



BULOKE WASTE and RESOURCE RECOVERY STRATEGY

2020 - 2025





Waste and Resource Recovery Background Report
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PO Box 1
WYCHEPROOF VIC 3527

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Buloke Shire Council's Waste and Resource Recovery Strategy outlines sustainable waste management and resource recovery strategies for the next five years.

Introduction

Scope

Waste management is a core element of Buloke Shire Council services, and is an essential service that meets ratepayer's needs. Waste management is an important function in maintaining a high level of community satisfaction. Ratepayer's expectations are considered annually as we aim to meet their needs.

Waste management also provides an avenue for Council to achieve environmental benefits by providing services that encourage good waste management practices and contribute to Council's commitment to the development of a sustainable community. Effective waste and resource recovery practices contribute to Council's commitment to the development of environmental sustainability across the Shire.

Strategies for waste management in Buloke are not developed in isolation. Buloke is a member of the Loddon Mallee Waste and Resource Recovery Group (Loddon Mallee WRRG), and this strategy has been developed in the context of the regional directions from the Loddon Mallee Implementation Plan to ensure alignment with regional and state themes.

In March 2020, the State Government announced its Circular Economy Policy which will transform the recycling industry in Victoria. The Government will work with Councils and industry to design a scheme that is in line with community expectations and delivers the best outcomes for Victoria. The Strategy has been designed to be able to adapt to the reforms as they are announced, with the resources available to Council to implement projects and programs accordingly.

Vision

This waste strategy provides a plan for future waste and resource recovery in Buloke giving guidance and direction to Council, while informing the community and partners about Council's current status and how it intends to respond to current and emerging issues in waste and resource recovery.

The Strategy was developed under the Council Plan 2017-21 theme, **Responding to and Enhancing our Built and Natural Environment** theme 4.8: *Improve Waste Management Practices and Reduce Waste to Landfill for Improved Environmental Outcomes.*

- Implement restoration program for Council utilised gravel pits and former landfill sites.
- Work with Loddon Mallee WRRG to implement best practice.
- Explore and promote resource recovery opportunities throughout the Shire.
- Review bin provisions in key public spaces in conjunction with other state authorities where relevant such as main street areas, recreation reserves, roadside stops and parklands to improve resource recovery and deter littering.

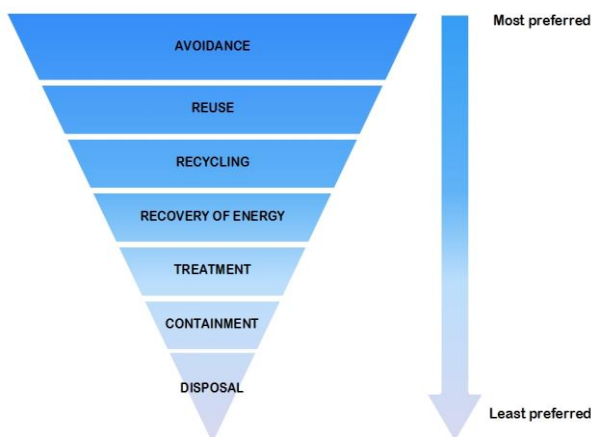
STRATEGIC DIRECTION AND SUPPORTING DOCUMENTS

Buloke Shire Council acts within a wider policy framework for waste management. A range of policies, plans and regulations at regional, state and national levels have been considered in the development of this strategy.

The state and regional strategic directives are to:

- Educate the community to reduce waste generation per capita
- Enable beneficial use of organics
- Increase reuse and resource recovery rates across the region
- Encourage and support innovation and research in order to develop new waste management solutions and markets.

The waste management hierarchy is the underlying principle of waste management policies in Australia and is included in the Environment Protection Act 1970. The hierarchy establishes the following order of preference for waste management:



Council supports the waste management hierarchy by working towards waste avoidance as the highest priority.

Landfills at both Donald and Birchip are exempt from licensing due to serving populations of less than 5,000 people. These landfills have limited life spans and preserving landfill life is imperative for the long term management of waste within Buloke Shire.

