







2005-2006 and 2006-2007

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Department of **Environment, Climate Change and Water** NSW



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# Executive summary 2005–2006 and 2006–2007

This publication contains the first two of a series of annual reports the Department of Environment, Climate Change and Water NSW (DECCW) intends to publish outlining the relative performance of kerbside and drop-off waste, recycling and resource recovery services in NSW, as reported by NSW councils.

Both the 2005–06 and 2006–07 reports detail information on dry recyclables, organics, residual waste, clean up, hard waste collections and drop-off facilities throughout NSW. Although the reports are published together, trend data will not be available until year three, instead broad comparisons can be drawn between the two reports and from some limited data available from 2000–2001.

### In general:

- Owing to an improvement in the level and scope of recycling collection services provided by councils in NSW, there have been collection increases in all recycling categories.
- The largest growth in amounts collected, as well as percentage of households receiving a collection service, has been in organics with the second largest being in dry recyclables.
- Dry recyclables collected at the kerbside have increased since 2000–01 by 212,000 tonnes, a 47% increase. Increases have been relatively constant each year.
- Household organics collections have tended to fluctuate each year since 2000–01 however there has been an overall increase of 94,549 tonnes collected, a 49% increase since 2000–01.

### Introduction

In August 2006 and 2007 the Department of Environment and Climate Change NSW (DECCW) surveyed all NSW local government councils to determine the characteristics of the waste and resource recovery services available to residents of NSW. The survey incorporated the information required under the National Environment Protection Measure (NEPM) for Used Packaging Materials<sup>1</sup>, in addition to information relating to domestic resource recovery as well as waste collection and disposal.

The NEPM contains a requirement for all local councils that provide kerbside recycling collection services to report on a number of aspects relating to their system. This information is published in the National Environment Protection Council (NEPC) annual report. DECCW's data survey builds upon the information collected under the NEPM by reporting on the suite of waste, recycling, and resource recovery achievements of councils in NSW. This report will provide consolidated information for councils to use in making decisions and to enable them to assess their own performance. The information will also help decision makers at all levels of government to measure progress against the goals and targets in the *NSW Waste Avoidance and Resource Recovery Strategy*<sup>2</sup>.

<sup>1</sup> For further information: www.ephc.gov.au

<sup>2</sup> For further information: www.environment.nsw.gov.au

The NSW Waste Avoidance and Resource Recovery Strategy 2003 (The Strategy) is designed to provide a continuing framework that will guide actions to achieve the State Government's policy objectives of minimising environmental harm from waste generation through to disposal, and conserving resources and maximising secondary resource use. The Strategy identifies four key result areas: preventing and avoiding waste; increasing recovery and use of secondary resources; reducing toxicity in products and materials; reducing litter and illegal dumping. The Strategy identifies a target for the municipal waste stream which aims to increase the recovery rate from 26% in 2000 to 66% by 2014.

This publication contains the first two of a series of annual reports DECCW intends to publish outlining the relative performance of kerbside and drop-off waste, recycling and resource recovery services in NSW. Although they are published together they are still separate reports. It is anticipated that future reports will continue to build upon and improve the foundation of this reporting framework, and to provide an accurate measure of the State's progress towards sustainable consumption patterns and sustainable resource management practices.

### • Dry recyclables collection

This section contains information relating to kerbside dry recyclables collection services provided by councils.

### Organics collection

This section contains information relating to kerbside organics collection services provided by councils.

#### Residual waste collection

This section contains information relating to kerbside residual waste collection services provided by councils.

### · Clean up/hard waste collection

This section contains information relating to the hard waste collection services provided by councils.

### Recyclables and organics drop-off facilities

This section contains information relating to council owned or operated recycling collection facilities where residents are able to take their recyclables.

### Methodology

The performance of these services has been consolidated to calculate overall waste generation and resource recovery rates in each local government area to enable comparisons to be made and to help councils and communities work towards meeting the 2014 target. However, when comparing figures from different local government areas, consideration should be given to regional variations in consumption patterns and available services. Average waste generation rates per household and per capita have also been developed to compare data at an individual level, particularly with the aspirational targets set for the State. In the next year of publication DECCW intends to publish trend data on performance in each category, however in the first two years only broad comparisons can be drawn.

The population figures that have been used for per capita calculations are derived from the Australian Bureau of Statistics (ABS) population estimates<sup>3</sup>. The population figures used are from, and refer to, population projections as at 30 June 2006. DECCW uses the figure from the start of the financial year as the ABS does not release the next year's figures until December. The ABS data is the most accurate projected figures available and is consistent from year to year.

The environmental benefits of recycling have been quantified for the materials recycled in NSW during 2006–07 using DECCW's *Environmental Benefits of Recycling Calculator*<sup>4</sup>. The calculations are based upon Life Cycle Analyses of the materials that comprise the kerbside recycling stream. The benefits have been categorised as savings in landfill space, greenhouse gas emissions, and water and energy use to enable effective comparison and ease of interpretation.

The council region classifications used within this report are based on the designations used in Schedule 1 of the *Protection of the Environment Operations Act 1997*<sup>5</sup>. The **Sydney Metropolitan Area (SMA)** means the area comprising the local government areas of Ashfield, Auburn, Bankstown, Baulkham Hills, Blacktown, Botany, Burwood, Camden, Campbelltown, Canada Bay, Canterbury, Fairfield, Holroyd, Hornsby, Hunters Hill, Hurstville, Kogarah, Ku-ring-gai, Lane Cove, Leichhardt, Liverpool, Manly, Marrickville, Mosman, North Sydney, Parramatta, Penrith, Pittwater, Randwick, Rockdale, Ryde, Strathfield, Sutherland, Sydney, Warringah, Waverley, Willoughby and Woollahra. The **Extended Regulated Area (ERA)** means the area comprising the local government areas of Cessnock, Gosford, Hawkesbury, Kiama, Lake Macquarie, Maitland, Newcastle, Port Stephens, Shellharbour, Shoalhaven, Wingecarribee, Wollongong and Wyong. The **Non-Regulated Area (NRA)** means the area comprising the remaining local government areas in NSW. This classification system has been used to reflect the geographical factors that affect waste management activities and the different regulatory conditions relating to waste operating within NSW.

**DECCW** acknowledges the cooperation and contribution of all NSW councils in providing the data presented within this report. Please note that the information within this report is dependent on the accuracy of data supplied by councils in the 2005-06 and 2006-07 survey. While DECCW has made an effort to verify the information supplied by councils wherever possible, DECCW is not in a position to validate the raw data that forms the basis of this report.

<sup>3</sup> ABS: Cat. No. 3218.0.55.001 Regional Population Growth, Australia – companion data

The calculator can be downloaded from the DECCW website: www.environment.nsw.gov.au

<sup>5</sup> http://www.environment.nsw.gov.au/legal/aboutpoe.htm

NSW Local Government Waste and Resource Recovery Data Report as reported by councils

2005-2006

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### Executive summary 2005-2006

In August 2006 the Department of Environment, Climate Change and Water NSW (DECCW) surveyed all NSW local government councils to determine the nature and characteristics of the waste and resource recovery services available to residents of NSW. The survey incorporated the information required under the National Environment Protection Measure (NEPM) for Used Packaging Materials<sup>6</sup> in addition to information relating to overall domestic resource recovery as well as waste collection and disposal.

The NEPM contains a requirement for all local councils that provide kerbside recycling collection services to report on a number of aspects relating to their system. This information is published in the National Environment Protection Council (NEPC) annual report. DECCW's data survey builds upon the information collected under the NEPM by reporting on the suite of waste, recycling, and resource recovery achievements of councils in NSW. This report will provide consolidated information for councils to use in making decisions and to enable them to assess their own performance. The information will also help decision makers at all levels of government to measure progress against the goals and targets in the *NSW Waste Avoidance and Resource Recovery Strategy* <sup>7</sup>.

The NSW Waste Avoidance and Resource Recovery Strategy 2003 (The Strategy) is designed to provide a continuing framework that will guide actions to achieve the State Government's policy objectives of minimising environmental harm from waste generation through to disposal, and conserving resources and maximising secondary resource recovery and use. The Strategy identifies four key result areas: preventing and avoiding waste; increasing recovery and use of secondary resources; reducing toxicity in products and materials; and reducing litter and illegal dumping. The Strategy identifies a target for the municipal waste stream which aims to increase the recovery rate<sup>8</sup> from 26% in 2000 to 66% by 2014.

Tackling consumption is perhaps the greatest challenge facing efforts to reduce the amount of waste produced by our society. The amount of waste we create is strongly linked to how much we spend and buy. Action to avoid and prevent waste needs to be considered at every step across the life cycle of goods and materials with a focus on those points in the supply chain where the impact and results will be most effective.

This is the first in a series of annual reports DECCW intends to publish outlining the relative performance of kerbside and drop-off waste, recycling and resource recovery services in NSW. It is anticipated that future reports will continue to build upon and improve the foundation of this reporting framework, and to provide an accurate measure of the State's progress towards sustainable consumption patterns and sustainable resource management practices.

This report contains information about the following services:

### Dry recyclables collection

This section contains information relating to kerbside dry recyclables collection services provided by councils.

<sup>6</sup> For further information: www.ephc.gov.au

<sup>7</sup> For further information: www.environment.nsw.gov.au

<sup>8</sup> Recovery rate is the percentage of the total amount of materials disposed of by households that is recovered for recycling or processing.

### Organics collection

This section contains information relating to kerbside organics collection services provided by councils.

#### Residual waste collection

This section contains information relating to kerbside residual waste collection services provided by councils.

### · Clean up/hard waste collection

This section contains information relating to the hard waste collection services provided by councils.

### Recyclables and organics drop-off facilities

This section contains information relating to council owned or operated recycling collection facilities where residents are able to take their recyclables.

