

Goulburn Valley

Regional Litter and Illegal Dumping Plan

December 2019



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Authorised and published by the Goulburn Valley Waste and Resource Recovery Group

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Abbreviations

DELWP	Department of Environment, Land, Water and Planning
EPA	Environment Protection Authority Victoria
WRRG	waste and resource recovery group
2019	2018-19 financial year
2018	2017-18 financial year

Terms

Land manager	The term land manager is used to refer collectively to the group of organisations that own or are responsible for managing public or Crown land. It includes councils, Parks Victoria, DELWP, Regional Roads Victoria, VicTrack, V/Line, and water and catchment management authorities.
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1. Vision

A clean region for everyone to enjoy

Our goal is to invest in prevention now to reap the rewards for the future.

2. Context

2.1 Why we need a regional litter plan

Long-term littering behaviour research has concluded that the majority of people do the right thing and dispose of their waste appropriately. However, a small minority have failed to get the message that our community rejects littering and dumping, or they simply don't care.

Many littered items could be recycled if disposed of appropriately. Many illegally dumped items could be reused by others or recycled at a resource recovery centre either for free or a fee, which is often much cheaper than the fine and costs if prosecuted for dumping.

Work needs to continue with our community, businesses, councils and land managers such as Parks Victoria, the Department of Environment, Land, Water and Planning (DELWP), Regional Roads Victoria, and catchment management and water authorities, to stop littering and dumping.

2.2 Purpose

This plan provides guidance to the community, businesses, councils and land managers to achieve a clean region for everyone to enjoy.

It provides insight, identifies the priorities and recommends partnerships to achieve our goals through focussed action.

The plan is built around three areas of focus:

- Build and strengthen a culture that rejects littering and dumping in the Goulburn Valley region.
- Plan programs that address the litter and dumping priorities and monitor and evaluate their effectiveness.
- Identify funding and resourcing requirements to deliver the necessary evidence base for the introduction of policies, legislation and further initiatives to reduce and prevent litter and dumping.

While major programs require external funding to implement, the plan also includes low or no-cost activities that can be implemented as opportunities arise.

The plan builds on past and ongoing activities and achievements.

2.3 Scope

The scope of the plan is to prevent and reduce litter and dumping where:

- Litter is broadly defined as small items of waste disposed of inappropriately.
- Illegal dumping is broadly defined as larger items, such as whitegoods, building and demolition waste or significant household waste, disposed of inappropriately.

It addresses the culture and behaviours of individuals and small businesses who litter and dump.

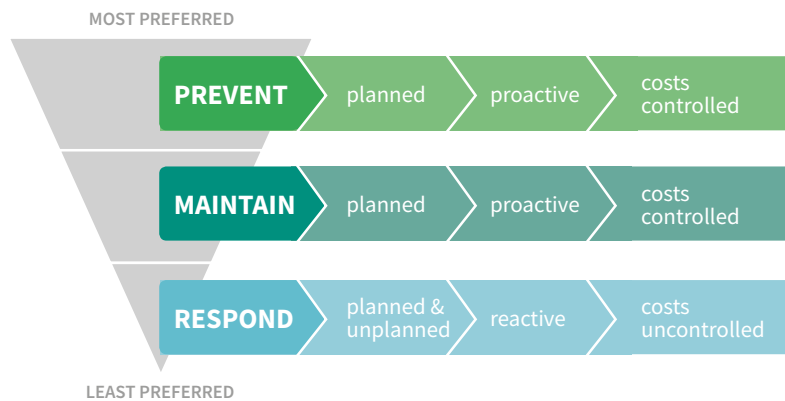
The plan does not address:

- Resource recovery and waste management services, such as kerbside waste and recycling collections, as they are dealt with in the Goulburn Valley Waste and Resource Recovery Implementation Plan and each council’s waste and resource recovery plans.
- Large scale industrial dumping which are an Environment Protection Authority Victoria (EPA) responsibility.
- ‘Environmental pollution’ resulting from business manufacturing or storage processes and activities such as discharges into the environment, including waterways, which are also an EPA responsibility.

A key outcome of this plan was to develop key actions to reduce and prevent local litter and illegal dumping priorities. The actions are based on a hierarchy of the most preferred to least preferred actions, described as *prevent*, *maintain* and *respond*.

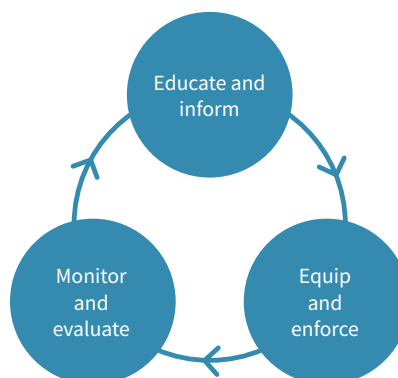
The most preferred action is to *prevent*. This is followed by activities to *maintain*, which are planned, proactive and where the costs are known and controlled. In contrast, to *respond* is the least preferred action as it is reactive and the costs are difficult to predict or control. For example, if there is an increase in dumping and littered areas the cost to clean up can escalate beyond what was budgeted. Figure 1 shows the hierarchy of preferred actions.

Figure 1 Hierarchy of most to least preferred litter and dumping actions



We have then grouped actions to address *prevent*, *maintain* and *respond* into three key elements of a circular process of refinement, shown in Figure 2.

Figure 2 Process for effective delivery and continuous improvement



As much as we would like it to be, the plan is not a silver bullet that will solve littering and dumping in the region. We need to continue understanding the complexity of littering and dumping behaviours and help people to do the right thing. Changing the culture of the minority to be aligned with the majority of our community takes time.

2.4 Goulburn Valley Waste and Resource Recovery Region

The Goulburn Valley Waste and Resource Recovery Region covers an area of 21,000 square kilometres, or about 9% of Victoria, and is home to nearly 198,000 people, or about 3% of the state's population.

Located in the central north of Victoria, it is incredibly diverse, spanning the rapidly growing residential urban fringes of Melbourne in the south, to regional centres and more rural areas, and borders the Murray River and southern New South Wales in the north.

The region has low population density (about nine people per square kilometre) but has diverse local populations. These range from vast rural populations through to regional centres like the City of Greater Shepparton, along with rapidly extending metropolitan residential fringes.

