



Clean Site – Building a Better Environment

Final Report

Keep Australia Beautiful Victoria

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## Acknowledgements

Keep Australia Beautiful Victoria acknowledges the support of its project partners:



Keep Australia Beautiful Victoria also acknowledges KESAB Environmental Solutions for their permission to adapt its Clean Site Program for introduction into the residential construction industry in Victoria.

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## Executive Summary

Clean Site - Building a Better Environment is an education program aimed at builders and tradespersons working in residential construction. Its aim is to reduce environmental impacts from building, by looking at ways to keep waterways clean, to use resources better and to reduce waste.

In Victoria the Clean Site program works by conducting builders forums, holding site meetings, undertaking mediation, hosting local government workshops and generally promoting good environmental practices to the residential construction industry at every possible opportunity.

Importantly Clean Site has also conducted site audits on six hundred building sites throughout twelve municipalities in Victoria's urban growth corridors twice a year for the past three years.

A valuable data set has been collected through the audits on waste management, fencing, windblown litter, stockpiles, washings, sediment movement, vehicle access and sediment control measures. This data provides the industry, developers, managing agents, local government and other stakeholders with important information about the environmental practices of the residential building and construction industry in Victoria.

Clean Site ('the project') was funded by the Sustainability Fund through its Round One funding. This funding allowed Clean Site to expand into six designated regional areas - Ballarat, Greater Bendigo, Greater Geelong, Latrobe, Moorabool and Mornington Peninsula after it commenced in six metropolitan municipalities through the Spring and Summer 2005 Site Audits.

It has also been supported by partners – Sita Environmental Solutions, Melbourne Water and AIM Hire allowing the project to continue to operate both within the metropolitan region and expanded until the end of the 2008-09 year with the conduct of a Summer 2009 audit.

As an independent, non-aligned environmentally based organisation, Keep Australia Beautiful Victoria has been in a unique position to help to educate the residential building and construction industry, the broader community and other key stakeholders about the impacts of residential construction practices and their ability to implement change.

With an overall rating from the audits of just below satisfactory, the general practices of builders and tradespeople involved in the residential construction industry are having some negative impact on the environment. There is still room for improvement before it can be asserted that their daily activities are not having detrimental impacts on our waterways and the environment more generally

Many though can take satisfaction in knowing that they are on the right path to minimising environmental impacts and that their concern for the environment is both genuine and heightened. With continued education, support, the removal of structural impediments and a number of key areas addressed, they will continue to improve.

## **Introduction**

### **Background**

The residential construction industry in Victoria faces many ongoing challenges. Some are unique to the sector, while others are shared by the broader construction industry. In turn these are overlaid by the general economic, environmental and social challenges that face all Victorians.

From increasing regulation, the early impact of rising interest rates and more recently the global financial crisis, to the pressure to meet energy and sustainability design requirements, the challenges are many and varied.

Add a competitive price driven market to an increasingly sophisticated customer base and it is clear that the residential construction industry operates within a complex and demanding space.

Not the least of the challenges faced by the industry, but one that could be easily overlooked is the management of the environmental impacts that arise from site management during the construction process.

Importantly two key areas, the impact that washings, sediments and litter have on storm water and waste management, particularly the amount of building and construction materials such as bricks, timbers and concrete going directly to landfill were identified as areas of concern.

Keep Australia Beautiful Victoria's Clean Site - Building a Better Environment is an education program designed to focus on minimising the environmental impacts from residential construction and is based on the successful model developed by KESAB Environmental Solutions in South Australia.

Since its beginning in 2005 Keep Australia Beautiful Victoria's Clean Site Program has helped to educate the building industry on how to manage the environmental impacts that arise from residential construction activity.

The Clean Site program has also encouraged the building industry and local government to work more cooperatively to identify issues, policies and local laws of concern and develop solutions that lead to better management of residential construction sites.

**Project Aim**

To reduce the environmental impacts from residential building and construction activity, by keeping waterways clean, using resources better and reducing waste.

**Project Objectives**

- To educate builders and tradespeople about the impact that their daily activities and practices have on the environment
- To conduct regular site audits to establish quantitative data on residential site management practices that have an impact on the environment
- To identify and address barriers that prevent the introduction of best practice local laws relating to residential construction across all municipalities in Victoria
- To educate all stakeholders about the importance of sound environmental management practices as they relate to residential building and construction.

## **Project Partners**

Clean Site – Building a Better Environment ('the project') was funded by the Sustainability Fund through Round One Funding announced in 2004.

The Clean Site Program itself commenced in Victoria through the support of Sita Environmental Solutions, the major industry partner of the program. Sita has continued to support Clean Site since its inception and has committed funding until the end of the 2008-09 financial year. The extent of Sita's funding is testament to their commitment to improving residential construction environmental practices, particularly in the area of waste management and recycling.

At its inception, Clean Site had a solely metropolitan focus, particularly in the municipalities of Cardinia, Casey, Hume, Melton, Whittlesea and Wyndham where the initial audits were conducted in Summer and Spring 2005. The funding from the Sustainability Fund allowed it to expand to include a regional focus in the designated municipalities of Ballarat, Bendigo, Geelong, Latrobe, Moorabool and the Mornington Peninsula.

Funding support has also been received from Melbourne Water, since 2006-07 through the Community Education Support Program. This funding has been provided in recognition of the impact that improper residential construction practices in the Melbourne metropolitan area have on the environment through stormwater. Melbourne Water has committed to funding Clean Site until the end of the 2008-09 financial year.

While the Funding Agreement with Sustainability Victoria concludes in December 2008, the support of Sita Environmental Solutions and Melbourne Water will allow a further audit, Summer 2009, to be completed and a high level Clean Site Summit to discuss the findings of the audit series to be held in late May – early June 2009.

Throughout the Clean Site program, in-kind support has also been provided by AIM Hire. AIM Hire's provision of promotional collateral has enabled Keep Australia Beautiful Victoria to reinforce the Clean Site message to builders and tradespeople in a very practical way.

The relationship with AIM Hire has also enabled Keep Australia Beautiful Victoria to promote the Clean Site program directly to its target audiences through regular updates via Bowens – The Builders Choice promotional and distribution channels.

## **Project Activities**

The Clean Site Project was comprised of a number of key components that combined to provide an effective education program designed to focus on minimising environmental impacts from residential construction:

### **Builders Forums**

Builders forums were initiated directly by Keep Australia Beautiful Victoria with builders or held in partnership with a local council.

A total of eleven Builders Forums were held during the project, with a total attendance in excess of three hundred participants. Five of the Forums were held in regional areas.

Builders Forums were held both on-site, providing hands on practical exposure to issues and possible solutions or as an off-site workshop.

Keep Australia Beautiful Victoria's facilitation of the builders forums provided an opportunity for builders and council officers to meet in a non-threatening and open environment to discuss trends within the municipalities, current issues of concern, local law implementation, assistance available and opportunities for improvement.

[See Appendix 1 - Project Activities Builders Forums]

### **Site Visits**

Throughout the project, the Clean Site Program Manager regularly visited building sites throughout Victoria calling in to discuss environmental site practices with builders and tradies on-site.

These visits were informal, deemed to be informative and generally well received. Materials such as 'Keeping Our Stormwater Clean' and the Clean Site DVD were distributed. Over 300 visits were undertaken throughout Victoria during the project.

### **Environmental Site Practices Audits**

Audits of building practices were undertaken at three hundred residential building sites, twice a year, in the six designated regional municipalities during the course of the project. Through the support of Sita Environmental Solutions and Melbourne Water, identical audits were also undertaken in six metropolitan municipalities.

By undertaking audits throughout Victoria, it allowed the project to produce a valuable time series data set that not only provided an overall snapshot of residential building site management practices, but comparison between regional and metropolitan areas. Please see the section on Key Findings for a summary of audit results.

Audits were undertaken in Summer and Spring each year. Audits commenced Summer 2005 (metropolitan) and Summer 2006 (regional). A detailed Audit Report was produced for each audit and is available by contacting Keep Australia Beautiful Victoria.

The audit covered bins, waste sorting, windblown litter, stockpiles, sediment movement, vehicle access points, crossings, tracked sediment, washings, sediment control measures, local laws and overall effort to responsibly manage the site.

Copies of the Clean Site Audit Reports were made readily available to the funding partners, participating Councils and other interested stakeholders.

Keep Australia Beautiful Victoria has also commenced the development of individual trend reports for participating Councils. These will be completed following the Summer 2009 audit, in time for the proposed Clean Site Summit that will report back to stakeholders on the key findings of the audit series proposed for late May – early June 2009.

[See Appendix 1 – Audits Local Government Municipalities]

### **Trades Show Exhibitions**

Keep Australia Beautiful Victoria exhibited at a total of six Trade Shows during the course of the project. These trade shows provided direct exposure to a large number of people, working on and responsible for, residential construction sites that may not have otherwise have been reached.

[See Appendix 1 – Project Activities Trade Show Exhibitions]

### **Local Government Workshops**

Local Government Workshops were a key feature of the project. The workshops provided a range of local government officers – local laws, asset protection, planners, environment and waste management and compliance the opportunity to gather to discuss key areas of interest in relation to environmental site management.

The workshops enabled the sharing of Clean Site Audit results, the exchange of information and discussion on local laws and related topics of interest. A specific Resource Recovery Forum was held for Council's in the North West area as part of the Workshop series.

The workshops provided valuable professional development and networking for officers involved in the management of residential site building practices. Workshops were open to all local governments in Victoria, and not just those municipalities within which the Clean Site program audits were conducted

Approximately 400 Council representatives attended a total of nine Local Government Workshops during the project.

[See Appendix 1 – Project Activities Local Government Workshops]

## **Education Sector**

Keep Australia Beautiful Victoria is committed to educating the future generation of builders and tradies. Clean Site has helped to achieve this by providing resources to TAFE teachers throughout Victoria, providing a central point of contact for questions or queries and facilitating relationships with local government and other managing agencies.

Multiple copies of the Clean Site DVD and the Melbourne Water booklet 'Keeping Our Stormwater Clean – A Builder's Guide' have been provided to seventeen Registered Training Organisations delivering Certificate II in Building and Construction – Workplace Procedures for Environmental Sustainability.

In addition Keep Australia Beautiful Victoria addressed the Victorian Building and Construction Teachers TAFE Conference held in Albury in June 2008 that was attended by 220 delegates.

[See Appendix 1 – Project Activities Education Sector]

## **General Promotion**

Clean Site featured in an episode of 'Your Business Success' that screened nationally on Channel 9 in October 2007. The episode also screened three times on the Sky News Business Channel in July 2008.

Clean Site was widely promoted by Keep Australia Beautiful Victoria through its distribution channels including KABV News and its website [www.kabv.org.au](http://www.kabv.org.au).

Clean Site has also been promoted by Bowens – The Builders Choice through regular monthly newsletter articles that have gone directly to builders and tradies throughout Victoria, plus appears on the Bowens website.

Keep Australia Beautiful Victoria has also distributed Clean Site DVDs, Melbourne Water booklets 'Keeping Our Stormwater Clean – A Builders Guide' and Clean Site information brochures throughout the life of the project.

The distribution of promotional collateral, such as hats, coffee cups, pens, bags and stubby holders has been an ongoing feature of the project.

Keep Australia Beautiful Victoria has also used its relationships and leverage throughout the project to ensure that the impact of residential site management practices are raised where appropriate with stakeholders and managing agencies including local government, the Victorian Action Litter Alliance (VLAA), Sustainability Victoria, EPA and Melbourne Water.

[See Appendix 1 – Project Activities General Promotion]

### **Policy, Legislation and Regulatory Issues**

Through the project, Keep Australia Beautiful Victoria identified a range of issues associated with residential building and construction industry and environmental site management practices that require further attention.

These included:

- inconsistency of local laws and their implementation:
- low level of resource recovery from residential construction sites
- washings from concrete trucks after pours
- site delivery access and tracked sediment obligations eg: bricks, trusses
- role of developers and other stakeholders

It is anticipated that these will be amongst many of the issues to be discussed at the proposed Clean Site Summit to be held late May – early June 2009.

## Key Findings

The Clean Site audits were conducted by Keep Australia Beautiful from Summer 2006 in regional municipalities, while they commenced in Summer 2005 in metropolitan areas.

The sample size in regional areas was 1800 sites, over a three year period and 2400 sites in metropolitan municipalities, over a four year period making a total sample size overall of 4200 sites. A further 600 will be added to this sample in Summer 2009 to complete the data set.

Fifty sites were randomly audited on each occasion in the following municipalities:

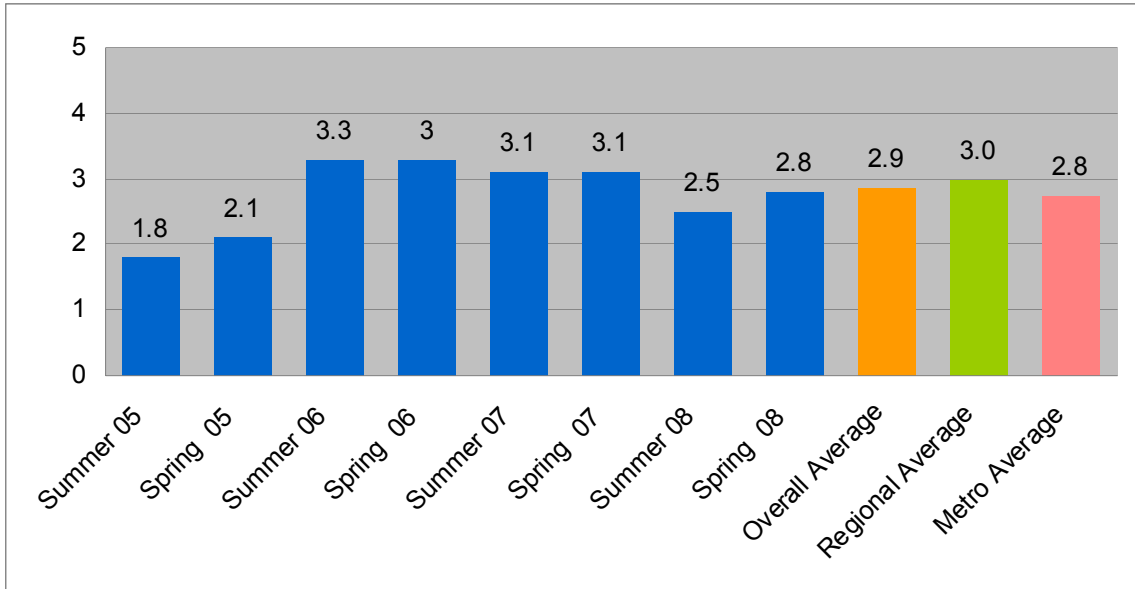
- |                        |              |
|------------------------|--------------|
| . Ballarat             | . Cardinia   |
| . Greater Bendigo      | . Casey      |
| . Greater Geelong      | . Hume       |
| . Latrobe              | . Melton     |
| . Moorabool            | . Whittlesea |
| . Mornington Peninsula | . Wyndham    |

For a site to achieve the highest rating of excellent - 5.0, it needed to be fenced with a suitable entry point constructed. It must also have a complaint closed bin with all potential windblown litter contained within it.

Stockpiles must be stored correctly on site with little or no offsite sediment movement. Sites must demonstrate evidence of one or more sediment controls in place. No evidence of washings or tracked sediment being present is acceptable. Sites must also show evidence of recycling either on site or through a use of a provider that sorts and recycles off site.

