

Litter Strategy 2008–11

Cardinia Shire Council



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Why a litter strategy?

Litter was identified in the Cardinia Shire Council Waste Management Strategy 2005–09 as an issue requiring its own strategy. Litter was also identified in the Cardinia Shire Council Stormwater Management Plan 2002 as one of the key threats to stormwater quality in the municipality.

The environmental impacts of litter occur both in waterways and on dry land. In waterways, this includes causing potential harm to aquatic wildlife and degrading waterways. Litter in this system also has the potential to cause localised flooding. On dry land litter can harm wildlife and domestic animals. They may be struck by passing vehicles whilst scavenging by roadsides for discarded food waste, or they may ingest litter mistaking it for food. Littered food waste poses the further problem of providing a food source to pests such as rats, pigeons, stray dogs and cats, threatening the viability of native wildlife through competition and the spread of disease. Cigarette butts can leach up to 4,000 toxins upon contact with water, including cadmium, lead and arsenic¹. Litter such as broken glass and syringes pose a health hazard to all.

Litter has social impacts as well. It is internationally recognised as having links to other anti-social behaviours, such as graffiti and property destruction. Surveys consistently show that most people feel littering is an important environmental issue, and yet people still litter². The community expects governments to take a lead role in preventing litter and also in cleaning up when it does occur.

Litter is a sign of a wasteful society representing a financial loss in materials that could otherwise have been recycled or reused. A clean environment provides a safer habitat for birds and animals, and feels safer to its residents. Littering behaviour studies have found that generally people litter where they already see litter, so littering becomes an accumulative problem. The presence of litter makes people feel unsafe in their communities and people see areas that are littered as areas that are uncared for and no-one's responsibility³.

Litter also represents a financial cost to Council. In the 2008–09 budget the total cost of cleansing comes to \$900,000 overall. Of this \$124,000 is budgeted for path sweeping, \$295,057 for street sweeping, \$303,987 for litter bin collection and \$34,902 for the removal of dumped rubbish.

What is litter?

The *Environment Protection Act 1970* defines litter in the State of Victoria as “any solid or liquid domestic or commercial waste, refuse, debris or rubbish and, without limiting the generality of the above, includes any waste glass, metal, plastic, paper, fabric, wood, food, soil, sand, concrete or rocks, abandoned vehicles, abandoned vehicle parts and garden remnants and clippings, but does not include any gases, dust or smoke or any waste that is produced or emitted during, or as a result of, any of the normal operations of the mining, building or manufacturing industry or any primary industry”. The Act covers both private and public land⁴.

The EPA definition includes liquid waste which is a litter issue that has been addressed in this municipality in the Stormwater Management Plan 2002 therefore the Litter Strategy will focus on solid gross pollutants only. Under Victoria's Environment Protection Act 1970, littering is illegal. The Act authorises EPA, local government, police and other litter enforcement agencies to take action against offenders. These agencies are able to issue 'on the spot' fines, although the matter may end up in court.

¹ Clean Virginia Waterways, Longwood University, Farmville, VA 23909

² Community Change, *Measuring Environmentally Desirable Behaviour in Australia: Littering Behaviour Study III*, BIEC, Sydney, 2001

³ Sustainability Victoria, *Litter Strategy Background Paper*, 2007

⁴ *Environment Protection Act*, 1970

The EPA also runs a litter hotline for members of the public to report littering on roadsides. In the 2006-07 financial year, 20,745 fines were issued across Victoria. Over the past five years the number of fines issued has increased by 155 per cent from the 8,142 fines issued in 2001-02⁵.

Who is involved in this strategy?

Litter is an issue that branches across a number of Council departments, including Environment and Heritage, Environmental Health, Operations Depot, Parks and Gardens, Engineering and Local Laws. This strategy is council focused yet also impacts on the community.

Strategy targets

The State Government's *Towards Zero Waste Strategy* targets a 25 per cent improvement from 2003 levels of littering by 2014⁶. This litter strategy adopts the state target and also sets three interim targets:

1. a 10% improvement from 2007 levels of littering by 2010
2. a 15% improvement from 2007 levels of rubbish dumping by 2010
3. a 10% improvement from 2007 levels of cigarette butt litter by 2010

Cardinia Shire Council's direction

Cardinia Shire Council has previously focused on litter prevention through the provision of infrastructure. Prevention has also focused on educating littering offenders so that they don't re-offend. The culture of this council has always been to educate rather than penalise litterers. Council also has several clean up programs in place to address litter where it occurs.

Future priorities for Cardinia Shire Council include eliminating dumped rubbish, reducing litter and illegal dumping in waterways and educating the community about the impacts of litter and dumped rubbish.

Key community concerns about litter can be identified through the Merit report system. The most reported litter issue is dumped rubbish in reserves and on roadsides with general littering in parks and reserves also generating complaints.

Relationship to other State Government and Council policies

This strategy links in with the:

- Cardinia Shire Council Stormwater Management Plan, 2002
- Cardinia Shire Council Environment Management Strategy, 2004–07
- Cardinia Shire Council Waste Management Strategy, 2005–09
- Sustainability Victoria Litter Strategy, 2008
- State Government of Victoria Towards Zero Waste Strategy, 2005

Cardinia Shire covers an area of 1280 square kilometres and contains 30 defined townships and areas. The Shire is in a state of transformation with several areas experiencing rapid urbanisation. The physical environment is diverse, and includes remnant forests, waterways, wetlands, floodplains and coastline. The northern part of the municipality is set in the foothills of the Dandenong Ranges. The southern part of the municipality contains the former Koo Wee Rup swamp and a 20 kilometre stretch of the coastline of Western Port Bay. The municipality also includes the Cardinia Reservoir and the Bunyip State Park.

Most stormwater from the municipality discharges to Western Port Bay. Cardinia Shire Council has only a minor role in the management of Western Port Bay; however, 80 per cent of the municipality's runoff drains into Western Port Bay and has a direct impact on the health of the Bay. Stormwater from

⁵ Environment Protection Authority: www.epa.vic.gov.au/litter/what_epa_does

⁶ State Government of Victoria, *Sustainability in Action: Towards Zero Waste Strategy*, 2005

the northern part of the municipality discharges into the Yarra River system and eventually into Port Phillip Bay. The stormwater system is designed to transport rainwater from our guttering and streets to the nearest natural watercourse. Many types of litter end up in the stormwater system adversely affecting waterways and the quality of water entering both Bays⁷.