The performance of these services has been consolidated to calculate overall waste generation and resource recovery rates in each local government area to enable comparisons to be made and to help councils and communities work towards meeting the 2014 target. However, when comparing figures from different local government areas, consideration should be given to regional variations in consumption patterns, available services and physical and social demographics. Average waste generation rates per household and per capita have also been developed to compare data at an individual level, particularly with the aspirational targets set for the State.

The population figures that have been used for the per capita calculations have been sourced from the Australian Bureau of Statistics (ABS) population estimates<sup>9</sup>. The population figures used are from, and refer to, population projections as at 30 June 2005. DECCW uses the figure from the start of the financial year as the ABS does not release the next year's figures until December. The ABS data is the most accurate projected figures available and is consistent from year to year, which will allow meaningful comparisons to be made.

The environmental benefits of recycling have been quantified for the materials recycled in NSW during 2005–06 using DECCW's *Environmental Benefits of Recycling Calculator*<sup>10</sup>. The calculations are based upon Life Cycle Analyses of the materials that comprise the kerbside recycling stream. The benefits have been categorised as savings in landfill space, greenhouse gas emissions, and water and energy use to enable effective comparison and ease of interpretation.

The council region classifications used within this report are based on the designations used in Schedule 1 of the *Protection of the Environment Operations Act 1997* <sup>11</sup>. The **Sydney Metropolitan Area (SMA)** means the area comprising the local government areas of Ashfield, Auburn, Bankstown, Baulkham Hills, Blacktown, Botany, Burwood, Camden, Campbelltown, Canada Bay, Canterbury, Fairfield, Holroyd, Hornsby, Hunters Hill, Hurstville, Kogarah, Ku-ring-gai, Lane Cove, Leichhardt, Liverpool, Manly, Marrickville, Mosman, North Sydney, Parramatta, Penrith, Pittwater, Randwick, Rockdale, Ryde, Strathfield, Sutherland, Sydney, Warringah, Waverley, Willoughby and

<sup>9</sup> ABS: Cat. No. 3218.0.55.001 Regional Population Growth, Australia – companion data

<sup>10</sup> The calculator can be downloaded from the DECCW website: www.environment.nsw.gov.au

<sup>11</sup> http://www.environment.nsw.gov.au/legal/aboutpoeo.htm

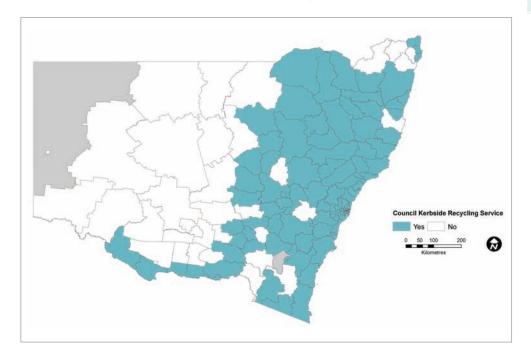
Woollahra. The **Extended Regulated Area (ERA)** means the area comprising the local government areas of Cessnock, Gosford, Hawkesbury, Kiama, Lake Macquarie, Maitland, Newcastle, Port Stephens, Shellharbour, Shoalhaven, Wingecarribee, Wollongong and Wyong. The **Non-Regulated Area (NRA)** means the area comprising the remaining local government areas in NSW. This classification system has been used to reflect the geographical factors that affect waste management activities and the different regulatory conditions relating to waste operating within NSW.

### Dry recyclables collected at the kerbside

Most councils have been successful in requiring and obtaining accurate reporting from the facilities receiving and processing their recyclables. However, it is acknowledged that some councils may have only been able to provide an estimate of tonnes of recycled material.

In NSW 116 councils provided a kerbside recycling service, reaching 91% of households and over 95% of the population (Figure 1). The availability of kerbside recycling to households varied across NSW with kerbside recycling services provided to 98% of households in the SMA, 99% in the ERA, and 68% in the NRA.

Figure 1: NSW councils providing kerbside recycling collection services



An average of 260 kg of dry recyclables was collected per household receiving a domestic recycling service in 2005–06. On a weekly basis this equates to an average of 5.0 kg per household or 1.8 kg per person. Of the 116 councils in NSW that provided a kerbside recycling service, 39 had an average weekly yield of less than 4.0 kg per household per week, and 30 had an average weekly yield in excess of 5.5 kg per household per week (Figure 2).

**DECCW** acknowledges the co-operation and contribution of all NSW councils in providing the data presented within this report. Please note that the information within this report is dependent on the accuracy of data supplied by councils in the 2005-06 survey. While DECCW has made an effort to verify the information supplied by councils wherever possible, DECCW is not in a position to validate the raw data that forms the basis of this report.

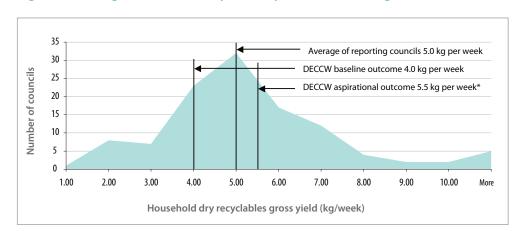


Figure 2: Average household recyclables yield across local government areas

\* Aspirational targets are included in DECCW Preferred Resource Recovery Practices www.environment.nsw.gov.au/warr/prefresourcerecovery.htm

In 2005–06 there were eight different dry recycling collection systems used by NSW councils (Table 1). The most common dry recycling collection system provided by councils was a fully commingled 240L Mobile Garbage Bin (MGB). In 2005–06, 59 councils used this system.

Sixty-six councils used DECCW's preferred collection systems for dry recyclables (240L fully commingled MGB or dual 120L MGBs for paper and containers). The adoption of standardised collection systems facilitates education and improved understanding and use of recycling systems by residents<sup>12</sup>.

Table 1: Average annual household recyclables yield by collection system

Collection system	No. of councils	Household gross yield (kg/hh/yr)	(kg/hh/wk)
240L MGB	59	261.00	5.02
240L MGB split recyclables	10	227.20	4.37
240L MGB split recyclables/waste	6	259.50	4.99
120L MGB	2	334.40	6.43
120L MGB dual bins <sup>1</sup>	7	317.20	6.10
Crate <sup>2</sup>	21	265.70	5.11
Bag	3	327.60	6.30
Other <sup>3</sup>	7	209.00	4.02

 $<sup>^{\</sup>rm 1}$  Dual 120L bins – 1 for paper, 1 for other dry recyclables collected alternate weeks

 $<sup>^{\</sup>rm 2}$  Either 2 crates – 1 for paper, 1 for other dry recyclables – or comingled crates

<sup>&</sup>lt;sup>3</sup> Other systems include combinations of either crate plus MGBs or MGBs only

<sup>12</sup> DECC 2004, Assessment of Alternative Domestic Waste and Recycling Systems, Department of Environment and Climate Change NSW, Sydney [A study commissioned by the NSW Jurisdictional Recycling Group and the Publishers National Environment Bureau – JRG 14].

Figure 3 compares average weekly household dry recyclables yield with collection system type. While 120L MGB and Bag collection systems show the highest average yield for 2005–06, only 5 councils use these systems. The councils using 120L MGB or Bag systems are all based within the NRA, and collectively service approximately 7500 households. Conversely the 66 councils utilising DECCW's preferred collection systems are geographically spread across the SMA, ERA and NRA and together service over 1.4 million households.

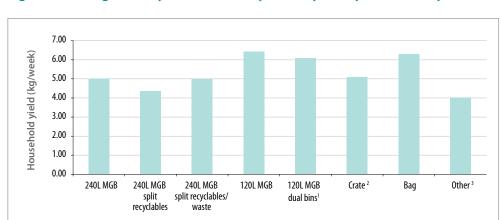


Figure 3: Average weekly household recyclables yield by collection system





In 2005–06 the total quantity of dry recyclables collected at the kerbside in NSW was 609,331 tonnes:

- 378,154 tonnes from the SMA
- 122,543 tonnes from the ERA
- 108,634 tonnes from the NRA.

There was an increase in the quantity of dry recyclables collected at the kerbside each year since 2000–01 (Figure 4). This is an increase of over 159 000 tonnes or 36% since 2000–01.

Above left: Metals bailed ready for collection by a reprocessor

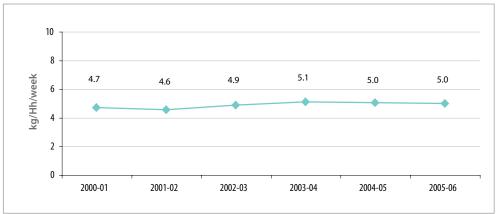
Above right: Sorting mixed dry recyclables into material type after collection

700 609.3 592.2 581.4 539.2 600 487.5 449.4 500 Tonnes (000) 400 300 200 100 0 2000-01 2001-02 2002-03 2003-04 2005-06 2004-05

Figure 4: Kerbside dry recycling collected in NSW 2000-01 to 2005-06.

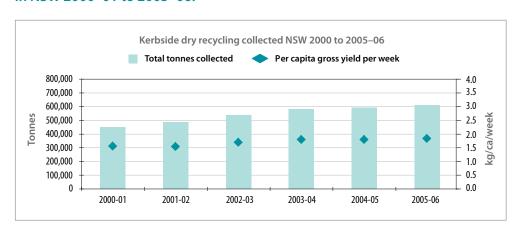
However, average household recyclables yield per week has remained relatively constant each year since 2000–01 (Figure 5).

Figure 5: Average household recyclables yield per week in NSW 2000–01 to 2005–06.



The overall increase in the quantity of recycling collected in NSW given the constant average per capita yields (Figure 6) is explained by increased number of councils offering a new or expanded recycling service to their households.

Figure 6: Annual quantity and average weekly per capita yield of recyclables in NSW 2000–01 to 2005–06.