In preparing this waste strategy, key documents that underpin the guiding principles of waste management include:

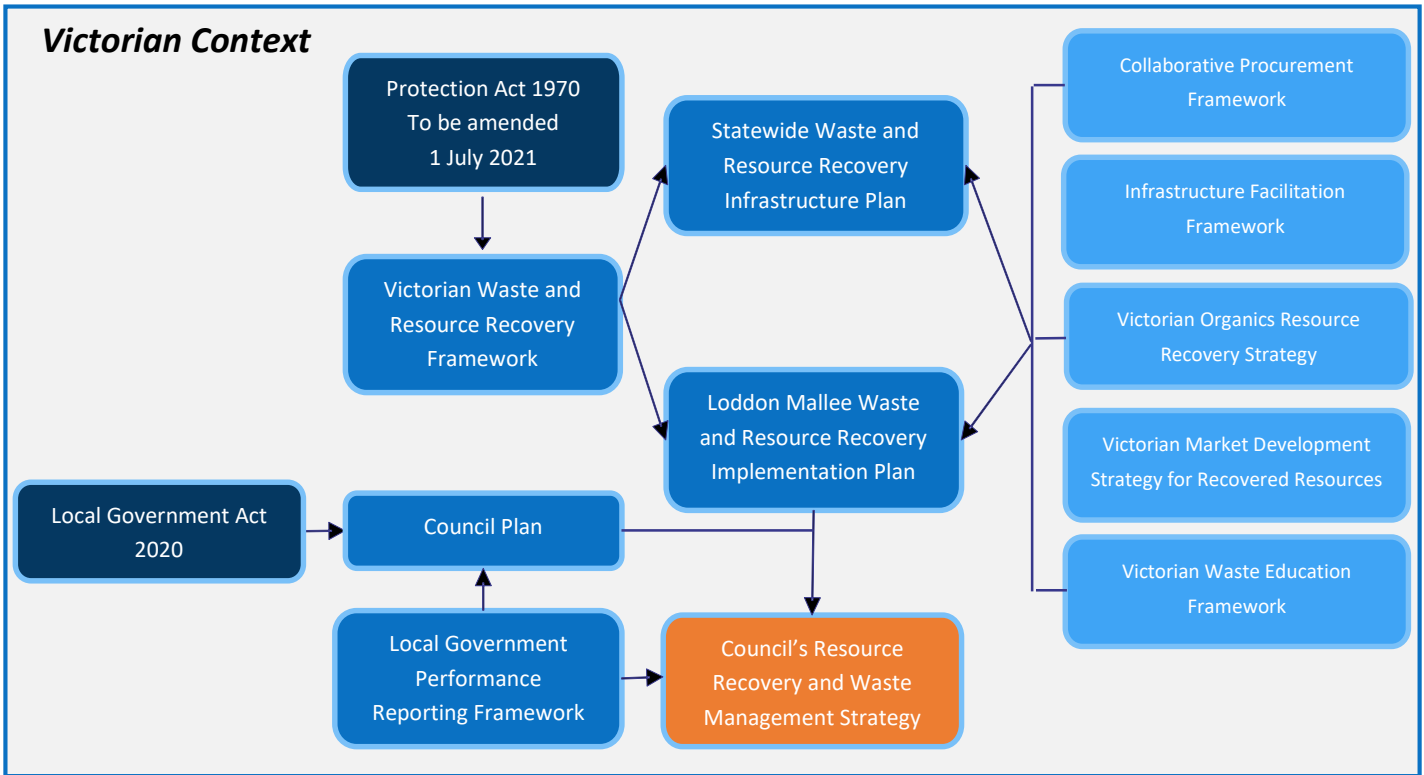
- Less Waste More Resources (2009)
- Recycling Victoria Policy 2020
- Statewide Waste and Resource Recovery Infrastructure Plan (2015)
- Loddon Mallee Waste and Resource Recovery Implementation Plan (2016)
- Victorian Waste Education Strategy (2016-21)
- Victorian Organic Resource Recovery Strategy (2015)
- Victorian Market Development Strategy (2016)
- Victorian Guide to Best Practice at Resource Recovery Centres (2009)
- Environment Protection Act (1970)
- Local Government Act (1989)
- Council Plan 2017-2021 – Council Plan priority “*Improve Waste Management Practices and Reduce Waste to Landfill for Improved Environmental Outcomes.*”
- Buloke Kerbside Waste and Recycling Collection Services Policy.