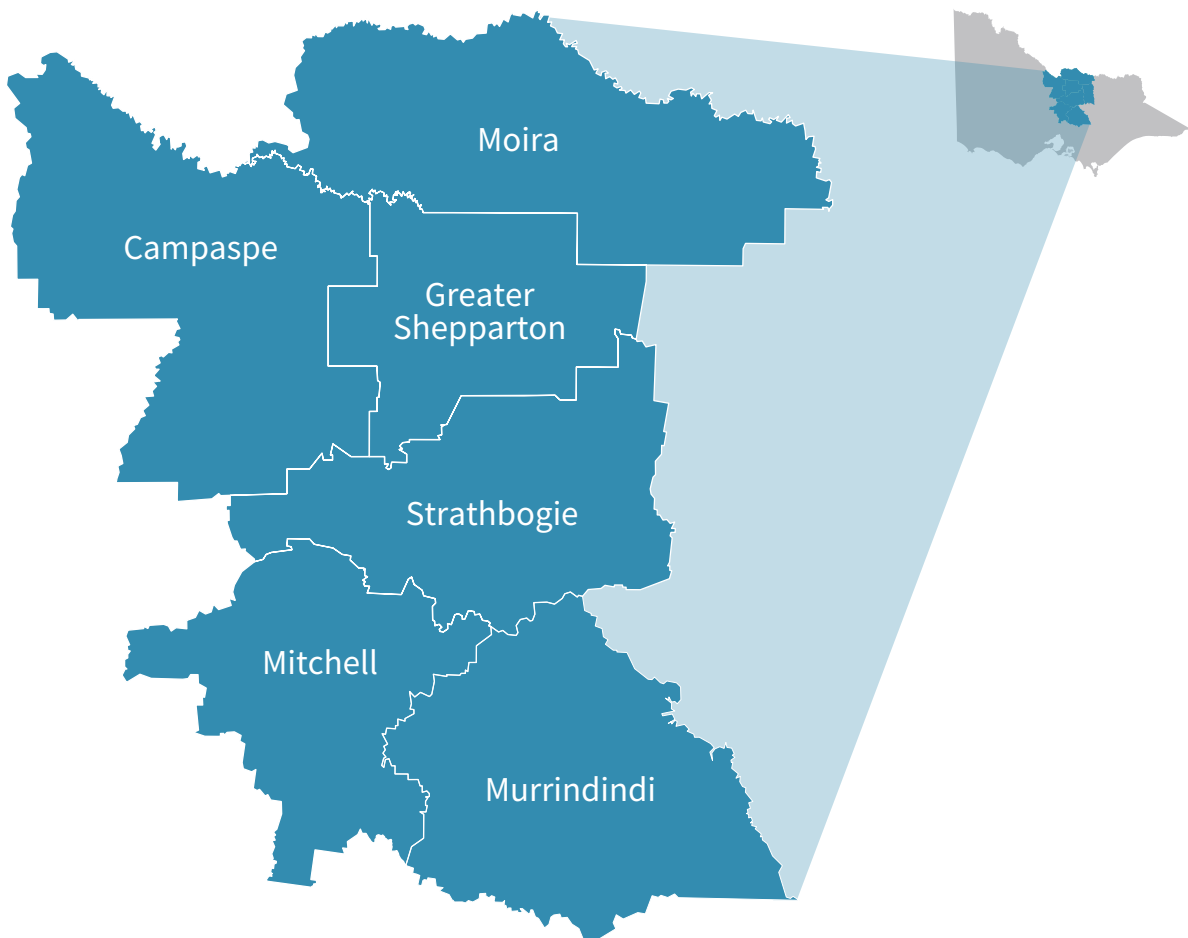
The region provides many nature-based tourism options, such as free camping along the Murray River, and over 40% of the Murrindindi Shire is state forest.

However, some of these activities and seasonal increases in population are associated with littering and dumping behaviours. For example, bins are not always provided at the free camping sites and campers do not always comply with the carry in carry out policy.

Figure 3 shows the map of the region which has six councils:

- Campaspe Shire
- Greater Shepparton City
- Mitchell Shire
- Moira Shire
- Murrindindi Shire
- Strathbogje Shire.

Figure 3 Map of Goulburn Valley Waste and Resource Recovery Region



2.5 How the plan was developed

In developing the plan, we have built on all of the previous efforts and programs across the region, used all the available data, consulted with the community and stakeholders about their views and expectations. We also researched what we know works to develop the actions.

The plan was developed by consulting the community through an online survey, collecting existing available data, consulting with councils, land managers and other stakeholders individually and at workshops held in the region.

The data sets used to support the development of regional priorities included:

- Council data reported to Sustainability Victoria's *Local Government Annual Waste Services Report*.
- Additional internal council data, such as through parks and gardens / works depot, local laws and roads units.
- EPA fines issued through its vehicle litter reporting program.
- Other land manager data collected internally.

As well as the data analysis, we considered:

- the *Victorian Waste Education Strategy*
- the region's 10-year *Waste and Resource Recovery Implementation Plan*
- each council's relevant strategies and plans such as waste and recycling, litter and illegal dumping, and education strategies
- previous litter and dumping programs conducted in the regions or elsewhere
- litter and dumping literature and research to identify what works.

Consultation was a key to our approach to developing the plan to learn the experiences of the community in general as well as those community members and staff cleaning up litter and dumping and to understand their expectations for a clean community.

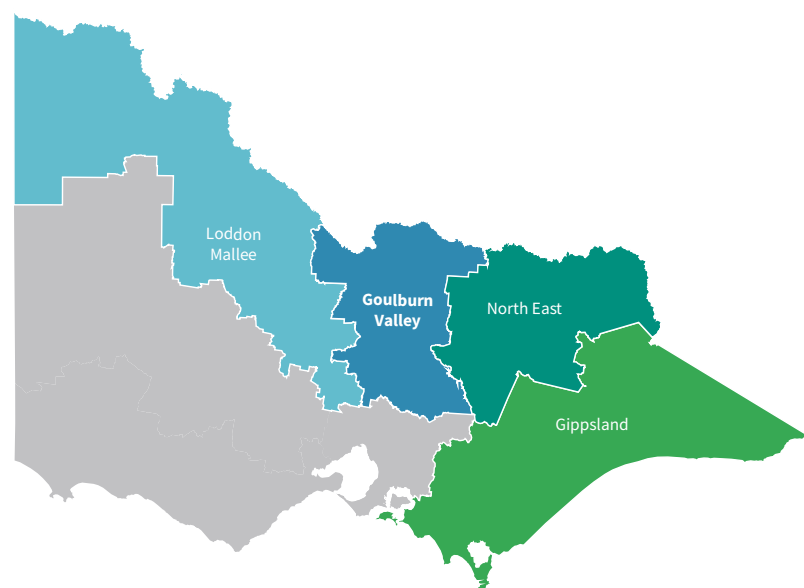
The plan has been developed by the Goulburn Valley Waste and Resource Recovery Group and partners through funding from Sustainability Victoria on behalf of the Victorian Government.

2.5.1 Collaboration and partnerships

The Gippsland, Goulburn Valley, North East and Loddon Mallee Waste and Resource Recovery Groups worked collaboratively using the same methodology to produce individual regional plans.

The four regions cover over 140,000 square kilometres or 62% of the geographical area of Victoria. Each region shares a border with New South Wales and the Murray River is the border for three regions. Figure 4 shows the regions in Victoria.

Figure 4 Victorian waste and resource recovery regions



3. Litter and illegal dumping

3.1 What is litter and what is dumping?

In everyday terms, people think of *litter* as items that are not disposed of properly and are actively thrown away or left behind. It tends to be smaller items that people need to get rid of ‘on the go’, such as food or snack packaging, drink containers, cigarette butts and so on. Some items are *accidentally* littered such as a tissue falling from a sleeve or an empty plastic bag flying away.

We differentiate *dumping* from litter as larger items, like household furniture, whitegoods, building and demolition waste, and bags of household rubbish. In the region, some dumping occurs on nature strips but most of it is in bushland and open spaces characterised by secluded access, which the dumper looks for to conceal their illegal activity. It involves *planning* and *action*; packing the car boot, ute or trailer and driving to a chosen place to ‘dump’ your waste.

Dumping is illegal and we use the two terms interchangeably throughout the plan.

