# Annual Environment Report
## 2018–2019

Macedon
Ranges
Shire Council

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Since the adoption of the Environment Strategy in June 2016, Council continues to deliver positive environmental outcomes through policy, plans, processes and practices.

Council is pleased to present this Annual Environment Report for the 2018-2019 financial year.

The report provides a summary of outcomes from Council's environmental works and activities according to four overarching themes:

- climate change
- biodiversity
- land and water management
- resource efficiency

Further details are provided in the report presented to Council on 23 October, 2019, which can be viewed on Council's website at: mrsc.vic.gov.au/minutes.

Council acknowledges that its work is only part of collective efforts across the community to improve the state of our natural and built environment and reduce the environmental impact of everyday living. Council applauds the work undertaken by people across the shire and looks forward to working with everyone to create a brighter environmental future in addressing a priority of the current Council Plan.

### Council Plan 2017-2027.  Priority 2: Protect the natural environment

- Address climate change mitigation, resilience and adaptation
- Protect biodiversity
- Enhance waterways and water catchment quality
- Manage waste as a resource
- Proactive environmental planning and policy
- Embed environmental sustainability principles across all Council operations
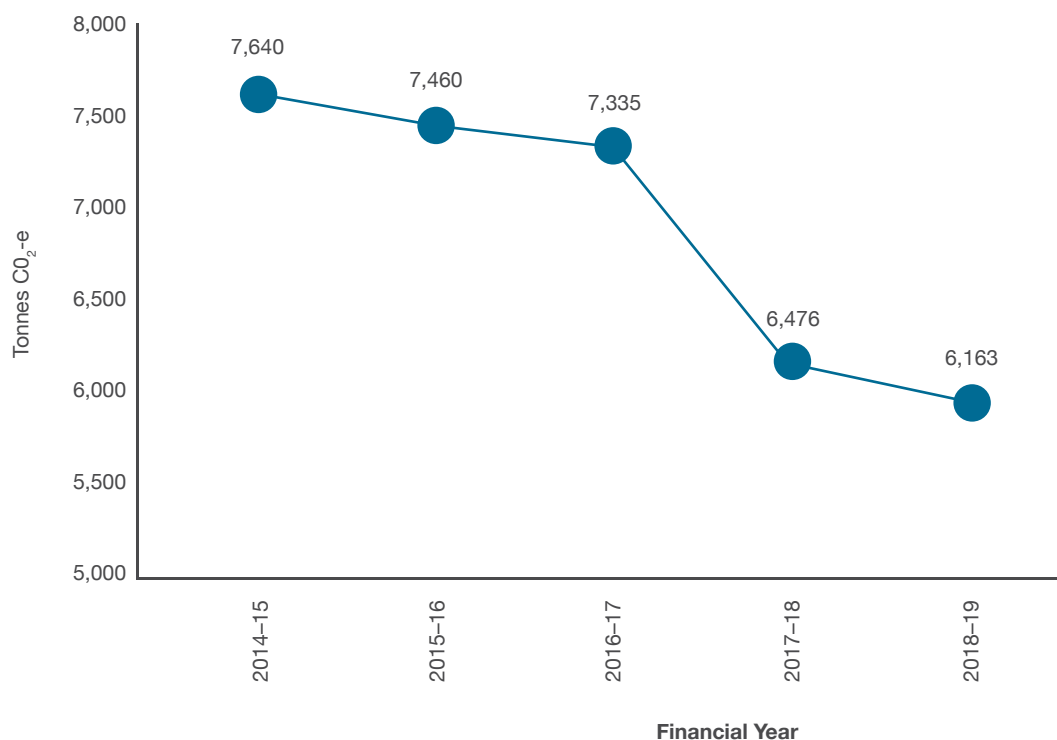
# Climate
Change

## Emissions from Council's operations

The Climate Change Action Plan adopted by Council in June 2017 outlines works that Council needs to undertake to achieve its adopted emissions reduction target:

To reduce greenhouse emissions from Council's operations by 25% by 2020-2021 from the baseline year of 2014-2015.

At June 2019, Council had reduced emissions from its operations by 1,478 tonnes CO2-e from the baseline year, approximately equating to the emissions produced from electricity and gas consumption by 105 (average) Australian households$CO_2$-e, as indicated below.