Recycling results in the avoidance of environmental impacts associated with resource extraction, materials production and manufacturing processes. The environmental benefits of recycling 609,331 tonnes in NSW during 2005–06 are demonstrated using the Environmental Benefits of Recycling Calculator. The indicators used in this calculator are greenhouse benefits, energy and water savings, as well as landfill space saved. All benefits are net benefits, that is, they are the benefits after the average impacts of collection, transporting and reprocessing have been accounted for.

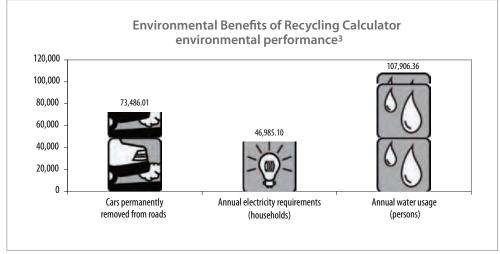
Utilising the *Environmental Benefits of Recycling Calculator*, the environmental benefits of recycling 609,331 tonnes of resources are:

- Energy savings: more than 10 million (10,147,971) gigajoules
- Water savings: more than 10 million (10,092,617) kilolitres
- Greenhouse gas savings: approx 306 thousand tonnes (305,969) tonnes CO<sub>2</sub> equivalent.

As shown in Figure 7, this results in the equivalent of 73,486 cars removed from the road, 46,985 household's annual electricity requirements not being used and 107,906 people's water usage being saved.

The recycling of 609,331 tonnes of resources also saved 1,678,929 m<sup>3</sup> of landfill space.

Figure 7: The environmental benefits of recycling 609,331 tonnes of resources





Recycling that otherwise would have gone to landfill

### Garden organics collected at the kerbside

It is acknowledged that some councils have only been able to provide estimates of the garden organics material recovered.

Fifty-three NSW councils provided a kerbside garden organics collection service, reaching 48% of households and 60% of the population (Figure 8). The availability of kerbside garden organics services to households varied across NSW with kerbside garden organics collection services provided to 54% of households in the SMA, 44% in the ERA, and 31% in the NRA.

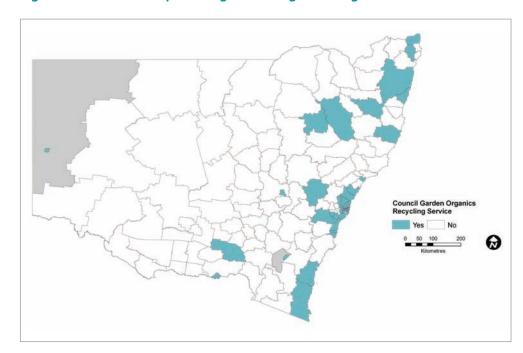
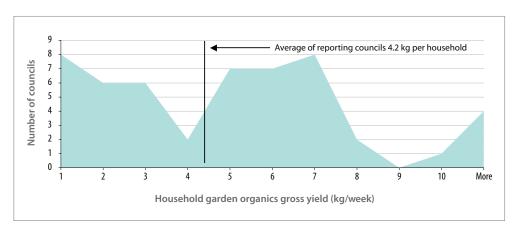


Figure 8: NSW councils providing kerbside garden organics collection services

An average of 218 kg of garden organic material was collected per household receiving a domestic organic service in 2005-06. On a weekly basis this equates to an average of 4.2 kg per household or 1.3 kg per person.

Figure 9: Average household garden organics yield by households receiving service



In 2005–06 there were 7 different garden organics collection systems used by NSW councils (Table 2 below). The most common garden organics collection system provided by councils was a 240L MGB collected fortnightly. In 2005–06, 31 councils used this system.

For councils with high volumes of garden organics (175kg or more per household per year), DECCW's *Preferred Resource Recovery Practices by Local Councils Guide* recommends a 240L MGB collection fortnightly. For councils with low volumes of garden organics (less than 175kg per household per year), the DECCW Guide recommends a tied and bundled collection three to four times per year. As demonstrated in Table 2, there are a number of alternative collection systems that have been adopted by councils with intermediate garden organics generation rates.

Table 2: Average weekly household garden organics yield by collection system

Collection system	No. of councils	Household gross yield kg/hh/yr	Household gross yield kg/hh/wk
240L MGB collected fortnightly	31	312.52	6.01
240L MGB collected monthly	5	184.60	3.55
240L MGB aerated, collected fortnightly or monthly	4	134.16	2.58
Bag, collected monthly or 2 monthly	2	81.64	1.57
140L MGB, collected weekly	1	377.00	7.25
Tied and bundled	5	36.40	0.70
Other collected fortnightly <sup>1</sup>	5	75.92	1.46

 $<sup>^{\</sup>scriptscriptstyle 1}$  Combination of tied and bundled + MGBs, or mix of MGBs, or crates + MGBs. Collection fortnightly

Figure 10 compares average weekly household garden organics yield with collection system type. The 140L MGB collection system shows the highest average yield for 2005–06, however, only one council used this system; Lismore Council used this system in 2005–6 to co-collect food organics and garden organics. The 31 councils who used the fortnightly 240L MGB collection system were geographically spread across the SMA, ERA and NRA and collectively serviced 738,000 households.

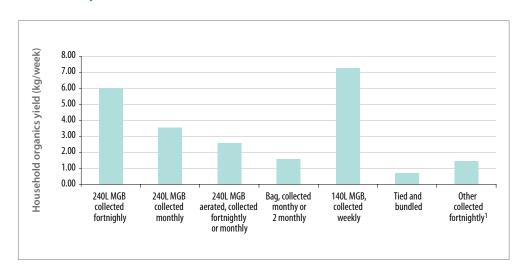


Figure 10: Average weekly household garden organics yield by collection system

Quantities of garden organics collected at the kerbside around NSW during 2005–06 totalled 270,402 tonnes:

- 157,199 tonnes from the SMA
- 58,386 tonnes from the ERA
- 54,817 tonnes from the NRA.

This is an increase of 76,000 tonnes, or 39%, since 2000–01.

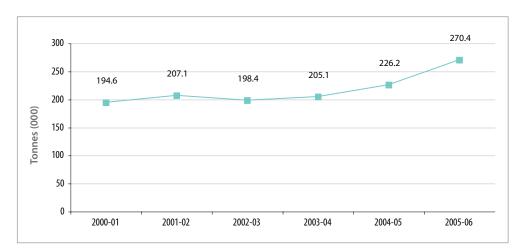
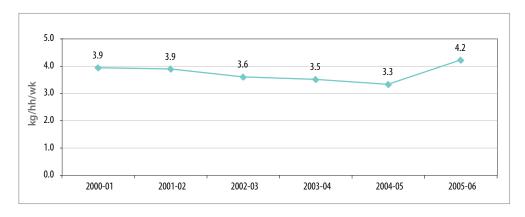


Figure 11: Kerbside garden organics collected in NSW 2000 to 2006

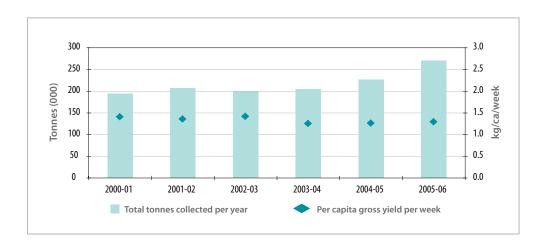
The average household garden organics yield per week has tended to fluctuate between 2000–01 and 2004–05 and then increased slightly for the 2005–06 period on a kg per household per week basis. (Figure 12 below).

Figure 12: Average household garden organics yield per week in NSW 2000 to 2006 based on total number of households in LGAs with a service



Since 2000–01, there has been a gradual increase in the amount of garden organics collected in NSW (Figures 11 and 13). This combines with the similar pattern of increase in the average yield per household, (Figures 12 and 13). The overall increase may be due to more councils offering a kerbside garden organics collection service, whereas the increase in yield per household may be attributed to greater awareness from education and an easing off of drought conditions, especially in the Greater Sydney Region. However, households may be limiting greater yields than those accounted for in this report due to the use of on site treatment processes such as home worm farming, composting and the provision of a council kerbside chipping service.

Figure 13: Annual quantity and average weekly per capita yield of garden organics in NSW 2000 to 2006 based on persons with a garden organics service







Recycled organic products such as mulch can be used on gardens

The environmental benefits of recycling 270,402 tonnes of garden organics are:

- Energy savings: more than 317 thousand (317,182.7) gigajoules
- Water savings: more than 129 thousand (129,793.4) kilolitres
- Greenhouse gas savings: more than 108 thousand (108,561.8) tonnes CO<sub>2</sub> equivalents.

# Residual waste collected at the kerbside (taken to landfill and/or AWT)

One hundred and fifty NSW councils provided a kerbside residual waste collection service, reaching 97% of households and over 99% of the population. The access to kerbside residual waste collection varied across NSW with 100% of households in the SMA receiving kerbside residual waste collection services, 99% in the ERA, and 89% in the NRA.

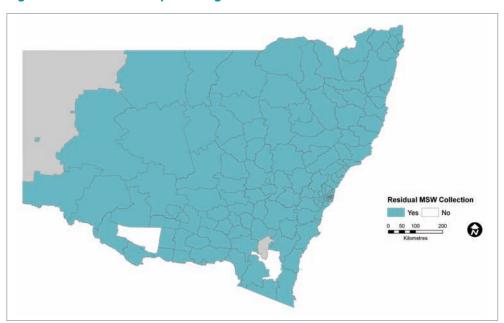


Figure 14: NSW councils providing kerbside residual waste collection services

An average of 630 kg of residual waste was collected per household receiving a domestic waste service in 2005–06 (Figure 15 below). On a weekly basis this equates to an average of 12.1 kg per household and 4.5 kg per capita.