3.2 What do we know about littering and dumping?

Social researchers Community Change have undertaken extensive research for many years on littering behaviours¹ that includes both observing what thousands of people do in public places and interviewing them about their behaviours. We know a lot about why people do it and how to prevent it based on that research.

Thankfully, the research finds *two-thirds of people in our community do the right thing and put their waste in a bin*. This fact was carefully considered in developing this plan and subsequent actions because we should acknowledge that most people do the right thing and reward them wherever possible and, very importantly, seek their support to help others do the right thing.

Research also indicates that there is no one type of litterer. People of all ages and backgrounds litter, and that behaviour varies depending on:

- the type of item needing disposal
- the type of location someone is in.

A summary of what the research tells us, which includes NSW EPA research into dumping, is summarised in Figure 5. Details of the NSW research is included in [Appendix I](#).

It is conservatively estimated that providing services to *maintain* clean towns and to clean up dumping and litter across the region costs over \$1.3 million annually. If we add the cost of street sweeping, which includes sweeping up litter as well as leaves and other organic matter, the cost rises to over \$2.6 million. (These services are discussed further in [Section 5.1.2](#))

The majority of the community who do the right thing often resent what they see is unnecessary expenditure cleaning up the mess of the minority that do the wrong thing. These funds could be spent on other areas that strengthen well-being and social cohesion throughout the region.

¹ *Litter-ology: understanding littering and the secrets to clean places*, Spehr, K. and Curnow, R., Environment Books, Frankston, 2015

Figure 5 Summary of the *what*, *why* and *when* of litter and dumping

3.3 How do we take action?

Litter-ology and other research tells us that we need to help people to understand what they might be doing wrong and what is the right thing to do. We need to make it as easy as possible by providing them with tools and systems, and impose consequences for those doing the wrong thing.

Figure 6 shows the types of things organisations, and we as individuals can do, to stop and prevent littering and dumping. The ‘How do we stop it?’ column is largely drawn from *Litter-ology*. The ‘What can I do?’ column lists what individuals can do, and are in fact what many of our communities are currently doing to demonstrate they reject littering and dumping.

Figure 6 Types of activities land managers and individuals can do to stop and prevent littering and dumping

How do we stop it?

- keep areas clean because clean areas stay clean
- build a culture of shared responsibility for our public places
- strengthen our community’s culture that rejects littering and dumping
- tell people why it is wrong, what it does
- tell people how to do the right thing
- tell people how much the fines and penalties are
- create a sense of surveillance where people feel they will be:
 - seen
 - fined
 - rejected by the community
- fine and prosecute offenders – and publicise the actions
- increase the number of community reporters to EPA’s vehicle litter reporting program
- help people safely take action against littering and dumping

What can I do?

- always use a bin
- find out where I can take things I no longer want
- ask a friend to help me take stuff to the resource recovery centre
- report dumping to council
- report anyone I see littering or dumping from a vehicle to EPA’s reporting program so they will be fined
- pick up litter when I see it
- report overflowing bins to council
- when safe, encourage litterers to use the bin
- tell others and encourage them to report to EPA
- be a champion for our clean community and region

Putting all of these things together into an action plan to reduce littering and dumping requires:

- research to understand the problem
- education to explain the problem so that people ‘know how to, want to, and know the benefits of’ rejecting this behaviour
- infrastructure to make it easy for people to do the right thing
- enforcement to reinforce the message and provide consequences
- incentives to persuade everyone to do the right thing
- rewards and acknowledgement for those doing the right thing
- partnerships and collaboration with those responsible or affected
- monitoring and evaluation to measure achievements and make refinements for ongoing or future actions.

Similarly, the UK Behavioural Insights Team developed the EAST framework² to change behaviours:

- Easy – harness the power of defaults, reduce the ‘hassle factor’ of taking up a service and simplify messages.
- Attractive – attract attention and design rewards and sanctions for maximum effect.
- Social – show that most people perform the desired behaviour, use the power of networks and encourage people to make a commitment to others.
- Timely – prompt people when they are likely to be most receptive, consider the immediate costs and benefits and help people plan their response to events.

We have based the actions in [Section 6](#) on these evidence-based models.

Social compacts

A *social compact* involves an unstated agreement where *if I do something then I expect something* to happen.

Examples include:

- If I report an overflowing litter bin in a park to council, I expect council to quickly come and empty the bin.
- If I report littering from a vehicle to the EPA’s reporting program, providing all of the required information and agreeing to attend court as a witness if necessary, I expect the litterer to be issued with a fine.
- If I always pick up my dog’s poo then I expect to never accidentally step in dog poo – an understandable expectation but unfortunately this cannot be guaranteed!

We generally have a sense of ‘rules’ or social compacts in public places. If we do the right thing and dispose of our waste properly then we expect whoever is responsible for the public place, like a council or Parks Victoria, to do their bit to empty the bins and keep places clean.

It’s easy to understand how the people picking up other people’s litter would feel very annoyed that the social compact of looking after your own waste isn’t demonstrated.

² EAST: Four simple ways to apply behavioural insights, Behavioural Insights Team, 2015

4. Strategic framework and policy context

This section outlines the relevant state and regional strategies, policies and legislation.

4.1 Victoria

In Victoria littering and dumping are dealt with by legislation and Victorian Government agencies are responsible for litter monitoring, programs and policies.

4.1.1 Victorian Environment Protection Act

On 1 July 2020, a new *Environment Protection Act* will come into force that will focus on prevention as well as providing a range of offences and fines for individuals and corporations that litter, dump and cause environmental pollution.

The new Act will assist councils and other land managers³ to reduce and prevent litter. For the first time, litter offences will be differentiated by quantity – 50 litres or less, 50 to 1000 litres and over 1000 litres. The larger the quantity of litter the larger the fine, as shown in Figure 7. Organisations attract significantly higher fines than individuals for the same offence which reflects the gravity of their actions and will also act as a strong deterrent to dispose of waste illegally.

Figure 7 Environment Protection Amendment Act 2018 offences and penalties¹

Offence	Person		Body corporate	
	Penalty units	Amount ²	Penalty units	Amount ²
Litter 50 litres or less	20	\$3,304.40	100	\$16,522.00
Dangerous litter	60	\$9,913.20	300	\$49,566.00
>50 litres to 1000	100	\$16,522.00	500	\$82,610.00
>1000 litres	240	\$39,652.80	1,200	\$198,264.00

¹ The new Act and offences will come into effect on 1 July 2020, when the penalty unit will increase (see ²).

² One penalty unit from 1 July 2019 until 30 June 2020 is \$165.22. The Victorian Government has a policy of automatically indexing certain fees and fines each year for inflation so that the value of those fees and fines is maintained. Accordingly, the penalty unit will rise on 1 July 2020, when the new Act comes into effect.

The fines for larger quantities of litter are significantly higher compared to those in the current *Environment Protection Act 1970*:

- On-the-spot fines range from \$330 for a small piece of rubbish or unlit cigarette to \$661 for a lit cigarette or burning litter.
- The offence of aggravated littering which must be prosecuted in court carries penalties up to \$9,913.20 (60 penalty units) or imprisonment for 1 month or both.

The new Act will provide greater powers to authorised litter enforcement officers in councils and other organisations that manage public land. The penalties provide a much needed, stronger deterrence to litter or dump. They also provide greater incentives for enforcement activities which address the current low returns on resource-intensive investigations and prosecutions. [Appendix II](#) has further details about both the new and current Acts and definitions of litter and aggravated littering.