**Greenhouse gas emissions from Council operations (tonnes CO2-e)**



The main works contributing to emissions reductions in Councils operations include:

- Installing 348kW of solar panels on 15 buildings, reducing emissions by approximately 490 tonnes CO2-e
- Completing the changeover of residential streetlights throughout the shire to energy efficient LEDs, reducing emissions by 755 tonnes CO2-e  (at June 2019 from June 2017)
- Replacing 20 vehicles in the passenger fleet with hybrid fuel vehicles, estimated to reduce emissions from Council's fleet by approximately 65 tonnes CO2-e

# Climate
# Change

## Case Study: roof top solar on buildings – Romsey Hub

The on-site generation of renewable energy is a key component of Council's works to reduce emissions. One example of the success of the solar panels is the Romsey Hub, where a 25kW solar array has reduced emissions by 33.8 tonnes $CO_2$-e (for 2018-2019 compared to 2017-2018), almost 95% of the modelled reduction of 36 tonnes $CO_2$-e.
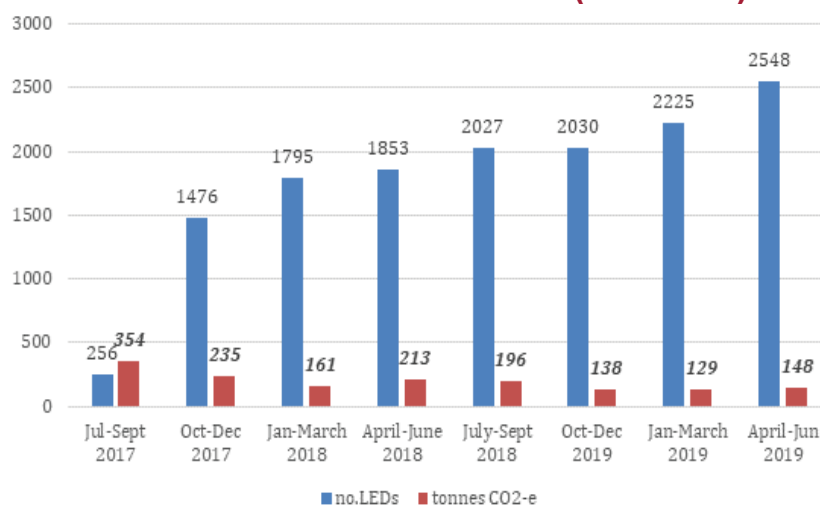


## Case Study: The environmental benefits from converting streetlights to LEDs

The conversion of streetlights to LEDs reduced greenhouse emissions for each month and each quarter, from an annual total of 1,365 tonnes $CO_2$-e at June 2017 (254 LEDs) to 611 tonnes $CO_2$-e at June 2019 (2,548 LEDs).

The LEDs have also saved Council a combined (approximately) $93,363 in energy and network costs and $36,695 in maintenance costs over the 2017-2018 and 2018-2019 financial years.

The annual financial and environmental benefits will continue over the 15 year life of the LEDs.

### Reduction in emissions from LED's (2017-2019)

# Climate
Change

## Supporting community action on climate change

Council conducted a pilot program in 2018-2019, facilitating the development of a local community climate change action plan. Malmsbury was selected as the location for the community-led planning project, and consultants were engaged to conduct an introduction session and three workshops from October 2018 to February 2019. This resulted in the Sustainable Malmsbury Action Plan, and implementation of several initiatives.



The success of the pilot project provides a foundation for Council to develop an ongoing community climate action program, Cool Changes.
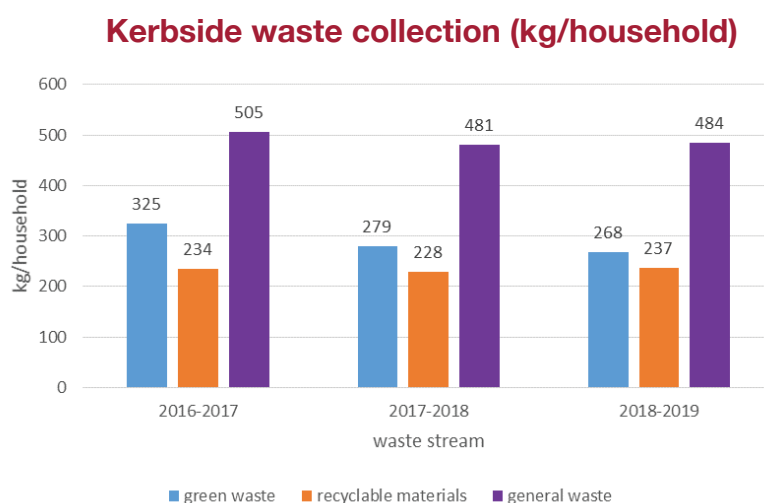
Council also increased its support to community groups in facilitating activity for environmental sustainability amongst the community, for example, partnering with the Macedon Ranges Sustainability Group to host a movie and a musical performance for children, and increasing emphasis on environmental projects in the Community Funding Scheme.