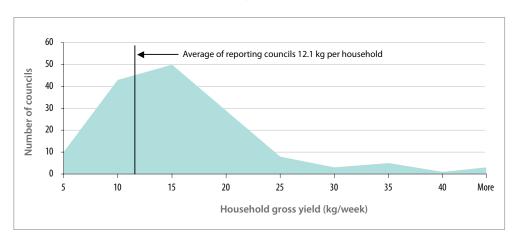


Figure 15: Household residual waste yields

In 2005–06 there were six different residual waste collection systems used by NSW councils (Table 3). The most common residual waste collection system provided by councils was a 240L MGB. In 2005–06, 78 councils used this system.

A total of 41 councils had adopted DECCW's preferred resource recovery practices for residual waste (80L MGB, 120L MGB, or 140L MGB) as smaller bin volumes encourage greater source separation of materials and facilitate a higher resource recovery rate.

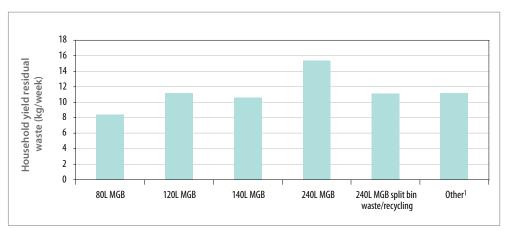
Table 3: Residual waste collection system by region

Collection system	SMA	ERA	NRA	Total	Household gross yield (kg/hh/yr)	Household gross yield (kg/hh/wk)
80L MGB	2	1		3	438.36	8.43
120L MGB	14		7	21	581.36	11.18
140L MGB	6		11	17	549.64	10.57
240L MGB	6	4	68	78	798.00	15.40
240L MGB split bin waste/ recycling	0	1	4	5	575.70	11.10
Other <sup>1</sup>	10	7	9	26	583.90	11.20

<sup>&</sup>lt;sup>1</sup> Mix of MGBs, predominant size not stated

The average weekly household residual waste generation is compared with collection system type in Figure 16. The 41 councils who used DECCW's preferred resource recovery practices are geographically spread across the SMA, ERA and NRA and collectively service over 856,000 households.

Figure 16: Average weekly household residual waste generation by collection system



<sup>&</sup>lt;sup>1</sup> Mix of MGBs. Predominant size not stated.

Figure 17: Domestic residual waste collected at kerbside (tonnes)

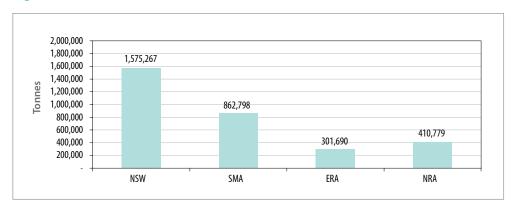


Figure 18: Domestic residual waste collected at kerbside kg per capita per week

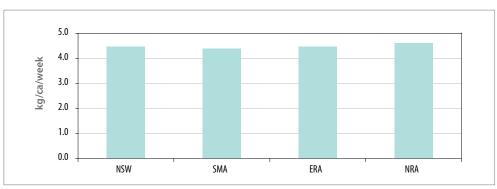
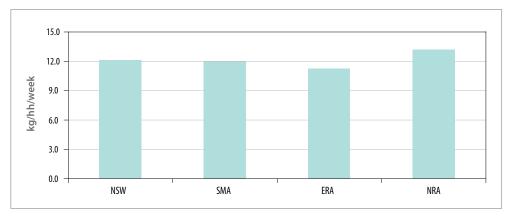


Figure 19: Domestic residual waste collected at kerbside kg per household per week



In 2005–06 the total quantity of residual waste collected at the kerbside in NSW was 1,575,267 tonnes:

- 862,798 tonnes from the SMA
- 301,690 tonnes from the ERA
- 410,779 tonnes from the NRA.

### **Alternative Waste Treatment (AWT)**

Alternative Waste Treatment (AWT) can involve a range of different treatment technologies that are used to treat or process residual waste to recover additional resources and/or stabilise the waste material prior to landfilling. Typically residue material from the AWT process, or processed material that cannot be beneficially reused, is disposed of to landfill.

In 2005–06, 65,400 tonnes of material was recovered from the residual waste stream using AWT technologies.

Councils were asked about their current position on AWT in the Data Return of 2005–06. Their responses are indicated in Figure 20.

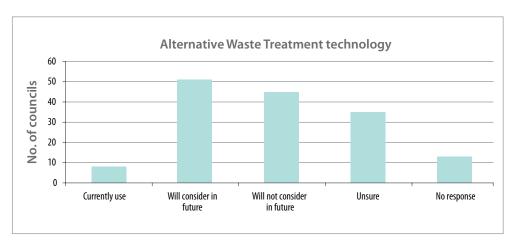


Figure 20: Councils and AWT.

### Domestic waste management charges

For reference purposes, the range of domestic waste management charges have been included as part of the summary table attached to this report as Appendix 1.



Waste that will end up in landfill, most of which could be diverted to recycling

### Kerbside clean up service

Ninety-five NSW councils provided a kerbside clean up collection service, reaching 83% of households and over 90% of the population (Figure 21). The access to a kerbside clean up service varied across NSW with these services being provided to 94% of households in the SMA, 91% in the ERA, and 58% in the NRA.

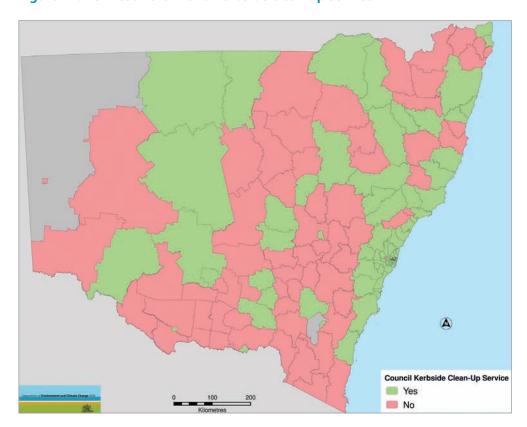


Figure 21: NSW councils with a kerbside clean up service

133,458 tonnes of bulky goods were collected in NSW, of which 109,703 tonnes were sent to landfill and 23, 754 tonnes were recycled. The overall Resource Recovery Rate (RRR) for kerbside clean up in NSW was in the order of 14%:

- 89,093 tonnes collected in the SMA (13% RRR)
- 25,213 tonnes collected in the ERA (16% RRR)
- 19,152 tonnes collected in the NRA (42% RRR).



A council re-use centre for household bulky goods that otherwise would have ended up in landfill

### **Drop-off facilities provided by councils**

One hundred and one NSW councils provided a recycling drop-off facility (dry recycling and/or garden organics), which was accessible by 56% of households and 55% of the population (Figure 22). The access to recycling drop off facilities varied across NSW with access to these facilities at 26% in the SMA, 95% in the ERA, and 87% in the NRA. The residents of 14 councils had a drop-off facility as their only recycling option.

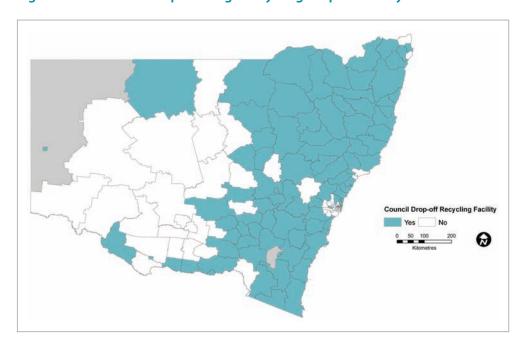


Figure 22: NSW councils providing a recycling drop off facility

190,191 tonnes of recyclable material were collected at drop off facilities:

- 32,997 tonnes of dry recyclables
- 157,194 tonnes of garden organics.

### **Recovery rates**

The recovery rate is the percentage of the total amount of materials disposed of by households that is recovered for recycling or processing. The target for Municipal Solid Waste (MSW) in the Strategy is to increase recovery rates from 26% to 66% by 2014. MSW is defined in the Strategy as:

The solid waste component of the waste stream arising from household waste placed at the kerbside for council collection and waste collected by council from municipal parks and gardens, street sweepings, council engineering works and public council bins. It excludes hazardous, clinical and related wastes.'

This report is based on waste and recycling generated by households only, which is a component of MSW and is not strictly the total of MSW. However, it is a good place to start for the purpose of looking at the State's scorecard.

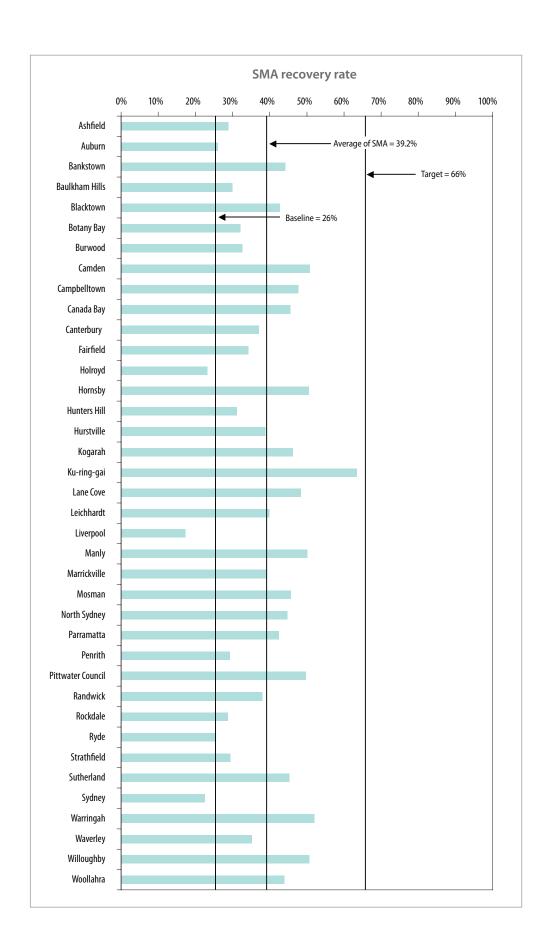
The recovery rate for NSW in 2005–06 was 37.5% when all collected household waste and recycling is included in the calculation, i.e. residual waste, recycling, garden organics, clean-up and drop-off. The recovery rates for the regions are:

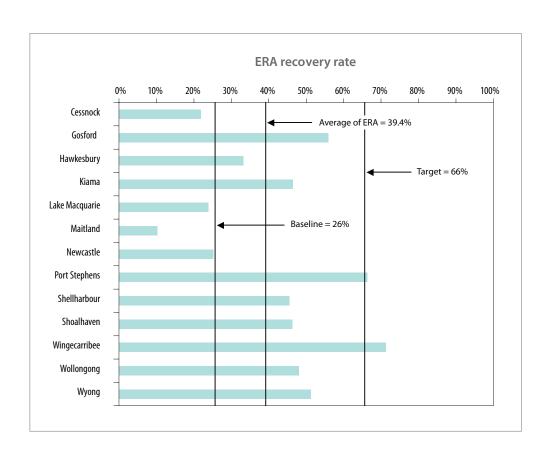
- SMA 39.2%
- ERA 39.4%
- NRA 32.7%.