Cardinia Shire Council has developed a Stormwater Management Plan to improve environmental management of stormwater throughout the municipality, in conjunction with relevant agencies EPA, Yarra Valley Water and South East Water. The Stormwater Management Plan identifies litter as a key threat to stormwater quality. Areas posing the greatest problem include building sites and poor waste management practices (littering) in commercial precincts⁸.

Cardinia Shire Council also has a Waste Management Strategy which originally identified the need to develop a Litter Strategy. The Waste Management Strategy is primarily concerned with identifying recycling and waste minimisation strategies. Recommendations that give direction to the Litter Strategy include establishing public place recycling trials on main streets and in shopping centres and continuing to provide recycling facilities at festivals and sporting events. Several services recommended in the Waste Management Strategy have already been implemented including the fortnightly green waste collection service, and the bi-annual hard waste collection. These services should help to reduce the amount of hard rubbish being illegally dumped.

The Waste Management Strategy also recommends encouraging the development of markets for recycled products including construction and demolition waste and investigating opportunities for recycling and re-using building materials such as bricks and concrete. This could assist in reducing the incidence of these materials being dumped illegally. Another recommendation of key significance to the Litter Strategy is to encourage the community to reduce waste, to buy reduced packaged items, to avoid 'throw away' products and refuse unnecessary packaging (plastic bags)⁹. Behaviour change initiatives with these aims are complimentary to the Litter Strategy which is highly dependent on altering attitudes and behaviours relating to litter and waste disposal.

In 2006 the State Government committed to develop a new litter strategy to meet the Towards Zero Waste targets in its *Our Environment Our Future Sustainability Action Statement*. The strategy is currently under development by Sustainability Victoria in partnership with the Environment Protection Authority and the Victorian Litter Action Alliance and is due for release this year. The issues paper focused on areas that are of concern to this municipality including illegally dumped rubbish, cigarette butt litter, roadside litter and building site litter.

The new Victorian Litter Strategy will recognise the successful litter management practices and the effective programs already being performed by local governments and other agencies across Victoria. It will also address the areas where more needs to be done to achieve a cleaner Victoria with the aim to move Victoria closer to being litter free.

The Victorian Government's *Sustainability in Action: Towards Zero Waste Strategy* (TZW), is a ten year plan to reduce the amount of waste generated in Victoria, increase the amount of materials for recycling and reprocessing and reduce damage to our environment caused by waste. A key target of the strategy is to reduce littering behaviour by 25 per cent by 2014 compared to 2003 levels¹⁰.

The State Government has committed to providing a variety of resources to local governments and other agencies so that they can deliver solutions locally and will assist in determining what actions to take to achieve a cleaner environment.

⁷ Cardinia Shire Council, *Environment Management Strategy*, 2004–07

⁸ Cardinia Shire Council, *Stormwater Management Plan*, 2002

⁹ Cardinia Shire Council *Waste Management Strategy*, 2005–09

¹⁰ State Government of Victoria, *Sustainability in Action: Towards Zero Waste Strategy*, 2005

Six key litter issues

There are a number of litter problems within Cardinia Shire that have been identified as the six key litter issues for the purposes of this paper, these are:

1. Illegally dumped rubbish
2. Cigarette butt litter
3. Construction and demolition litter
4. Commercial and industrial litter
5. Litter on roadsides, schools, parks and gardens
6. Dog excrement

This strategy will look at how Council is currently managing the issue and what the environmental, social and financial implications of the issue are. It will also propose recommended actions to resolve each issue. Recommendations in **bold** are unbudgeted.

1. Illegally dumped rubbish

Current situation

The illegal dumping of hard rubbish is a priority issue for Cardinia Shire Council. Hard rubbish is often dumped on roadsides, in reserves, on empty lots and in car parks. Not only is dumped rubbish unsightly, it also represents a loss of Council's time and resources in the collection and disposal process. If the rubbish is dumped on Council property, the cost of clean up is borne by Council. If the rubbish is dumped on private property, the property owner must pay for the clean up. Dumped rubbish is generally reported to Council by residents. This report gets logged on to the Merit system. From January 2007 to January 2008 Council received 303 reports relating to rubbish and litter, of these 256 related to illegally dumped rubbish, 10 related to litter in parks, gardens and reserves and 8 related to litter on building sites. The average number of reports per month is 25.

After receiving the report a Local Laws officer will investigate the dumped items to try to establish who dumped the rubbish. If the offender is identified a Local Laws officer will visit the person and ask them to remove the rubbish. If they are unable to determine who is responsible, they will forward the report to Council's Operations Depot for inclusion in the next dumped rubbish collection. Operations depot staff send out a truck once a month to collect all reported dumped rubbish.

If they are able to determine who dumped the rubbish Local Laws officers have the authority to issue an infringement notice. The legislation is enforced under Environment Protection Act 1970 Section 45. The infringement cost for a minor offence is \$110, for a more significant offence it is \$220 and can be up to \$6000 if the case goes to court.