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# Resource Efficiency

Most of Council's work related to resource efficiency concerns the management of the kerbside waste collection services, and the operation of its three transfer stations (including the tip shop at Kyneton). In 2018-2019, there were many external factors in the waste management industry that required a more reactive approach to management of these services. Some key actions included:

- commencing a new contract for kerbside collection services in October 2018
- planning for the staged introduction of a combined Food Organics Garden Organics (FOGO) collection service across the shire, to commence in early 2020
- assessing options for delivering and processing recyclable materials, including options for separating glass from other recyclable materials

### Kerbside waste collection (kg/household)



Council also continued to maintain and improve data collection processes throughout 2018-2019. Data shows a decrease in the amount of general waste by 21 kg per household per year from the baseline year of 2016-2017 (4.1% decrease). However, the disposal of almost half a tonne of general waste per household per year indicates scope for Council to engage the community in waste minimisation and resource recovery practices. This will be facilitated by the employment of a Waste Education Officer in 2019-2020, and the staged introduction of a FOGO collection service over the next few years (removing organic waste from general waste bins).

# Biodiversity

Council's adoption of the Biodiversity Strategy in December 2018 was a key highlight for 2018-2019. It will serve as a comprehensive guide for Council to manage biodiversity across the shire in a coordinated and strategic manner, and in partnership with agency and community stakeholders to result in improved quality and extent of ecosystems.

Implementation of the Biodiversity Strategy will be enabled by a Bushland Reserves Officer (commenced late 2018), a Biodiversity Projects Officer (commenced December 2019) and a Private Land Conservation Officer (commenced September 2019).

A few other highlights in biodiversity management from 2018-2019 are shown below.

**Ecological burn conducted at Malmsbury Common to facilitate biomass reduction and increased species diversity**

# Biodiversity

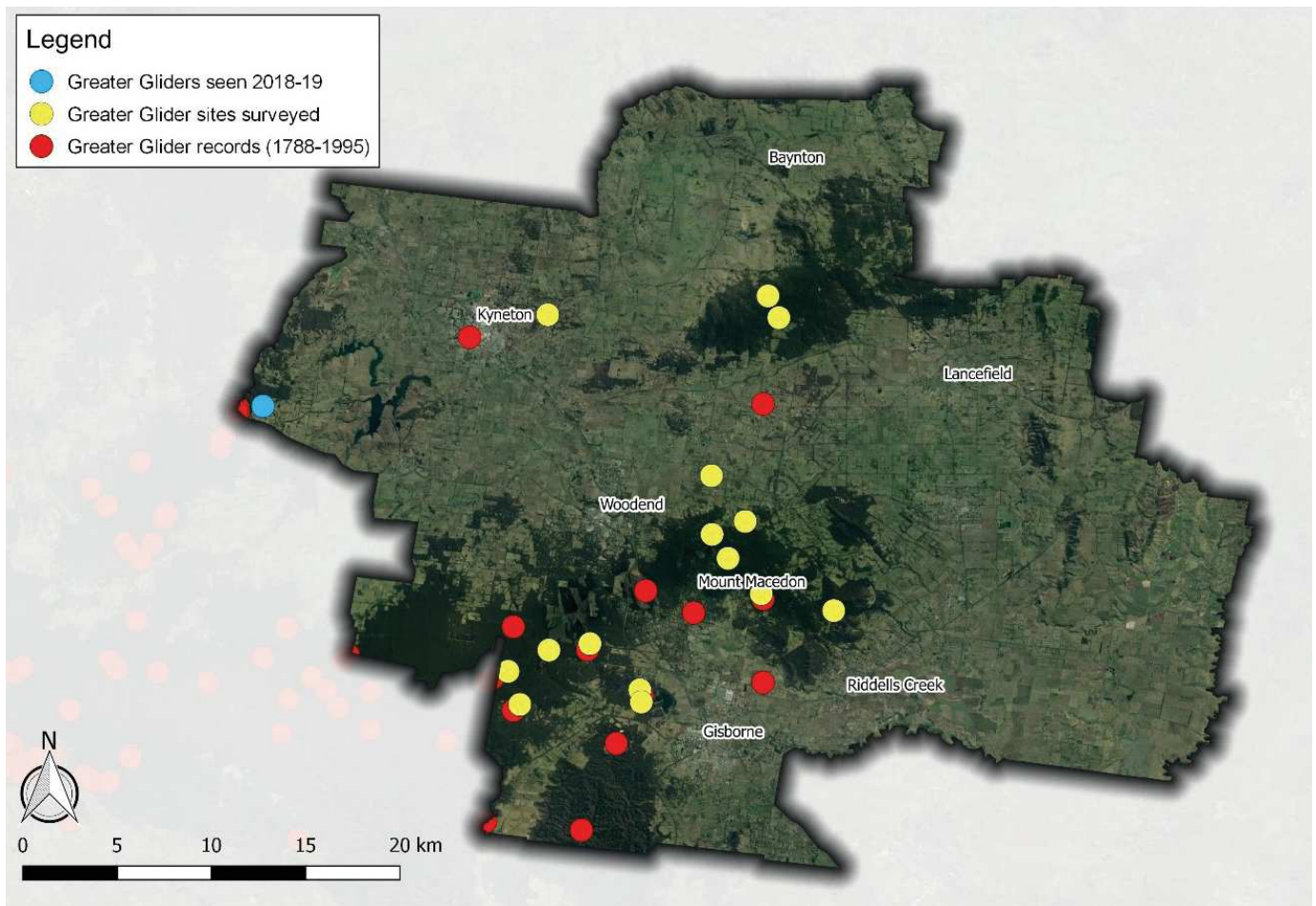**Completion of stage 1 works at Malmsbury Common in accordance with the masterplan**