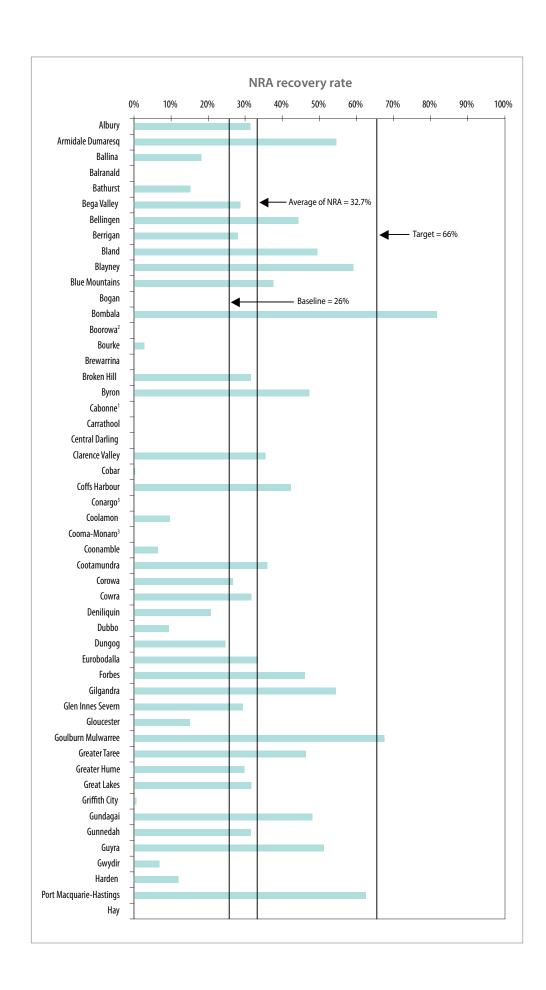
The graphs also indicate the baseline recovery rate of 26% in 2000 and the target recovery rate of 66% by 2014.

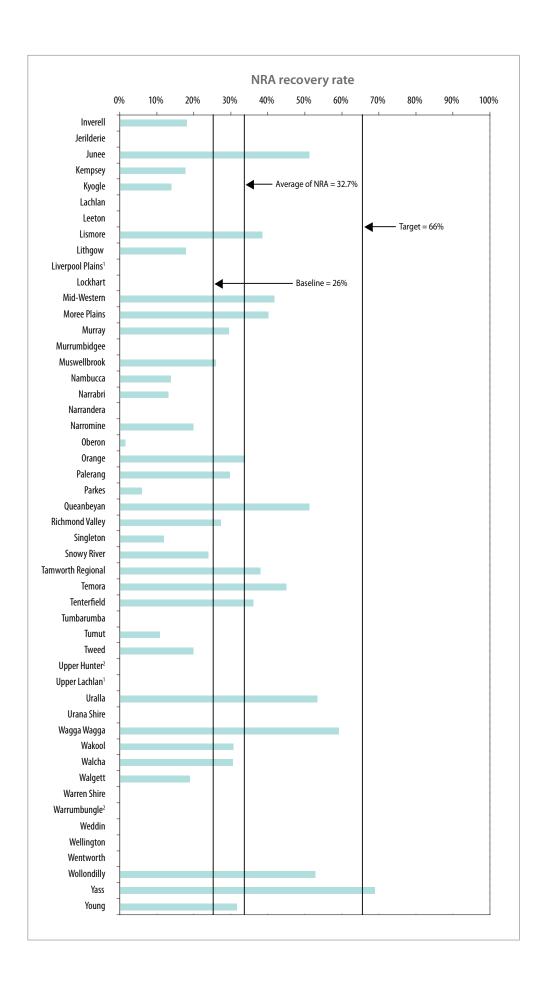
**Note:** The following is a key to the notations attached to some local council's data in the following recovery rate graphs:

- <sup>1</sup> Council did not supply kerbside waste data
- <sup>2</sup> Council did not supply kerbside recycling data
- <sup>3</sup> Council does not provide kerbside waste and recycling services.









### **Glossary**

### **AWT technology**

Alternative Waste Treatment technology

### **DECCW**

Department of Environment, Climate Change and Water NSW

### Domestic waste generation

The sum of the total of all materials collected or recovered through the domestic waste collection and resource recovery services (i.e. waste + recycling + garden organics + clean up).

### **Domestic Waste Management Charge**

The rate that councils charge each year for the provision domestic waste management services for each parcel of rateable land for which the service is available (\$496 the Local Government Act 1993).

### Drop off recycling

Places where materials or goods can be lawfully deposited for resource recovery or special management.

### Dry recyclables

The standard range of dry recyclables includes: recyclable paper and cardboard including newspapers, magazines, phone books, cardboard packaging and liquid paperboard; glass bottles and jars; steel cans and aerosols; aluminium rigid and semi-rigid packaging; all plastic containers.

### **Gross yield**

The total amount of material collected from an individual household as a result of the provision of a specific waste and/or resource recovery service.

#### Household

A household comprises the people that usually reside together within a single housing unit (house, unit, farm etc).

### Kerbside clean up collection

A kerbside waste collection for waste items that are too large for collection via the normal household waste service.

### Kerbside recycling

A formalised kerbside collection system for recyclables from households, where the householder segregates the wastes according to material type and places them in containers on the kerbside for separate collection.

#### LGA

Local Government Area

#### **MGB**

Mobile Garbage Bin. Also in the general context refers to mobile bins used for the collection of recycling and garden organics.

### **Organics**

Compostable organics is a generic term for all organic materials that are appropriate for collection and use as feedstocks for composting or in related biological treatment systems (e.g anaerobic digestion). Compostable organics is defined by its material components: residual food organics, garden organics, wood and timber, biosolids and agricultural organics.

Garden organics include:

- Putrescible garden organic material (grass clippings)
- Non-woody garden organic material
- · Woody garden organic material
- Trees and limbs
- Stumps and rootballs (not usually accepted in kerbside collection systems).

Garden organics is one of the primary components of the compostable organics stream.

### Predominant bin type

Where a council offers residents a range of bin sizes for a particular waste stream, the size used by the greatest number of households in a given LGA is considered the predominant bin type.

### Predominant service type

Where a council offers residents a range of waste service types, the waste service provided to the greatest number of households is considered to be the predominant service type.

### **Recovery Rate**

The Recovery Rate is the proportion of domestic dry recyclables and organics recovered through kerbside and drop off resource recovery services compared to total domestic waste generation.

#### Residual waste

Residual waste or garbage is materials that are not separated for recycling or recovery, but are generally disposed of at solid and inert waste landfills.

### Waste Avoidance and Resource Recovery (WARR) Act 2001

An Act to promote waste avoidance and resource recovery. Its purpose is to develop a state-wide framework to achieve integrated waste and resource management planning, programs and service delivery, to provide for the continual reduction in waste generation, to minimise the consumption of natural resources and the final disposal of waste and to encourage the most efficient use of resources.

### Waste Avoidance and Resource Recovery Strategy (WARR Strategy) 2003

The development of the WARR Strategy is a requirement of the WARR Act 2001. The initial Strategy was released in 2003 and an updated Strategy was released in 2007. The WARR Strategy provides guidance and priorities for action to ensure that efficient resource use and impacts on the environment are considered throughout the life cycle of goods and materials, including the extraction of raw materials, manufacturing, distribution, consumption and recovery for reprocessing or safe disposal.