The *Environment Protection Act 1970* is currently being overhauled and the Victorian Government intends this new legislation to take effect from 1 July 2020.

The *Environment Protection Amendment Act 2018* focuses on preventing waste and pollution impacts rather than managing those impacts after they have occurred. The new Act for the first time introduces a general environmental duty — A person who is engaging in an activity that may give rise to risks of harm to human health or the environment from pollution or waste must minimise those risks, so far as reasonably practicable.

³ Council and other land managers can be authorised litter officers under the *Environment Protection Act 1970*.

4.1.2 Victorian organisations responsible for litter

Sustainability Victoria is the lead agency for litter in the Victorian Government's Environment Portfolio which is made up of DELWP, EPA, Sustainability Victoria and the seven waste and resource recovery groups (WRRGs).

Sustainability Victoria supports state and local government, land managers and other partners to address litter and illegal dumping issues⁴.

In 2019, the Victorian Litter Action Alliance⁵, the peak body for litter management, was formally amalgamated into Sustainability Victoria who will continue supporting litter prevention programs, tool kits and resources across Victoria.

Sustainability Victoria is responsible for:

- identifying litter priorities through the Victorian Litter Report Card (see [Section 5.1.3](#))
- the Victorian Litter Plan to coordinate litter action plans to identify opportunities for leveraging greater outcomes from programs and activities
- promoting activities in relation to litter across government and industry
- monitoring trends in littering.

EPA operates under the Environment Protection Act and runs the public vehicle litter reporting program (see [Section 5.1.4](#)).

4.1.3 Victorian Waste Education Strategy

The 2016 *Victorian Waste Education Strategy* includes a strategic direction to reduce litter and illegal dumping. The development of the regional plan fulfils Action 1.1 for WRRGs to develop regional litter plans that identify and prioritise litter issues for that region.

4.1.4 Litter and the circular economy

The Victorian Government is developing a circular economy policy to provide a long-term vision for how the state's waste and resource recovery system manages increasing amounts of materials, while maximising circular flows and minimising impacts on the community and the environment. The concept of a circular economy underpins the Goulburn Valley Waste and Resource Recovery Implementation Plan, and its strategies and projects that we deliver.

Current efforts in tackling plastic pollution, litter and illegal dumping across Victoria will be supported by a circular economy that promotes reuse, recycling, and phasing out single-use and disposable items.

4.2 Goulburn Valley region

The 10-year *Goulburn Valley Waste and Resource Recovery Implementation Plan*, includes actions to improve data collection and reporting to enhance decision-making, and to support the local delivery of the Victorian Waste Education Strategy.

4.3 Councils

While none of the six councils have a litter and dumping plan they all include litter and dumping actions in their waste and resource recovery plans. One council is currently reviewing its plan and will look to the Regional Litter and Illegal Dumping Plan for strategic guidance.

⁴ <https://www.sustainability.vic.gov.au/Government/Litter-and-illegal-dumping>

⁵ The Victorian Litter Action Alliance was established in 2000 and provided a coordinated approach to preventing litter across state and local government, industry and community sectors. In 2019, it was formally amalgamated into Sustainability Victoria.

5. Where are we now?

5.1 Data

This section presents the data we have collected and analysed to develop the plan.

5.1.1 Data limitations

If you can't measure it you can't manage it!

We wanted to build the plan on a strong evidence base and worked with all land managers to determine the extent of the problems and costs we are facing.

However, this was our biggest challenge in developing the plan. Nearly everyone we asked said, dumping in particular, 'is a big problem ... and it is growing'.

But few organisations could provide recorded data because they did not have a data recording system, said the staff did not have time to record data, or there were limitations with the systems they use.

Given these limitations, the data we have reported must be considered to only be an indication of the extent of the problem and that it significantly under-represents the true costs of responding to, investigating and cleaning up litter and dumping.

To understand the true cost to land managers and the community of illegal dumping we need a standardised system to record the number of incidents, locations, quantities and types of items being dumped, the cost of clean up and disposal, the number of investigations undertaken and fines issued, as well as the amount of staff time to do all of those things.

While achieving a comprehensive statewide standardised data collection and recording system is a longer-term goal that the region alone cannot overcome, this plan encourages all land managers to record at least a minimum of four key components of dumping:

- location
- quantity
- item type
- disposal cost.

Throughout the development of the plan, stakeholders strongly agreed with and supported the need to record better data.

To achieve this in the life of the plan will provide the basis for much greater investment to move from responding to prevention, and the ability to evaluate the impact of programs.

5.1.2 Council services

Councils provide a range of *prevent*, *maintain* and *respond* services to keep our region and communities clean.

5.1.2.1 Prevent

Goulburn Valley WRRG and its predecessor organisation, the Goulburn Valley Waste Management Group, has a long history of leadership in litter and dumping prevention and management.

Since 1998, the WRRG has worked with the six councils and other regional stakeholders on a coordinated approach to behaviour change.

Over the years funding was obtained from Sustainability Victoria, the Packaging Stewardship Forum of the Australian Food and Grocery Council, the EPA, and others to deliver a broad range of programs.

Examples include:

- Purchasing two mobile billboard advertising trailers, still in use, to support regional and statewide programs and to promote the EPA's Litter Reporting Program.
- Data benchmarking studies.
- A 'secure your load' program using television and other advertising.
- Supporting existing Keep Victoria Beautiful Adopt a Roadside programs and promoting their expansion through purchasing a litter clean up trailer that is now managed by Landcare.
- As a key member of the Murray River Litter Prevention Taskforce, working with Parks Victoria, councils and other stakeholders to reduce camping litter along the Murray and neighbouring communities.

In 2015, the group developed a Litter Directions Paper but due to legislative changes to its role, litter prevention has not been a focus for several years.

This plan will provide the impetus and guidance to seek external funding to reinvigorate litter and dumping prevention activities across the region.

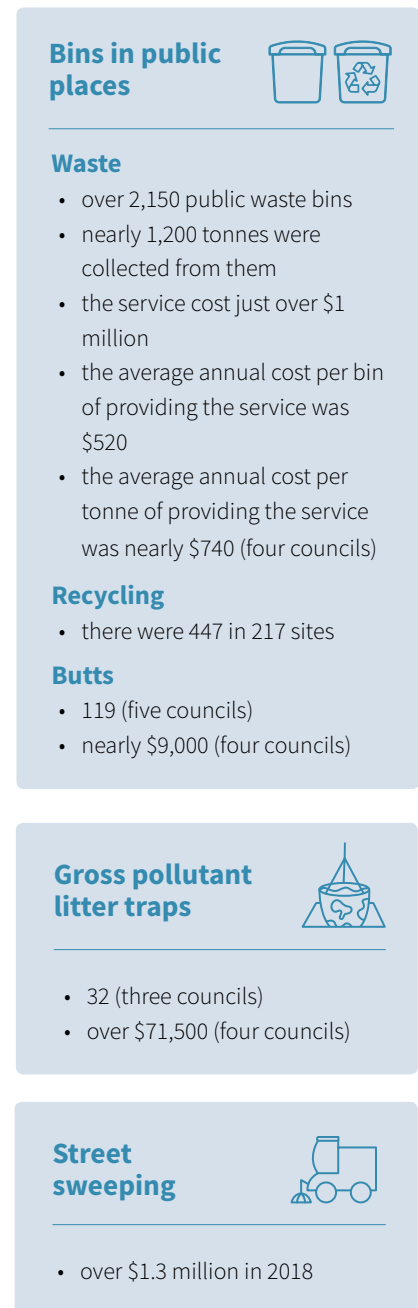
5.1.2.2 Maintain

These are scheduled services that are provided to keep our communities clean and include providing public waste and recycling bins, and litter traps to stop litter and organic matter entering waterways through the stormwater system. Street sweeping is a scheduled service and sweeps up litter along with autumn leaves and other organic matter. However, the breakdown of materials is not collected and the full cost of street sweeping should not all be attributed to litter.