Strategic Framework for Waste and Resource Recovery

An overview of the framework for Buloke Shire Council within the Victorian and Commonwealth context is provided below.

Commonwealth Context

National Waste Policy 2009
National Product Stewardship Act



 Acts, legislation and policies
 Strategies, Plans and Associated Frameworks
 Supporting Documents

Where are we now?

Performance and achievements

The previous *Buloke Waste Management Strategy 2012-2022* was developed and adopted by Council when the Central Murray Regional Waste Management Group (RWMG) was the statutory body established under the *Environment Protection Act 1970* responsible for waste management planning and coordination. Loddon Mallee RWMG developed a regional waste and resource recovery plan in 2016 which outlined the strategy for waste management and resource recovery in the region.

In developing the previous strategy, the key objectives at the time included (among other things):

- recovering 60% of the domestic waste stream
- reducing the number of landfills in the region to less than 24

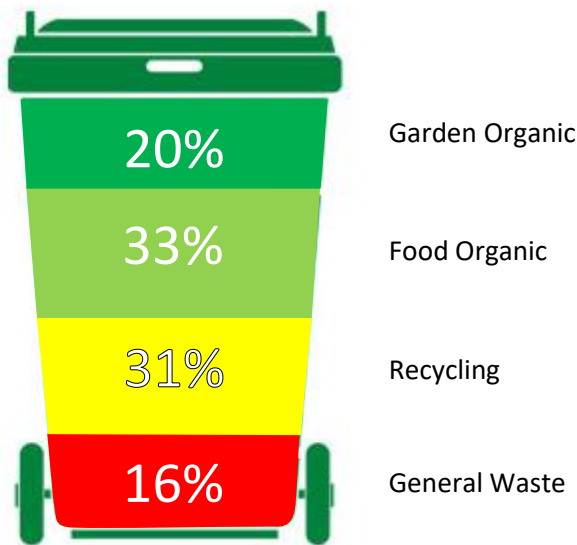
- aligning collection contract end dates to allow for regional contracts
- establishing markets for recycled organics in order to establish a regional garden organics processing facility
- establishing at least one value-added industry for recyclables
- encouraging reduction in packaging use, including a 75% reduction in use of plastic shopping bags
- approaching zero net greenhouse emissions
- achieving 75% cost recovery for municipal waste/resource management programs
- reducing the region’s ecological footprint by 20%

The regional waste management plan referenced a number of actions that were to be undertaken in Buloke; these are outlined in the table below:

Key actions and outcomes achieved

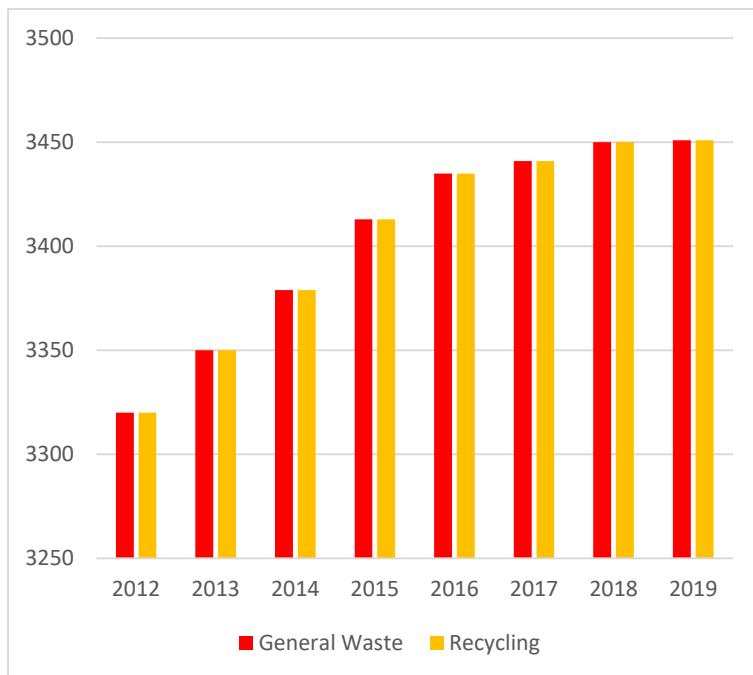
Action implemented	Outcome achieved
The development of a rehabilitation plan for closed landfill sites.	Closed landfill sites at Nandaly, Watchupga, Corack, Curyo, Berriwillock, Nullawil, and Watchem rehabilitated and monitored for remedial works.
Benchmarking of landfills and transfer stations against best practice.	Implementation of best practice management principles at all landfills and transfer stations to ensure regulatory and EPA compliance.
Closure of Charlton, Culgoa and Wycheproof landfills and conversion to transfer stations.	Transfer Stations and bin banks established in towns where landfills have been closed to ensure residents have access to a facility within a 30-minute drive. Bin band installed at Culgoa. Transfer stations established at Charlton and Wycheproof on former landfill sites.
Limit access to tipping face at existing landfills.	Improved occupational health and safety practices at landfills with limited access to tipping faces.
Improve signage, recycling bins, litter control at existing facilities.	30m ³ skip bins installed at all sites for bulk cardboard and paper recycling. Improved signage at waste streams directing customers to drop off points. Improved litter screens installed at landfills.
Update facility operating manuals for landfills and transfer stations.	Comprehensive operating manuals outlining policies and procedures issued to ensure common practices at all landfill and transfer station sites.
Increase disposal fees for self-haul waste.	Landfill fees benchmarked with neighbouring Councils annually through budgeting process.

Average Buloke Waste Bin Composition (2019)



Despite the decline in population within the Shire since the 2011 Australian Bureau of Statistics (ABS) Census of 2.9%, the number of kerbside collections grew by 3.9% over the period of the previous waste strategy. This growth in number of collections is most likely due to a greater uptake of the service for rural residents where the service is optional.

Number of waste services



COMMUNITY PROFILE

TOTAL POPULATION

6,201 (2016)

1,533 (25%)

UNDER 25 YRS

3,396 (55%)

25-69 YRS

1,255 (20%)

OVER 69 YRS

POPULATION GROWTH

-2.9% (2011-2016)

HOUSEHOLDS

2,461

36% COUPLES WITH CHILDREN

51% COUPLES WITHOUT CHILDREN

13% LONE PERSONS

HOUSEHOLD GROWTH

-5.9% (2011-2016)

2011 ABS Census data

2016 ABS Census data

Better Practice Principles

In development of this waste strategy, Council has developed principles to guide how waste and resource recovery will be implemented and managed to achieve a best practice approach. These principles are:

1. The delivery of services and use of infrastructure will align with the “*Council Plan*” 2017-21 and the “*Statewide Waste and Resource Recovery Infrastructure Plan*” 2015-44.
2. Resource recovery through recycling and waste to energy is prioritised where it is economically viable and where it improves community, environment and public health outcomes.
3. Successful waste minimisation and diversion can only truly be maximised through effective partnerships. Council will partner where mutually beneficial outcomes can be achieved.
4. Council is committed to educating our community in waste avoidance, minimisation and recycling practices through waste and environment behaviour change.
5. Council will advocate on behalf of the community for waste and resource recovery issues.
6. Social and environmental compliance are key drivers for action and change. Council commits to being compliant at all times.
7. Council will prioritise the uptake of services, programs and behaviours that align with the waste hierarchy through incentives rather than enforcement approaches where possible.
8. The collection of data to support decision making is valued and prioritised. Decisions are made on a fact based approach.
9. Council will maximise its ability to access grants and meet infrastructure and

program needs through the annual budgeting process and full cost recovery for waste management.