## Appendix 1: Councils and their waste and resource recovery services

Council name	Population (ABS 30 June 2005)	Number of indivivdual households	Supplied data	Residual MSW collection	Kerbside recycling	Drop-off recycling facility	Domestic waste to AWT	Domestic Waste Management Charge (DWMC)	Comment on DWMC
NSW	6,771,799	2,574,663							
Albury	47,247	21,017	Y	Υ	Υ	Υ	N	\$115.00	
Armidale Dumaresq	24,611	7,270	Υ	Υ	Y	Y	N	\$199.00	
Ashfield	40,018	14,885	Υ	Υ	Υ	N	N	\$154.00	
Auburn	64,209	20,954	Y	Y	Y	N	N	\$353.40	Variable charges – most common charge
Ballina *	39,953	14,614	Υ	Υ	Υ	N	N	\$170.00	Urban residential
Balranald	2,730	760	Υ	Υ	N	N	N	\$197.00	
Bankstown	177,000	56,047	Υ	Υ	Υ	N	N	\$270.00	
Bathurst	37,001	14,249	Υ	Υ	Υ	Υ	N	\$117.00	
Baulkham Hills	161,068	52,358	Y	Y	Y	N	N	\$245.00	Variable charges – most common charge
Bega Valley	32,431	16,525	Y	Υ	Υ	Υ	N	\$138.32	
Bellingen	12,758	5,532	Υ	Υ	Υ	Υ	N	\$246.00	
Berrigan	8,289	3,857	Y	Υ	Υ	Υ	N	\$173.00	
Blacktown	283,458	90,738	Y	Y	Y	N	Y	\$216.00	Variable charges – most common charge
Bland	6,530	2,156	Υ	Υ	N	Υ	N	\$192.00	
Blayney	6,773	2,309	Υ	Υ	Υ	Υ	N	\$88.80	
Blue Mountains	76,511	32,766	Υ	Y	Y	Y	N	\$217.00	Variable charges – most common charge
Bogan	3,105	869	Υ	Y	N	N	N		Not provided
Bombala	2,534	770	Υ	Υ	Υ	Υ	N	\$187.00	
Boorowa	2,495	1,039	Υ	Y	Υ	Y	N	\$165.00	
Botany Bay	37,074	12,856	Υ	Y	Υ	N	N	\$259.00	
Bourke	3,906	1,212	Υ	Y	N	Υ	N	\$191.60	
Brewarrina	2,168	481	Υ	Y	N	N	N	\$243.60	
Broken Hill *	20,203	9,472	Υ	Υ	N	Υ	N	\$25.40	
Burwood	31,158	11,084	Υ	Υ	Υ	N	N	\$257.00	
Byron	30,827	11,379	Υ	Y	Y	Y	N	\$156.00	Variable charges – most common charge
Cabonne	12,703	5,100	Υ	Y	Y	Y	N	\$228.60	Variable charges – most common charge
Camden	51,367	16,312	Υ	Y	Y	N	N	\$176.80	Variable charges – most common charge
Campbelltown	150,216	51,429	Υ	Υ	Υ	N	N	\$213.20	
Canada Bay	67,261	28,989	Y	Y	Y	N	N	\$218.00	Variable charges – most common charge

Council name	Population (ABS 30 June 2005)	Number of indivivdual households	Supplied data	Residual MSW collection	Kerbside recycling	Drop-off recycling facility	Domestic waste to AWT	Domestic Waste Management Charge (DWMC)	Comment on DWMC
Canterbury *	134,126	43,753	Υ	Y	Υ	N	N	\$240.00	
Carrathool	3,274	806	Υ	Y	N	N	N		Not provided
Central Darling	2,406	1,102	Y	Y	N	N	N	\$170.00	Variable charges – most common charge
Cessnock	48,502	15,490	Υ	Υ	Υ	Υ	N	\$206.65	
Clarence Valley	49,538	23,023	Υ	Υ	Υ	Υ	N	\$184.00	
Cobar	5,013	1,596	Υ	Υ	N	N	N	\$155.00	
Coffs Harbour *	67,442	27,195	Y	Y	Y	Y	N	\$252.00	Variable charges – most common charge
Conargo	1,800	350	Y	N	N	N	N	\$0.00	No domestic kerbside services provided
Coolamon *	4,127	1,189	Υ	Υ	N	N	N	\$165.00	
Cooma-Monaro	9,792	4,800	Y	N	N	Y	N	\$174.00	No domestic kerbside services provided
Coonamble	4,714	1,438	Y	Y	Y	Y	N	\$230.00	Coonamble only – variable charges depending on township
Cootamundra	7,623	3,025	Υ	Υ	Υ	Υ	N	\$207.90	
Corowa	11,058	4,285	Υ	Υ	Υ	Υ	N	\$40.00	
Cowra	13,185	4,305	Y	Y	Y	Y	N	\$320.00	Variable charges – most common charge
Deniliquin	8,169	2,960	Y	Υ	N	Υ	N	\$90.00	
Dubbo *	39,263	13,635	Υ	Υ	Υ	Υ	N	\$121.00	
Dungog	8,440	3,349	Y	Υ	Υ	Υ	N	\$124.00	
Eurobodalla	36,389	22,374	Y	Υ	Υ	Υ	N	\$195.00	
Fairfield	187,790	58,283	Υ	Υ	Υ	Υ	Υ	\$260.00	
Forbes	9,974	2,702	Υ	Υ	Υ	Υ	N	\$213.45	
Gilgandra	4,660	2,170	Υ	Υ	Υ	Υ	N	\$150.00	
Glen Innes Severn	8,735	3,292	Υ	Υ	Υ	Υ	N	\$102.50	
Gloucester	4,917	1,520	Υ	Υ	Υ	Υ	N	\$196.00	
Gosford *	163,304	68,000	Υ	Y	Y	Y	N	\$250.64	Variable charges – most common charge
Goulburn Mulwarree	27,112	8,982	Υ	Υ	Υ	Y	N	\$158.50	
Great Lakes	34,659	19,732	Y	Υ	Υ	Υ	N	\$215.00	
Greater Hume	10,510	4,200	Y	Υ	Υ	Υ	N	\$145.00	
Greater Taree	46,986	19,963	Y	Y	Y	Y	N	\$150.00	Variable charges – most common charge

### Appendix 1: Councils and their waste and resource recovery services (continued)

Council name	Population (ABS 30 June 2005)	Number of indivivdual households	Supplied data	Residual MSW collection	Kerbside recycling	Drop-off recycling facility	Domestic waste to AWT	Domestic Waste Management Charge (DWMC)	Comment on DWMC
Griffith *	25,140	7,354	Y	Y	N	N	N	\$150.00	
Gundagai	3,764	820	Y	Υ	Y	Y	N	\$210.00	
Gunnedah	12,074	5,173	Y	Υ	Υ	Υ	N	\$175.00	
Guyra	4,460	1,283	Υ	Y	Y	Y	N	\$180.00	Variable charges  – most common charge
Gwydir	5,530	1,280	Υ	Υ	Υ	Υ	N	\$149.00	
Harden *	3,773	1,033	Υ	Υ	N	Υ	N	\$208.63	
Hawkesbury	63,824	22,602	Υ	Y	Υ	Υ	N	\$151.40	Variable charges – most common charge
Нау	3,534	3,600	Υ	Υ	N	N	N	\$92.00	
Holroyd	91,941	35,922	Υ	Υ	Υ	N	Υ	\$214.00	
Hornsby	157,204	54,762	Υ	Υ	Υ	Υ	N	\$251.00	
Hunters Hill	13,928	4,540	Υ	Y	Y	N	N	\$267.46	Variable charges – most common charge
Hurstville	76,036	29,135	Υ	Υ	Υ	N	N	\$230.00	
Inverell	15,794	7,395	Υ	Υ	Υ	Υ	N	\$235.00	
Jerilderie *	1,871	430	Y	Y	N	N	N	\$134.04	Estimated on total Collected and households serviced
Junee	5,922	1,820	Υ	Υ	Υ	Υ	N	\$205.00	
Kempsey	28,742	10,767	Υ	Υ	N	Υ	N	\$136.00	
Kiama	20,357	7,783	Υ	Y	Y	Y	N	\$277.20	Variable charges – most common charge
Kogarah	55,800	20,696	Υ	Y	Y	N	N	\$249.60	
Ku-ring-gai	108,697	36,662	Υ	Y	Y	N	N	\$250.00	Variable charges – most common charge
Kyogle	9,630	2,744	Υ	Υ	N	Υ	N	\$218.00	
Lachlan	7,360	1,836	Υ	Y	N	N	N	\$128.00	Condobolin only  – variable charges depending on township
Lake Macquarie	190,320	72,161	Υ	Υ	Υ	Υ	N	\$193.80	
Lane Cove	32,326	12,865	Υ	Υ	Υ	N	N	\$299.00	
Leeton	12,026	4,448	Υ	Υ	N	N	N	\$28.80	
Leichhardt	51,142	24,065	Υ	Y	Y	Y	N	\$343.00	Variable charges – most common charge
Lismore	43,628	15,800	Υ	Υ	N	Υ	N	\$137.40	

Council name	Population (ABS 30 June 2005)	Number of indivivdual households	Supplied data	Residual MSW collection	Kerbside recycling	Drop-off recycling facility	Domestic waste to AWT	Domestic Waste Management Charge (DWMC)	Comment on DWMC
Lithgow *	20,889	7,363	Υ	Y	Y	N	N	\$208.00	Variable charges – most common charge
Liverpool	170,192	52,699	Y	Y	Υ	N	N	\$220.00	
Liverpool Plains	7,852	2,323	Y	Y	Y	Y	N	\$196.00	
Lockhart	3,520	876	Y	Y	N	N	N	\$125.25	
Maitland	61,517	22,015	Y	Y	Y	Y	N	\$174.80	Variable charges – most common charge
Manly	38,886	17,700	Y	Υ	Υ	Υ	N	\$290.00	
Marrickville	75,114	32,621	Υ	Υ	Υ	N	N	\$292.29	
Mid-Western	22,141	8,882	Y	Y	Y	Y	N	\$127.30	Mudgee/ Gulgong only – variable charges depending on township
Moree Plains	15,936	5,895	Y	Y	Y	Y	N	\$221.50	Variable charges – most common charge
Mosman	28,363	12,650	Y	Y	Y	Y	N	\$264.00	Variable charges – most common charge
Murray	6,729	2,138	Υ	Υ	Υ	N	N	\$165.00	
Murrumbidgee	2,620	630	Y	Y	N	N	N	\$68.55	Estimated on total Collected and households serviced
Muswellbrook	15,149	6,027	Υ	Y	Υ	Υ	N	\$163.00	
Nambucca	18,755	7,046	Y	Y	Y	Y	N	\$352.00	
Narrabri	14,172	4,279	Υ	Y	Υ	Υ	N	\$200.00	
Narrandera	6,582	2,433	Y	Y	N	N	N	\$150.28	Variable charges – most common charge for Narrandera
Narromine	7,033	1,815	Υ	Y	Υ	Υ	N	\$236.00	
Newcastle	146,967	56,655	Υ	Y	Y	N	N	\$194.39	
North Sydney	60,944	31,658	Υ	Y	Υ	N	N	\$186.00	Variable charges – most common charge
Oberon	5,447	1,355	Υ	Y	N	Υ	N	\$124.00	
Orange *	37,791	15,662	Υ	Y	Υ	Υ	N	\$136.80	
Palerang	11,470	4,500	Υ	Υ	Υ	Υ	N	\$253.00	
Parkes	15,034	6,366	Υ	Υ	Υ	N	N	\$160.00	
Parramatta	151,860	52,674	Y	Y	Y	N	N	\$232.40	Variable charges – most common charge