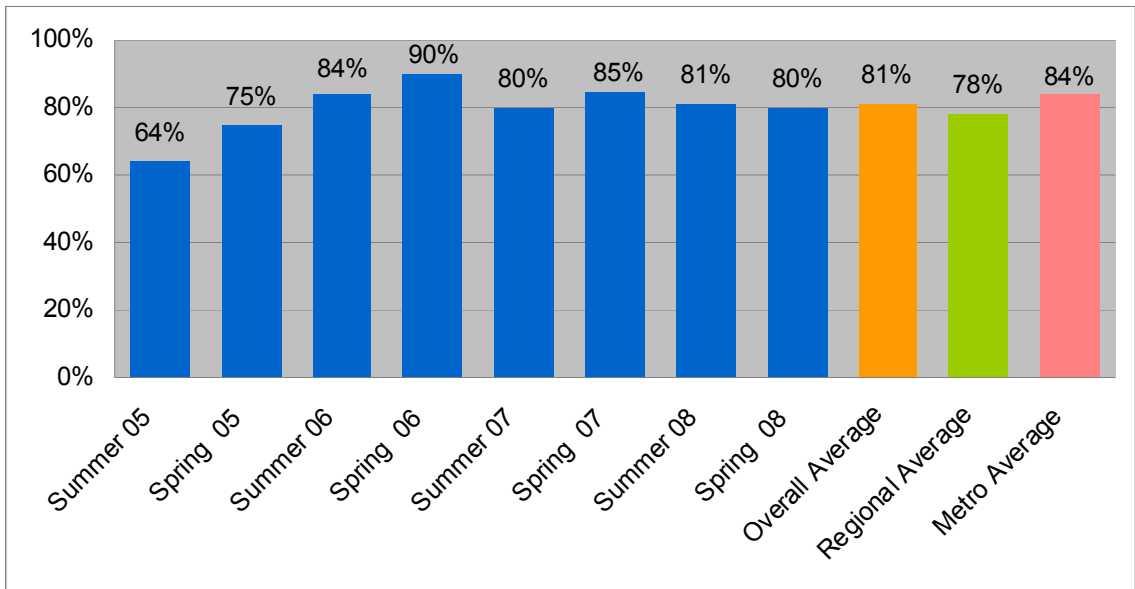
The findings of the audits showed a rating of 2.8 for the overall attempt being made to implement responsible site management practices on site. With one being very poor and 5 being rated as excellent, an overall rating of 2.8 is considered just less than satisfactory.

### Overall Average Site Ratings



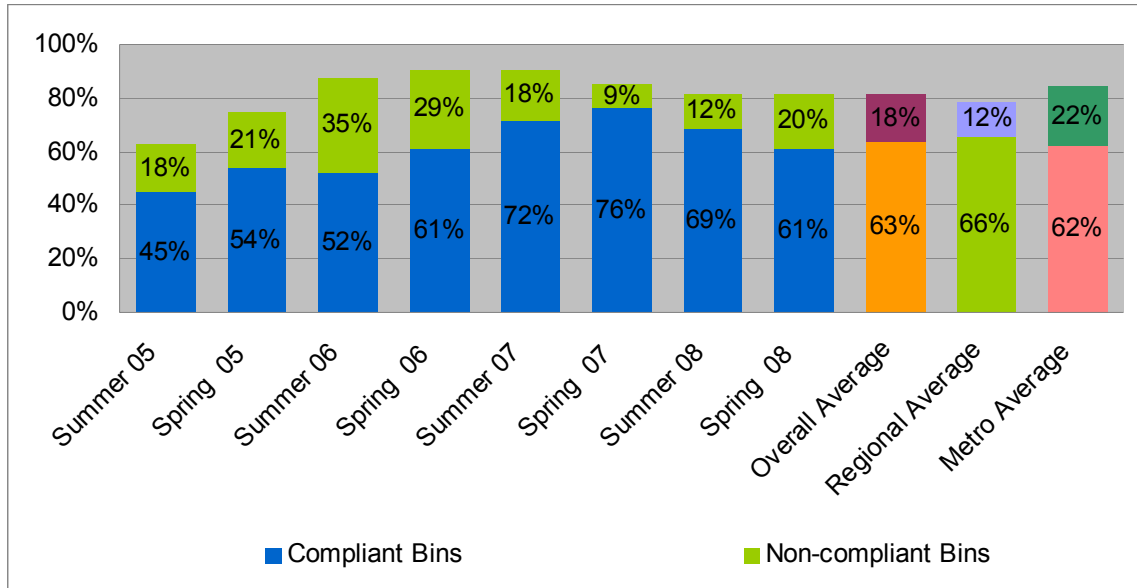
Regional sites had an average site rating of 3.0 and metropolitan sites an average of 2.8. The overall average of both was 2.9.

### Overall Bins Present



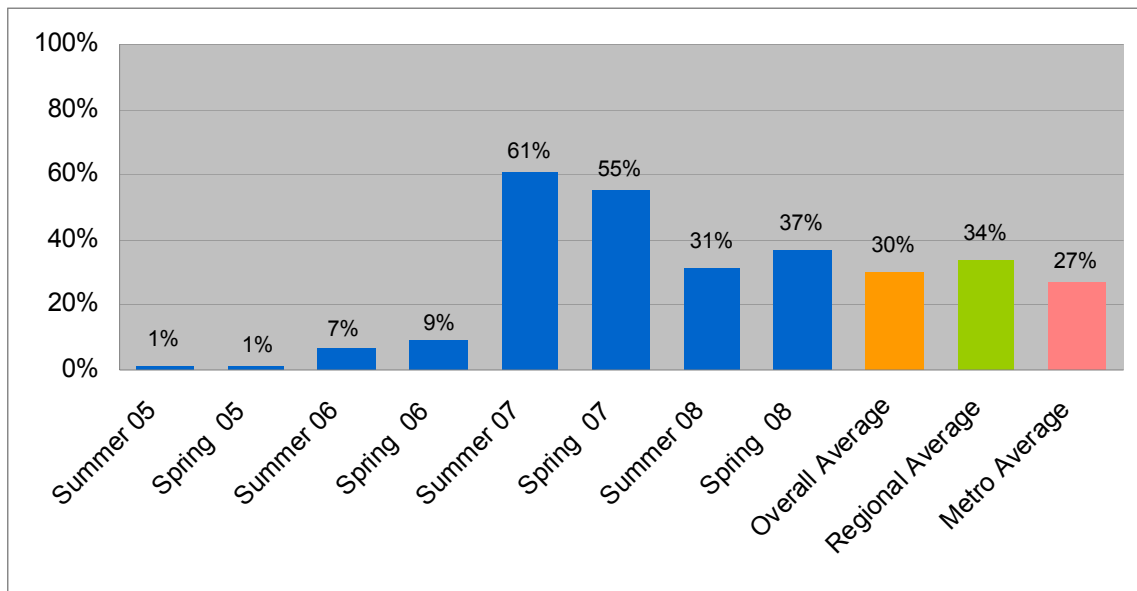
The Audit results showed overall 81% of all sites had a bin present, with regional sites returning a result of 78% and metropolitan sites 84%.

### Overall Bins Present Compliant v Non Compliant



Of the bins present overall, 63% were deemed to be compliant on average. Regional compliance was 66% compared to 62% in metropolitan areas.

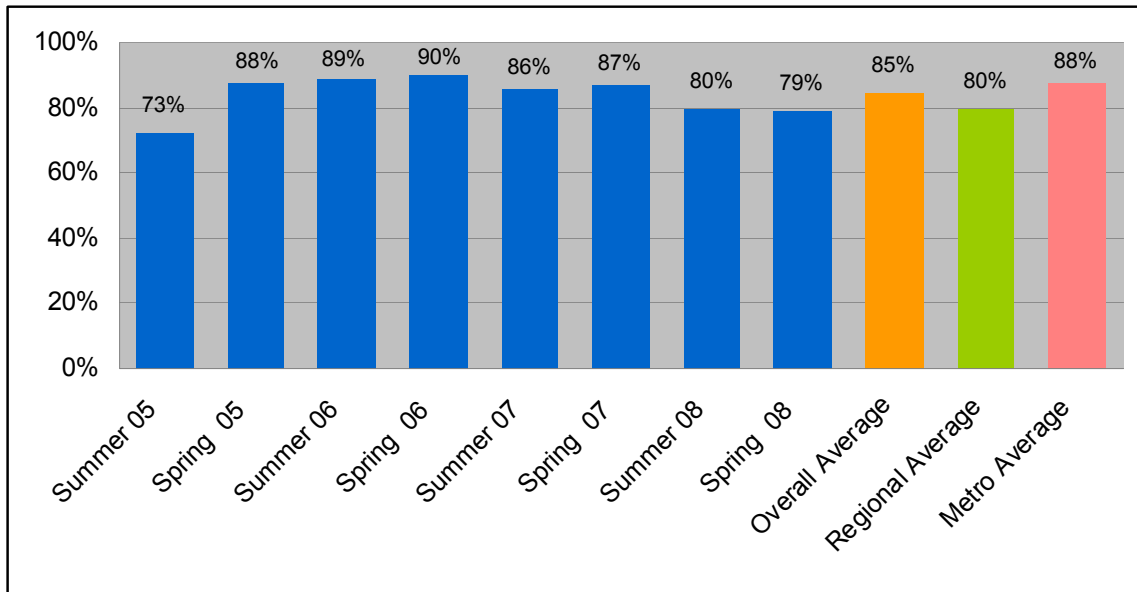
### Overall Waste Sorting Present<sup>1</sup>



Regional municipalities recorded a waste sorting result of 34% compared to 27% in metropolitan areas, with an overall average of 30% which is disappointingly low.

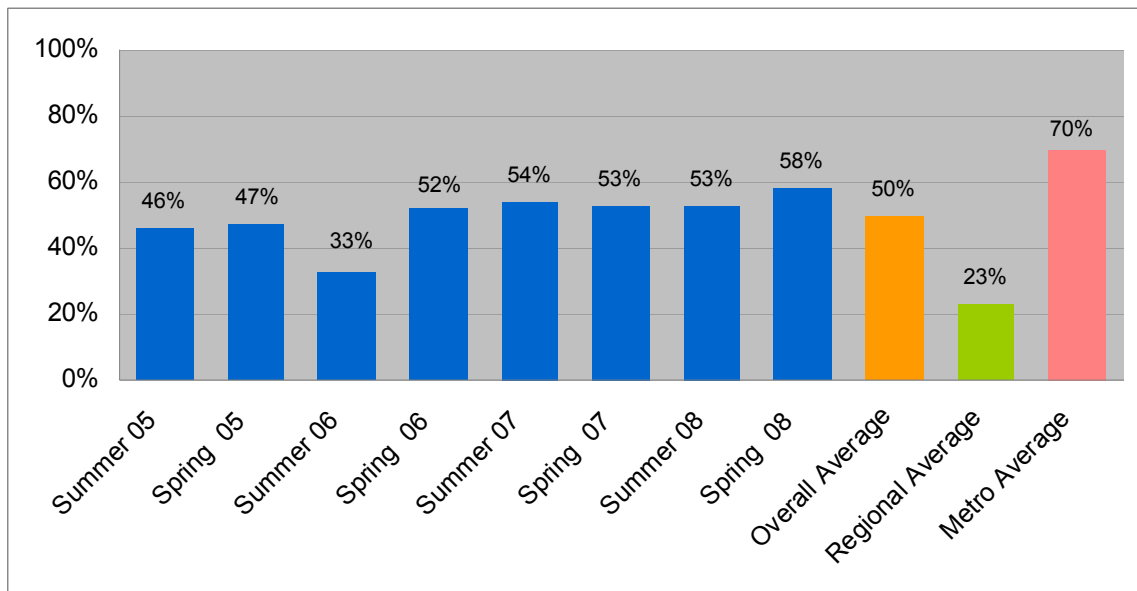
<sup>1</sup> A change to recording conventions took place from the Summer Audit 2007 to include waste sorting provided by a service contractor who sorts waste off-site.

### Overall Toilet Present



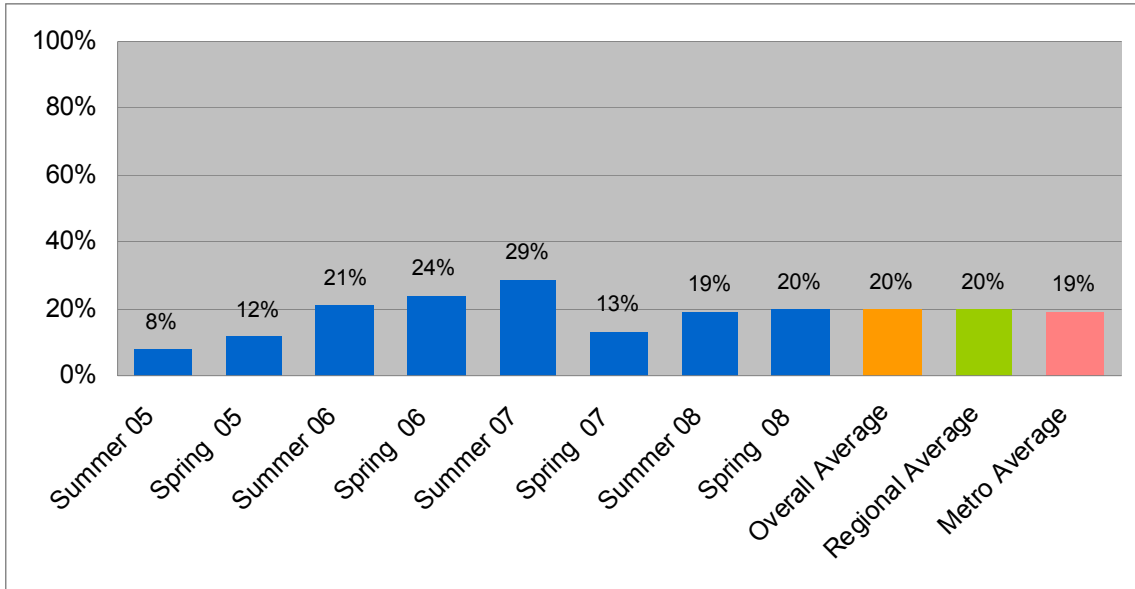
While over 85% of all sites present had a toilet present, the regional average was down to 80%, while the metropolitan average was 88%.

### Overall Site Fencing Present



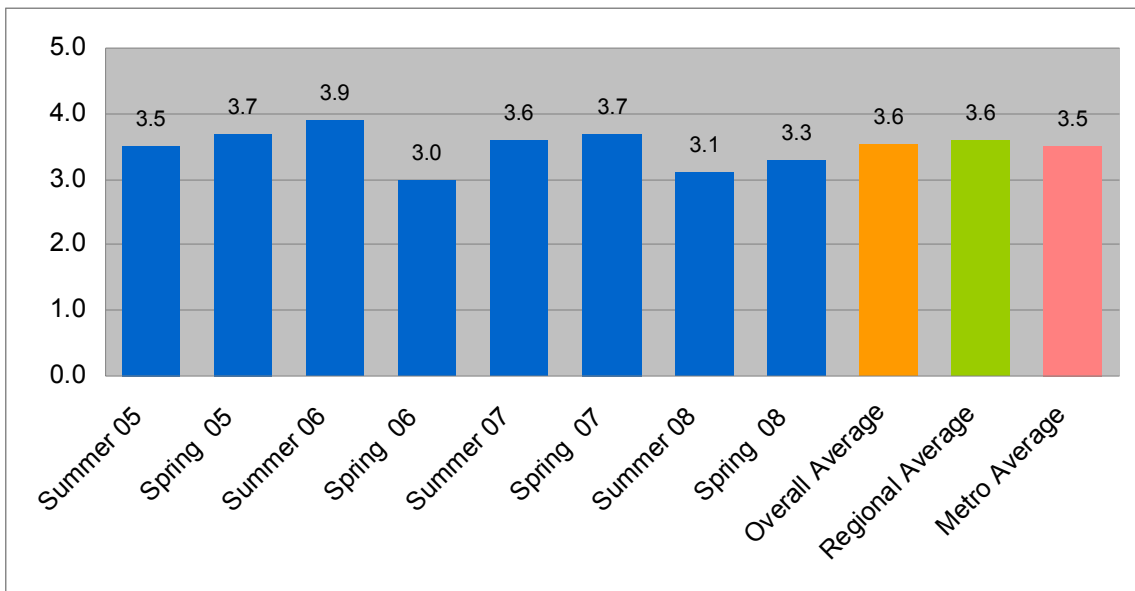
While an overall average of 50% was recorded, only 23% of regional sites audited had site present fencing compared to 70% in metropolitan municipalities.