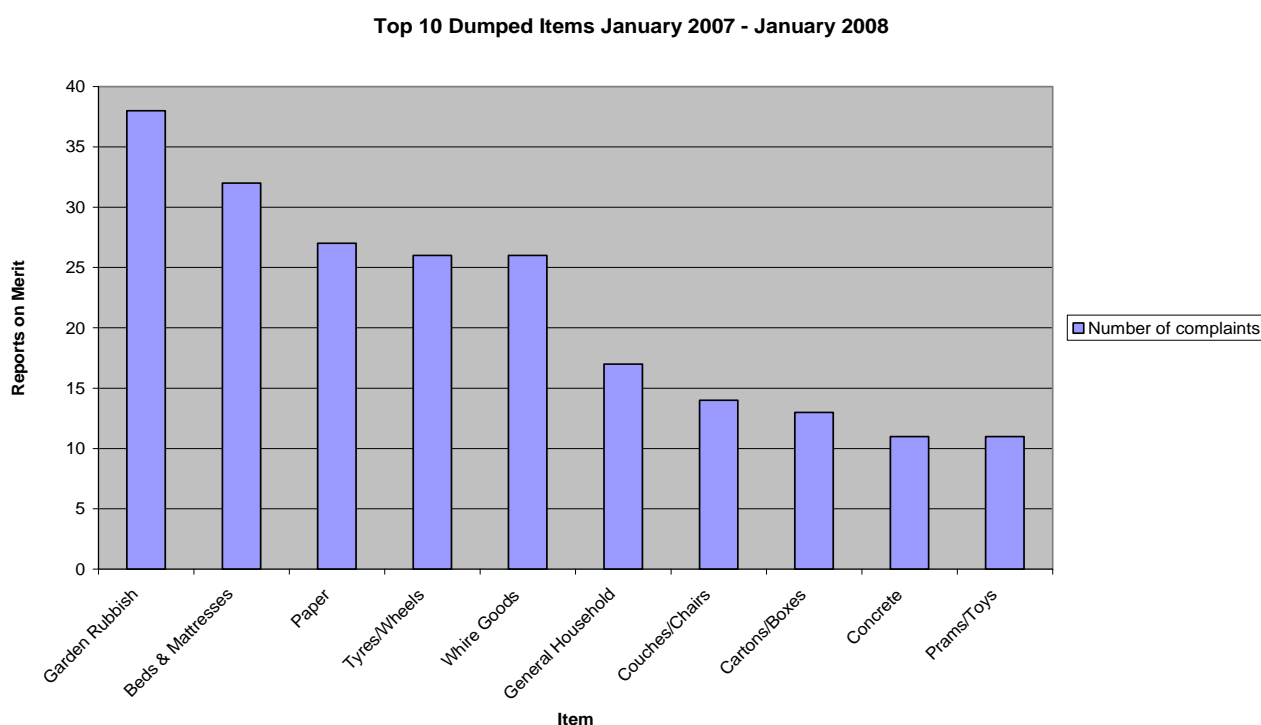
A twice yearly hard rubbish collection service was reintroduced in the municipality in 2007. The first collection since reintroduction in December 2007 picked up a total of 170 tonnes of hard waste. On top of this, 1100 mattresses were collected, which are the second most commonly dumped item. The hard rubbish collection service provides residents with an opportunity to correctly dispose of hard waste that removes the barriers of costly gate fees and transportation. It is expected that the provision of this service will lead to a reduction in the amount of hard rubbish in need of disposal across the Shire.

A new green waste collection service was introduced in the municipality in January 2007. To date around 7000 residents in township areas have taken up the service. In 2007 approximately 2500 tonnes of green waste were collected. This service is limited to township areas as it is assumed that residents in rural areas have the space to dispose of green waste by other means.

The issues

A review of council Merit reports has identified Dumped Rubbish as a priority litter issue for residents in Cardinia. In 2006 the most reported dumped item was garden rubbish. More than a year after the introduction of a 240 litre green waste fortnightly kerbside collection service in township areas, garden rubbish remains the most reported dumped rubbish item followed by beds and mattresses, tyres and wheels, white goods and paper. Some variation occurs from month to month with the third, fourth and fifth most reported items, however, garden waste invariably remains the most dumped and beds and mattresses the second most dumped items.

Graph 1 below, illustrates the ten most commonly dumped items in Cardinia Shire in 2007. Approximately 70 per cent of these items could have been recycled.



Graph 1: Ten most dumped items in Cardinia Shire from January 2007–January 2008

Litter is an accumulative problem as people tend to leave litter where they see it. This is particularly evident with illegally dumped rubbish. Out of the way roadsides, undeveloped house blocks and reserves are common targets. Roadsides that are repeatedly targeted include McDonald's Drain Rd, Mulcahy Rd and Peck Rd in Pakenham, A'Beckett Rd in Bunyip and Lecky Rd and Henry Rd in Officer. Pakenham has the highest reported incidence of dumped rubbish with 95 complaints from January 2007 to January 2008, followed by 26 for Cockatoo and 22 for Officer.

Charity shop clothing bins are also a target for rubbish dumping. Sometimes this may be due to the bin being too full. At other times rubbish that is not fit for reuse is being dumped. Charity shop collection bins can create dumping hotspots as they are generally placed in car parks and other 'out of the way' places, making it possible for people to dump without detection. Council issues permits under Local Law 10 Section 52 for clothing recycling bins on the grounds that goods are not deposited near or around the bin. Other Councils have dealt with this issue by allowing charities to place wheelie bins on the footpath during the day for the collection of goods. The benefits of this system are that bins can be kept within sight of the store volunteers whilst being used and can be stored inside at night.

The main reasons people give for dumping rubbish include:

- Correct disposal is too expensive
- Lack of transport

- Limited storage facilities while waiting for a hard waste collection
- Don't know what else to do with it
- Can't be bothered or don't care about 'doing the right thing'
- Easier to dump and there will almost certainly be no reprisals¹¹

Research suggests that a process of intervention can break the cycle of rubbish dumping. If the only action taken by a council is to remove dumped rubbish after it has been reported, it gives the community the impression that Council accepts the situation. If, however, Council investigates the incident, utilising 'under investigation tape' and issuing 'clean up notices' rubbish is generally removed within 48 hours and the impression given is that Council takes the issue seriously¹².

Currently Cardinia Shire Council budgets around \$34,000 for the clean up of dumped rubbish every year however this amount is usually exceeded. In 2007 one incident alone cost Council in excess of \$20,000. Unfortunately, despite investigation by the EPA, the perpetrator in this instance was not identified and penalised.



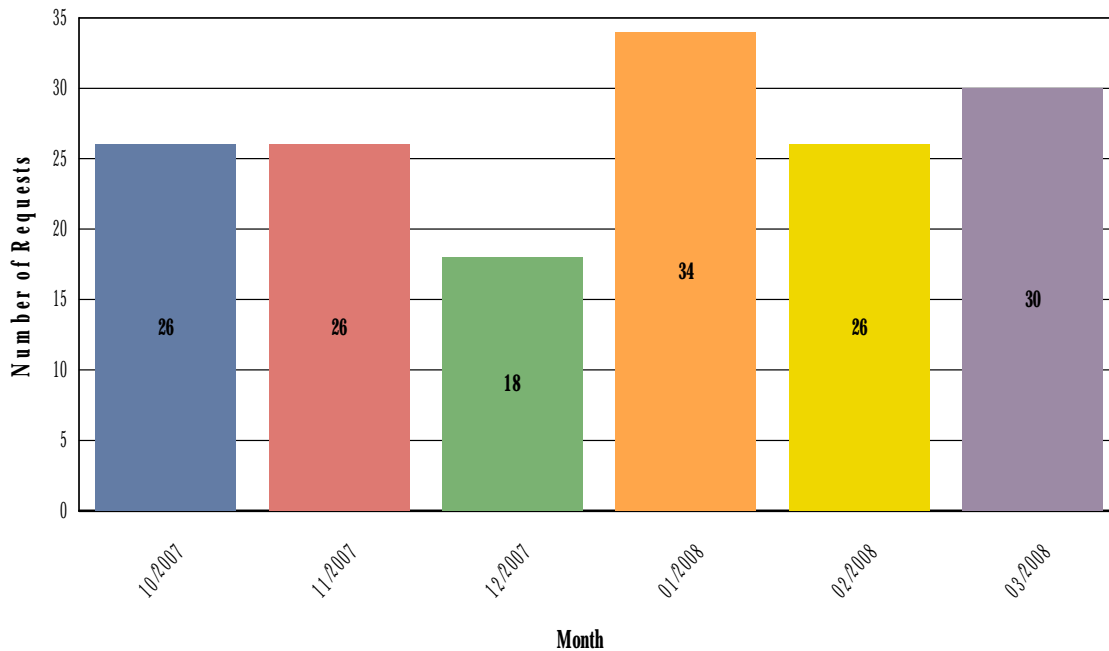
It is yet to be seen whether the reintroduction of a twice yearly hard rubbish collection service will cause a decrease in the incidence of illegally dumped rubbish. This should be the case if those dumping rubbish locally also live locally and therefore benefit from the collection service. Anecdotal evidence from the depot suggests that the months following the first collection in December 2007 saw a decrease in call outs for dumped rubbish collection.

