution complaints (number)	14	20	12	17	17	↓
Town Water Quality	Number of instances drinking water guidelines not met	0	0	0	0	2	→
	Number of drinking water complaints	84	87	41	42	83	↓
Water extraction	Number of Water Supply Work Approvals from surface water sources	235			243	243	↓
	Volume of surface water permissible for extraction under licences (GL)	30			27	30	↓
	Actual volume extracted through surface water licences					5.8	→
	Number of Water Supply Work Approvals from groundwater resources	1,533			1,681	1,722	↓
	Volume of groundwater permissible for extraction under licences (GL)	2.3			1.9	2.4	↓
	Actual volume extracted through groundwater licences (GL)	0.01			0.01	0.02	→
Council water consumption	Area of irrigated Council managed parks, sportsgrounds, public open space (ha)	132	134	134	138	139	↓
	Water used by council for irrigation (including treated and untreated) (ML)	246	434	337	293	270	↑
Town water consumption	Annual metered supply (ML)	5,720	6,042	4,875	3,934	4,055	↑
	Annual consumption (Total from WTP) (ML)	6,578	6,819	5,441	3,917	3,829	↑
	Average annual household mains potable water usage (kL)	272.6	297.2	229.4	169.6	182.8	↑
	Average level of water restrictions implemented	0.0	0.0	3.0	5.0	5.0	↓
	Water conservation programs (number)	2	3	5	5	4	→

Towards Sustainability

Issue	Indicator	2016-17	2017-18	2018-19	2019-20	2020-21	Trend
Waste Generation	Total waste entombed at primary landfill (tonnes)	43,608	42,874	40,497	40,392	50,042	↓
	Total waste entombed at other landfills (exc recyclables) (tonnes)	150	150	155	155	160	↓
	Average total waste generated per person (tonnes)	1	1.00	0.94	0.93	1.14	↓
	Average cost of waste service per residential household	\$368	\$377	\$394	\$413	\$432	↓
Hazardous/Liquid Waste	DrumMuster collections (number of drums)	1,514	2,164	1,879	2,109	1,992	↑
	Household Hazardous Wastes collected (kg)	8258	5,090	15,437	2,359	29,174	↑
Reduce	Organics collected (diverted from landfill) (tonnes)	6,429	5,780	6,138	5,358	7,191	↑
	E-Waste collected (diverted from landfill) (tonnes)	8	19	29	16	33	↑
Recycle	Volume of material recycled (tonnes)	2,951	3,684	4,360	3,012	4,144	↑
	Volume of material recycled per person (kg)	70	86	101	69	94	↑
Littering and illegal dumping	Number of illegal waste disposal complaints to Council	108	129	147	135	81	↑
Engineering, Infrastructure and Civil Works	New road construction (km)	4	6	5	0.93	1	↑
	Road upgrades (km)	55	53	80	42	53	↑
Risk Management	Flood management plans/ flood mapping - increase in area covered (ha)	0	0	0	0	0	→
	Hazard reduction burns (number)	0	1	1	0	1	↓
Climate Change Mitigation	Office paper used by Council (A4 & A3 reams)	3,539	2,641	2,288	2,724	1,578	↑
	Council sustainability initiatives (number)	26	27	28	33	35	↑
	Council mitigation initiatives (number)	5	6	8	9	9	↑
Council Greenhouse Gas Emissions	Annual electricity consumption for Council controlled facilities (MWh)	15,289	15,289	14,746	13,220	11,874	↑
	Annual natural gas consumption for Council controlled facilities GJ)	15,107	14,958	15,845	14,545	17,867	↓
	Annual bottled gas consumption for Council controlled facilities (L)	1,686	2,205	3,065	1,693	1,595	↑
	Total fuel consumption (KL)	857	858	876	915	970	↓
	Proportion of Council's electrical energy demand met from council-owned renewable energy infrastructure	3.0%	4.1%	4.4%	5.3%	6.6%	↑
	Council total operational greenhouse gas emissions (tCO ₂ -e/year)	38,492	29,636	30,798	35,111	22,263	↑
Community Greenhouse Gas Emissions	Small scale renewable energy uptake (kW installed)	1,071	2,176	3,837	5,165	7,289	↑
	Number of solar water heaters and heat pumps installed	19	19	10	10	13	↓



CASE STUDY: Bathurst Regional Council Renewable Energy Action Plan (Bathurst LGA)

Energy savings actions and renewable energy projects undertaken by Bathurst Regional Council have demonstrated there is a strong business case and community support for further action. Key benefits are reduced operational costs, flow on social and economic benefits as resources are redirected and enhanced environmental outcomes.

In 2020, Bathurst Regional Council adopted a Renewable Energy Action Plan which sets out Council's strategy and action plan to minimise its dependence on fossil fuel energy sources. It has a primary focus on alternatives to grid-sourced electricity, but also considers and makes recommendations about transitioning away from natural gas and liquid fossil fuels.

The plan employs an energy management hierarchy which prioritises energy efficiency actions. The plan includes an:

- Electricity efficiency target of 15% in comparison with 2018-19 electricity consumption of 15,069 MWh.

The plan also sets the following renewable electricity targets:

- Renewable Target 1 - 25% of Council's electricity consumption to be from renewable sources by 2023
- Renewable Target 2 - 50% of Council's electricity consumption to be from renewable sources by 2025

Current State and Commonwealth policy settings, uncertainty in the electricity market and rapidly evolving technology in the renewable energy and storage space make it prudent to set short- and medium-term targets which can be reviewed and raised, where appropriate, as the renewable market develops. For this reason, a mid-term review of the plan is scheduled for 2023.

The plan explores the strategic drivers for Council to increase its use of renewable energy, considers the state of the electricity market and examines the opportunities available to Council. It also details the actions which have been identified to enable Council to meet the stated energy efficiency and renewable electricity targets.

The plan is being used as a working document by Council to drive operational change and increased efficiency.

The Renewable Energy Action Plan is available on the Bathurst Regional Council website

https://bit.ly/BRC_REAP.