### Overall Washings Present



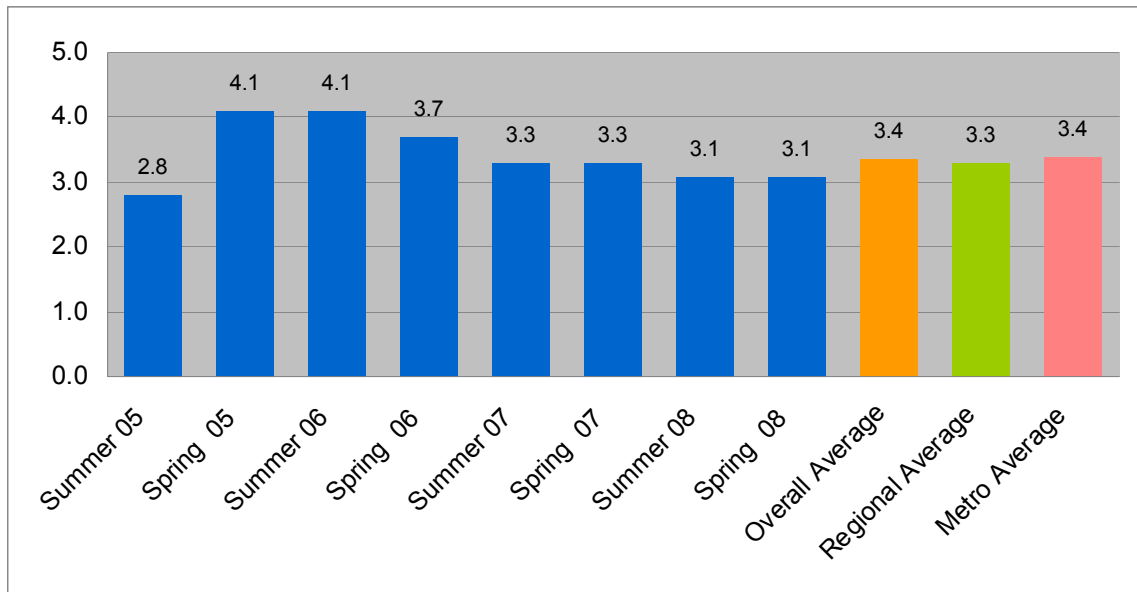
Evidence of washings was found in 20% of sites overall. Regional sites recorded an average of 20%, marginally higher than the 19% recorded in metropolitan areas.

### Overall Average Windblown Litter Rating



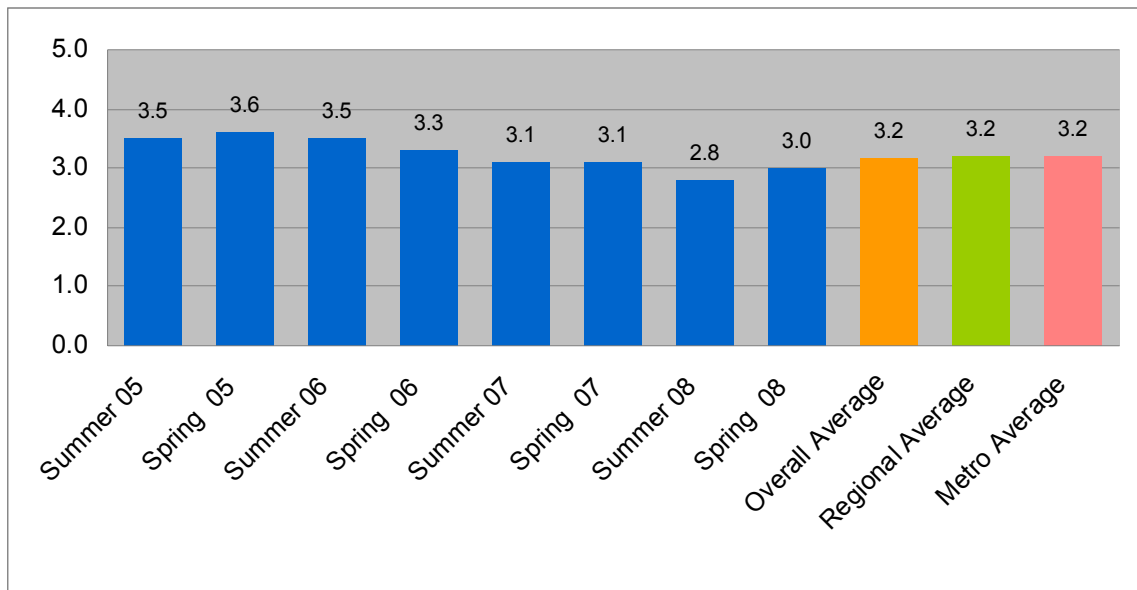
With a rating of 5 for excellent and less than 1 as very poor, an overall average rating of 3.6 is considered satisfactory to good. The regional rating of 3.6 was marginally above the metropolitan average of 3.5.

### Overall Average Stockpile Storage Rating



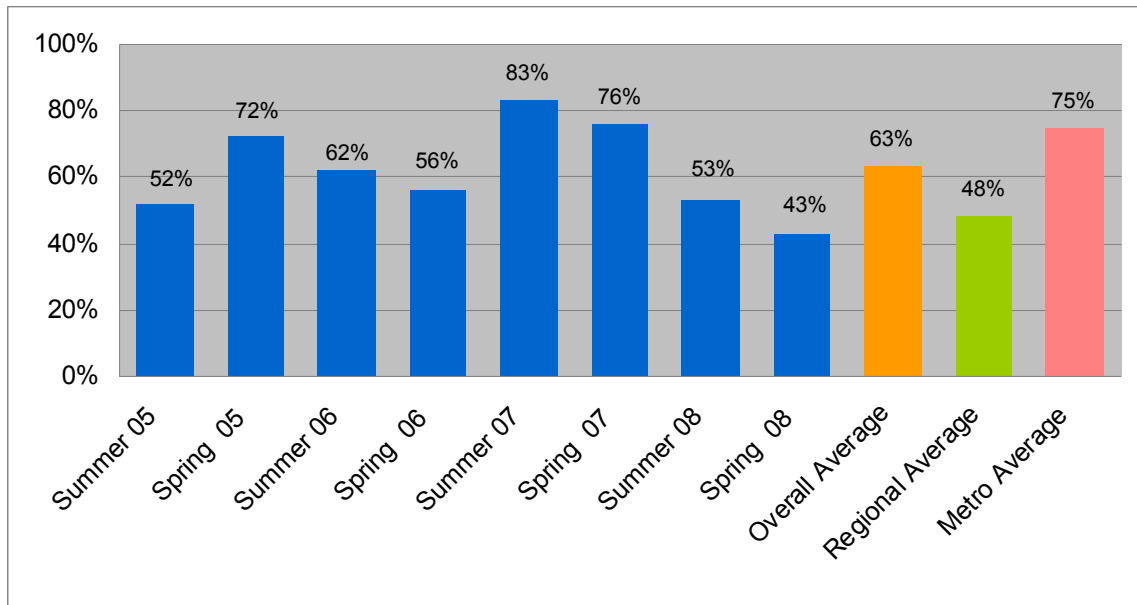
The overall rating of 3.4 is considered satisfactory to good. It was fairly consistent across Victoria, with regional results returning a score of 3.3 and metropolitan 3.4. A score of 5 is rated as excellent, while 1 is considered to be very poor.

### Overall Average Sediment Movement Rating



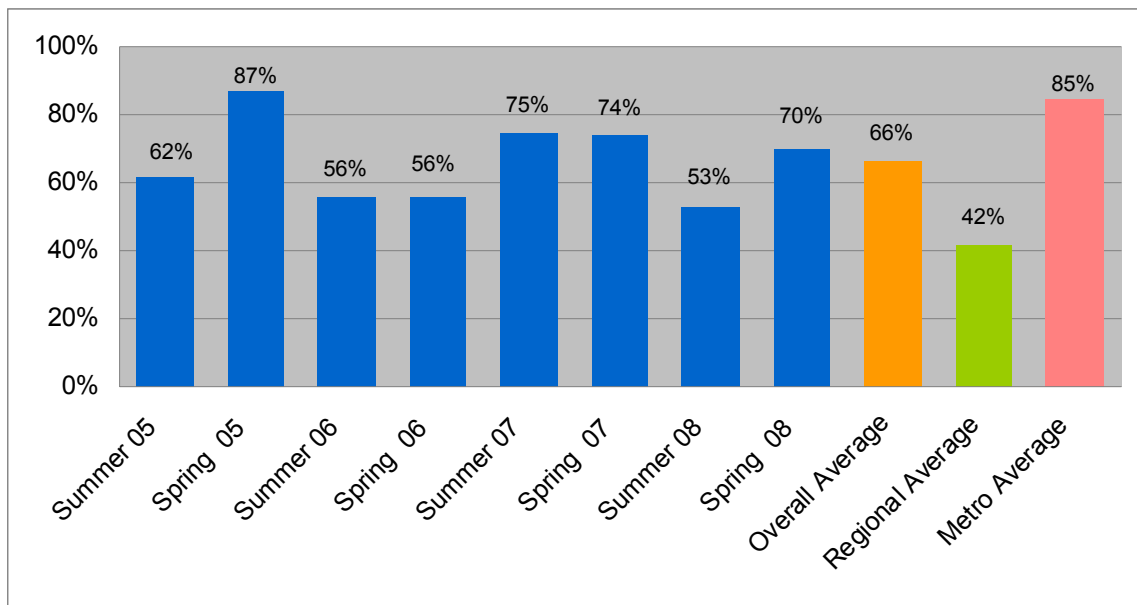
A high to moderate sediment movement rating of 3.2 was recorded overall. With 5 representing minor and 1 extreme, the consistent rating of 3.2 recorded in both regional and metropolitan municipalities is considered to be in the lower end of high to moderate.

### Overall Single Vehicle Access Point Present



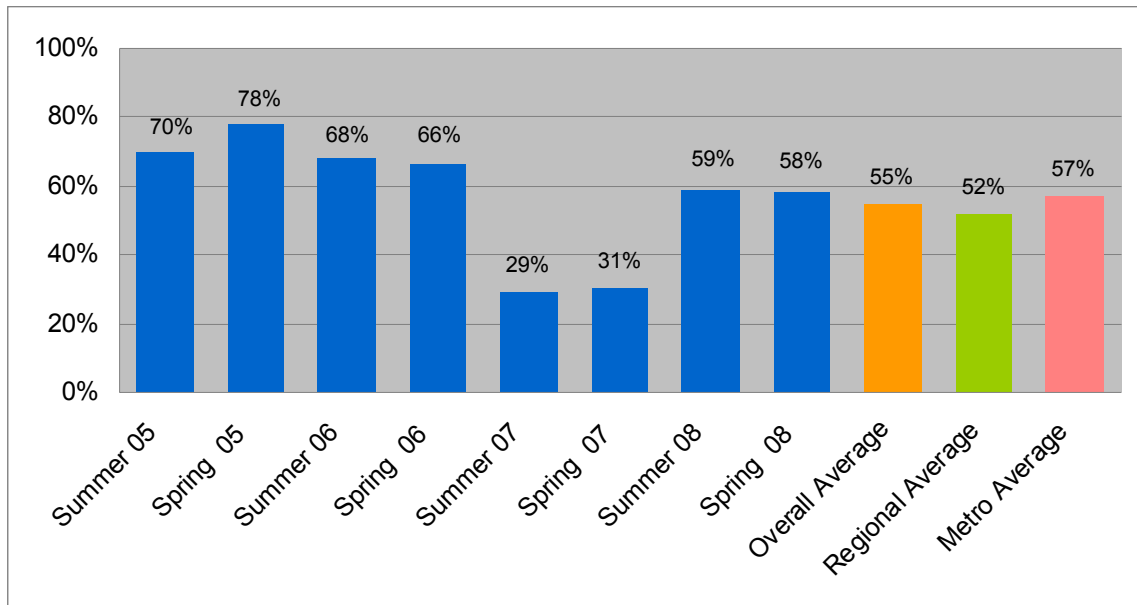
While only 48% of regional sites had a single vehicle access point present, 75% of sites in metropolitan areas recorded a positive result. Overall 63% of all sites showed evidence of a single vehicle access point.

### Overall Proper Vehicle Crossing Present



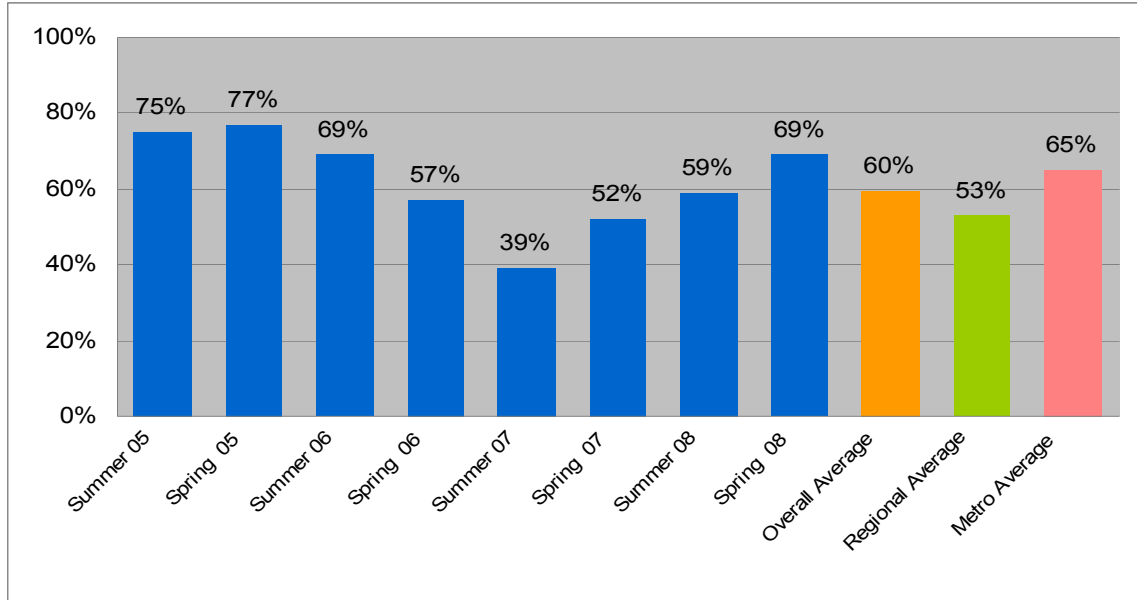
Of all sites, 66% had a proper vehicle crossing present, although only an average of 42% was recorded in regional municipalities. A proper vehicle crossing was recorded in 85% of metropolitan sites.

### Overall Tracked Sediment Present



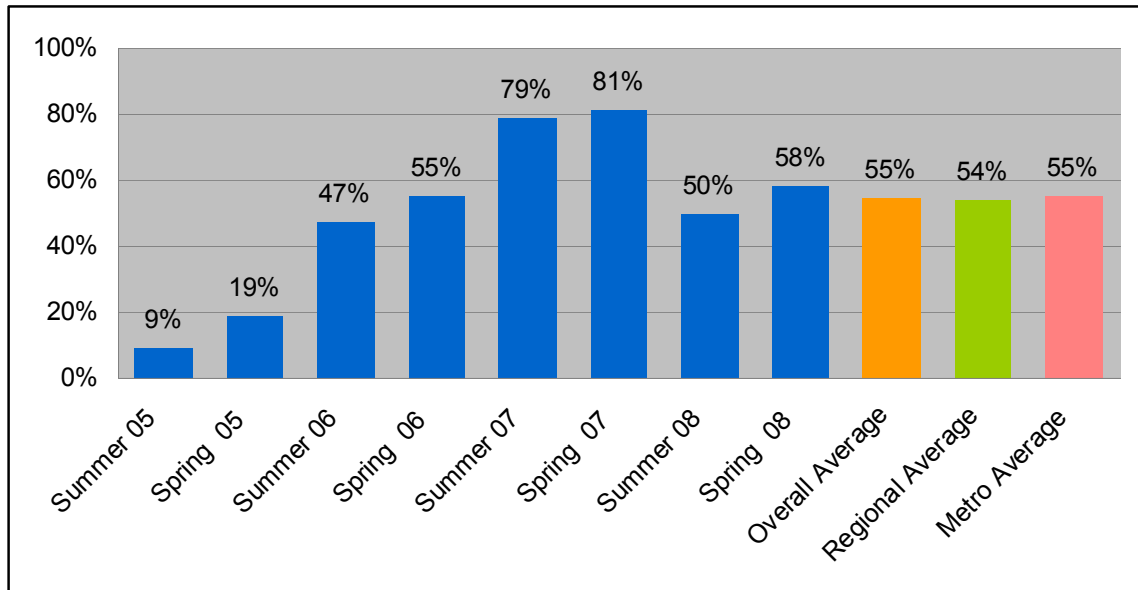
Tracked sediment that moved off site was recorded in 55% of all sites, while 52% presence was recorded overall in regional municipalities and 57% in metropolitan areas.