Figure 8 lists the data reported from the six councils in the region for the last year data was reported for that category.

Together the cost of providing the *maintain* services was over \$1.1 million and if street sweeping was added, which is organic matter and litter, this rises to over \$2.4 million.

Figure 8 Best available annual data for regional council maintenance services



5.1.2.3 Respond

The council services provided to respond to litter and dumping are many and varied. The response is not simply restricted to cleaning up. They include:

- accepting litter and dumping reports in person, by email and through digital and online applications
- undertaking investigation and enforcement action which can include interviewing people and issuing notices to clean up
- undertaking media and communications activities to highlight the problems and ask the community for help or to educate the community about fines and prosecutions
- replacing or improving infrastructure
- adjusting cleaning or bin emptying schedules.

There is limited recorded information about responding, which highlights the challenges of collecting data for cleaning up dumped rubbish and roadside litter:

- cleaning up dumped rubbish was over \$136,000 (five councils)
- cleaning up roadside litter was nearly \$77,000 (four councils).

A commonly proposed explanation for illegal dumping is that there is no hard waste collection service, whether it be a tip voucher, a booked hard waste collection or an annual collection across the whole council. Many people expect or believe they are entitled to free hard waste disposal, but few consider how much the service costs per household. Councils could promote the real cost of providing the service to help people understand some of the complexities and that providing a service would require an increase in the waste service charge.

5.1.3 Victorian litter and dumping measures

The *Keep Australia Beautiful National Litter Index (NLI)* provides results of litter counts by volume and item. The counts are conducted twice annually in undisclosed locations mainly in metropolitan areas.

In 2017-18, the results for Victoria found:

- A 25% increase in total litter items counted.
- A 24% increase by volume of litter (the increase in volume reduced to 15% when illegal dumping was excluded).
- Cigarette related litter was the main contributor to the higher count with an increase of 38% and cigarette related litter represented 59% of the overall litter counted.
- There was more litter counted at all site types which was also mainly attributed to increases in cigarette related litter.
- There were more litter items recorded across most litter categories with the exception of plastic bags and other glass.
- Retail precincts and shopping centres have the greatest litter loads by count, while industrial precincts have the greatest loads by volume.

Sustainability Victoria's 2016 Litter Report Card identified five priorities:

1. litter in coastal areas and waterways
2. illegal dumping of waste
3. roadside litter
4. cigarette butt litter
5. plastic and microplastic litter.

Sustainability Victoria advised that the *2020 Litter Report Card* is currently underway.

5.1.4 EPA public litter reporting program


Each year EPA receives about 20,000 litter reports from ordinary people witnessing litter from vehicles. Over 80% of the fines issued are for cigarette butts.

Figure 9 shows how many fines were issued for offences that occurred in each council area between 2015 and 2019. In 2019, 163 fines were issued for littering that occurred in the Goulburn Valley region.

Please note that while the littering offence occurred in the region, the litterer might live anywhere else in Victoria – in another council in the region, or outside the region – but be observed littering while passing through.

The number of Goulburn Valley residents reported for littering was 221; higher than the number of fines issued in the region and, again, the Goulburn Valley resident may have littered in a different location. However, not every report results in a fine being issued, as sometimes all of the required information is not provided, or an error (for example, in the registration number), may have been made.

In 2019, the highest number of fines issued (81) was for lit cigarette butts, followed by a small item of litter (44) and then deposit litter (38).



A CLEANER VICTORIA IS IN YOUR HANDS

REPORT LITTER

ONLINE MOBILE FORM CALL

People can report using EPA's app, website, phone or by mail.

Reporters need to provide:

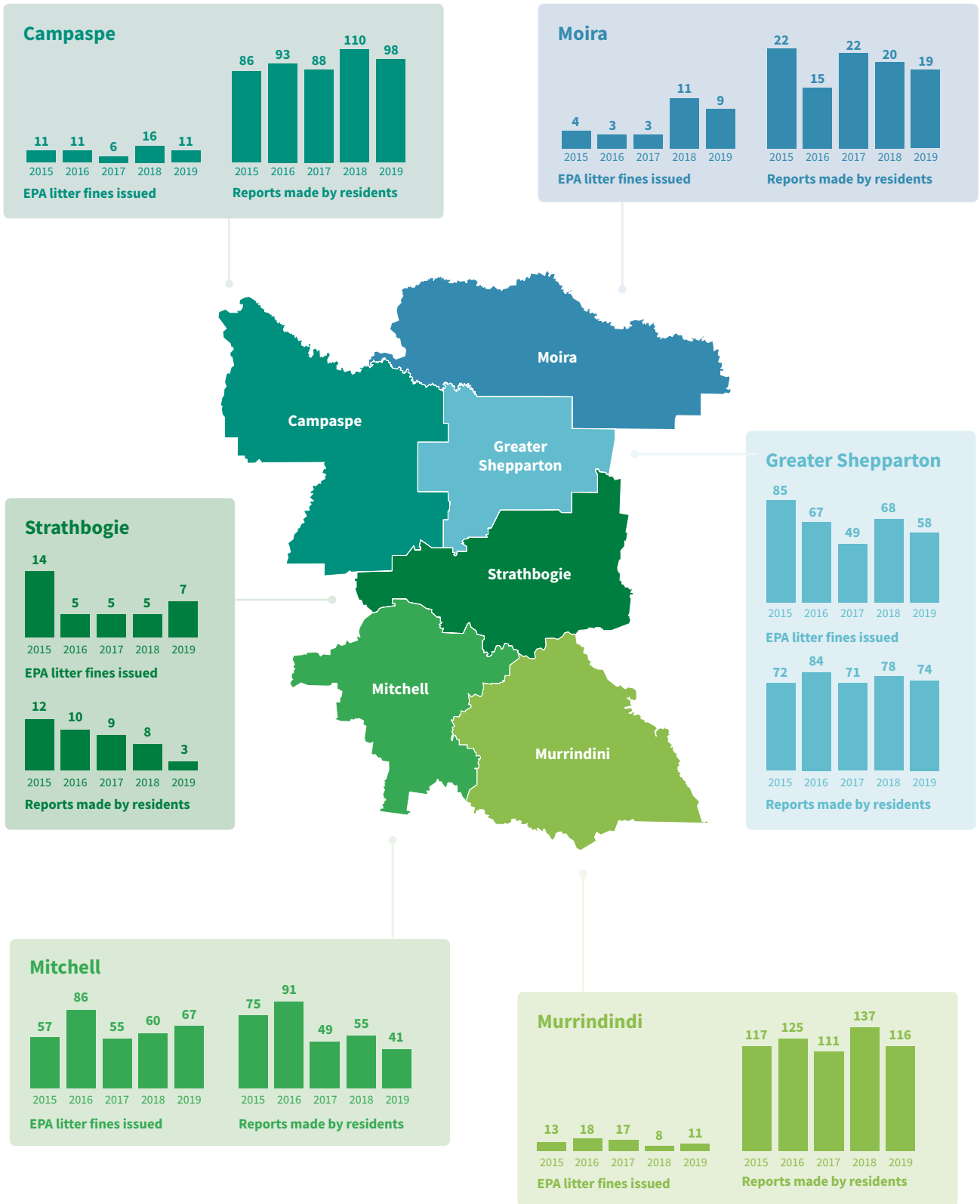
- vehicle registration number and vehicle details to track down the owner
- the location, time and date of the littering
- the type of litter
- the gender of the offender
- driver / passenger in the vehicle
- confirmation the information is true and accurate and, if required, they are prepared to attend court as a witness.

