



State of the environment

2020 - 2021

Acknowledgement:

Dubbo Regional Council acknowledges the Wiradjuri People who are the Traditional Custodians of the Land. Council pay respect to the Elders both past, present and emerging of the Wiradjuri Nation and extend that respect to other Aboriginal peoples from other nations who are present.

A State of 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. As per section 428A* of the Local Government Act the SOE Report is required to be included in Council's Annual Report in a year in which an ordinary election is held. The below SOE Report provides a snapshot of data for the Dubbo Regional Council Local Government Area across a range of environmental indicators as shown in the tables below. The tables provide an understanding of trends by comparing this year's data (2020/2021) with an average of previous years.

*Section 428A as it pertains to State of the Environment reports was repealed on 20 August 2021. However, during this reporting period, which ended on 30 June 2020, it was still in effect.

2020/2021 HIGHLIGHTS

- The number of potentially contaminated sites in the Dubbo region increased. This is most likely associated with a comprehensive contaminated lands project conducted by Council between 2019 - 2021 to assist in identifying, recording and monitoring historically contaminated sites.
- The area (hectares) of habitat rehabilitated within the Dubbo region increased resulting in an improved environmental trend. There was however a decrease in the number of threatened species actions implemented and invasive species actively managed.
- Town water consumption decreased within the Dubbo region resulting in an improved environmental trend. This follows at least two years of increased town water consumption as a result of severe drought in 2018 and 2019. In fact 2019 was Australia's hottest and driest year on record, with much of the country affected by drought (*Australian Government's Bureau of Meteorology's Annual Climate Statement 2019*).
- Of note a very high level of 'E.coli remote from wastewater treatment plants' was measured in 2019/20 and 2020/21. This decrease in water quality could be associated with the drought breaking, and an increase in rainfall experienced across the Macquarie River catchment washing sediment and pollutants into the river system. Council continues to increase the number of gross pollutant traps installed across the catchment, and wastewater from the Dubbo Sewerage Treatment Plant is reused.
- The total waste entombed at Council's primary landfill (tonnes) continued to increase, less waste however was entombed at other landfill sites and transfer stations in the Dubbo region. This is due to Council closing a number of rural sites in 2019/20 to improve organisational waste management practices and to reduce uncontrolled illegal dumping at those locations. On a positive note there was an increase in the annual volume of material recycled, garden organics and e-waste collected and diverted from landfill.
- Annual electricity consumption and costs for Council controlled facilities decreased resulting in an improved environmental trend, although Council natural gas and fuel consumption increased. This could be associated with cooler weather experienced in the region in 2020/21. Council adopted an Energy Strategy and Implementation Plan in early 2020 which resulted in a number of comprehensive energy efficiency and renewable energy measures being implemented. This included the replacement of over 88% of Council's street light network with energy efficient LED technology, and the installation of solar systems on numerous Council buildings.
- The Dubbo Region continued to support renewable energy with an increase in the uptake of both small and large scale renewable energy.

LAND

| Issue | Indicator | 2016-17 | 2017-18 | 2018-19 | 2019-20 | 2020-21 | Trend |
|----------------------------------|-------------------------------------------------------------------|---------|---------|---------|---------|---------|-------------------------------------|
| Contamination | Contaminated land sites - Contaminated Land Register (number) | 1 | 1 | 1 | 1 | 1 | No or little change |
| | Contaminated land sites - potentially contaminated sites (number) | 461 | 503 | 516 | 526 | 530 | Worsening Trend |
| | Contaminated sites rehabilitated (number) | 3 | 0 | 2 | 1 | 0 | Worsening Trend |
| Erosion | Erosion affected land rehabilitated (ha) | 0 | 22 | 10 | 1 | 20 | Improvement |
| Land use planning and management | Number of development consents and building approvals | 975 | 879 | 837 | 789* | 894* | Development increased in the Region |
| | Land use conflict complaints (number) | 24 | 24 | 3 | 5 | 2 | Improvement |
| | Loss of primary agricultural land through rezoning (ha) | 0 | 0 | 0 | 0 | 0 | No or little change |

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

*This total represents approval consents only with refused, withdrawn and rejected applications removed whereas they were included in previous years.

BIODIVERSITY

| Issue | Indicator | 2016-17 | 2017-18 | 2018-19 | 2019-20 | 2020-21 | Trend |
|--------------|--------------------------------------------------------------------|---------|---------|---------|---------|---------|---------------------|
| Habitat Loss | Proportion of Council reserves that is bushland/remnant vegetation | 23% | 23% | 23% | 23% | 23% | No or little change |
| | Habitat areas revegetated (ha) | 14 | 28 | 15 | 3 | 20 | Improvement |
| | Roadside vegetation management plan | No | No | No | No | No | No or little change |

| | | | | | | | |
|---------------------------------|----------------------------------------------------------------------------|----|----|----|----|----|---------------------|
| | Roadside vegetation rehabilitated (ha) | 0 | 0 | 0 | 0 | 0 | No or little change |
| Threatened Species | Threatened species actions implemented (e.g. PAS, recovery plans) (number) | 6 | 7 | 6 | 2 | 1 | Worsening Trend |
| Noxious weeds and feral animals | Priority weeds in region (number) | - | - | 57 | 57 | 57 | No or little change |
| | Invasive species under active management (number) | 27 | 16 | - | - | 10 | Worsening Trend |