However, as shown in Graph 2 below, a report of Merit requests suggests that call outs increased in January, immediately following the hard rubbish collection. This report is probably reflecting the incidence of some residents putting rubbish out for collection after the collection date which may then have been reported to Council as dumped rubbish.

¹¹ Victorian Litter Action Alliance, *Litter Prevention Kit – Illegal Dumping*, Melbourne, 2007

¹² Victorian Litter Action Alliance, *Litter Prevention Kit – Illegal Dumping*, Melbourne, 2007

Dumped Rubbish /Litter Complaints by Month



Graph 2: Report of dumped rubbish complaints before and after the hard rubbish collection in December 2007

Recommendations

	Action	Department responsible	Budget	Year
1.1	Run media campaign highlighting the penalties for rubbish dumping	E&H, Comms	\$2500	2008–09
1.2	Commence the installation of signs in areas where rubbish dumping is prevalent, highlighting penalties	E&H, Comms, Depot	\$1000	2008–09
1.3	Develop promotional materials for hard & green waste services and identify free disposal points for recyclable materials	E&H	\$2500	2008–09
1.4	Review Council procedure for investigating and following up dumped rubbish	E&H, Local Laws, Depot		2008–09
1.5	Trial utilisation of investigation tape & postcards when investigating dumped rubbish	Local Laws, Depot, E&H	\$1500 (per 48 rolls)	2009–10 - ongoing
1.6	Review Council procedure and resource allocation for collecting dumped rubbish to ensure a more responsive service	E&H, Depot		2009–10
1.7	Investigate the costs involved in running an annual or bi-annual kerbside clothing collection	E&H		2008–09
1.8	Review Council procedure for issuing permits for charity shop clothing bins and investigate options for non-compliance	E&H, Local Laws		2008–09
1.9	Consider trialling use of wheelie bins on pavements for clothing collection in place of skips	E&H		2008–09

2. Cigarette butt litter

Current situation

In Cardinia cigarette butt litter is most prevalent at recreation reserves; licensed venues; commercial areas and transport stations and stops. When cigarette butt litter occurs on footpaths it is swept up in the street cleansing process. In front of licensed venues cigarette butt litter is often dropped in garden beds. Council's parks and gardens contractors are responsible for removing litter when weeding and garden bed maintenance is undertaken.

Council has not as yet installed any cigarette butt bins in any public places. Following the legislation banning smoking indoors, some licensed venues installed cigarette butt bins themselves for patrons.

Several street litter bin enclosures have a corner engraved with a cigarette butt out symbol which is designed for butting out cigarettes prior to disposing of them in the litter bin. A visual inspection of several litter bins throughout the Shire indicates that in many cases the butt out corner is being used, however, the cigarette butt is then dropped onto the footpath.

The issues

Cigarette butts are a significant litter issue as they have numerous impacts on the environment and are the most littered item in the Shire. Research indicates that cigarette butts can take between 2 months and 36 months to degrade, depending on the environmental conditions. Other organisations claim they can take up to 15 years to break down¹³.

Although individual cigarette butts seem small, given the number that are littered each year, approximately 7.2 billion Australia wide, the toxic and soluble chemicals that they contain quickly add up¹⁴. Chemicals can leach from cigarette butts within one hour of contact with water. These chemicals are toxic to small crustaceans at concentrations as low as one cigarette butt per 40 litres of water. This toxicity can persist for as long as seven days¹⁵.

Litter audits conducted by Council between July 2007 and February 2008 at a number of cigarette butt litter hotspots demonstrate that cigarette butts are the most commonly littered item in the municipality. A contributing factor to this has been the ban on smoking indoors introduced in July 2007 which has increased the amount of smokers outdoors on footpaths in front of licensed venues, cafes and shops.

The attitude of smokers is another contributing factor to the high occurrence of cigarette butt litter. Many smokers do not realise or believe that littering their cigarette butts has an environmental impact or is an inappropriate behaviour¹⁶. Six out of ten Australian smokers in outdoor settings litter their cigarette butts¹⁷. Smokers do not view cigarette butts as litter in the same way that they view papers, bottles, cans and other items as litter¹⁸. Although smokers do not view their behaviour as inappropriate, when questioned many smokers blame their behaviour on a lack of well designed, well placed bins. Over 80 per cent of smokers questioned also said they would bin their butts if suitable bins were available¹⁹.