Once received, enforcement officers obtain the name and address of the owner of the registered vehicle and investigate the details of the report. Where appropriate a fine or infringement notice is issued.

Goulburn Valley residents are active reporters when they see littering from a vehicle and made 351 reports in 2019. Again, we don't know if these reports are for offences witnessed in Goulburn Valley as the offence could have occurred anywhere in Victoria. Figure 9 shows the number of reports made by residents of each council in the region between 2015 and 2019.

Murrindindi residents are the most active reporters with 33% of 2019 reports even though the council's population is 7% of the region's total population. Campaspe are the second most active reporters making 28% of reports from a council with 19% of the region's population.

Figure 9 EPA litter fines issued in each council, 2015-2019



5.1.5 EPA pollution reports

EPA relies on the community to report incidents of pollution, environmental hazard or other activities potentially harmful to the environment.

Figure 10 shows the number of reports made each year for Goulburn Valley between 2015 and 2019. Figure 11 shows the breakdown of the types of dumping made in the reports. The categories used in the data entry system are very high level, mainly focused on risk, such as asbestos, and the size of the dumping.

Figure 10 Number of EPA pollution reports made, 2016-19

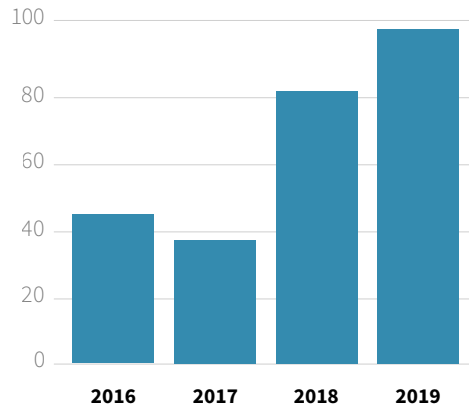
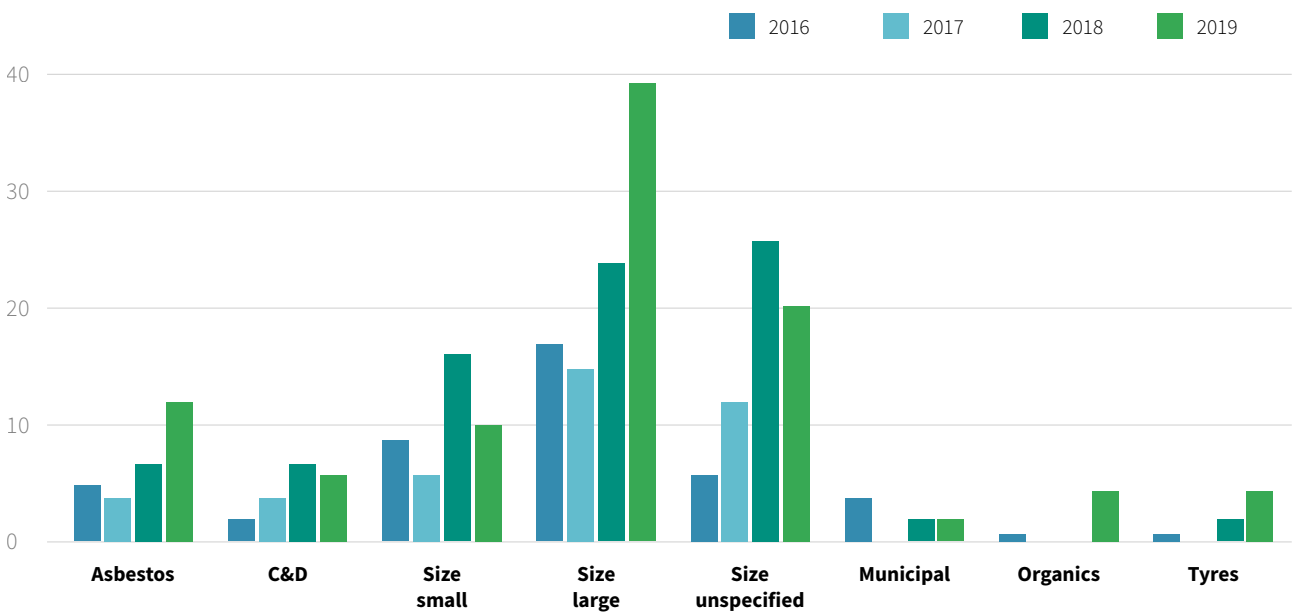


Figure 11 EPA pollution reports by dumping category, 2016-19



Notes: C&D means 'construction and demolition' waste which has been called 'building and demolition' waste in this plan.
 Size: there is no specification for the volume of the 'small' and 'large' sizes

5.1.6 Parks Victoria

Parks Victoria does not have a standardised data collection system for officers to record the quantity, item type, cost to clean up and dispose of dumped rubbish.

In 2017, Parks Victoria conducted an analysis of the cost of illegal dumping clean ups in parks and reserves under its control across the state and estimated the total cost to be well over \$1 million. This included estimated staff time for response, investigation, follow up, clean up and disposal costs. Attending to illegally dumped rubbish was the most time-consuming activity reported by 80% of depot staff.

Asbestos was a major concern:

- the number of dumping incidents was increasing
- 81 recorded incidents of hazardous materials, most containing asbestos
- asbestos clean-up was estimated to be \$140,000
- it poses serious health risks to staff and users and can be spread in the environment making it much more difficult to clean up.

Parks Victoria tries to work closely with the EPA Illegal Dumping Strikeforce for incidents of large industrial dumping using parts of the Environment Protection Act restricted to EPA officers.

5.1.7 Department of Environment, Land, Water and Planning

DELWP does not have a standardised data collection system for officers to record the quantity, item type, cost to clean up and dispose of dumped rubbish. There is no assessment of the negative impacts of dumping on the community's enjoyment of the forest and parks or the environmental impacts.

DELWP regional staff reported increased dumping in forests on the fringe of Melbourne, possibly by people choosing to illegally dump to avoid landfill costs. While no formal records are kept the officers reported, 'It is not unusual for the Broadford staff to fill a three-tonne tipper with rubbish after a weekend. We have also had over 80 vehicles dumped over the past five years. Most of the time these cars have been stripped and burnt. Large amounts of tyres and mattresses are very common.'

At the time of writing, DELWP was developing LitterWatch Victoria, an online platform which will support consistent measurement of litter and illegal dumping across Victoria.

5.1.8 HVP Plantations

HVP Plantations is one of the largest private plantation companies in Australia with plantations situated around Victoria. In the Goulburn Valley region HVP manages over 6,600 hectares of plantations mainly concentrated around Murrindindi and also in the Mitchell and Strathbogie council areas.