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

WATER & WATERWAYS



| Issue | Indicator | 2016-17 | 2017-18 | 2018-19 | 2019-20 | 2020-21 | Trend |
|-----------------------------------|--------------------------------------------------------------------------------|---------|---------|---------|---------|---------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Surface & Ground Water Quality | E.coli remote from wastewater treatment plants (per 100ml) | 375 | 654 | 365 | 2901 | 1188 | Worsening Trend |
| Riparian | Riparian vegetation recovery actions (number) | 14 | 22 | 10 | 0 | 1 | Worsening Trend |
| | Riparian vegetation recovery area (ha) | 14 | 28 | 15 | 0 | 20 | Improvement |
| Industrial/Agricultural Pollution | Load Based Licencing Volume (kg) | 9,191 | 11,978 | 16,865 | 10,606 | 24,580 | Worsening Trend There was a substantial increase in Council's load base licencing volume in 2020/21 due to heavy rainfall events. This resulted in 2 licence exceedances. |
| | Exceedances of license discharge consent recorded (number) | 0 | 0 | 0 | 0 | 2 | Worsening Trend |
| | Erosion & Sediment Control complaints received by Council (number) | 10 | 3 | 3 | 2 | 3 | Improvement |
| Stormwater Pollution | Number of gross pollutant traps installed | 60 | 62 | 62 | 63 | 63 | Improvement |
| | Total catchment area of GPTs (ha) | 1,254 | 1,430 | 1,430 | 1,838 | 1,838 | Improvement |
| | Water pollution complaints (number) | 15 | 11 | 11 | 6 | 4 | Improvement |
| Town Water Quality | Number of instances drinking water guidelines not met | 19 | 0 | 0 | 0 | 0 | Improvement |
| | Number of drinking water complaints | 724 | 6 | 29 | 60 | 20 | Improvement |
| Council water consumption | Area of irrigated Council managed parks, sportsgrounds, public open space (ha) | 179 | 208 | 210 | 218 | 218 | Worsening Trend |
| | Water used by council for irrigation (including treated and untreated) (ML) | 886 | 1,334 | 1,697 | 753 | 687 | Improvement |
| Town water consumption | Annual metered supply (ML) | 8,330 | 10,231 | 10,425 | 6,919 | 6,786 | Improvement |
| | Annual consumption (Total from Water Filtraion Plant) (ML) | 9,451 | 12,116 | 10,425 | 5,840 | 5,650 | Improvement |

| | | | | | | |
|---------------------------------------------------------|-----|-----|-----|-----|-----|---------------------|
| Average annual household mains potable water usage (kL) | 343 | 418 | 396 | 287 | 271 | Improvement |
| Maximum level of water restrictions implemented | 0 | 0 | 2 | 4 | 1 | Improvement |
| Water conservation programs (number) | 0 | 8 | 6 | 13 | 6 | No or little change |

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

TOWARDS SUSTAINABILITY

| Issue | Indicator | 2016-17 | 2017-18 | 2018-19 | 2019-20 | 2020-21 | Trend |
|------------------------|----------------------------------------------------------------------|---------|---------|---------|---------|---------|---------------------|
| Waste Generation | Total waste entombed at primary landfill (tonnes) | 48,959 | 51102 | 62,222 | 69,012 | 58,684 | Worsening Trend |
| | Total waste entombed at other landfills (excl. recyclables) (tonnes) | 121 | 3364 | 3142 | 3390 | 2460 | Improvement |
| | Average total waste generated per person (tonnes) | 0.95 | 1.04 | 1.23 | 1.35 | 1.13 | No or little change |
| | Average cost of waste service per residential household | \$316 | \$303 | \$378 | \$389 | \$399 | Worsening Trend |
| Hazardous/Liquid Waste | Household Hazardous Wastes collected (kg) | 9102 | 9400 | 12849 | 6072 | 9260 | Improvement |
| Reduce | Garden organics collected (diverted from landfill) (tonnes) | 3984 | 6846 | 5630 | 4924 | 7209 | Improvement |
| | E-Waste collected (diverted from landfill) (tonnes) | 13 | 13 | 2.3 | 5.4 | 16.08 | Improvement |