**A new publication for identification and appreciation of native flora, and an updated publication for identification and control of weeds**

# Biodiversity

**The "Spotlight on Species" program conducted in partnership with the Upper Campaspe Landcare Network recorded 18 Powerful Owls, 59 Greater Gliders, and 26 Phascogales. The results indicate that the Greater Glider is no longer present in the central parts of the shire**



Council also continued to provide advice to planning permit applicants in regards to minimising removal of native vegetation for land development purposes. To support this work and increase awareness about requirements for tree health, a Tree Protection Guideline was published in March 2019.

A key priority for biodiversity protection in the immediate future will be to review the Vegetation Protection Overlay and associated schedules in the Macedon Ranges Planning Scheme. Council will also continue to increase its working relationship with management and community stakeholders to facilitate stewardship and care for the natural values of the shire.

# Land and Water
## Management

Council continued its work in regards to improving the health of land and waterways in 2018-2019, with key achievements including:

- a review of Council's Domestic Wastewater Management Plan (2013), resulting in the Draft Domestic Wastewater Management Plan 2019

- a reduction of over 40,000m2 in area of weeds on council-managed roadsides and reserves (equal to approximately 5.5 soccer pitches)

- establishment of the Nassella control program to prevent the spread of a Serrated Tussock and Chilean Needle Grass (as pictured below) as emerging weeds for the shire



A priority area of work in waterway protection for the next couple of years will be to provide support to the North Central Catchment Management Authority as it progresses implementation of its regional flood management strategy, and undertakes and facilitates restoration works in the Upper Coliban and Campaspe catchments.

Council will also complete the Domestic Wastewater Management Plan 2019, and work with Coliban Water to conduct audits of domestic wastewater treatment systems in the upper catchment of the Coliban River.

# Environment Events

A key way for Council to engender environmental stewardship amongst the community is to host a range of talks, workshops, and field days. Throughout 2018-2019, Council hosted, or partnered with community or agency stakeholders to host, over 40 events, attended by over 1,000 participants. A snapshot of some events from 2018-2019 is

**A picnic with the bats. Hanging Rock, March 2019**



**Landholders at a Blackberry Control Workshop, February 2019**



**Enjoying a trail ride while learning about the ecosystems of Cobaw State Forest, November 2018**



**Participants in a eucalypt identification workshop stand under a 400 year old Candlebark at Bald Hill Reserve, March 2019**



Council looks forward to delivering environmental outcomes from its wide range of works and activities on an ongoing basis, and to working in partnership with community and agency stakeholders in environmental management.

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