There are illegal dumping hotspots across the plantations, particularly Kinglake West where household rubbish and furniture, building and demolition waste and cars are commonly dumped.

Some cars are burnt straight away but some are burnt days later. It is unknown if the arsonist is the same person returning or another person. Obviously, fires are a great threat to the plantations and surrounding areas and the community's safety.

Dumpers are householders and businesses. For example, a full semitrailer load of building waste was dumped, most likely by a business, and blocked an access track. It required a resource-intensive clean up to separate, collect and dispose of the material.

HVP has installed surveillance cameras to deter and detect dumpers, and undertakes regular clean ups, but the dumpers continue.

HVP is looking to this plan for guidance to reduce the scale of the issue and to prevent dumping as well as to streamline reporting processes across responsible authorities.

5.2 What the community told us

We consulted the community through an online survey that explored the community's perception and attitudes towards littering and illegal dumping. Almost 1,400 people responded to the survey which was open for approximately four weeks over July and August 2019. Using the Victorian government's Engage Victoria website, respondents spent an average of 15 minutes and rated their top five types of litter and dumped items, and the top five locations in which they occurred in the region.

The response makes it the largest community litter and dumping survey ever conducted in Victoria and highlights the benefits of the four regions working together asking the same questions.

In Goulburn Valley, nearly 570 people completed the survey and a separate report on the results was developed. The majority of the community surveyed are concerned about littering and dumping, do the right thing, take action, and understand the broad range of negative impacts.

People in the Goulburn Valley region care a lot about littering and illegal dumping. Overall, the community believes people's attitudes followed by low risk of penalties are the main causes of littering and dumping. A lack of knowledge and infrastructure issues rated much lower.

Figure 12 shows a snapshot of the most common thoughts held by our community and Figure 13 shows the types of thought processes, or 'social rules', people consider when faced with other people's litter.

The survey found the region has an engaged and motivated community that is very concerned about littering and dumping and believe they personally do the right thing with their own waste. Many people took a variety of actions to prevent litter and also clean up the litter of others to keep our neighbourhoods, bushland, beaches and regions clean for all to enjoy.

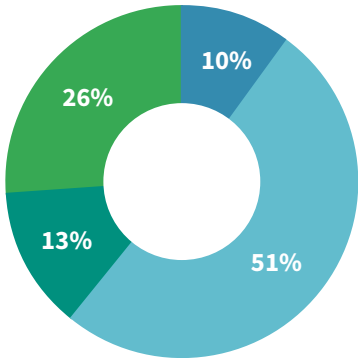
A smaller number of people knew they could report to council or the EPA vehicle litter reporting program, where litterers are fined, but a much smaller proportion of those actually reported.

These people already reject littering and illegal dumping and we can all work together to take further action as community champions to help those who are doing the wrong thing do the right thing.

Figure 12 What our community thought



Figure 13 What influences picking up other people’s litter



- Nothing stops me, I clean it all up
- It depends on the type of litter
- It depends if I can wash my hands soon after
- It depends if there's a bin nearby

But worryingly, because it is illegal, 3 out of 10 people thought it was acceptable to dump belongings on the nature strip, and 5 out of 10 thought it was acceptable to throw away an apple core or other food scraps. These people risk being fined if they were caught doing these things.

Thirty-nine individuals admitted to dumping, which included 26 who dumped belongings on the nature strip. These people would all be fined if caught.

Only 3 out of 10 people said they reported dumping to council and only 2 out of 10 reported littering and dumping to EPA’s vehicle litter reporting program. We will encourage our highly concerned and motivated community to take reporting action to assist councils and land managers identify littering and dumping hotspots, and to fine those observed littering or dumping.

5.2.1 Community survey priorities

The community was asked to rank their top five littered and dumped items and the top five litter and dumping locations. Figure 14 shows the results.

Figure 14 Community survey ranked top five priorities for littering and dumping

	Littering	Dumping
Item		
1	fast food packaging, scraps	household rubbish
2	drink containers, straws, lids	household furniture, clothes
3	cigarette butts, packets	mattresses
4	overflowing public bins	tyres
5	plastic bags	building and demolition waste
Location		
1	rivers and creeks	bushland
2	roadsides	rivers and creeks
3	around shops	roadsides
4	bushland / plantations	vacant private land
5	recreational parks and gardens	residential streets

5.2.2 Advocacy priorities to reduce litter and dumping

We asked the community to list the top litter and illegal dumping issue they wanted the Victorian and Australian Governments to listen to and help change. The question was designed to focus on issues within the Victorian and Australian Government's responsibility, to differentiate from the questions about local government actions.

Eight out of 10 people agreed the Goulburn Valley WRRG and the councils should advocate to the Victorian and / or Australian Governments. Respondents nominated a variety issues the governments could address.

These have been distilled into:

- making sure that managers of Crown land, such as roads, state and national parks and forests, and waterways, take actions to:
 - prevent litter and dumping
 - clean up litter and dumping
 - increase enforcement activities
- reducing the cost of disposing of waste to landfill and transfer stations
- running an education and communications campaign to reduce litter
- running a program targeting campers to reduce their litter and dumping
- running a program targeting fast food packaging litter on roadsides.

Victorian and Australian Government policies need to be considered when reviewing the results, particularly in relation to reducing the costs of waste disposal. As discussed in [Section 5.1.2.3](#), people often propose illegal dumping is a result of the 'high' cost of waste disposal. It is noted that we need to help people understand the true costs of waste disposal, the value of materials and take personal responsibility for their own waste including making better purchasing choices. The Circular Economy Policy ([Section 4.1.4](#)) captures these issues and will promote greater incentives to recover materials for reuse and recycling. The cost of waste disposal has an upward trend and is likely to continue to rise. It has also been noted in the research for this plan that it was not uncommon for dumpers to drive past resource recovery centres to dump material when they could have dropped it off, sometimes for free when sorted correctly.











With these considerations in mind, Goulburn Valley WRRG will work with the councils to analyse the feedback and issues further and develop a plan of realistic priorities for advocacy to the Victorian and / or Australian Government, with consideration of policies such as the Circular Economy Policy.

5.3 Workshop priorities

In August 2019, 47 people from councils, the community, Parks Victoria, DELWP and Regional Roads Victoria attended a workshop in Beveridge or Shepparton. Figure 15 shows the priority litter and dumping types and locations agreed at the workshops.

Note that at the workshops, participants grouped location categories together based on their experience and knowledge, for example grouping 'national and state parks' with 'bushland / plantations'. Participants each had five votes to allocate.

Figure 15 Workshop top littering and dumping priorities¹

Littering			Dumping		
Item			Item		
	fast food packaging	15		household rubbish, furniture and mattresses	35
	drink containers, straws, lids	4		tyres	8
Location			Location		
	roadsides	17		bushland, state and national parks	22
	rivers and creeks	9		roadsides and residential streets	7
	state and national parks, bushland	6		rivers and creeks	5

¹ Participants had five votes for all choices












5.4 Victorian Litter Scorecard tool priorities

We used Sustainability Victoria’s *Litter Scorecard* tool (see [Appendix III](#) for technical information) to enter all of the data collected, the community survey results and stakeholder workshop findings to produce rankings of regional issues.

