

PROJECT SNAPSHOT

LITTER ISSUE

Roadside Litter: The aesthetic, environmental and economic impacts of litter thrown from vehicles and lost from unsecured loads.

KEY ELEMENTS

- Community launch of Regional Roadside Litter Campaign 17th Dec 2004.
- Mobile Billboards installed for 3 weeks
- Permanent roadside signage 'Now Targeting Roadside Litter' (six signs)
- EPA Litter Report Line promoted via radio, newspaper, billboards and brochures.
- Litter audits of billboard sites and traffic/litter comparisons undertaken
- Free car litter bags distributed via fast food outlets, petrol stations, Shire Offices, tourist information centres etc.
- EPA Litter Report Forms distributed throughout all Shire owned vehicles.

KEY MESSAGE

'Don't Waste Our Roadsides'

PROJECT OUTCOMES

Raised awareness amongst tourists and general community. Campaign resulted in an overall reduction of litter across all four project sites by 63%. The uptake & use of car litter bags & Litter Report Forms is indicative of influenced behavioural change.

LESSONS LEARNED

Need to plan and order materials/resources for program well in advance for best coordination and impact of litter campaign within intended timeframe.

PROJECT PARTNERS

EcoRecycle Victoria, Beverage Industry Environment Council, Barwon RWMG, EPA, City of Greater Geelong, Colac Otway Shire, Surf Coast Shire, Borough of Queenscliffe, Community Change, VLAA, Community Litter Prevention Task Forces.

FINAL REPORT

Organisation Name: Barwon Regional Waste Management Group

Project Title: 'Don't Waste Our Roadsides' Regional Litter Campaign

Date: 31/03/05

PROJECT SUMMARY

This project aimed at raising awareness of the aesthetic, environmental and economic impacts of litter thrown from vehicles and lost from unsecured loads. It encouraged people to take responsibility for this litter through an integrated and strategic approach.

In summary the objectives were to raise awareness of the impacts of roadside litter in the community, to reduce this litter through an integrated campaign and motivate both locals and visitors to utilise the EPA Litter Report Line.

The project took place across 4 chosen sites, one in each Shire of the Barwon Region as follows:

1. Beckley Park – City of Greater Geelong
2. The Narrows – Borough of Queenscliffe
3. Anglesea Rd – Surf Coast Shire
4. Lavers Hill Rd – Colac Otway Shire

The campaign ran over the summer peak period from December 2004 to February 2005. The high amount of tourists to the region were the main target audience for this campaign.

THE PROJECT

A regional litter forum was held in the Barwon Region in August 2004. The purpose of this forum was to bring the community together allowing them to have a voice and work together in determining priority litter issues for the region.

A grant application was developed around the highest priority issue identified at that forum which was roadside litter. Each Shire selected litter hot spots and the community brainstormed activities as part of an integrated approach to addressing the issue in the region. This campaign was designed to strengthen and support the efforts already undertaken by Council roadside crews, Adopt a Highway projects and other local clean up initiatives. The focus of this program however was on litter prevention.

THE PROJECT

The official launch by Ian Tresize (Member for Geelong) kicked off the campaign on Friday 17th December 2004 at Balyang Sanctuary. Approx 45 people from across the Barwon Region attended the launch.



Figure 1.

Regional Litter Campaign launch at Balyang Sanctuary.

Left to Right: Cr Tony Ansett (City of Greater Geelong - CoGG), Maree McCaskill (Beverage Industry Environment Council), Cr Barbara Abley (CoGG), Ian Tresize (Member for Geelong), Cr John Burgess (CoGG), Enzo Brucella (Barwon RWMG)

The campaign was featured on K-Rock (a local radio station) with an interview of the project manager at the conclusion of the launch. Four skins were developed with the 'Don't Waste Our Roadsides' message (Figure 2) being the key theme and four skins were provided by the EPA promoting the Litter Report Line (Figure 1). Each billboard displayed one of each skin. The four mobile billboards were then installed at locations previously mentioned.



Figure 2.

'Don't Waste Our Roadsides' billboard featured opposite Beckley Park in the City of Greater Geelong. In front (left) Anne Miller – Waste Advisory Officer for City of Greater Geelong and (right) Elisia Dowling – Regional Education Officer for Barwon Regional Waste Management Group.