¹³ Victorian Litter Action Alliance, *Litter Prevention Kit – Cigarette Butts* Melbourne 2007

¹⁴ Butt Littering Trust: www.buttlitteringtrust.org.au

¹⁵ Warne, M et al, *Variation in and causes of Toxicity of cigarette butts to a Cladoceran and Microtox*, University of Sydney, 2005

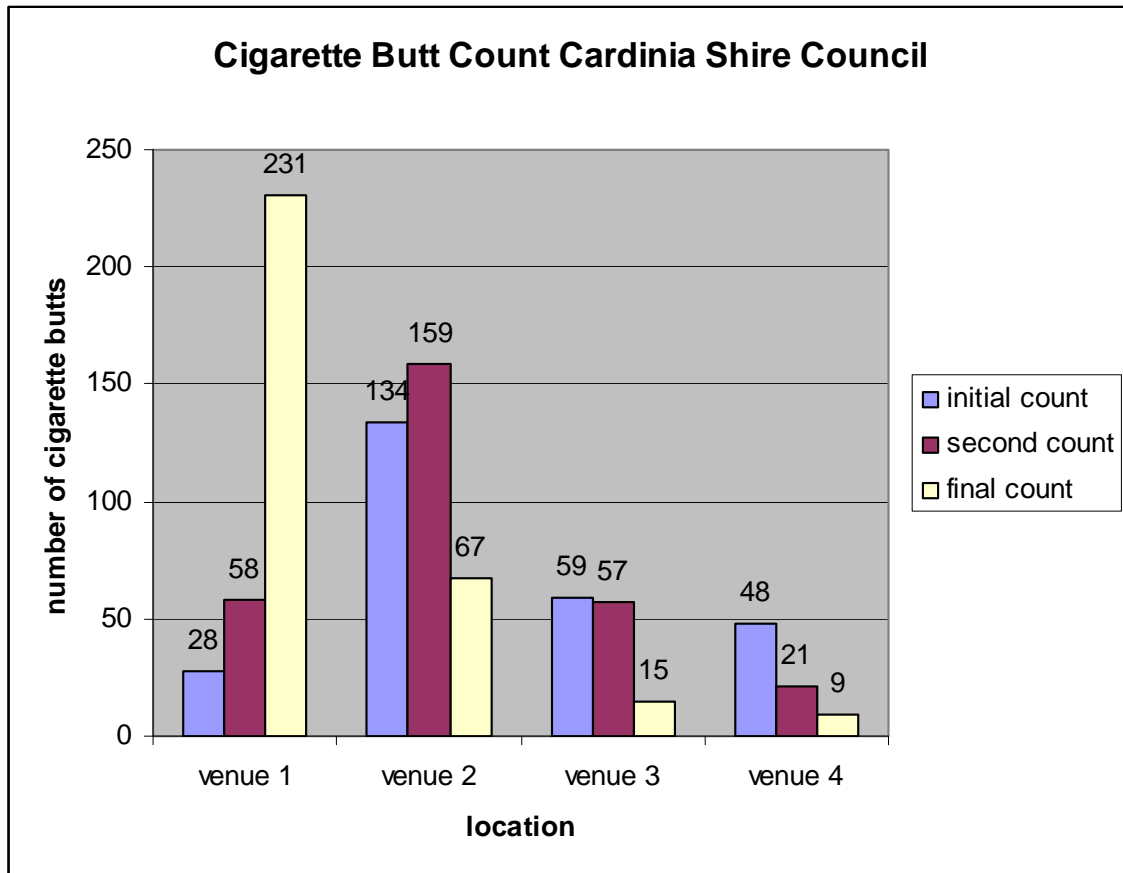
¹⁶ Keep Australia Beautiful National Association, McGregor Marketing, 1998

¹⁷ Community Change, *Measuring Environmentally Desirable Behaviour in Australia: Littering Behaviour Study III*, BIEC Report, 2001

¹⁸ Keep Australia Beautiful National Association, McGregor Marketing, 1998

¹⁹ Keep Australia Beautiful National Association, McGregor Marketing, 1998

To determine the extent of the problem in this municipality three counts were conducted at four licensed venues prior to, immediately after and one month after the introduction of legislation to ban smoking indoors. The result of these litter counts are shown below in Graph 3.



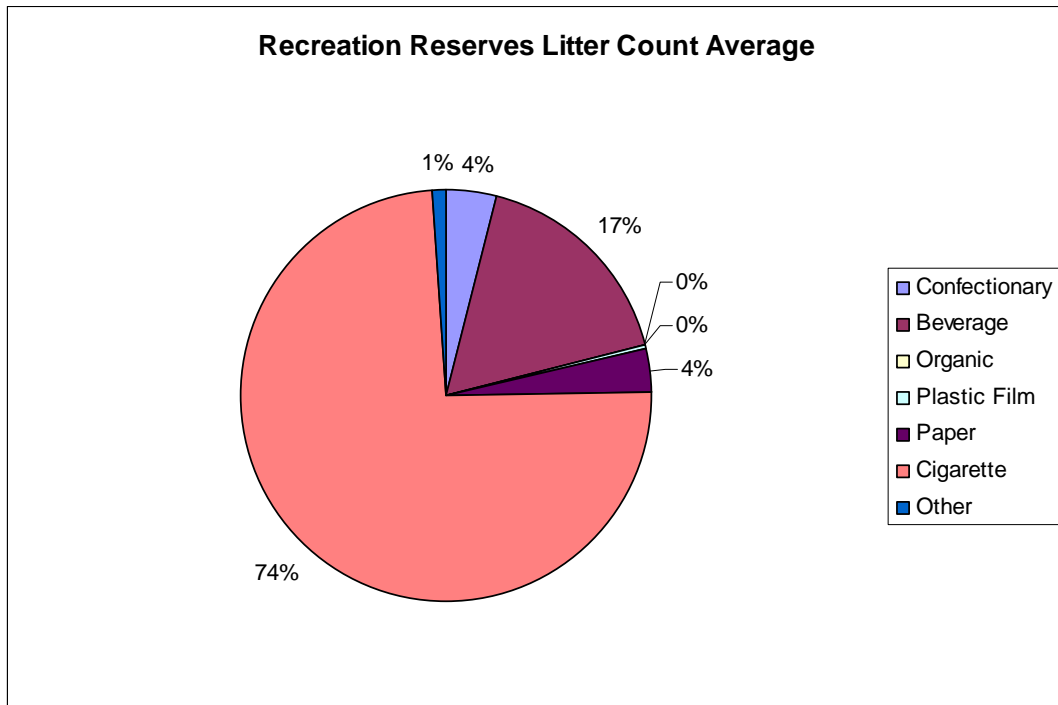
Graph 3: Cigarette butt counts at four licensed venues on 1/7/07, 8/7/07 and 17/9/07

It was found that immediately following the ban, cigarette butt litter increased, except for at two venues where cigarette butt bins were provided for patrons. By the third count, three out of the four venues had provided cigarette butt bins and these had significantly less cigarette butt litter than at the first count.

The one venue that had not provided butt bins had significantly more cigarette butt litter following the introduction of the new legislation. These results demonstrate that the provision of butt bins in areas where people congregate to smoke helps to reduce cigarette butt litter.