The *Litter Scorecard* is a multi-criteria analysis tool where issues are entered and scored into four categories: inadequate infrastructure, problem litter / illegal dumping, geography and concentration and sources of litter. Figure 16 shows the results generated from the tool, with many rankings shared rather than differentiated.






We also entered program issues data into the *Litter Scorecard* tool which produced a clear ranking of the top five issues, shown in Figure 17. Not surprisingly, they included a lack of resources to adequately investigate and enforce as the top ranking, followed by lack of resources for staff to deliver programs. Insufficient resources for education and the high costs of landfill ranked equal 3rd followed by the need for better data to provide evidence of the need for programs to build strong business cases to secure funding.

Figure 16 Litter Scorecard top ranked issues

Littering and dumping issues	Ranking	Category
 Rivers and creeks	1	Geography and concentration
 Roadsides	1	Geography and concentration
 Bushland / plantations	3	Geography and concentration
 National and state parks	3	Geography and concentration
 Hazardous ¹	5	Problem litter / illegal dumping
 Household rubbish	6	Problem litter / illegal dumping
 Fast food packaging, scraps	7	Problem litter / illegal dumping
 Cigarette butts, packets	7	Problem litter / illegal dumping
 Household furniture, clothes	7	Problem litter / illegal dumping
 Mattresses	7	Problem litter / illegal dumping
 Tyres	7	Problem litter / illegal dumping

¹ Data on asbestos and syringes was grouped together under the category of 'Hazardous'.

Figure 17 Litter Scorecard top ranked program issues

Program issues	Ranking	Category
 Enforcement	1	Insufficient resources
 Staff	2	Insufficient resources
 Education	3	Insufficient resources
 High costs of landfill	3	Insufficient resources
 Better data needed for programs and attention to issues	3	Evidence and data / knowledge gaps

6. Regional priorities

We identified the top priorities for the Goulburn Valley region using:

- community survey litter and dumping type and location priorities ([Figure 14](#))
- stakeholder workshop litter and dumping type and location priorities ([Figure 15](#))
- Sustainability Victoria's Litter Scorecard tool ([Figure 16](#)).

There was strong consistency of the highest priority items and the highest priority locations for littering and dumping across all three data sets.

The Litter Scorecard produced 'geography and concentration' issues as the top four rankings followed by a 'problem litter / illegal dumping' issue. But to identify actions to reduce and prevent litter and dumping in these locations we need to understand what sort of items are being littered or dumped. Because, as discussed in [Section 3.2](#), people's behaviour and motivations vary depending on the type of item to be disposed of and the location the person is in. Establishing the relationship between items in locations informs the most appropriate actions based on the research and evidence of what works, discussed in [Section 3.3](#).

The analysis produced two distinct priorities that combine a problem type in a problem location that are shown in [Figure 18](#).

Figure 18 Regional litter and dumping priorities



6.1 Addressing the priorities with actions

As discussed in [Section 2](#), the plan focuses on three areas which are to:

- Build and strengthen a culture that rejects littering and dumping in the Goulburn Valley region.
- Plan programs that address the litter and dumping priorities and monitor and evaluate their effectiveness.
- Identify funding and resourcing requirements to deliver the necessary evidence base for the introduction of policies, legislation and further initiatives to reduce and prevent litter and dumping.

We have developed an action plan with a variety of activities or interventions to prevent, maintain and respond (see [Figure 1](#)) to the highest priority for litter and for illegal dumping. The plan aims to move the majority of actions to *prevent* and *maintain* to reduce *respond* actions over time.

While major programs require external funding to implement, the plan also includes low or no-cost activities that can be implemented as opportunities arise.

The action plan has been based on the evidence of the litter and dumping priorities in the region, built on past and ongoing activities and achievements within the region, and 20 years of research findings about littering behaviours, captured in the book *Litter-ology*⁶, and used the recommended actions that have been proven to be effective (discussed in [Section 3.3](#)).

⁶ *Litter-ology: understanding littering and the secrets to clean places*, Spehr, K. and Curnow, R., Environment Books, Frankston, 2015

We will also consult and collaborate with the other WRRGs that share our priorities to strive for consistency of approach, messaging and actions.

The key actions to reduce roadside litter are shown in Figure 19. A detailed action plan will sit behind the key actions.

Figure 19 Key actions to reduce littering of fast food packaging and scraps, cigarette butts and packets, and household rubbish on roadsides



The key actions for dumping are very similar for roadside and are shown in Figure 20.

Figure 20 Key actions to reduce dumping of household rubbish, furniture, clothes, mattresses, tyres, and small-scale asbestos in rivers and creeks, bushland / plantations, national and state parks



7. Implementing the key actions

7.1 Establish a regional partnership for delivery

The first step in delivering the action plan is for the Goulburn Valley WRRG to engage the land managers and other stakeholders affected by litter and dumping to establish a collaborative regional partnership to deliver the plan.

Goulburn Valley WRRG will facilitate developing a memorandum of understanding, or compact, with the land managers in the region to determine governance, roles and responsibilities, agreed data collection, reporting, communication, and monitoring and evaluation protocols.

Goulburn Valley WRRG will engage with the following land managers:

- councils
- DELWP
- Parks Victoria
- Regional Roads Victoria
- VicTrack
- V/Line
- water and catchment management authorities.

Community and other groups would also be approached to collaborate in the regional partnership to deliver the action plan.

Figure 21 outlines the phases of a four-year delivery plan for Goulburn Valley WRRG to facilitate, with the foundation work the key task to be completed in the Year 1. As funding becomes available, Years 2, 3 and 4 will be delivered.

Figure 21 Four-year delivery plan

<p>YEAR 1</p> <p>Establish</p>	<ul style="list-style-type: none"> • Establish a regional litter and dumping taskforce • Develop agreed roles and responsibilities through a memorandum of understanding or compact • Standardise data collection, reporting, communication protocols and tools • Set benchmarks and shared objectives • Develop prioritised and costed action plan
<p>YEAR 2</p> <p>Deliver, evaluate, refine and report</p>	<ul style="list-style-type: none"> • Implement litter and dumping priority initiative/s • Promote activities • Share information • Identify and evaluate key learnings • Recommend activities to achieve improved performance • Report to the community and other stakeholders
<p>YEAR 3</p> <p>Deliver, evaluate, refine and report</p>	<ul style="list-style-type: none"> • Implement litter and dumping priority initiative/s • Promote activities • Share information • Identify and evaluate key learnings • Recommend activities to achieve improved performance • Report to the community and other stakeholders
<p>YEAR 4</p> <p>Review, refine and report</p>	<ul style="list-style-type: none"> • Review the effectiveness of the taskforce and make appropriate amendments • Review evidence base and re-establish priorities • Develop shared objectives and develop prioritised and costed action plan • Report to the community and other stakeholders

7.2 Measuring change

A monitoring and evaluation plan to measure the impacts will be developed as part of the detailed action plan when funding is secured. It will include establishing:

- project outcomes
- key outcome indicators, including for 'soft' outcomes
- measurement tools
- baseline data, noting that some has been established in the development of this plan
- targets where appropriate and for Years 2, 3 and 4
- accountability for tasks
- measurement period to measure any changes
- depending on funding, measurement 12 months after the program to measure sustained changes.

The data components rely upon a statewide data collection system being available to and used by all land managers.

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Appendices

The appendices can be found on the website:

www.gvwrrg.vic.gov.au