10. Where approaches fall outside these principles staff will seek direction from Council in all cases.

Objectives

The objectives below are to be delivered across multiple themes addressed in the following pages of this strategy. Implementation of the future directions and opportunities identified within the themes will help to achieve these objectives by improving waste management practices and reducing waste to landfill for improved environmental outcomes. These objectives are:

- Implement restoration program for Council utilised gravel pits and former landfill sites.
- Work with Loddon Mallee Waste and Resource Recovery Group to implement best practice.
- Explore and promote resource recovery opportunities throughout the Shire.
- Review bin provision in key public spaces in conjunction with other state authorities where relevant such as main street areas, recreation reserves, roadside stops and parklands to improve resource recovery and deter littering.

Themes

Landfills

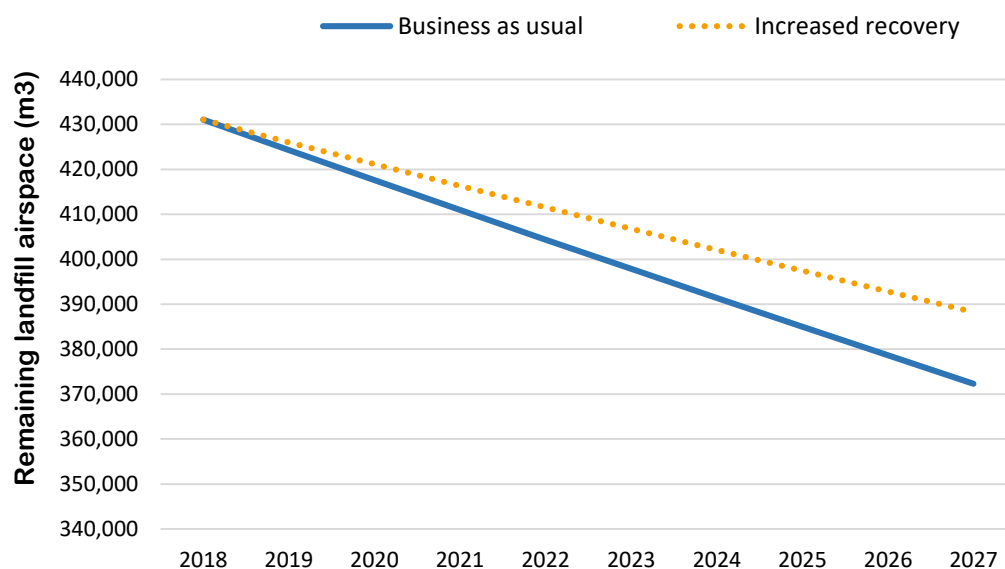
Status

Buloke Shire Council operates two fit for purpose unlicensed landfills at Birchip and Donald. There are nine closed and rehabilitated landfills throughout the shire.

- Both landfills are exempt from licensing serving a population of less than 5,000 people at each site. These sites comply with the legislative requirements as defined by the EPA.

- All closed landfills throughout the Shire have been assessed to establish the risk they pose to human health and the environment utilising tools provided by the EPA.
- Current capacity estimates at Donald landfill indicate this landfill will run out of space in 2031. Extending this lifespan is a matter of high importance for the future viability of waste management in the Shire.
- Current capacity estimates for Birchip landfill indicate a lifespan of more than 25 years. Careful management of this landfill is required to ensure future waste management needs.

Projected landfill airspace drawdown (30% reduction in kerbside waste to landfill)



Future direction/opportunities

Council is legislated to ensure landfills are responsibly managed to protect human health and the environment from the impacts of landfills. Council will:

- Communicate the target of 30% reduction in waste to landfill and provide regular reporting on achievements against the goal on website and social media.
- Manage, monitor and report on the condition of each landfill to meet legislative requirements where they exist.
- Implement community wide education programs to avoid waste production.
- Examine potential financial incentives for waste minimisation.
- Investigate methods for improving diversion of waste from landfill and provide information to the community online.
- Improve data recording at landfills and provide online and social media.
- Council to lead by example reducing paper usage, sensors for lighting, composting our organics and promote these activities.
- Advocate to Government on future of landfills/Materials Recycling Facilities after our landfills have reached capacity.
- Investigate options for hard waste collection on a fee for service basis.

- (Include promotion of private skip bin operators)
- Conduct a community survey on the willingness to pay for hard rubbish collection.