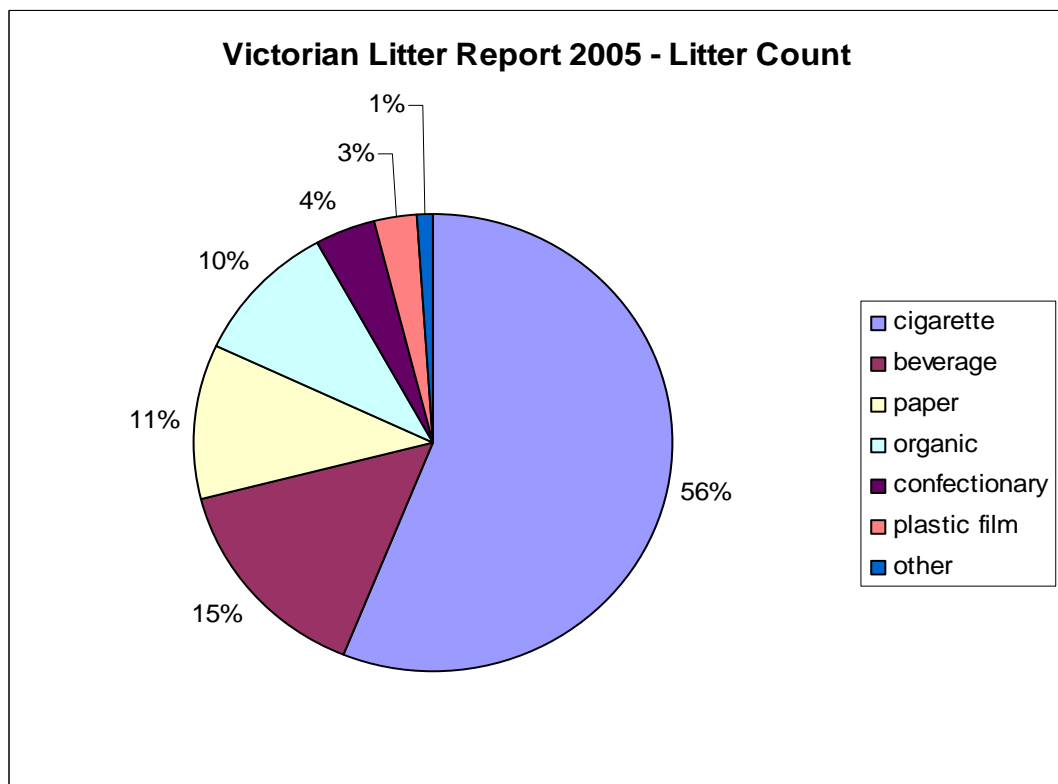
Further litter counts were undertaken at seven recreation reserves across the Shire in February 2008 to determine whether recreation reserves are a cigarette butt litter hotspot. The results from these seven surveys were averaged and the results are shown below in Graph 4 (page 12).





Graph 4: Litter count averages for 7 reserves in Cardinia Shire, February 2008

The results of these litter counts demonstrate that cigarette butt litter accounts for, on average, 74 per cent of litter counted at recreation reserves, which is almost 20 per cent higher than the state average which is shown in Graph 5 below.



Graph 5: State wide litter audit 2005

Recommendations

Installing cigarette butt bins significantly contributes to reducing cigarette butt litter. Butt bins should be installed in high use areas where butt litter is highly visible and/or difficult to remove. The infrastructure should ideally be accompanied by a program of education and enforcement.

	Action	Department responsible	Budget	Year
2.1	Apply for litter grant from Sustainability Victoria for the purchase of 21 butt bins for installation in seven recreation reserves	E&H	\$10,000	07/08
2.2	Provide cafes in township areas with windproof ashtrays for use on outside tables on condition of displaying anti-littering educational material	E&H	\$2000	2008–09
2.3	Run media campaign on cigarette butt litter highlighting environmental impacts and penalties that apply for littering	E&H, Comms	\$1000	2008–09
2.4	Trial installation of butt bins in 6 townships	E&H, Depot	\$2000 (\$300/bin)	2008–09
2.5	Investigate contract development to empty butt bins	E&H		2008–09
2.6	Produce stickers to attach to bins with butt out corners	E&H, Comms	\$1500	2008–09

3. Construction and demolition litter (building sites)

Current situation

In December 2005 Cardinia Shire Council changed the local laws for building sites. From this date onwards Building Permits were required to meet Local Law requirements such as asset protection permits, temporary fencing, silt control, containment of windblown litter, signage and hygiene facilities.

Prior to these changes Council received numerous complaints about litter from building sites, since the changes complaints have reduced significantly. These local laws are enforced by a dedicated Building Amenity Officer. Any breach of these local laws can incur a \$200 Local Law infringement, or a maximum court penalty of \$2000. The preferred approach of the Building Amenity Officer is not to issue penalties but to build relationships with builders and developers, educating and encouraging them to adhere to the requirements.

This approach has been met with great success as demonstrated in the Spring 2007 Keep Australia Beautiful Clean Site Audit. Cardinia Shire Council was audited and received above average results in providing waste bins on site, showing evidence of waste sorting and constructing site fencing. The rating for windblown litter was average and the ratings for stockpiles and off-site sediment movement were below average²⁰. These results also demonstrate that the main litter issue relating to construction and demolition is not solid gross pollution but stormwater quality, which is dealt with in the Stormwater Management Plan.

The issues

The primary issue relating to construction and demolition is stormwater quality. Other issues include windblown litter and the illegal dumping of building rubble. Windblown litter is mainly in the form of plastic packaging from building materials. Site fencing helps to minimise the problem however it is

²⁰ Keep Australia Beautiful, Spring 2007 Clean Site Audit Report, Melbourne, 2007

apparent that plastic still escapes from building sites and has the potential to travel and end up in pastures, watercourses or tangled on fencing. It can harm both wildlife and domestic stock and also causes visual pollution. It is difficult to identify the site from which the plastic has escaped once it is outside a perimeter fence as generally it has no markings on it.

The Merit system has four different categories for building rubble when it is reported as a dumped rubbish/litter item. When these four categories are combined, building waste comprises the third most reported dumped rubbish/litter type. This can be seen as a general dumped rubbish issue or an issue relating more specifically to the construction and demolition industry which has a very high turn over of materials and waste products.

Recommendations

The results from the Keep Australia Beautiful *Clean Site Audit* indicate that our current approach is working. The recommendation is therefore to continue with the current program of education and negotiation when issues arise on building sites.