### Overall Sediment Control Measures Present



Overall, 60% of sites had some type of sediment control measure present (predominately a turf strip), Evidence was only present in 53% of regional sites, compared to 65% of metropolitan sites.

### Overall Compliance with Local Laws



Overall, 55% of sites complied with local laws. Regional areas had 54% compliance with local laws whilst metropolitan sites had 55% compliance with local laws.

[See Appendix 2 – Overall Audit Findings]

## Project Evaluation

As an independent, non-aligned environmentally based organisation, Keep Australia Beautiful Victoria has been in a unique position to help to educate the residential building and construction industry, the broader community and other key stakeholders about the impacts of residential construction practices and their ability to implement change.

Clean Site is complimentary to, not a competitor of, other initiatives that are undertaken to minimise the impact of residential construction activities on-site. These initiatives include both Master Builders Green Living and HIA GreenSmart programs. Both of these programs have been promoted to builders and attendance of those who are keen to further expand their knowledge of sustainable building practices is actively encouraged.

In both instances these programs, run by respected industry associations, focus on the broader aspects of building environmentally responsible housing that includes energy, water, ventilation and design principles plus recycling and waste management and overall site management.

The Clean Site project has concentrated solely on site management practices, ensuring the importance of this particular message is not diluted while the broader agenda of developing sustainability options in residential construction is explored.

While other programs require the attendance at formal off-site training sessions, Clean Site did not rely on the attendance of builders or tradies at formal off-the-job training. It recognised early the difficulties of getting builders, and importantly tradies, to structured training sessions<sup>2</sup> including barriers and pressures such as cost, location and time and as such developed a suite of alternative mechanisms to reach its target audience.

The project milestones originally agreed to with the Sustainability Fund centred on three key deliverables - Clean Site Audits, Demonstration Days and Trade Nights. It was clear from early in the project that while the Clean Site Audits were clearly appropriate and deliverable, the rigid requirement for Demonstration Days and Trade Nights was not. Importantly these events involved considerable 'down time' on site or attendance at activities after hours that proved difficult to secure.

Other barriers that prevented these deliverables being achieved as agreed included the prescriptive nature of the timing and location of the Demonstration Days and Trade Nights, the identified need for other more suitable mechanisms to engage builders and tradies, the inability of the project to reach a larger audience without alternative mechanisms and high staff turnover in the role of Clean Site Manager.

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<sup>2</sup> Attendance at structured Clean Site activities undertaken through Keep Australia Beautiful Victoria enabled builders and tradies to earn points for Continuing Professional Development (CPD), required to maintain registration through the Building Commission. Examples of such included attendance at formal presentations at Trade Nights or structured on-site presentations.

Regular liaison with the Sustainability Fund ensured that the impediments and their alternatives were discussed, that there was no objection to this change of emphasis and all Project Milestone reports were submitted and accepted.

The independent audit data gathered by the project remains a key feature of the Clean Site project. This data has enabled Keep Australia Beautiful Victoria and local government to have informed dialogue with their residential builders about what is really going on out there on site and not just rely on anecdotal evidence, council fines or unstructured observations as the source.

The audit data has provided avenues for opening dialogue, focussing council compliance attention and consideration and review of local laws. It has also highlighted areas of specific concern requiring attention and differences in audit results between municipalities that can be tied back to different local laws requirements.

Keep Australia Beautiful Victoria has also been able to build upon its relationship with local government to facilitate dialogue both between councils and builders, and across municipalities.

As an independent agency, Keep Australia Beautiful Victoria is not perceived as 'working for' either the builders or local government when it comes to difference of opinion, interpretation or dispute. This has also extended to participating on local council consultations to review local laws and mediation meetings with builders. It has also been able to offer informed advice and opinion based on the audit results to agencies such as EPA, Melbourne Water and Sustainability Victoria.

Keep Australia Beautiful has also used its reach into the broader community through its other activities and programs to promote the Clean Site message to community members who are engaging residential builders, neighbours of houses being built and those who have a general interest in environmental matters.

## The Project Results

With an overall rating of just below satisfactory, the general practices of builders and tradespeople involved in the residential construction industry are still having some negative impact on the environment. There is room for improvement before it can be asserted that their daily activities are not having detrimental impacts on our waterways and the environment more generally.

What is clear from the audits though is the impact that a number of very poorly managed sites are having on the overall rating of both an individual municipality and the overall outcome. Small pockets of particularly poor practices are impacting on the overall industry.

A major challenge for the Clean Site program, local government, developers, the building and construction industry and the general community is to identify those who are underperforming and make them more accountable for their actions

For many though, they can take satisfaction in knowing that they are on the right path to minimising environmental impacts and that their concern for the environment is both genuine and heightened. With continued education, support and the removal of structural impediments they will continue to improve.

To ensure that improvement a number of key areas need to be addressed:

### **Recycling & Resource Recovery**

The low rate of recycling & resource recovery remains an area of concern.

Addressing the problem within the waste sector where many bin providers continue to take builders waste directly to landfill, and not to a sorting facility to enable resource recovery, is a major issue inhibiting higher recovery rates and must be addressed at a number of levels if it is to be overcome.

The failure of builders to secure consistent contractual arrangements for bin access across all municipalities continues to be a factor that impedes efforts to encourage builders to engage in recycling. Volume builders who work across a wide range of municipalities are likely to seek a one bin solution and often elect cost and convenience over the aim of resource recovery. This may result in the choice of a provider who does not recycle waste.

Access to appropriate facilities, contractual arrangements, cost and the education of builders and bin providers must all be addressed before significant improvement within the sector is likely.

Waste providers who provide a resource recovery facility must be better supported by builders or the commercial realities of operating facilities in this sector will influence decisions in regard to ongoing viability.

Increasingly builders need to be encouraged to take a step back and incorporate the principles of 'reduce and reuse' before the need to even consider recycling as a means of reducing landfill contribution. Consideration must be given to the possible reuse of excess materials on current or future projects in the same or derived forms.

Broader building practices, outside of the scope of the Clean Site program need to be developed that further assist the overall resources required for construction. Developers for instance must be encouraged to consider the requirement for builders, particularly volume builders, to show evidence of recycling as a condition of working on their estates.

### **Sediment Control**

The message in regard to the importance of sediment control is still not making the impact that it needs to. Problems still exist with stockpile storage, runoff, sediment movement and to a lesser extent the placement of stockpiles on site.

The reliance on ineffective turf strips, the lack of other control measures and the limited use of multiply controls remains a concern as does the total absence of measures on some sites. The lack of rain has been somewhat of a bonus when it has come to sediment control.

As to be expected, the audit results showed greater evidence of sediment movement when rainfall had recently occurred. Builders and tradies are being lulled into a false sense of security when it comes to the need to control sediment leaving a site. Builders need to heed both the environmental message and the cost effectiveness message that relates to the best practice management of stock piles.

Further education is also required to ensure builders and tradespeople better manage their washings and understand the severity of the problem that they are creating when these washings enter the waterways. New products on the market to contain washings from painting for example need greater promotion and acceptance within the industry.

Other issues such as wash outs after concrete pours must also be addressed. Access to appropriate facilities, industry practices and the responsibility of suppliers and other sectors of the industry relating to environmental impacts also need addressing.

### **Local Laws Consistency**

To ensure best practice site management is achieved, greater consistency of local laws is required, including the interpretation and application of those that already exist both within and between municipalities.

Compliance with local laws remains a major challenge for both the residential building industry and local government. Greater uniformity of local laws will assist with achieving improved compliance.

Many builders and trades people work across a number of municipalities. They perceive the lack of consistency as confusing, unnecessary and unproductive. They send mixed

messages about the importance of such measures if they are required by some councils but not by others. Resultant breaches are often perceived by builders as nothing more than a 'grab for cash' when fines are imposed.

### **Making Builders More Accountable**

While education and infrastructure are essential elements of any successful behaviour change program, enforcement is also vital in reinforcing the message that behaviour relating to poor site management practices is not acceptable.

It is critical that builders are not only aware of the penalties that apply, but that there is a reasonable probability that non-compliance will be detected and acted upon. Local fines need to be set at an appropriate level to act as a deterrent and to act as an incentive to change and improve practices.

The cost of penalties has been shown to be costed into works by some builders without further consideration as to how to improve site management practices. These costs are in turn passed onto clients through their contracts as 'other costs' and are often not questioned by the buyer.

Greater emphasis also needs to be placed on the recognition for good site management to provide incentive for builders to continue to develop environmental responsible management practices. Those that provide best practice models should be widely profiled to assist in the education and behaviour change of other members of the industry.

Builders should be encouraged to establish Environmental Site Management Plans. These Environmental Site Management Plans should outline all processes and procedures to be implemented to assist in managing the environmental impacts associated with construction on the site.

Importantly builders should ensure all that all contractors and sub-contractors are aware of local law requirements, the consequences of infringements and importantly the impact that improper practices have upon the environment. Developers and local government have a key role in helping to shape this future direction.

### **Key Offenders**

The presence of a small number of high volume builders who are continually allowing, or turning a blind eye to, poor environmental management practices to take place on their sites is a concern. More often than not, 'pockets' of non-compliance are detected from the same builder and frequently this can also be across municipalities.

Where poor site management practices are in place on one site, they are likely to influence behaviours of other builders in neighbouring sites resulting in clusters of demonstrated poor behaviour. Sites that tend to be poor on one factor tend to rate poorly on a number of factors indicating an overall poor approach to environmental management practices and not just a lapse on one or two components.

The completion of a further audit report in Summer 2009 and the proposed Clean Site Summit in mid 2009 will only further enhance the outcomes of the project. The data, learnings and awareness that has been raised within the residential building and construction industry of the environmental impacts of on-site practices has proven to be very valuable. The challenge for Keep Australia Beautiful Victoria and all stakeholders is to secure a way to ensure the Clean Site program can continue beyond the end of the 2008-09 financial year.

## **Appendix 1 – Project Activity**

### *Builders Forums*

- Whittlesea - September 2005
- Lara - May 2006
- Casey - October 2006
- Renmark Builders - February 2007
- Brunisma Builders - March 2007
- Australand - March 2007
- Geelong - April 2007
- Melton - June 2008
- Geelong - September 2008
- Yarrawonga - November 2008
- Shepparton - November 0028

### *Audits – Local Government Municipalities (2006-2008)*

#### *Regional*

- Ballarat
- Greater Bendigo
- Greater Geelong
- Latrobe
- Moorabool
- Mornington Peninsula

#### *Metropolitan (2005-2008)*

- Cardinia
- Casey
- Hume
- Melton
- Whittlesea
- Wyndham

### *Trade Shows Exhibitions*

- Mitre 10 Trade Show Frankston – November 2006
- Bowns The Builders Choice Trade Expo – October 2006
- Safety in Action - March 2007
- National Tradesman’s Expo – June 2007
- Bowns Store Opening – Campbellfield May 2008
- Tradesman’s Expo – May 2008

### *Local Government Workshops*

- Whittlesea (x3) – September 2005, February 2007, December 2008
- Hume (x2) – May 2007, May 2008
- Mornington Peninsula – May 2007
- Mildura – July 2008
- Ballarat – December 2007
- Bayside – February 2008

### *Attendees:*

- Ballarat, Greater Geelong, Moira, Darebin, Moorabool, Mornington Peninsula and Greater Shepparton, Bayside, Brimbank, Cardinia, Casey, Frankston, Greater

Dandenong, Hume, Kingston, Knox, Melbourne, Melton, Moreland, Port Phillip, Whitehorse, Whittlesea, Yarra Ranges

*General Promotion:*

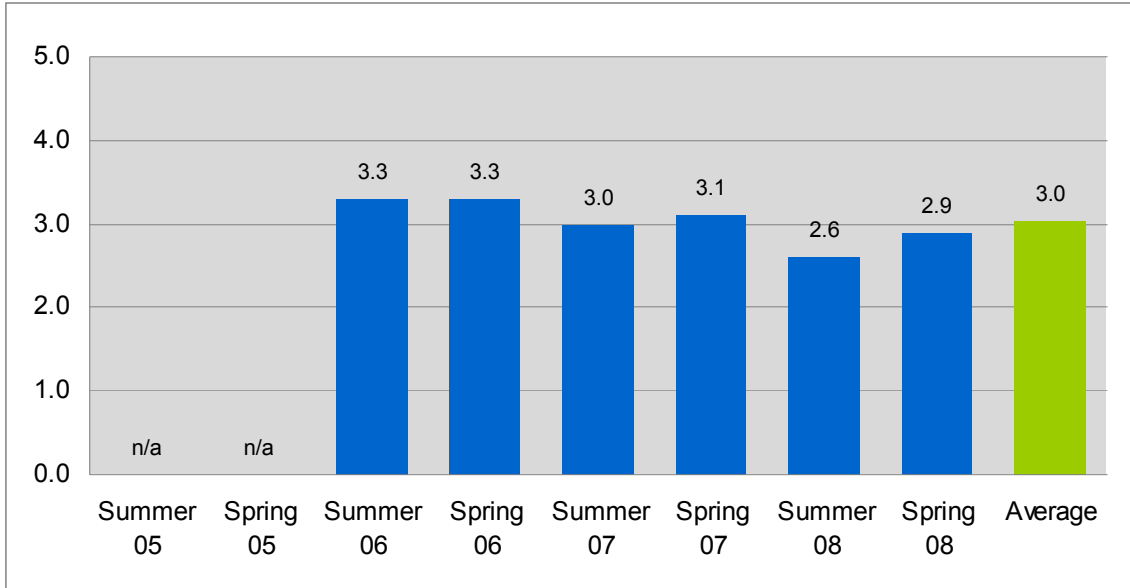
- KABV News – Quarterly distribution 1000+ copies
- While [www.kabv.org.au](http://www.kabv.org.au) has experienced considerable down time in 2008 it is currently being redeveloped and it is planned to include a dedicated Clean Site page. Prior to current upgrade Clean Site information was available on the website
- 'Your Business Success' – Channel 9 28 October 2007 & Sky News 5-6 July 2008
- Clean Site DVDs – over 2000 copies
- Melbourne Water booklets 'Keeping Our Stormwater Clean – A Builders Guide' – over 500 copies
- Clean Site information brochures – over 1000
- Promotional collateral - hats, coffee cups, pens, bags and stubby holders – over 3000 items