Prior to installation, audit plots were established at each billboard site for monitoring and evaluation purposes. The main findings from the audit are shown below in the results section. The Geelong Advertiser among other regional and local newspapers featured a photo of the billboards during the campaign (Figure 2).

Other program components involved the purchasing of 10,000 biodegradable car litter bags along with dispensers (Figure 3) for the distribution to the target audience. These were supplied to fast food outlets, petrol stations, Visitor Information Centres and Shire Office's across the region. Bundles of the EPA Litter Report Forms were also given to each Council for use in work vehicles.

FREE CAR LITTER BAGS

Keep our roadsides clean



Figure 3.
Graphic featured on
car litter bag
dispensers and
bags.



Please take your rubbish home

All of these elements combined were the reason for gaining such positive results from this campaign. The excellent results are not the reflection of any single activity but were effectively due to the integrated approach taken throughout the campaign to try and target the audience and engage them in different ways.

The target audience were primarily tourist traffic flocking to the coast during summer and using the Great Ocean Road. The audience was not exclusively tourists however the aim was also to raise awareness among the general community.

PROJECT PARTNERS

The project partners played a variety of important roles throughout the campaign, for example:

- EcoRecycle Victoria assisted with Launch arrangements and provided media support.
- The Beverage Industry Environment Council developed the 'Don't Waste Our Roadsides' graphic for the billboards, contributing this to the campaign and participated in the Launch.
- The Environment Protection Authority supplied skins for each of the billboards and Litter Report Forms.
- Key contacts from each of the four member Councils supplied staff to assist the project manager in the setting up of audit plots and the monitoring of those plots. This entailed the cleaning of project areas, litter counts and

traffic counting arrangements. These project partners also assisted with the distribution of the car litter bags and dispensers to various outlets and ensured that EPA Litter Report Forms were placed in Council vehicles.

- The Surf Coast Shire provided the ‘Keep our roadsides clean, take your rubbish home’ graphic for use on the car litter bags and dispensers.
- City of Greater Geelong provided media support for the campaign.
- Community Change assisted with the development of methodology for litter auditing process and analysis of results.
- Community Litter Prevention Task Forces were involved in consultation process at planning phase.
- Victorian Litter Action Alliance provided informational support by supplying case studies from similar campaigns to provide guidance with the implementation phase.

THE RESULTS

The method of evaluation used for this campaign was a roadside litter audit.

- All four billboard sites were audited – Anglesea Rd (SCS), Opposite Beckley Park (CoGG), The Narrows (BoQ), Lavers Hill Rd (COS)
- 4 plots were measured, pegged, and monitored at each site. The base measure for each plot was 48sq m and all were located within a distance of 5km from the billboard on left hand side of road heading towards the Great Ocean Road. The area was cleaned and left for a period of time prior to Christmas. The accumulated litter was then counted and cleaned from the area. Billboards were then installed and after another period of time litter was counted in the plot areas and cleaned once again.
- Traffic was counted at 3 of the 4 sites for a one week period during the positioning of the billboards.

Figure 4. shows that in a 10 day normal peak period without the billboards being displayed and campaign being implemented we would expect to see a total of approx 119 items of litter on the roadsides across all four project sites as compared with 39 items during the presence of the billboard. This is equivalent to an overall 67% decrease in litter from having no billboard to having 4 billboards displayed across the region (Figure 5).