	Action	Department responsible	Budget	Year
3.1	Investigate options for reporting the results from the KAB Clean Site Audit and publicly praising developers who 'do the right thing'	Comms, Local Laws, E&H	\$1000	2008-09
3.2	Promote waste sorting options provided by SITA through clean site program	E&H, Local Laws, Comms		2008-09
3.3	Develop site waste management literature for builders, contractors and home owners i.e. Guide to waste disposal and recycling options	E&H, Local Laws	\$1000	2009-10

4. Litter on roadsides, schools, parks and gardens

Current situation

Litter bins are provided by council in all parks and gardens in the Shire. The majority of these are 240lt MGBs with a small number of 55lt post mounted units. Litter bins are emptied by depot staff.

Litter that occurs in parks and gardens is dealt with by the parks and gardens maintenance contractors. They are required to collect litter prior to mowing and when weeding garden beds. The duration of time between mowing and litter collections varies depending on the type of park or reserve being maintained. For example areas of urban turf are cut once a week between September and December and fortnightly from January to August. Parkland turf is cut fortnightly from September to December and every three weeks between January and August. Neighbourhood turf is cut every three weeks all year round and natural turf is cut three times per year.

The service providers are also able to respond to individual requests to clean up littered areas outside of the maintenance round. Litter hotspots in Pakenham include Bourke Park and PB Ronald Reserve.

Litter in primary and secondary schools is managed by the staff and students. Perimeter fences help to contain windblown litter. Despite this it is still possible to find school lunchbox litter in waterways close to school grounds.

Roadside litter is the responsibility of VicRoads if it occurs on one of their roads between the roadside and the kerb. They require their maintenance contractors to collect litter prior to mowing and will clean up litter that is reported to them by a member of the public. All other roadside litter is the responsibility of Council. The majority of litter fines issued in Victoria relate to littering from motor vehicles and originate as reports made by members of the public. This type of enforcement is far more cost effective

than face to face activity by litter enforcement officers, and empowers members of the community who want to do something about littering²¹.

The community not only report litter but also contribute to litter clean up. The township of Emerald has a self organised litter crew called the 'Clean Team' which conducts a clean up every two months in different areas of the town. Council supports their activities through the provision of safety wear.

This year, Cardinia had nine registered sites for Clean Up Australia Day with around 180 volunteers turning up on the day. The high level of participation in Clean Up Australia Day indicates that many people in the community are concerned about litter and are willing to act to address the problem.

The 2006 National Litter Index places beverage containers as the number one litter item by volume and the number three litter item by weight. Beverage containers represent a loss of valuable resources that could have been recovered through recycling. Council is currently rolling out additional public place recycling facilities to townships and recreation reserves to increase the recovery of these products. Container Deposit Legislation (CDL) is a response to beverage litter currently in operation in South Australia which provides a refund on empty beverage containers. Nationally the introduction of CDL is currently part of a Senate Inquiry into waste streams and Council intends to make a submission to any review at the appropriate time.



The issues

General littering along roadsides, in schools, and in parks and gardens is a highly visible form of littering throughout the Shire. Plastic bags, beverage containers and takeaway food packaging predominate along with cigarette butt litter. This litter has the potential to enter waterways via the stormwater system.

Litter makes a place seem uncared for and highly littered areas can feel unsafe. The most common reasons people give for littering are “too lazy” (24%), “no ashtray” (23%) and “no bin” (21%)²². People are more likely to litter in areas where they see litter, therefore prevention and timely clean up are the most effective measures to reduce litter.

Schools, in particular secondary schools, are a hotspot for litter in the municipality which has been found to escape into nearby drains and creeks. Secondary school students are a key user group to focus on with a litter prevention behaviour change program. Council has not engaged directly with secondary schools in the municipality about the issue of litter.

²¹ EPA Victoria, Litter Enforcement Toolkit, 2007

²² Community Change, Measuring Environmentally Desirable Behaviour in Australia: Littering Behaviour Study III, BIEC Report, 2001

Recommendations

	Action	Department responsible	Budget	Year
	SCHOOLS			
4.1	Meet with schools, discuss existing litter programs, develop action plans. Consider establishing a school environment network	E&H		2008–09
4.2	Introduce the Sustainability Victoria LESS program into secondary schools	E&H	\$2000	2008–09 - ongoing
4.3	Engage Vox Bandicoot in a litter education program with 5 schools and invite families to attend educational performances	E&H	\$11,000	2009–10
4.4	Run litter essay/poster competition with schools – use designs to decorate litter bins	E&H	\$3000	2009–10
4.5	Develop educational materials for use with primary and/or secondary students	E&H	\$3000	2009–10
	INTERNAL & COMMUNITY			
4.6	Put EPA litter report forms in all council vehicles and on website	E&H	\$500	2008–09 ongoing
4.7	Promote and expand Emerald Clean Team	E&H, Depot, Comms		ongoing
4.8	Promote VicRoads Adopt-A-Roadside Scheme	E&H, Comms		2008–09
4.9	Seek funding to erect signs on high profile roadsides advertising the EPA Litter Report Line and penalties for littering (artwork from VLAA)	E&H, Depot		2009–10
4.10	Conduct a ‘branded litter’ audit on roadsides, parks and footpaths	E&H	\$2000	2009–10
4.11	Consider developing a Council sponsored “Tidy Street” competition or ‘Adopt-a-Spot’ program	E&H, Comms, Parks & Gardens	\$5000	2009–10
4.12	Purchase sign to promote Emerald Clean Team and assist with other publicity	E&H	\$500	2008–09
4.13	Duplicate Clean Team model in other townships	E&H + Community Strengthening		2008–09
4.14	Warn residents that overloaded garbage bins will not be collected	E&H		2008–09

5. Commercial and industrial litter

Current situation

Litter bins are provided by Council in all township areas, these are emptied by depot staff. These are predominantly post mounted units with 55lt galvanised steel inners. These are intended for use by pedestrians. Sometimes these bins get used by traders who have insufficient waste disposal facilities.