*Education Sector:*

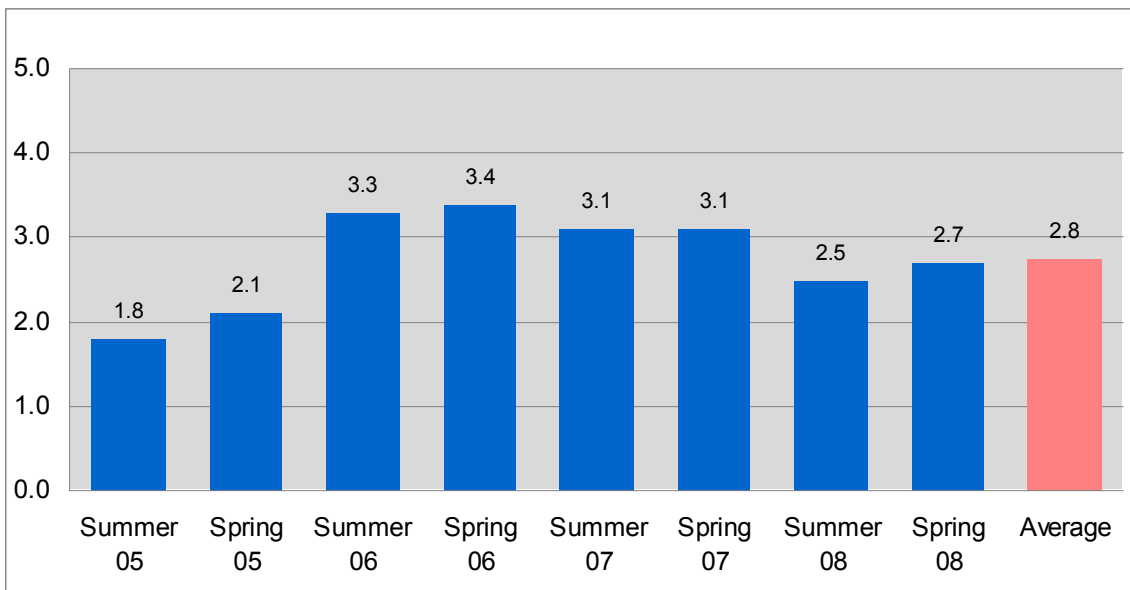
- Gordon Institute of TAFE
- Bendigo Regional Institute of TAFE
- Chisholm Institute of TAFE
- Corio Bay Senior College
- Gipps TAFE
- Holmesglen TAFE
- Kangan Batman TAFE
- Northern Melbourne Institute of TAFE
- South West Institute of TAFE
- Swinburne University of Technology
- University of Ballarat
- Victoria University
- Box Hill TAFE
- Central Gippsland TAFE
- East Gippsland Institute of TAFE
- Goulburn Ovens Institute of TAFE
- CVGT Bendigo

## Appendix 2 – Overall Audit Findings

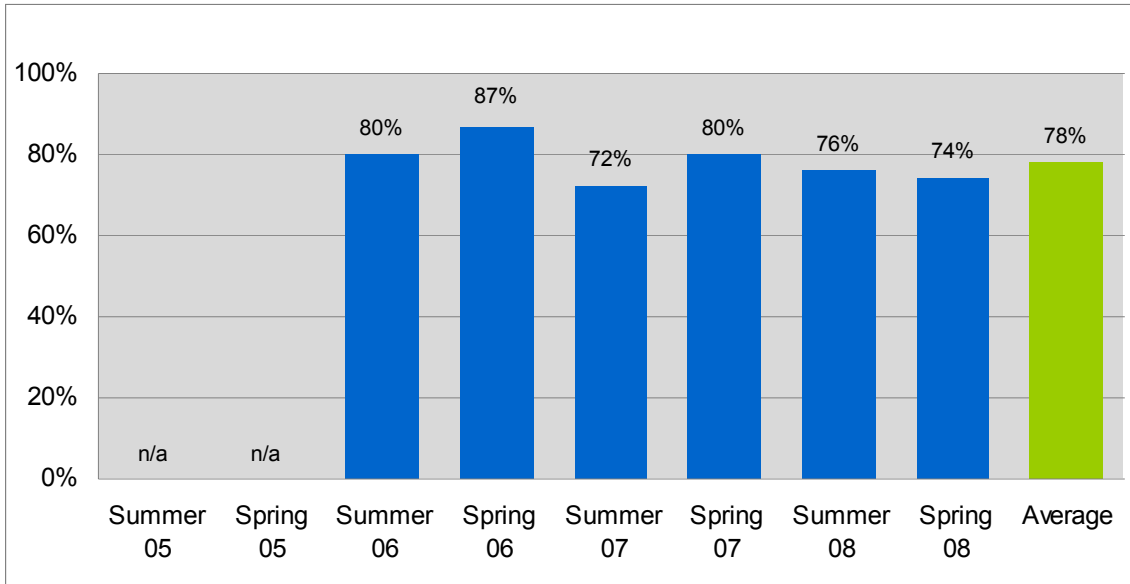
**Overall Average Site Ratings  
Regional**



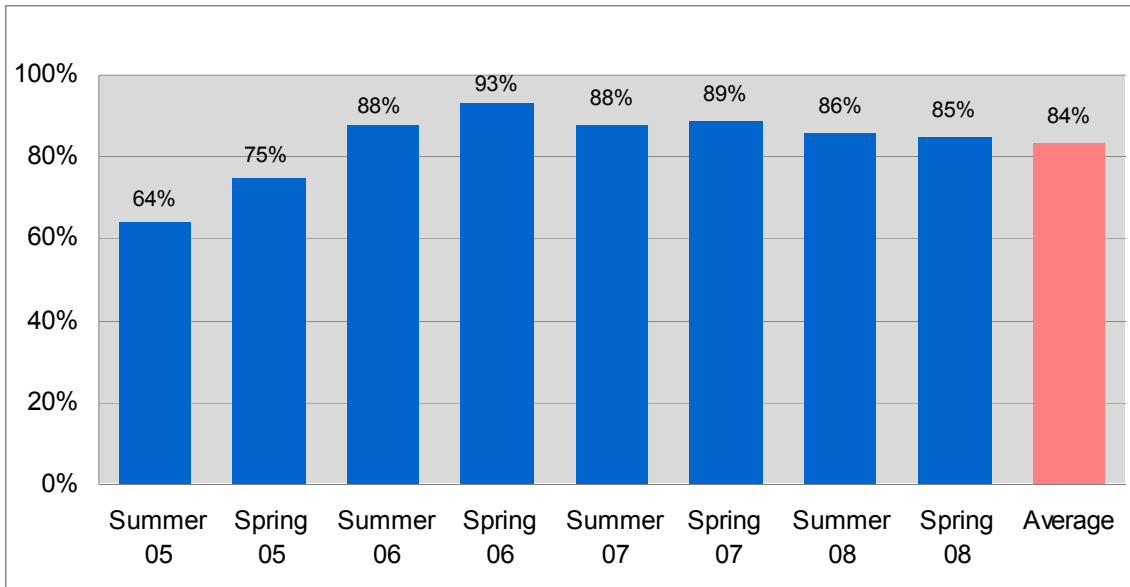
**Overall Average Site Ratings  
Metropolitan**



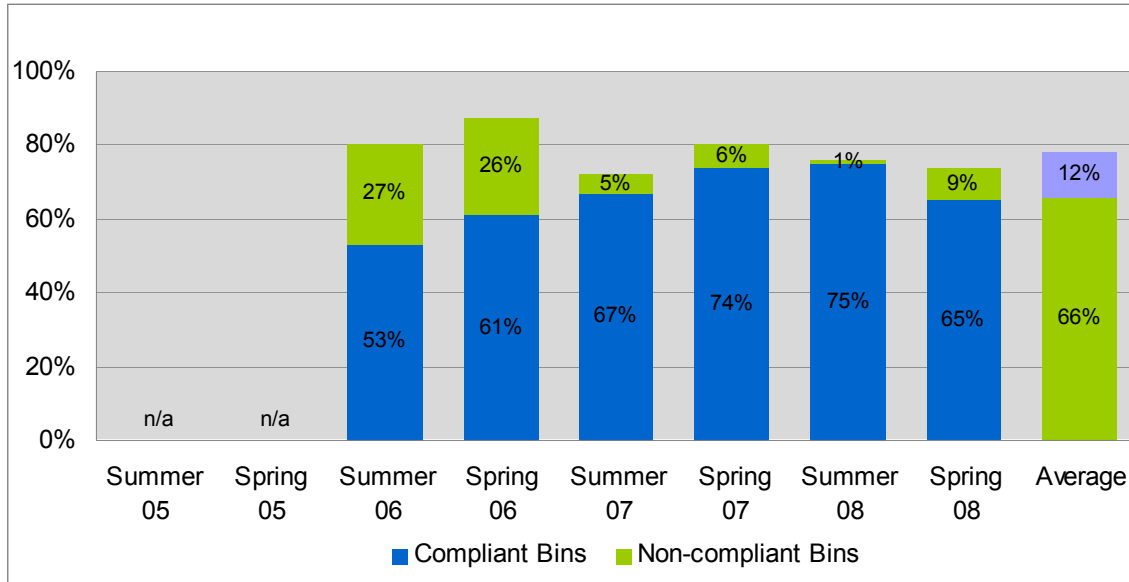
### Overall Bins Present Regional



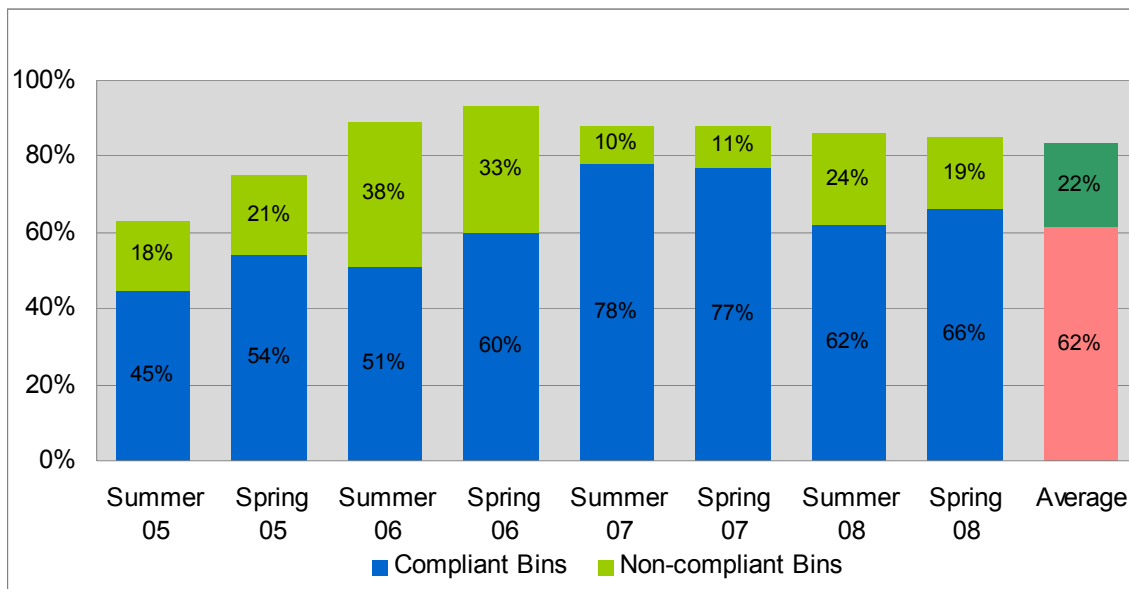
### Overall Bins Present Metropolitan



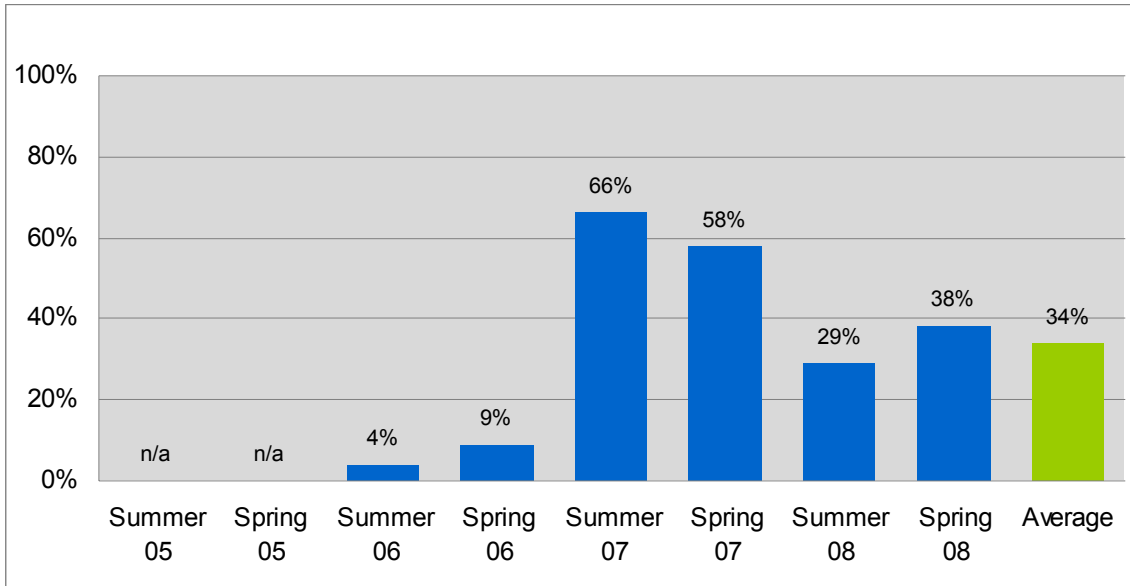
### Overall Compliant v Non Compliant Regional



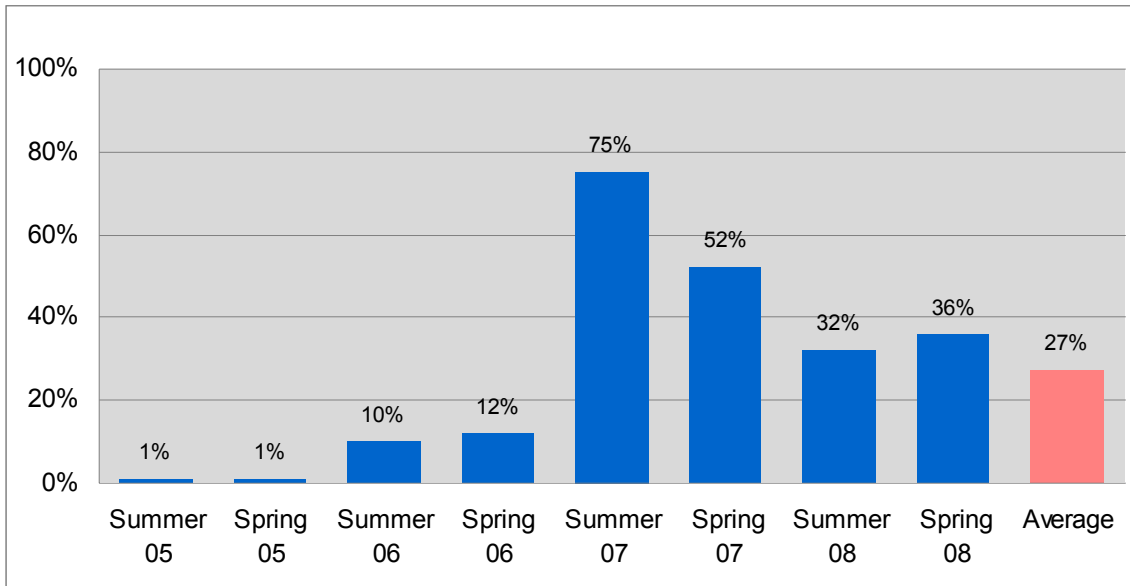
### Overall Compliant v Non Compliant Metropolitan