- Investigate feasibility of composting and waste to energy opportunities within the Shire.
- Develop and implement waste and resource recovery education programs for the agricultural sector within the shire.

Kerbside services

Status

Waste Bin

3,450

weekly collections

2,175

tonnes per year



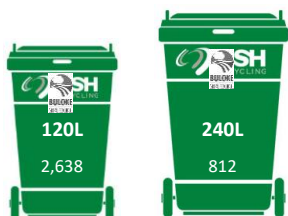
Recycle Bin

3,450

fortnightly collections

882

tonnes per year



Future direction/opportunities

Kerbside audits conducted by Council indicate contamination of recycle waste is approximately 12% and significant volumes of food and garden organics plus recyclable materials are deposited into bins.

The 2020 recycling policy recycling crisis in Victoria has also impacted diversion of materials from landfill. The Victorian State Government has issued a Recycling Policy in 2020, Council is committed to implementing legislative changes.

Council will continue to seek increased diversion of materials from landfill by:

- Developing an education program to reduce recycling contamination.
- Encourage home composting through education and potential financial incentive.
- Provide bins for a “glass out” recycling option.

Infrastructure

Status

Council operates fit for purpose transfer stations located at Charlton, Sea Lake and Wycheproof, as well as landfills at Donald and Birchip. A significant number of materials are recovered through these facilities annually:

Agriculture chemical drums	15,800
Concrete brick and tile	190 tonnes
E-Waste	20 tonnes
Garden organics	800 tonnes
Mattresses	60
Motor oil	2,615 litres
Steel	463 tonnes
Tyres	350 EPU*

*Equivalent Passenger Units

Future direction/opportunities

Council is committed to operating transfer stations with best practice waste management goals as the guiding principle. In meeting this objective Council will:

- Identify any opportunities to improve transfer station operation to meet best practice standards.
- Improve data recording at transfer stations.
- Investigate opportunities to increase diversion of materials from landfill.
- Install security cameras to better monitor loads and illegal dumping.
- Implement glass collection containers to separate glass from comingled recycling.
- Develop improved tipping facilities.
- Work with the Watchem community to consider the options for a community run transfer station, resource recovery centre including a Paddy’s Market for sale of recycled items.

Education

Status

Council has worked with the Loddon Mallee Waste and Resource Recovery Group to deliver waste education throughout the region. This has ensured a consistent message not only for Buloke but also neighbouring Councils.

In light of recent changes in waste management legislation, Council has identified a greater need to ensure residents are informed on issues to yield the greatest benefit for waste and resource recovery.

Future direction/opportunities

To achieve effective long term behaviour change it is necessary to have good education. Effective education provides opportunities to change attitudes and increase awareness which ultimately leads to behaviour change. Council is determined to achieve awareness amongst residents by committing to:

- Partner with Loddon Mallee WRRG to deliver high quality education campaigns and programs.
- Deliver education aimed at reducing contamination in recycling.
- Deliver e-waste education campaigns and programs.
- Develop and deliver an asbestos containment and disposal education campaign.
- Advocate to State Government for an asbestos collection program.
- Develop an illegal dumping education campaign.
- Promote home composting initiatives.
- Provide separate glass only bins in conjunction with an education campaign.

Resource Recovery

Status

Council currently diverts significant volumes of materials that are economically and environmentally appropriate from landfill. These items include cardboard, paper, comingled recyclables, garden organics, scrap

steel, white goods, e-waste, motor oil, concrete, bricks, mattresses and tyres.

Future direction/opportunities

Opportunities exist for improvement in resource recovery. Recovered materials can be reused and recycled to reduce the dependence on natural raw resources to manufacture new products. Resource recovery also reduces waste sent to landfill thus extending the life span of current landfills.

Advancement in technologies have seen improvements in the recovery of materials previously thought to be uneconomical such as tyres and e-waste. Council will partner with Loddon Mallee WRRG, local businesses and community groups to investigate market development opportunities in the shire. The following are some of the foreseeable options:

Organics

Removing both food and garden organics from landfill has significant environmental and economic benefits.