A regular street cleansing program exists to remove pollutants from footpaths and kerbside channels. Kerbs, channels and footpaths are swept in township areas on a weekly basis, with the exception of Pakenham which is swept three times a week. Council spends \$289,874 annually on street cleansing. Gross pollutant traps (GPTs) have been installed to capture litter washed into the stormwater system in the following locations:

- Lakeview Terrace Wetlands, Lakeview, Beaconsfield (decommissioned)
- Vista Drive, Beaconsfield (decommissioned)
- GPT 1 Tantallon Boulevard Wetlands, Officer, Panorama Estate (being replaced)
- GPT 2 Tantallon Boulevard Wetlands, Officer
- Buchan Green Wetlands, Pakenham (Delfin)
- The Glen Wetlands, Pakenham (Delfin)
- Clearwater Wetlands, Clearwater Drive, Pakenham (Delfin)
- Flower Street, Pakenham (behind Safeway)
- Campbell Street, Pakenham (decommissioned)

The majority of GPTs exist in residential areas where they have been installed by the developer. There are ongoing issues with the servicing and maintenance of existing GPTs. Two GPTs are no longer in operation because they caused localised flooding following heavy rain. The Campbell Street GPT was removed as operations staff were unable to service it.

The current approach taken by engineering is to install grated pits in the kerbside to stop gross pollutants from reaching the watercourse. These are able to be cleansed through the street sweeping program but still require additional maintenance. Due to the infrequency of street sweeping in some areas it may be four to six weeks before this litter is collected in which time it has the potential to be moved by the wind whilst also creating visual pollution. It also increases the volume of litter to be collected by the street sweeper on its rounds.

To improve recovery rates for recyclables disposed of away from home Council has installed 120 litre public place recycling bins in several townships. They are located in Main St Pakenham, McBride St Cockatoo, Kilvington Drive Emerald, Westernport Rd Lang Lang and Toomuc Reserve Pakenham, Main St Garfield and Seven Mile Rd Nar Nar Goon. The provision of public place recycling across the municipality will be increased over the 2008-2009 financial year.

The issues

Commercial areas are a major source of litter entering the stormwater system. Much of this litter comprises food and beverage packaging, paper, plastic bags and packaging and cigarette butt litter. Statistics indicate that around 30 per cent of the population litters in public places and that people living in regional areas are more likely to litter than those living in urban areas²³.

²³ Victorian Litter Action Alliance, *Litter Prevention Kit Campaign Toolkit*, Melbourne, 2006

The main reasons people give for littering are being “too lazy” to walk to a bin or that there was no bin provided²⁴. Street sweeping helps to remove some of this litter as does providing an adequate number of litter bins. When litter does enter the stormwater system GPTs can capture it before it reaches a major watercourse. GPTs however, are only useful if they are well designed and installed in places where they can be easily cleaned and serviced. Installing GPTs requires an ongoing program of cleaning and maintenance.



Recommendations

	Action	Department responsible	Budget	Year
5.1	Conduct an audit of bin placement with litter crew	E&H, Depot	\$500	2008–09
5.2	Review guide for bin placement to include commingled recycling bins	E&H		2008–09
5.3	Investigate ways to minimise use of single use condiment sachets & paper serviettes in cafes with outdoor eating areas	E&H, Planning, Local Laws		2008–09
5.4	Review existing street cleansing program	E&H, Depot		2008–09
5.5	Include litter clean up within given radius of shop in planning permit provision for take away food premises	E&H, Planning, Local Laws		2008–09
5.6	Investigate best options for reducing litter in stormwater system – grated pits or GPTs	E&H, Depot		2008–09
5.7	Review the Stormwater Management Plan	E&H		2008–09
5.8	Replace GPT at Campbell St, Pakenham	Engineering, Depot	\$20,000	2009–10
5.9	Commence a process to identify appropriately placed litter bins to be complemented with a commingled recycling bin alongside	E&H, Depot		2009–10
5.10	Where no bins are available educate people to take their rubbish home with them as per Parks Victoria policy in National Parks	E&H		2009–10

²⁴ Victorian Litter Action Alliance, *Litter Prevention Kit Campaign Toolkit*, Melbourne, 2006

6. Dog excrement

Current situation

At present there is no Council owned infrastructure within the Shire aimed at addressing the issue of dog excrement. Lakeside estate has a number of bag dispensers around the lake. In other public places the expectation is on the dog owner to bring their own bag and clean up after their own dog.

The issues

At present dog excrement is not a major issue in most areas of the municipality. However, increasing urbanisation places greater pressure on open space areas to accommodate the needs of all user groups. One potential conflict in parks and on walking tracks is the issue of dog excrement. The strategy most commonly used by local authorities to deal with dog excrement is to provide clean up bag dispensers at convenient locations along regular dog walking paths.

As well as improving amenity of the municipality, installing dog excrement bins increases awareness of dog excrement as a litter issue. They provide the infrastructure and also the space to promote the message to clean up after your dog.

These are, however, often susceptible to vandalism and may create yet another litter issue when plastic bags escape. Solutions include using paper bags instead of plastic bags or encouraging dog owners to bring their own bags when walking their dogs. The proposal to trial an off leash area for dog walking along Toomuc Creek and an increase in urban dog ownership raises the issue of dog excrement as a litter problem that will potentially intensify as the urban population continues to grow.

Recommendations

	Action	Department responsible	Budget	Year
6.1	Investigate a trial of dog excrement clean up bag dispensers at existing off leash areas	E&H, Depot	\$4000	2009-10
6.2	Run media campaign raising awareness of dog excrement as a litter issue	E&H, Comms	\$2000	2009-10
6.3	Develop positive behaviour reward scheme for dog owners	E&H, Local Laws	\$2000	2009-10
6.4	Trial compost loo for dogs at one off leash site in collaboration with the Cardinia Dog Owners Group	E&H, Parks and Gardens	\$2000	2009-10
6.5	Provide more dog excrement bins around Shire to encourage appropriate disposal by dog owners	E&H, Depot		2009-10

Summary

The need for a Litter Strategy was identified in the Waste Management Strategy 2005–09. This document outlines how litter impacts on the environment, the community and Council. A strategy dealing specifically with litter helps to identify what approaches currently exist to manage the various litter issues. From this it is possible to see which ones are effective and where opportunities exist for improvement.

The recommendations contained within this strategy include both internal operational changes and external community based actions. This document offers a basis from which to make informed decisions relating to litter as a waste management and stormwater quality issue.

	Action	Department responsible	Budget	Timeframe
7.1	Establish an internal Litter Taskforce to progress the development, implementation and review of the litter strategy	E&H		2008–09
7.2	Check progress of strategy implementation annually	E&H		2009–10
7.3	Conduct review of strategy in 3 year's time	E&H		2010–11

TOTAL BUDGET 2008–09 = \$27,000

BUDGET CONSIDERATION 2009–10 = \$56,500