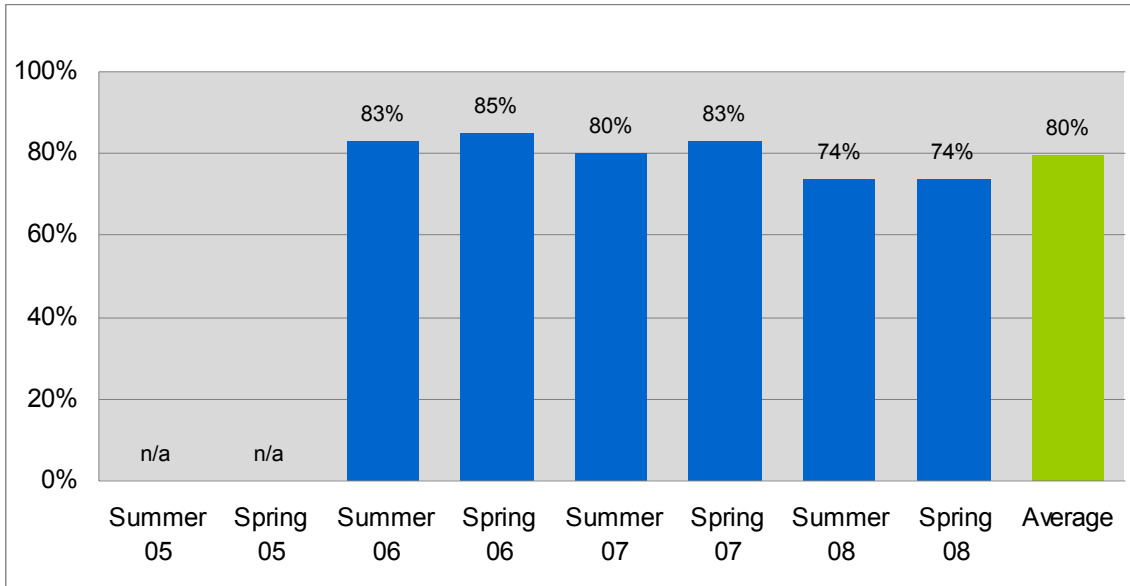
### Overall Waste Sorting Present Regional



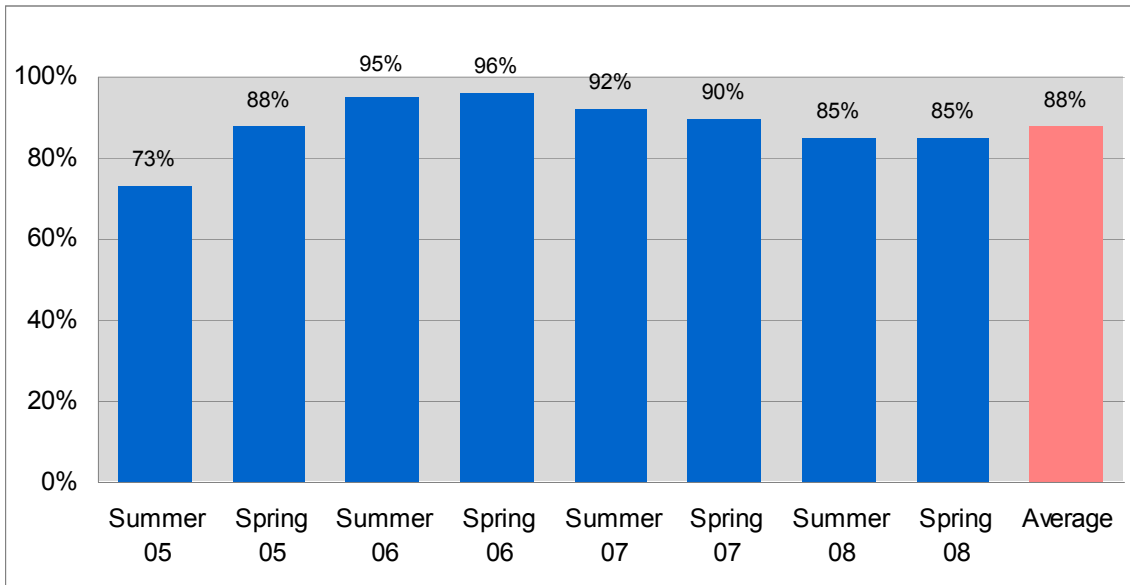
### Overall Waste Sorting Present Metropolitan



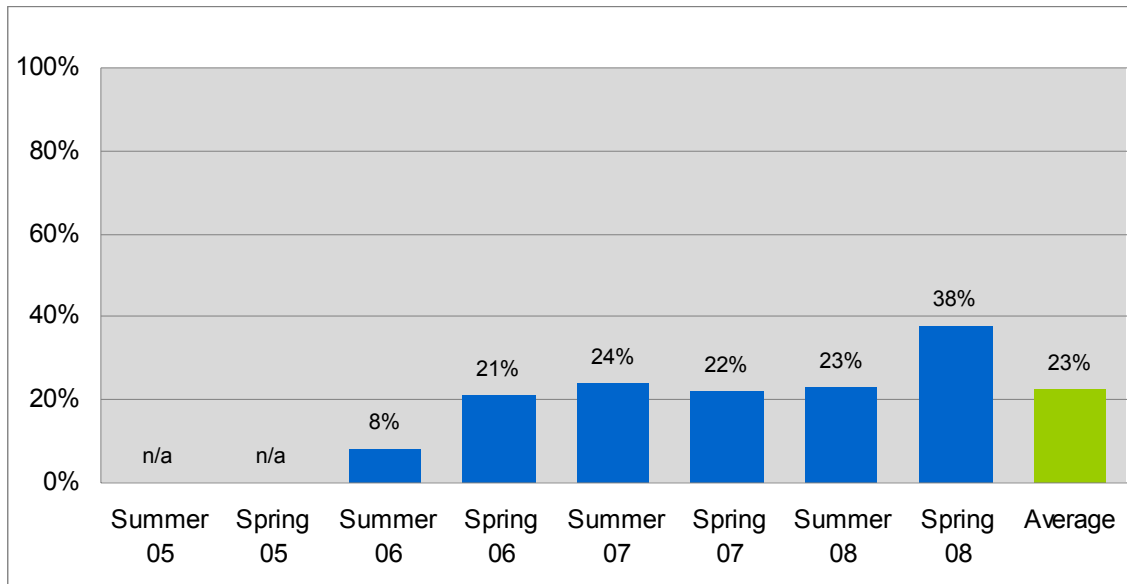
### Overall Toilet Present Regional



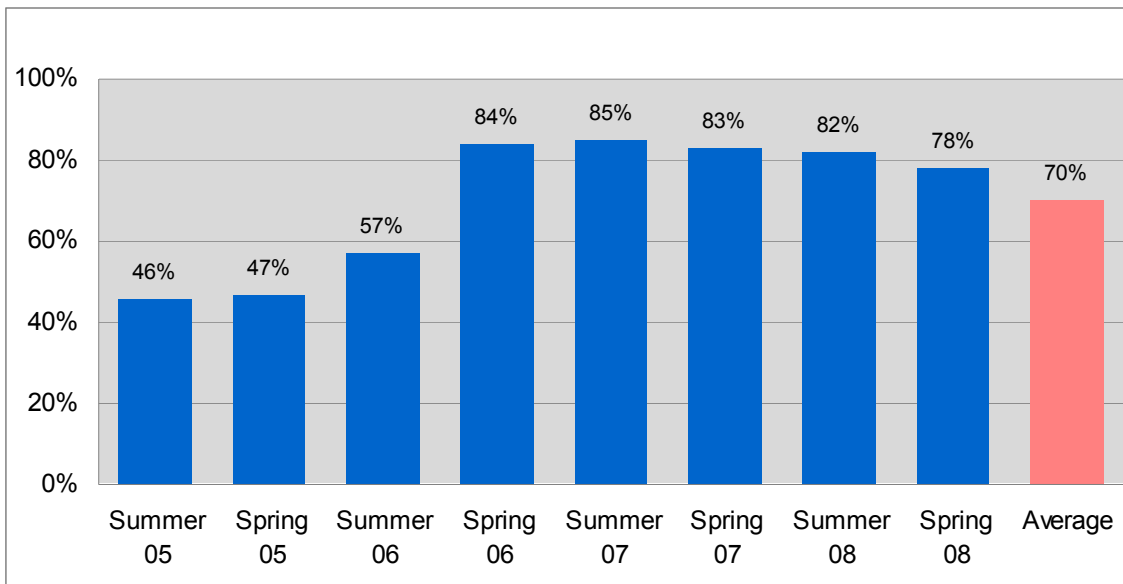
### Overall Toilet Present Metropolitan



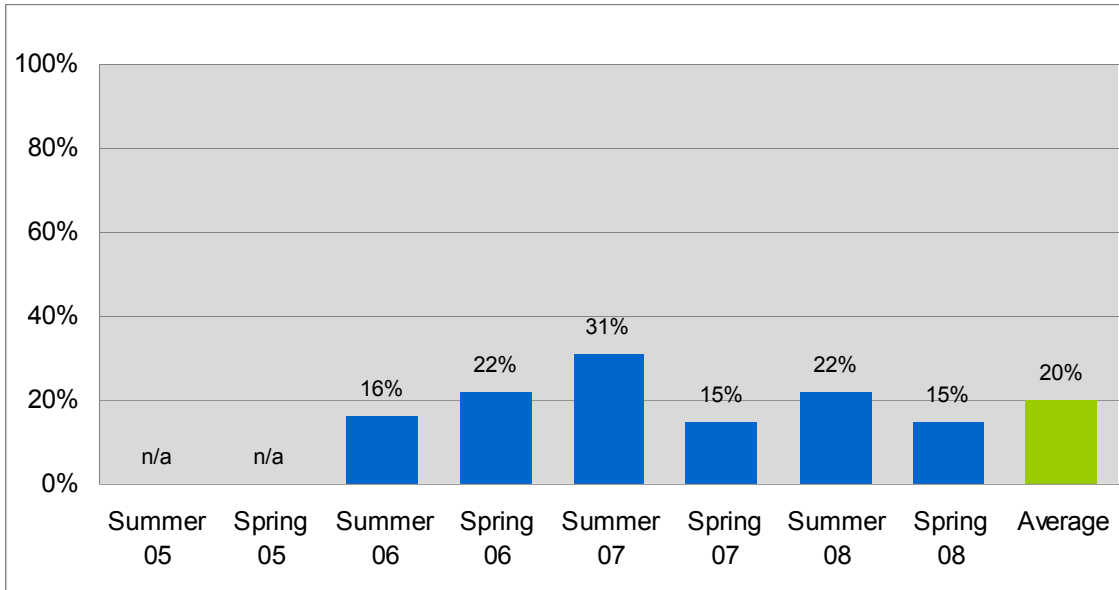
### Overall Site Fencing Present Regional



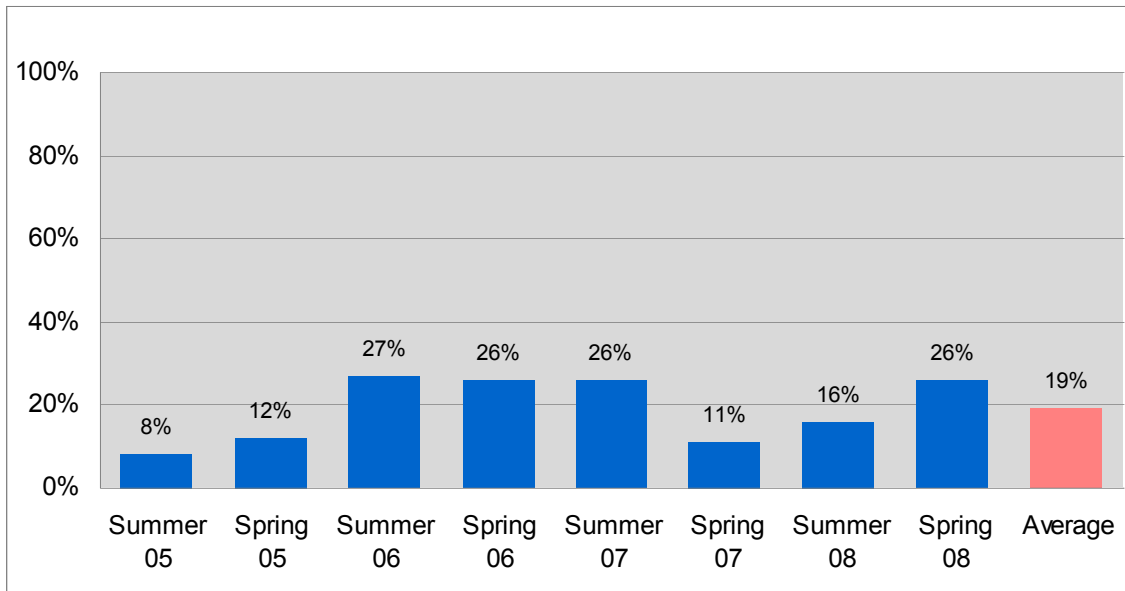
### Overall Site Fencing Present Metropolitan



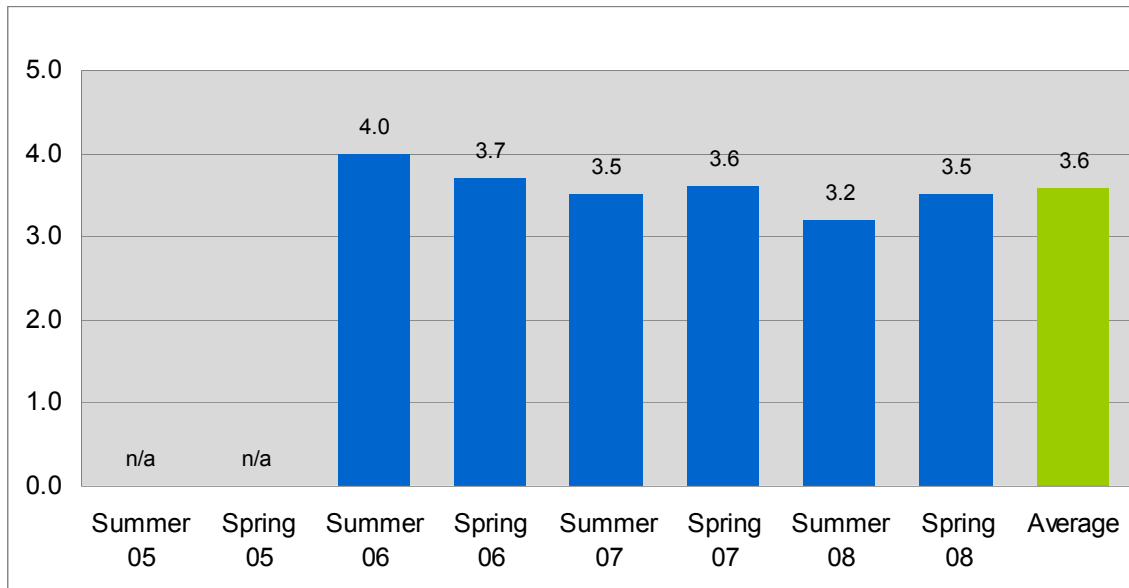
### Overall Washings Present Regional



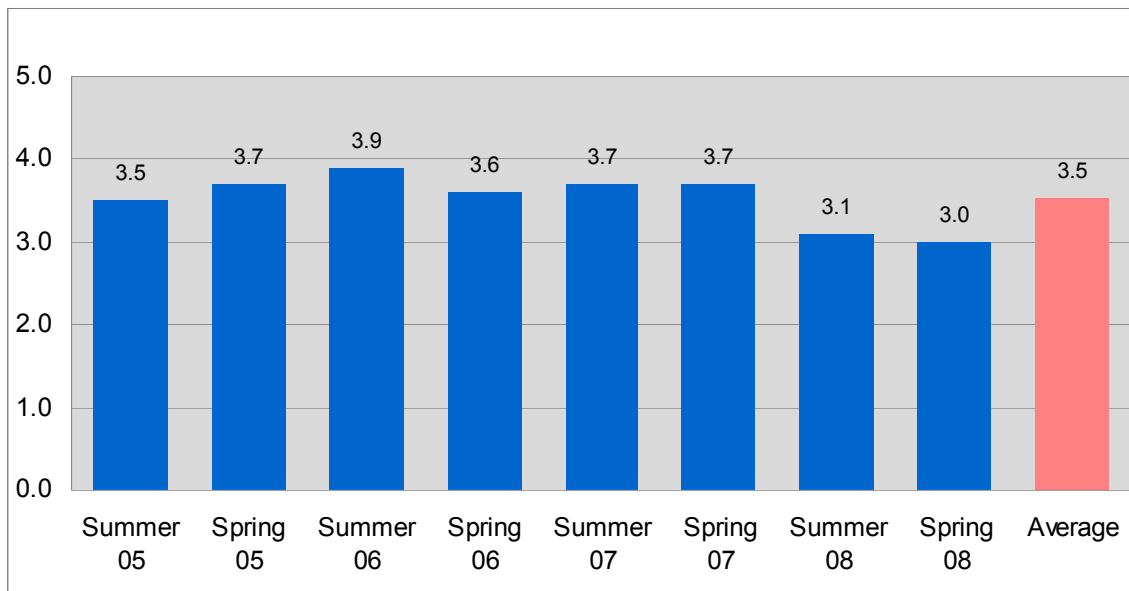
### Overall Washings Present Metropolitan