#### Appendix 1: Councils and their waste and resource recovery services (continued)

Council name	Population (ABS 30 June 2005)	Number of indivivdual households	Supplied data	Residual MSW collection	Kerbside recycling	Drop-off recycling facility	Domestic waste to AWT	Domestic Waste Management Charge (DWMC)	Comment on DWMC
Penrith	177,955	61,380	Υ	Y	Y	N	Y	\$225.00	Variable charges – most common charge
Pittwater	57,354	20,779	Υ	Y	Y	Y	N	\$291.00	
Port Macquarie- Hastings	70,581	28,774	Υ	Y	Y	Y	Y	\$305.45	Variable charges – most common charge
Port Stephens	63,579	27,993	Υ	Y	Υ	N	Υ	\$249.50	
Queanbeyan	37,169	14,862	Υ	Y	Y	Y	N	\$182.00	Variable charges – most common charge
Randwick	126,034	53,590	Y	Y	Y	Y	N	\$281.60	
Richmond Valley	20,913	9,224	Υ	Y	N	Y	N	\$215.00	
Rockdale	95,341	34,600	Υ	Y	Y	N	N	\$256.00	Variable charges – most common charge
Ryde	99,550	37,103	Υ	Y	Y	N	N	\$215.00	Variable charges  – most common charge
Shellharbour	63,124	24,640	Υ	Y	Υ	Y	N	\$178.00	Variable charges – most common charge
Shoalhaven	93,615	46,381	Υ	Y	Y	Y	N	\$176.00	Variable charges – most common charge
Singleton	22,270	8,063	Υ	Υ	Υ	Υ	N	\$217.00	Urban residential
Snowy River	7,293	4,109	Υ	Y	Y	Y	N	\$255.81	Variable charges – most common charge
Strathfield	31,624	11,022	Υ	Y	Υ	N	N	\$245.00	
Sutherland	215,053	78,067	Υ	Y	Y	N	N	\$243.50	Variable charges  – most common charge
Sydney	148,367	76,000	Υ	Y	Y	N	Y	\$235.50	Variable charges – most common charge
Tamworth Regional	54,522	19,724	Y	Y	Y	Y	N	\$198.00	Variable charges – most common charge
Temora	6,337	1,934	Υ	Υ	Υ	Υ	N	\$125.00	
Tenterfield	6,805	3,804	Υ	Y	N	Y	N	\$240.00	Variable charges – most common charge
Tumbarumba	3,613	1,169	Υ	Y	N	N	N	\$252.00	
Tumut	11,347	3,850	Υ	Y	N	Y	N	\$235.00	
Tweed	80,935	33,666	Υ	Y	Y	N	N	\$65.00	

Council name	Population (ABS 30 June 2005)	Number of indivivdual households	Supplied data	Residual MSW collection	Kerbside recycling	Drop-off recycling facility	Domestic waste to AWT	Domestic Waste Management Charge (DWMC)	Comment on DWMC
Upper Hunter	13,424	6,713	Υ	Y	Y	Y	N	\$198.00	Variable charges – most common charge
Upper Lachlan	7,328	2,614	Y	Y	Y	Y	N	\$194.00	Crookwell only – variable charges depending on township
Uralla	6,075	2,261	Y	Y	Y	Y	N	\$186.20	Variable charges – most common charge
Urana *	1,389	382	Υ	Υ	N	N	N	\$135.00	
Wagga Wagga	58,055	21,197	Y	Υ	Y	Y	N	\$180.00	
Wakool	4,836	1,445	Y	Y	Y	Y	N	\$93.00	Variable charges – most common charge
Walcha	3,283	848	Y	Y	Y	Y	N	\$205.00	
Walgett	8,031	4,545	Υ	Υ	N	Υ	N	\$271.10	
Warren *	3,273	760	Υ	Υ	N	N	N	\$158.00	
Warringah	139,626	50,151	Y	Y	Y	Y	Y	\$256.00	Variable charges – most common charge
Warrumbungle	10,508	5,200	Υ	Υ	Υ	Υ	N	\$255.00	
Waverley	61,611	29,510	Y	Y	Y	N	N	\$339.00	
Weddin	3,848	2,000	Y	Y	N	N	N	\$162.00	Grenfell only  – variable charges depending on township
Wellington	7,328	2,434	Y	Y	N	N	N	\$170.00	
Wentworth	7,300	2,137	Υ	Y	N	N	N	\$170.00	Urban residential
Willoughby	63,959	24,593	Υ	Y	Y	N	N	\$295.00	
Wingecarribee	44,670	16,524	Y	Y	Y	Y	N	\$263.00	
Wollondilly	41,463	13,350	Y	Y	Y	Y	N	\$273.76	Variable charges – most common charge
Wollongong	192,402	74,518	Y	Y	Y	Y	N	\$210.00	Variable charges – most common charge
Woollahra	52,747	31,308	Υ	Y	Y	N	N	\$260.00	
Wyong	143,393	59,999	Υ	Y	Y	Y	N	\$249.40	
Yass	12,936	3,184	Υ	Y	Υ	Υ	N	\$256.00	
Young	12,035	4,470	Y	Y	Y	Y	N	166.92	

 $<sup>\</sup>hbox{$^*$ Household numbers adjusted to allow for mis-reporting of individual households in Multi Unit Dwellings}\\$ 

# Appendix 2: Classification of councils, Schedule 1 POEO Act

Sydne	ey Metropolitan Area (SMA)
150	Ashfield
200	Auburn
350	Bankstown
500	Baulkham Hills
750	Blacktown
1100	Botany Bay
1300	Burwood
1450	Camden
1500	Campbelltown
1520	Canada Bay
1550	Canterbury
2850	Fairfield
3950	Holroyd
4000	Hornsby
4100	Hunters Hill
4150	Hurstville
4450	Kogarah
4500	Ku-ring-gai
4700	Lane Cove
4800	Leichhardt
4900	Liverpool
5150	Manly
5200	Marrickville
5350	Mosman
5950	North Sydney
6250	Parramatta
6350	Penrith
6370	Pittwater
6550	Randwick
6650	Rockdale
6700	Ryde
7100	Strathfield
7150	Sutherland
7210	Sydney
8000	Warringah
8050	Waverley
8250	Willoughby
8500	Woollahra
Exten	ded Regional Area (ERA)
1720	Cessnock
3100	Gosford
3800	Hawkesbury
4400	Kiama
4650	Lake Macquarie
5050	Maitland
5900	Newcastle
6400	Port Stephens
6900	Shellharbour
6950	Shoalhaven
8350	Wingecarribee
8450	Wollongong
8550	Wyong

Non-	Regulated Area (NRA)
50	Albury
110	Armidale Dumaresq
250	Ballina
300	Balranald
470	Bathurst
550	Bega Valley
600	Bellingen
650	Berrigan
800	Bland
850	Blayney
900	Blue Mountains
950	Bogan
1000	Bombala
1050	Boorowa
1150	Bourke
1200	Brewarrina
1250	Broken Hill
1350	Byron
1400	Cabonne
1600	Carrathool
1700	Central Darling
1730	Clarence Valley
1750	Cobar
1800	Coffs Harbour
1860	Conargo
2000	Coolamon
2060	Cooma-Monaro
2150	Coonamble
2200	Cootamundra
2310	Corowa
2350	Cowra
2500	Deniliquin
2600	Dubbo
2700	Dungog
2750	Eurobodalla
2900	Forbes
2950	Gilgandra
3020	Glen Innes Severn
3050	Gloucester
3310	Goulburn Mulwarree
3350	Greater Taree
3370	Greater Hume
3400 3400	Great Lakes
3450 3450	Griffith City
3430 3500	Gundagai
3550	Gunnedah
3650	Guyra
3660	Gwydir
3700	Harden
	Port Macquarie-Hastings
3750	
3850	Hay
4200	Inverell

<ul><li>4250 Jerilderie</li><li>4300 Junee</li><li>4350 Kempsey</li><li>4550 Kyogle</li></ul>	
4350 Kempsey	
· , ,	
4550 Kyoale	
1330 I NOGIC	
4600 Lachlan	
4750 Leeton	
4850 Lismore	
4880 Lithgow	
4920 Liverpool Plains	
4950 Lockhart	
5270 Mid-Western	
5300 Moree Plains	
5500 Murray	
5550 Murrumbidgee	
5650 Muswellbrook	
5700 Nambucca	
5750 Narrabri	
5800 Narrandera	
5850 Narromine	
6110 Oberon	
6150 Orange	
6180 Palerang	
6200 Parkes	
6470 Queanbeyan	
6610 Richmond Valley	
7000 Singleton	
7050 Snowy River	
7310 Tamworth Regional	
7350 Temora	
7400 Tenterfield	
7450 Tumbarumba	
7510 Tumut	
7550 Tweed	
7620 Upper Hunter	
7640 Upper Lachlan	
7650 Uralla	
7700 Urana Shire	
7750 Wagga Wagga	
7800 Wakool	
7850 Walcha	
7900 Walgett	
7950 Warren Shire	
8020 Warrumbungle	
8100 Weddin	
8150 Wellington	
8200 Wentworth	
8400 Wollondilly	
8710 Yass	
8750 Young	