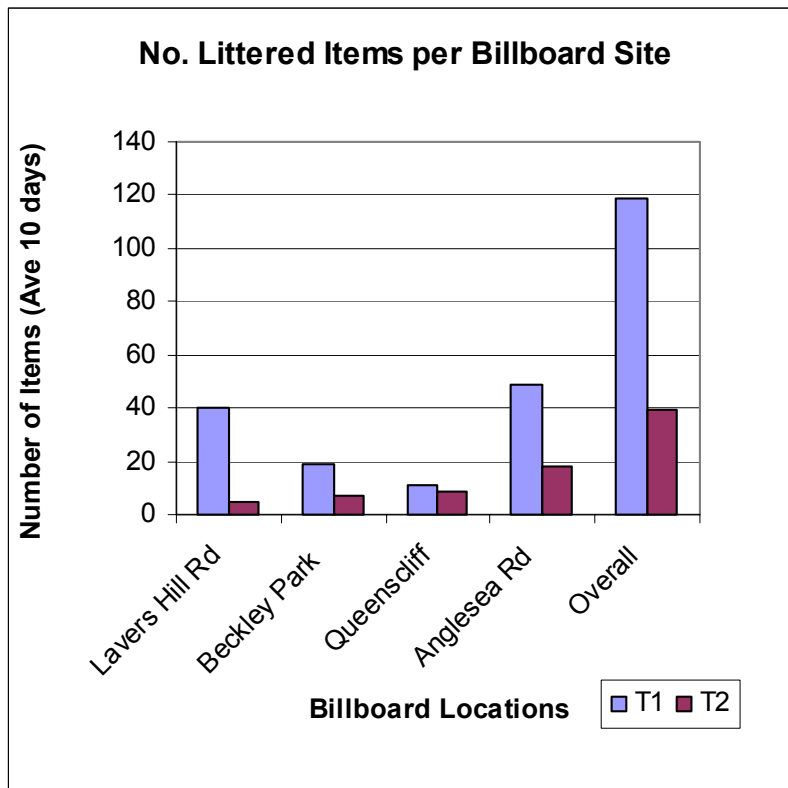


Figure 4.
Number of littered items found per site audited. A comparison between having a billboard and not having a billboard with key educational messages displayed.

The Anglesea Rd site was the most highly littered sight, followed by Lavers Hill Rd, Beckley Park and then Queenscliff. Queenscliff was considered to be the lowest littered site prior to the project being implemented and this was proven correct. Therefore as you can see in Figure 4 the billboard and campaign had the lowest impact for reducing litter at this site.

As shown in Figure 5 the billboard on Lavers Hill Rd and campaign as a whole had the biggest impact on litter in this area with an 87.5% decrease in littered items found once the billboard had been positioned and the campaign was in full swing. The Anglesea Rd and Beckley Park sites both had a 63% reduction of litter throughout the campaign (Figure 5).

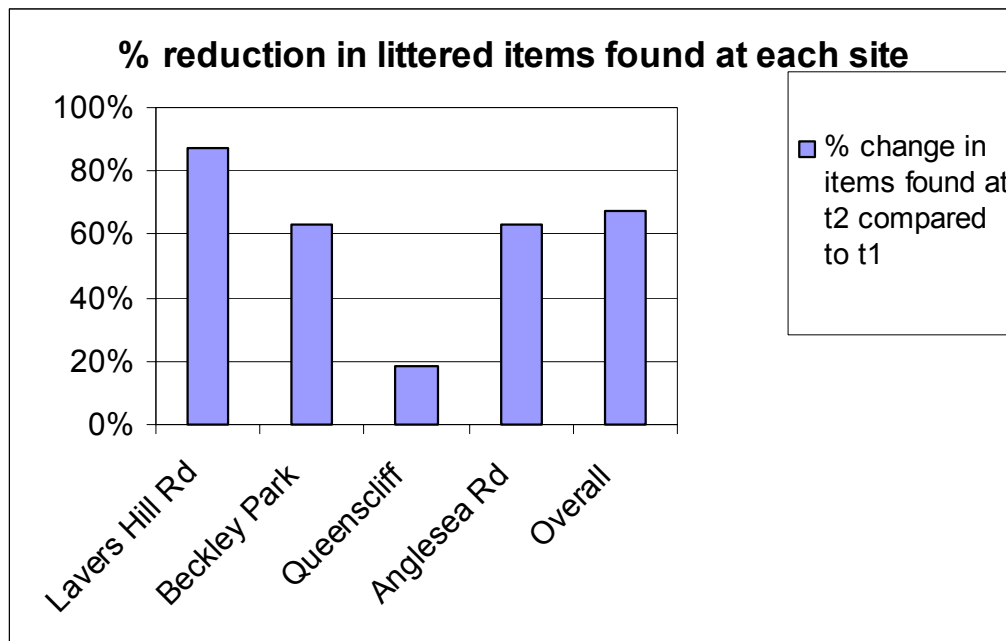


Figure 5.
Percentage Reduction of littered items found at each site.
T1 = before billboard
T2 = during billboard