| | | | | | | | |
|---------------------------------------------|-----------------------------------------------------------------------|-------------|---------------------------|----------------------------------|-------------|-------------|---------------------------------------|
| Recycle | Volume of material recycled (tonnes) | 8,088 | 10,417 | 12,914 | 13,062 | 11,745 | Improvement |
| | Volume of material recycled per person (kg) | 157 | 200 | 243 | 243 | 217 | Improvement |
| Engineering, Infrastructure and Civil Works | New road construction (km) | 1 | 2 | 5.6 | 1.7 | 2.5 | No or little change |
| | Road upgrades (km) | 87 | 32 | 31 | 48 | 83 | Road upgrades increased in the Region |
| Risk Management | Council adaptation initiatives | 0 | 0 | 1 | 3 | 1 | No or little change |
| | Flood management plans/ flood mapping - increase in area covered (ha) | 0 | 0 | 0 | 0 | 0 | No or little change |
| | Hazard reduction burns (number) | 2 | 0 | 0 | 0 | 0 | No or little change |
| | Natural Disaster Declarations (flood bushfire drought) | - | 3 (Drought March 2018) | 1 (Storm/Flood December 2018) | 0 | 0 | Improvement |
| Council sustainability initiatives | Council sustainability education initiatives (number) | 26 | 23 | 21 | 16 | 14 | Worsening Trend |
| Climate Change Mitigation | Council mitigation initiatives (number) | 6 | 8 | 10 | 12 | 17 | Improvement |
| | Office paper used by Council (A4 & A3 reams) | 3,464 | 2,853 | 2,701 | 2,011 | 2,175 | Improvement |
| Council Greenhouse Gas Emissions | Annual electricity costs for Council controlled facilities | \$4,239,611 | \$4,575,067 | \$4,830,372 | \$4,326,454 | \$4,060,550 | Improvement |
| | Annual electricity | 21,650 | 23,044 | 23,056 | 20,498 | 18,705 | Improvement |

| | | | | | | | |
|----------------------------------|------------------------------------------------------------------------------------------------------------------------------------|--------|--------|--------|--------|--------|-----------------|
| | consumption for Council controlled facilities (MWh) | | | | | | |
| | Annual natural gas consumption for Council controlled facilities (Gj) | 10,260 | 5,225 | 3,172 | 861.4 | 5,284 | Worsening Trend |
| Council Greenhouse Gas Emissions | Annual bottled gas consumption for Council controlled facilities (L) | 28,164 | 25,770 | 28,316 | 25,315 | 13,383 | Improvement |
| | Total fuel consumption (KL) | 1,117 | 1,044 | 1,163 | 1,213 | 1,296 | Worsening Trend |
| | Landfill emissions offset from methane flaring (t CO2e-) | 27,456 | 28,725 | 23,578 | 24,371 | 30,153 | Improvement |
| | Renewable energy uptake - total kW installed accumulative on Council buildings and facilities | 82 | 82 | 102 | 112 | 256 | Improvement |
| Council Greenhouse Gas Emissions | Small scale renewable energy uptake - Total kW of accredited small scale systems installed per year in postcodes 2830, 2820 | 2146 | 3682 | 5277 | 9352 | 8150 | Improvement |
| | Total number of solar water heaters and heat pumps installed per year in postcodes 2830, 2820 | 40 | 44 | 36 | 33 | 22 | Worsening Trend |

| | | | | | | | |
|--|----------------------------------------------------------------------------------------------------------------------------------|---|-------|--------|---|--------|-------------|
| | Large scale renewable energy uptake - Total MW of accredited power stations installed per year in postcodes 2830, 2830 | - | 18.34 | 113.20 | 0 | 200.90 | Improvement |
|--|----------------------------------------------------------------------------------------------------------------------------------|---|-------|--------|---|--------|-------------|

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

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 (hrs) | 5,233 | 4,800 | - | 2058 | 2500 | Worsening Trend |
| | Number of growers markets/local food retailers specialising in local food | 13 | 11 | 11 | 32 | 32 | Improvement |
| Indigenous Heritage | Inclusion in DCPs & rural strategies (Yes or No) | Yes | Yes | Yes | Yes | Yes | No or little change |
| | Extent of liaison with Indigenous communities (self-assessed from 0 = none to 3 = High) | 3 | 2 | 3 | 3 | 3 | Stable |
| | Development approvals on listed Indigenous sites | 8 | 0 | 0 | 0 | 0 | Improvement |
| | Number of Indigenous heritage management actions/responses | 1 | 3 | 2 | 2 | 2 | Little or no change |
| Non-Indigenous Heritage | NSW Heritage Items | 15 | 15 | 15 | 15 | 15 | Little or no change |
| | Locally listed Heritage Items | 423 | 424 | 424 | 424 | 421 | Little or no change |
| | Actions to protect non-Indigenous heritage (including management plans) | 1 | 6 | 2 | 2 | 2 | Little or no change |

| | | | | | | | |
|--|---------------------------------------------------------------------------------|----|----|----|----|----|---------------------|
| | Heritage buildings on statutory heritage lists demolished/degraded in past year | 0 | 0 | 0 | 0 | 0 | Little or no change |
| | Heritage buildings on statutory heritage lists renovated/improved in past year | 26 | 30 | 25 | 30 | 25 | Little or no change |

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