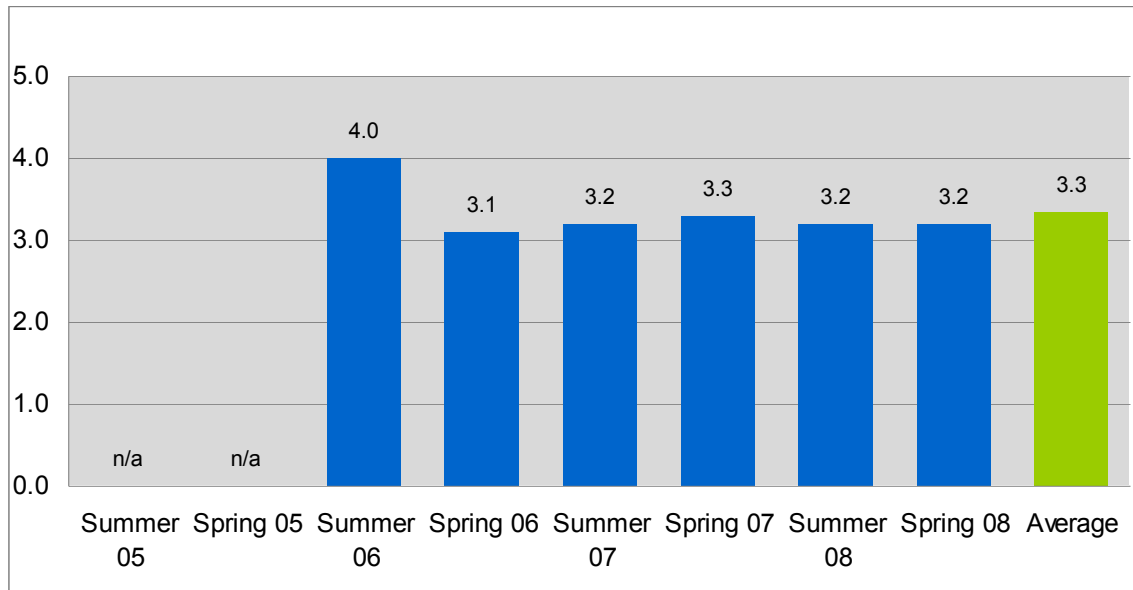
### Overall Windblown Litter Rating Regional



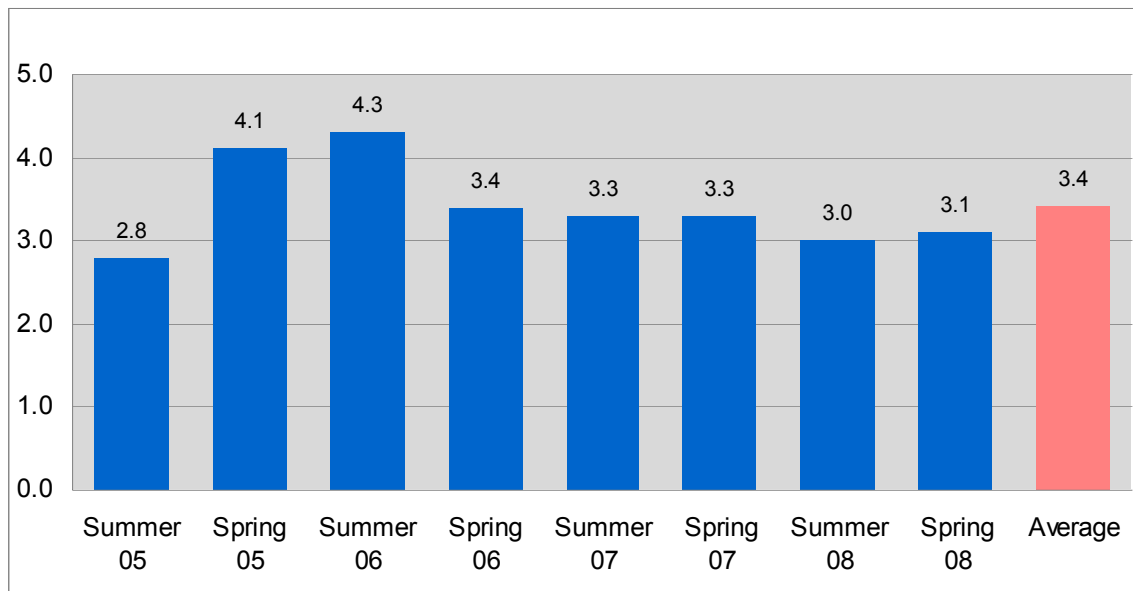
### Overall Windblown Litter Rating Metropolitan



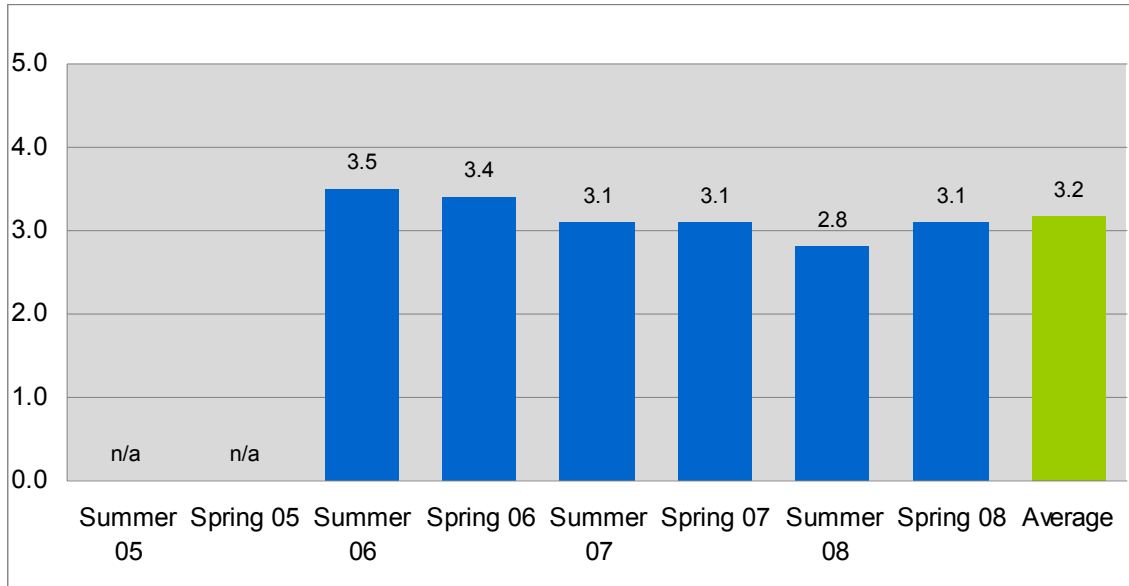
### Overall Stockpile Storage Rating Regional



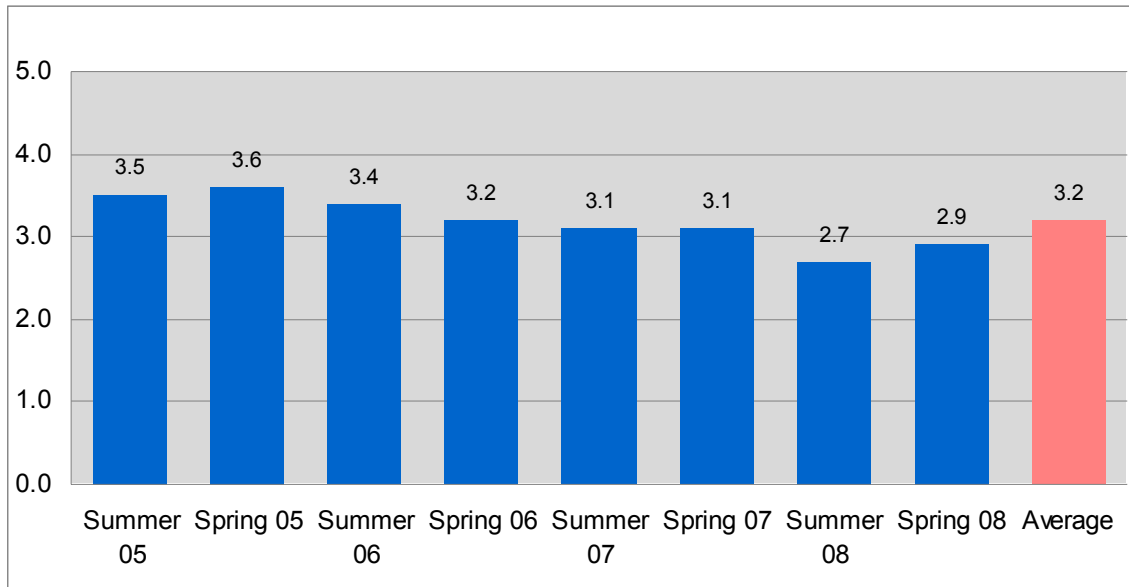
### Overall Stockpile Storage Rating Metropolitan



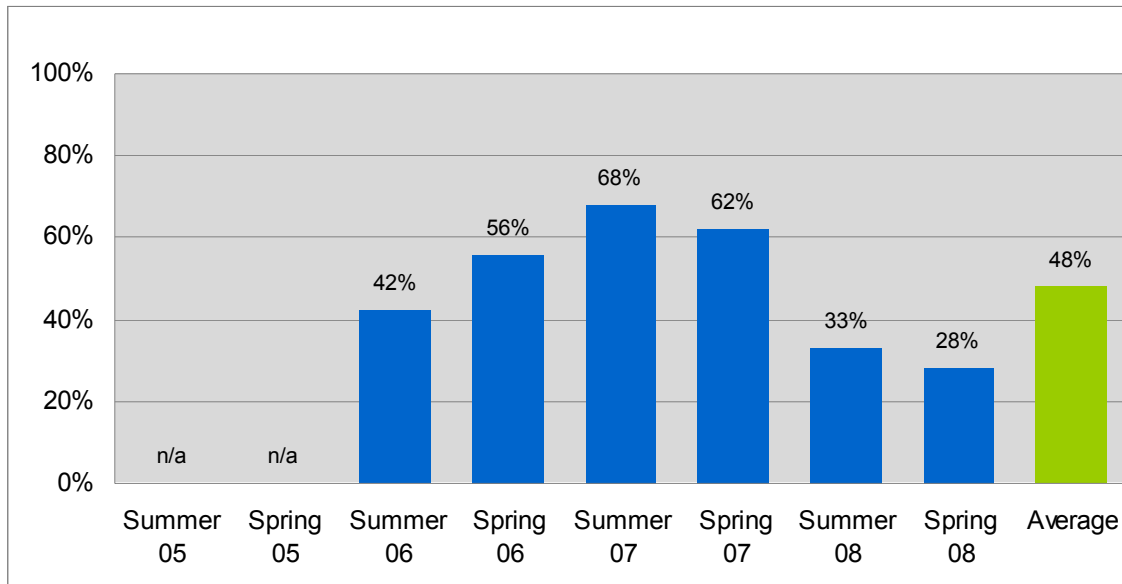
### Overall Sediment Movement Rating Regional



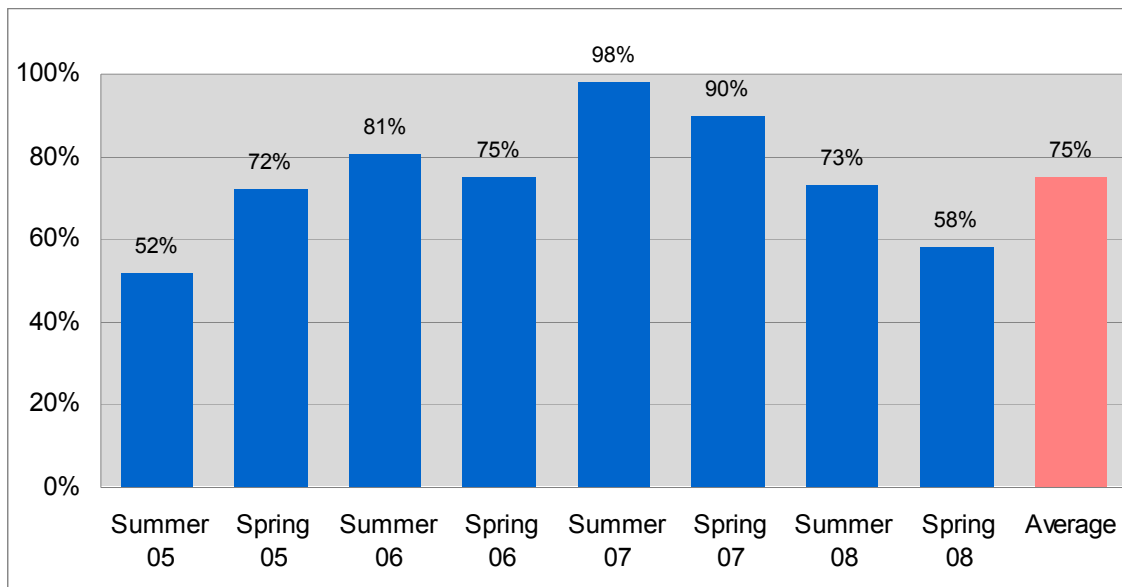
### Overall Sediment Movement Rating Metropolitan



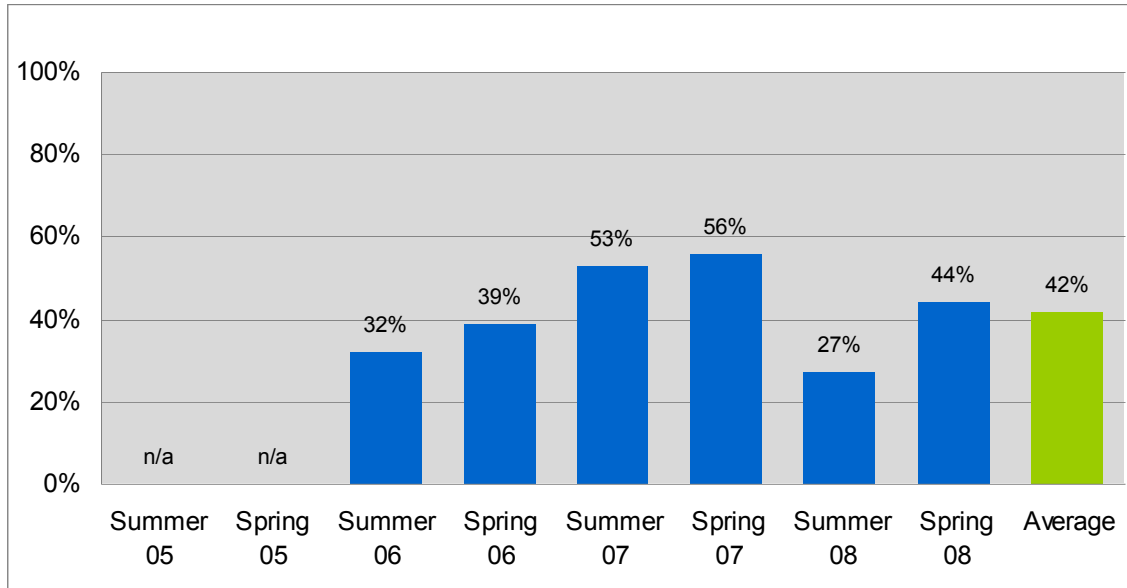
### Overall Single Vehicle Access Point Present Regional