Figure 6 indicates the relationship between the level of traffic compared with amount of litter found on roadsides. Figure 6 looks specifically at how much litter you would expect to find on roadsides at each project site per 1000 cars. Lavers Hill Rd had the highest vehicle to litter ratio as compared with the Queenscliff and Anglesea Rd sites. Beckley Park traffic was not counted due to being a three lane Highway at the conclusion of a Freeway. The interesting observation is that overall for the 10 days Lavers Hill Rd had the least total amount of cars travel down it with only 1485 cars counted as compared with 9285 on the Anglesea Rd and 7897 on the road into Queenscliff. This indicates that the isolated road conditions on Lavers Hill Rd (being a much quieter and windier road) may create a belief that people are not seen and therefore think it is ok to throw litter out their windows and get away with it. The presence of a Billboard may have caused these people to feel more exposed and not so hidden away forcing them to reconsider their actions. This is also indicated by the huge reduction in litter displayed in Figures 4 and 5. From the results in figure 6 overall in a ten day period you would expect to see approximately 2 items of litter accumulating per 1000 cars in a 48sq m area. This result is influenced by the presence of the billboards.

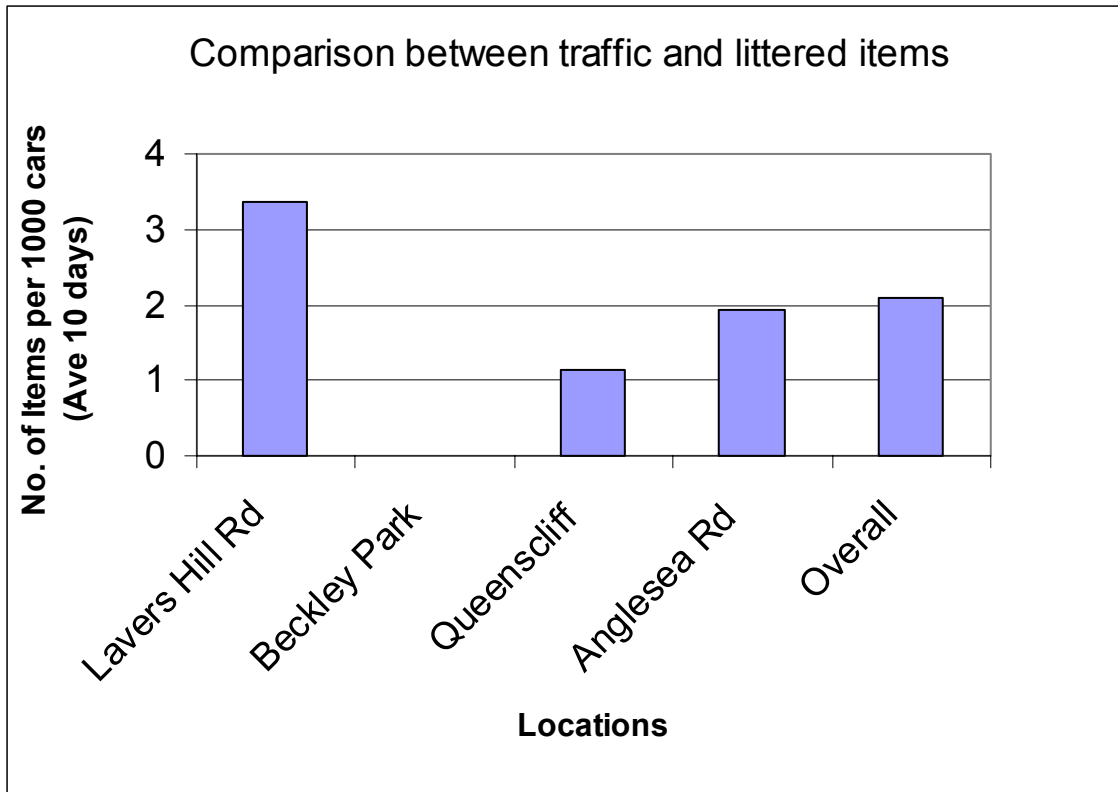


Figure 6.
Comparison between level of traffic and the number of littered items per site

Project outcomes

The project objectives were met with the overall impact of the project being that greater awareness was raised among the tourists and general community about roadside litter issues. The community were provided with a tool to be able to report incidents of littering via the EPA Litter Report Form or the advertised Litter Report Line. The car litter bags were useful in reminding people to dispose of their litter appropriately. The billboards helped to provide a presence in areas where litterers may have felt they would not normally be seen and therefore think it is ok to practice this behaviour. The demand for the car litter bags was overwhelmingly unexpected. People liked them and found them to be handy in their cars. This indicated a possible behaviour and attitudinal change and assisted us with the spreading of our key messages. The results demonstrated earlier in this report indicate good, strong project outcomes.