Comingled recycling

Glass in comingled recycling presents a significant problem with glass shards contaminating some products rendering them unusable.

Soft plastics

A resource that is not currently being effectively captured for recovery and reuse. Soft plastics pose a significant environmental threat.

Across Australia, research and development is resulting in opportunities for a wide variety of materials to be recovered and reused or repurposed. Buloke must be poised to take advantage of any opportunities that come along to further divert waste from landfill. As well as the opportunities outlined above, there are opportunities in the textile, footwear, furniture, carpets, construction and demolition waste etcetera.

Timber

A resource that has significant reuse potential. While timber effectively captures carbon, once landfilled it has a significant contribution to greenhouse gas emissions.

Furniture

Not all furniture is recovered and reused effectively. It is a bulky item for landfilling and contains many reusable components.

Partners

Status

The Loddon Mallee WRRG is the key partner Council works with to ensure effective waste management principles and objectives. Other partners include neighbouring Councils, Environment Protection Authority, Sustainability Victoria and Department of Environment, Land, Water and Planning.

Council works closely with waste and resource recovery contractors to ensure cost effective and efficient kerbside collections.

Future direction/opportunities

Due to geographic and demographic constraints, Council has limited resources and realises the importance of maintaining strong partnerships. Council will foster these partnerships wherever mutual, economic, environmental and social benefits can be achieved.

Litter

Status

Litter is a persistent problem in Victoria.

- Council relies on our partnership with the Loddon Mallee Waste and Resource Recovery Group for litter education strategies aimed at improving litter attitudes and behaviours.
- Council also delivers street litter infrastructure.

- Enforcement occurs through the *Environment Protection Act 1970*.
- Council also maintains a number of litter traps that collect and remove litter washed into the storm water system.

Future direction/opportunities

Although Council has endeavoured to address litter in the past, more work is required.

Council will:

- Identify strategies to gain a better understanding of the causes and contemporary tactics to significantly reduce the littering problem through partnership with the Loddon Mallee WRRG.
- Conduct a review of street litter infrastructure and upgrade to current best practice standards.
- Advocate for a Victorian container deposit scheme to be implemented as a matter of urgency.
- Address littering through a combination of education, infrastructure and enforcement.

Illegal dumping

Status

- All reports of illegal dumping are investigated, acted upon and cleaned up where it occurs on Council owned land.
- Where investigations provide information that identifies the person responsible for the illegal dumping incident, enforcement actions are undertaken to recover costs for clean-up.

Future direction/opportunities

Council does not have accurate data relating to illegal dumping instances within the municipality. Council will:

- Improve data collection to gain a greater understanding of the problem.
- Address illegal dumping through a combination of education, infrastructure and enforcement.

Events

Status

Council provides specific 240 litre waste event bins on a first come first served basis. Community events are generally free of charge, however, corporate events are invoiced for the cost of collection and processing of the waste materials. There are 57 bins available.

Council is working with a local music event to identify and assist with methods for better waste management practices aimed at reducing waste to landfill.

Future direction/opportunities

There are opportunities for Council to improve the event bin service and management of unwanted waste materials collected at events. Council will:

- Develop a Waste Wise Event Plan that identifies important waste avoidance and resource recovery specific requirements for event organisers.
- Encourage and assist event organisers to implement higher standards for waste management at events including innovative resource recovery models such as dishwashing services to reduce the use of plastic plates and cutlery.

Evaluation of each of the identified initiatives will be measured by the following indicators:

1. Reduce the average annual amount of waste generated per household (kg/hh/yr).

- 2016-17 – 854kgs
- 2017-18 – 876kgs
- 2018-19 – 886kgs

2. Reduce contamination in kerbside recycling.

- Bin audits conducted every year.

3. Increase diversion of waste materials collected through kerbside bins.

- Current diversion rate 29%

4. Evaluate the delivery of actions in the annual waste action plan.

The Role of Council

Council has a role to play in its own actions in managing waste, recycling and organics at offices and depots. Attention will be given to paper usage and disposal of food and garden organics. Opportunities to utilise best practice to recycle plant and equipment along with demolition material will be identified and implemented.