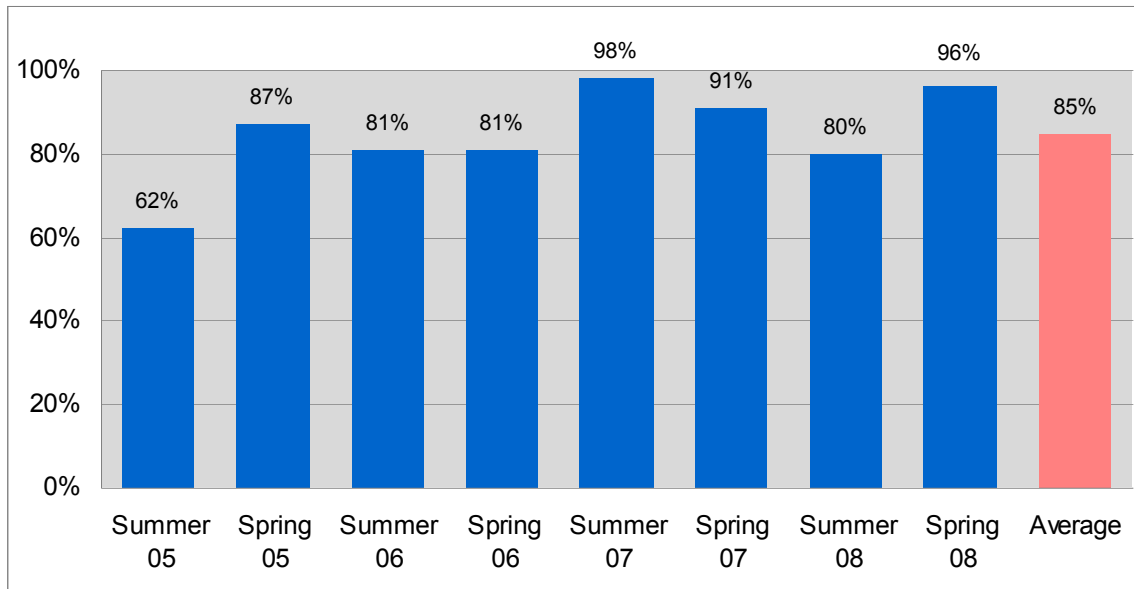
### Overall Single Vehicle Access Point Present Metropolitan



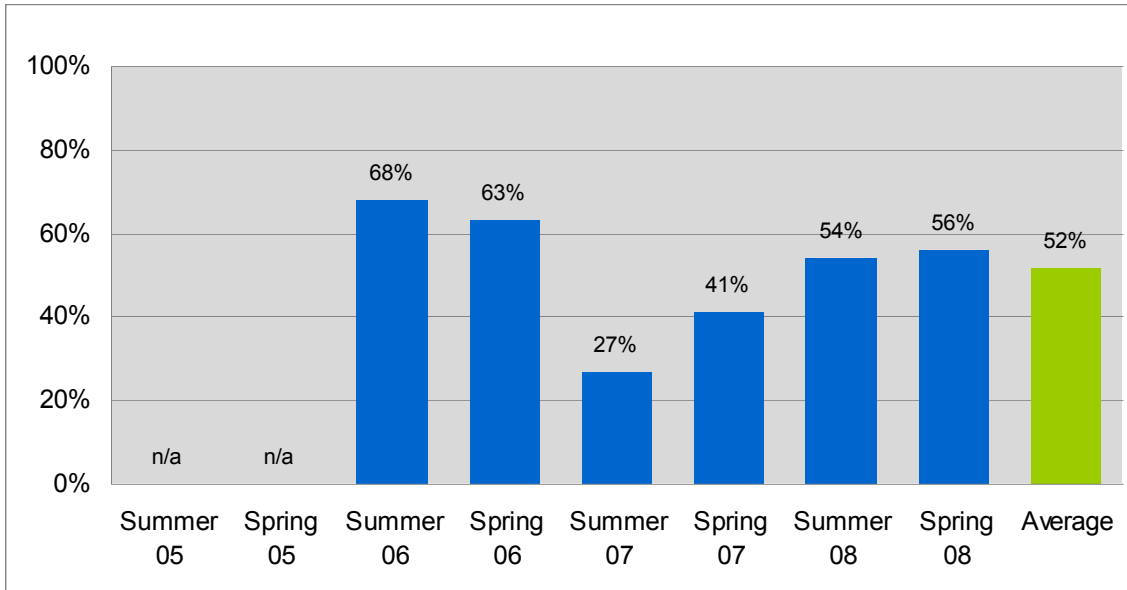
### Overall Proper Vehicle Crossing Present Regional



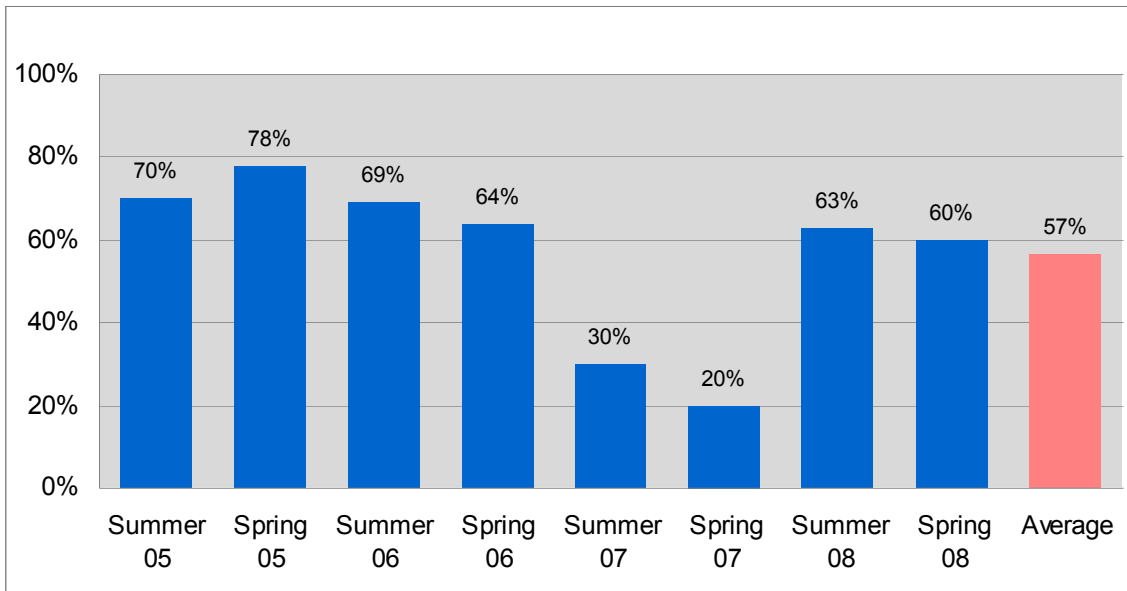
### Overall Proper Vehicle Crossing Present Metropolitan



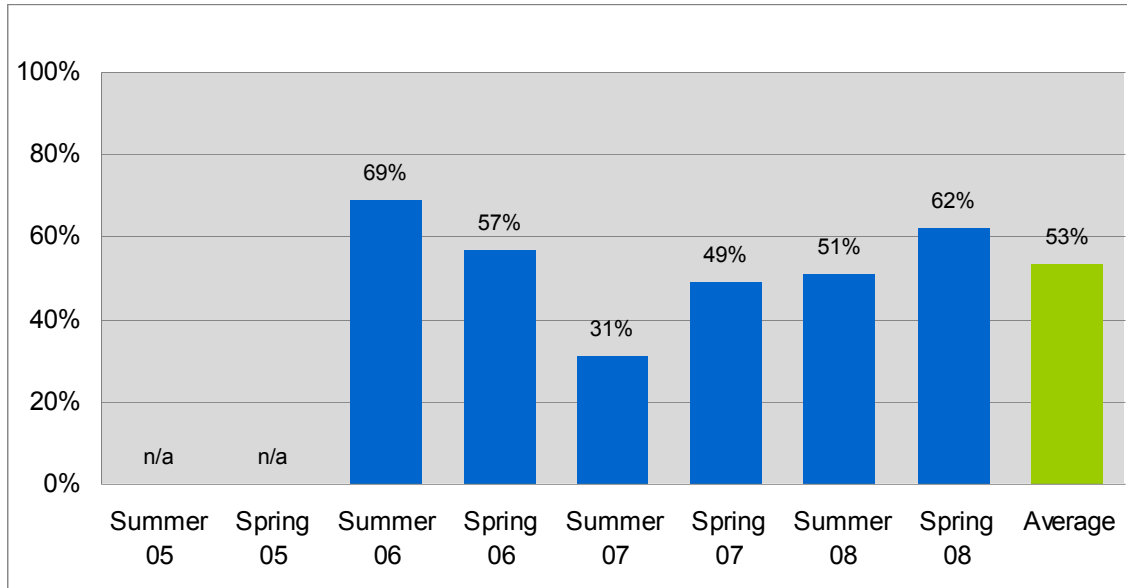
### Overall Tracked Sediment Present Regional



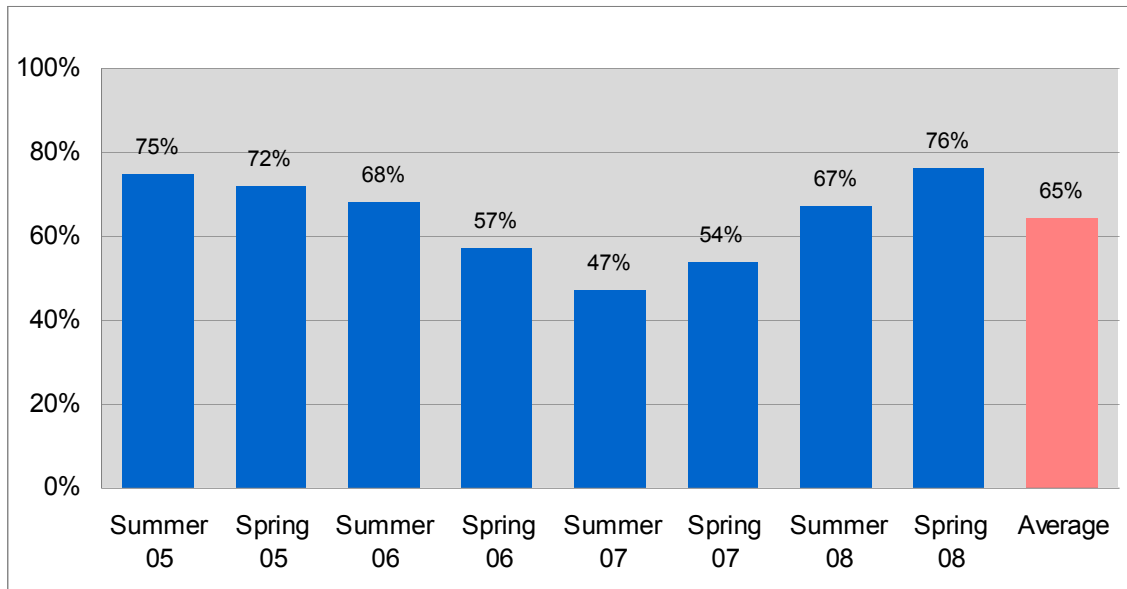
### Overall Tracked Sediment Present Metropolitan



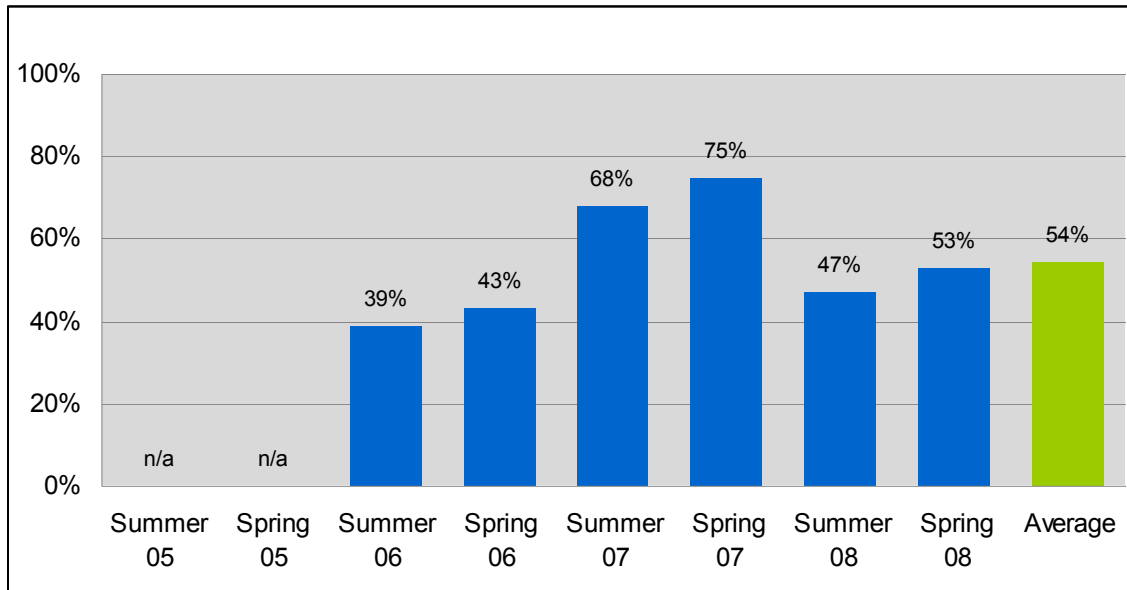
### Overall Sediment Control Measures Present Regional



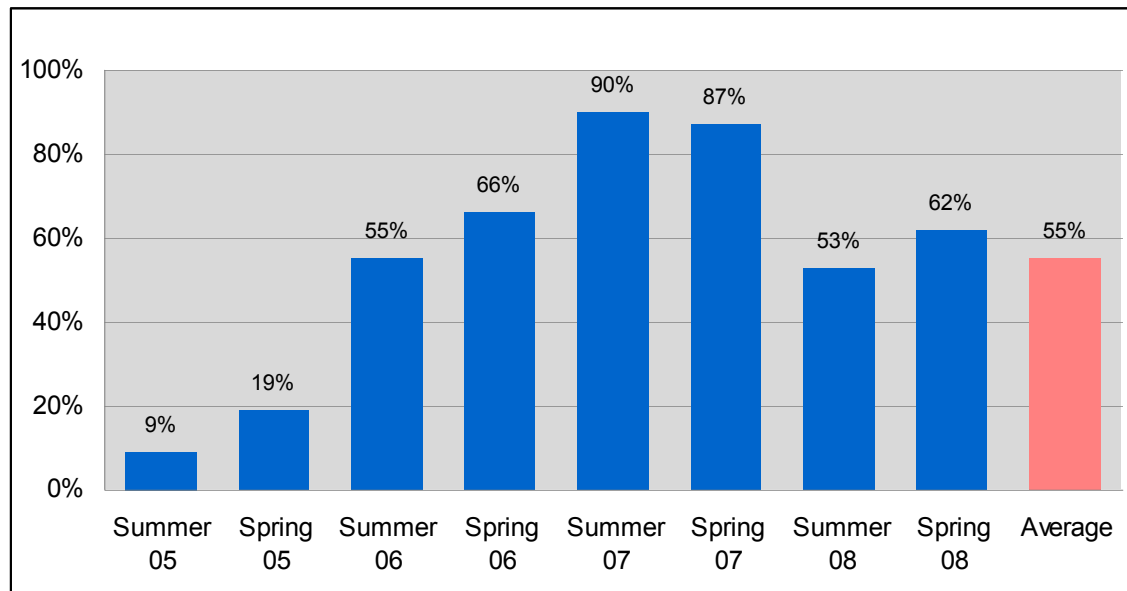
### Overall Sediment Control Measures Present Metropolitan



### Overall Compliance with Local Laws Regional



### Overall Compliance with Local Laws Metropolitan



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