LESSONS LEARNED & RECOMMENDATIONS

1. The car litter bags were very popular and the 10,000 bags ran out fast across the region due to their popularity. However we were required to be sensitive to the townships who were plastic bag free or had aims of becoming plastic bag free. The size of the bags were a little small which limited what could be put into them. In future I would recommend that the size be reconsidered and made larger. At first the effectiveness of giving out car litter bags was uncertain. We were afraid we would be creating another waste item however we encouraged that people reuse the bag by emptying its contents into a bin and returning it to their car. Also it was extremely time consuming delivering the car litter bags/dispensers to outlets and explaining the campaign to shop owners. This needs to be taken into consideration during the planning phase and extra time allocated to compensate.
2. The practicality of the bag dispensers was questionable as they were too large for some counters and took up too much space for shop owners. This is worth considering before ordering things that are to be displayed on counters. The less space they take up the more favourable they are to shop owners.
3. The mobile billboards were very expensive to hire by the day and therefore the time they were displayed in key hot spots was limiting. There may be more effective means of getting the message out there for the entire duration of the summer period rather than a snap shot over the Christmas and New Year period. It was

suggested that large banners be developed and displayed at various outlets, rotating them around the region permanently.

4. During the auditing process if extra resources were available it would have been good to attempt to source and itemise the type of litter and where it may have come from (eg. MacDonald's, KFC etc.). This however would prove extremely time consuming. Litter was categorised into material types only. For the purpose of this case study only the totals have been provided. Full audit data is available for each site upon request.
5. It is essential that VicRoads and the relevant Council Officers be consulted with early to determine the most practical positions for the large mobile billboards. You need to ensure that the necessary approval is gained by the landowner whether it be VicRoads or the Local Council. You may need formal approval or to gain permits in some cases. If you are not prepared for this in the planning phase it could have the potential to set you behind on your timeline. The other thing to consider is traffic safety. Is the Billboard obstructing the view of oncoming traffic from turning vehicles? Is it an area where large machinery or vehicles need to manoeuvre?
6. You need to ask yourself is the area you have chosen for establishing audit plots frequently mowed? How frequently? Or are there any other factors to consider in the area that may impact on the audit results? It is important to be aware of these things and communicate to the relevant people in order to ensure the area is untouched until such time as the monitoring is complete. Otherwise it could mean the difference between obtaining accurate results. We were successful in actively involving these people in the auditing process so as they were aware of the project outcomes and given some ownership over the program.
7. If funding availability was announced earlier with more time to plan before the summer period this litter campaign would have been even more effectively coordinated. It is essential that there be enough time for the ordering of resources, educational materials, planning and organisational processes etc. prior to the campaign launch so as to allow for possible delays and still be able to deliver within the allocated timelines.
8. Another component of this campaign was to hold a forum that targeted service providers and building industry employees regarding the securing of loads when transporting waste materials so as not to lose any on the way to a transfer station. It was discovered however that the summer time is their busiest period and it was not physically possible for them to attend a forum at this time. It was decided that this be tackled separately to the current campaign for that reason and a forum be held later in the year.

FUTURE DIRECTIONS

This project most certainly has the potential to expand and be strengthened by complimentary activities in the future. Other suggestions have been developing a number of banners to be displayed at food outlets along the Great Ocean Road rather than using the temporary mobile billboards again and use of posters in shop windows.

The next step would be to gain feedback from project partners and participants to gain an indication of how we can best expand upon and strengthen the work already done. We may look also at involving the takeaway shop managers as project partners in future. Maybe even hold a "forum" of operators/managers as a joint combat on the problem. This would be good PR for them also.

CONTACT DETAILS

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BUDGET EXPENDITURE

Expenditure Item	Cost
1. Audit Methodology and analysis of results	\$2,600
2. Car litter bags and dispensers	\$5,000
3. Billboard hire and associated costs	\$9,400
4. Education and communication	\$3,000
Total	\$20,000

DECLARATION

Final report prepared by Elisia Dowling
Regional Education Officer
Barwon Regional Waste Management Group