# **Appendix 3: Recovery rates**

			T <sub>4</sub> (ker	Total domestic recovery (kerbside, clean up, drop off)	c recovery up, drop of	f)		Domestic recovery (kerbside only)	recovery de only)	
				05-06	9			90-90	90-	
ABS	Council name	DLG group no.	Domestic kerbside, clean up, drop-off, dry recyclables and organics	Domestic kerbside, clean up, drop-off, waste to landfill	Total domestic waste generated	Total domestic recovery rate	Domestic kerbside dry recyclables and organics	Total domestic kerbside waste to landfill	Total domestic kerbside waste generated	Total domestic kerbside recovery rate
			tonnes	tonnes	tonnes	%	tonnes	tonnes	tonnes	%
	NSW		1,159,078	1,934,085	3,093,163	37.5%	879,734	1,575,267	2,455,000	35.8%
	SMA		608,206	941,980	1,550,186	39.5%	535,353	862,798	1,398,151	38.3%
150	Ashfield	7	4,379	10,796	15,175	28.9%	4,266	968'6	14,162	30.1%
200	Auburn	7	5,331	15,134	20,465	26.1%	5,289	14,184	19,473	27.2%
350	Bankstown	Μ	32,554	41,121	73,675	44.2%	32,394	37,877	70,270	46.1%
200	Baulkham Hills	7	19,739	46,246	65,985	29.9%	16,973	46,246	63,219	26.8%
750	Blacktown	~	46,951	62,850	109,801	42.8%	23,034	58,466	81,500	28.3%
1100	Botany Bay	2	4,772	10,103	14,874	32.1%	3,212	9,250	12,462	25.8%
1300	Burwood	2	3,658	7,558	11,216	32.6%	3,573	7,151	10,724	33.3%
1450	Camden	9	11,161	10,815	21,976	50.8%	11,112	10,497	21,609	51.4%
1500	Campbelltown	7	30,672	33,520	64,192	47.8%	27,241	30,088	57,329	47.5%
1520	Canada Bay	2	12,783	15,314	28,098	45.5%	12,585	14,046	26,632	47.3%
1550	Canterbury	2	19,938	33,943	53,882	37.0%	19,743	31,113	20,857	38.8%
2850	Fairfield	3	28,411	54,472	82,884	34.3%	11,357	44,514	55,871	20.3%
3950	Holroyd	3	8,354	27,668	36,021	23.2%	6,803	27,668	34,471	19.7%
4000	Hornsby	7	33,078	32,324	65,402	20.6%	32,042	29,091	61,133	52.4%
4100	Hunters Hill	2	1,608	3,546	5,153	31.2%	1,608	3,401	2,008	32.1%
4150	Hurstville	3	12,193	19,207	31,400	38.8%	12,193	17,036	29,229	41.7%
4450	Kogarah	2	10,721	12,443	23,164	46.3%	10,715	10,688	21,403	50.1%
4500	Ku-ring-gai	3	32,735	18,882	51,617	63.4%	32,661	17,150	49,811	65.6%
4700	Lane Cove	2	5,718	6,108	11,826	48.4%	5,718	6,108	11,826	48.4%

## Appendix 3: Recovery rates (continued)

			Τς (kerl	Total domestic recovery (kerbside, clean up, drop off)	recovery Jp, drop off	(j		Domestic recovery (kerbside only)	recovery de only)	
				05-06	<b>1</b> 9			05-	90-50	
ABS	Council name	DLG group no.	Domestic kerbside, clean up, drop-off, dry recyclables and organics	Domestic kerbside, clean up, drop-off, waste to landfill	Total domestic waste generated	Total domestic recovery rate	Domestic kerbside dry recyclables and organics	Total domestic kerbside waste to landfill	Total domestic kerbside waste generated	Total domestic kerbside recovery rate
			tonnes	tonnes	tonnes	%	tonnes	tonnes	tonnes	%
4800	Leichhardt	7	8,387	12,631	21,018	39.9%	7,932	10,785	18,717	42.4%
4900	Liverpool	7	10,583	20'05	61,254	17.3%	669'6	20'02	698'09	16.1%
5150	Manly	2	7,851	7,801	15,652	50.2%	7,689	6,955	14,643	52.5%
5200	Marrickville	3	11,244	17,413	28,657	39.2%	10,971	15,919	26,890	40.8%
5350	Mosman	2	5,521	6,561	12,082	45.7%	2,296	6,195	11,491	46.1%
5950	North Sydney	2	9,168	11,322	20,490	44.7%	9,138	10,232	19,370	47.2%
6250	Parramatta	3	56,999	36,644	63,643	42.4%	26,995	35,140	62,135	43.4%
6350	Penrith	7	22,063	53,379	75,442	29.2%	14,528	50,749	65,277	22.3%
6370	Pittwater	2	11,580	11,723	23,303	49.7%	11,580	11,255	22,835	50.7%
6550	Randwick	3	17,976	29,352	47,328	38.0%	17,533	26,032	43,565	40.2%
0999	Rockdale	3	10,903	27,098	38,001	28.7%	6,865	23,622	33,487	29.5%
6700	Ryde	3	10,221	30,123	40,344	25.3%	9,917	27,631	37,548	26.4%
7100	Strathfield	2	3,596	8,641	12,238	29.4%	3,596	8,306	11,902	30.2%
7150	Sutherland	3	46,098	55,572	101,670	45.3%	45,663	46,807	92,470	49.4%
7210	Sydney	_	13,230	45,534	58,763	22.5%	12,429	40,112	52,542	23.7%
8000	Warringah	3	33,435	30,825	64,259	52.0%	25,578	26,014	51,591	49.6%
8050	Waverley	2	691'6	16,828	25,997	35.3%	691'6	15,605	24,774	37.0%
8250	Willoughby	2	15,143	14,724	29,867	20.7%	14,975	14,152	29,127	51.4%
8500	Woollahra	2	10,282	13,091	23,373	44.0%	10,282	12,147	22,429	45.8%

	ERA		274,303	422,170	696,473	39.4%	180,929	301,690	482,619	37.5%
1720	Cessnock	4	3,937	14,068	18,005	21.9%	3,760	14,068	17,828	21.1%
3100	Gosford	7	45,797	36,124	81,921	25.9%	38,857	31,312	70,169	55.4%
3800	Hawkesbury	9	10,628	21,337	31,965	33.2%	6,182	18,378	24,560	25.2%
4400	Kiama	4	5,393	6,226	11,618	46.4%	3,300	3,424	6,725	49.1%
4650	Lake Macquarie	2	30,207	96,510	126,717	23.8%	19,072	56,022	75,094	25.4%
5050	Maitland	4	5,537	48,460	53,997	10.3%	5,250	18,470	23,720	22.1%
2900	Newcastle	2	19,616	58,251	77,867	25.2%	13,884	45,060	58,944	23.6%
6400	Port Stephens	4	18,744	9,531	28,275	66.3%	5,127	8,353	13,480	38.0%
0069	Shellharbour	4	10,984	13,151	24,135	45.5%	6,517	13,069	19,586	33.3%
0569	Shoalhaven	2	22,467	26,093	48,560	46.3%	11,244	21,704	32,948	34.1%
8350	Wingecarribee	4	17,882	7,196	25,078	71.3%	4,170	5,190	098'6	44.6%
8450	Wollongong	5	45,897	49,801	869'56	48.0%	36,220	36,619	72,839	49.7%
8550	Wyong	7	37,215	35,423	72,638	51.2%	27,345	30,021	57,366	47.7%
	NRA		276,569	569,934	846,503	32.7%	163,452	410,779	574,231	28.5%
09	Albury	4	5,224	11,379	16,603	31.5%	3,368	11,049	14,417	23.4%
110	Armidale Dumaresq	4	2,758	4,778	10,536	54.6%	2,568	4,778	10,346	53.8%
250	Ballina	4	3,146	14,196	17,342	18.1%	3,146	11,743	14,889	21.1%
300	Balranald	6	0	946	946	%0:0	0	936	936	0.0%
470	Bathurst	4	2,768	15,448	18,216	15.2%	909	10,448	11,053	5.5%
550	Bega Valley	4	7,712	19,147	26,859	28.7%	5,971	5,147	11,119	53.7%
009	Bellingen	1	1,406	1,762	3,168	44.4%	938	1,654	2,592	36.2%
650	Berrigan	10	3,737	9,638	13,375	27.9%	909	6,029	6,634	9.1%
800	Bland	10	2,796	2,861	2,657	49.4%	0	2,852	2,852	0.0%
850	Blayney	10	2,893	2,000	4,893	59.1%	493	2,000	2,493	19.8%
006	Blue Mountains	_	16,983	28,163	45,146	37.6%	6,302	23,987	30,290	20.8%
950	Bogan	6	0	1,144	1,144	%0:0	0	1,144	1,144	0.0%
1000	Bombala	6	782	175	957	81.7%	601	145	746	80.6%
1050	Boorowa <sup>2</sup>	6	0	200	200	%0:0	0	200	200	%0.0
1150	Bourke	6	97	3,437	3,534	2.7%	0	1,997	1,997	0.0%
1200	Brewarrina	6	0	125	125	0.0%	0	120	120	0.0%

## Appendix 3: Recovery rates (continued)

			Te (ker	Total domestic recovery (kerbside, clean up, drop off)	c recovery up, drop of	f)		Domestic recovery (kerbside only)	recovery de only)	
				02-06	9			05-	90-90	
ABS	Council name	DLG group no.	Domestic kerbside, clean up, drop-off, dry recyclables and organics	Domestic kerbside, clean up, drop-off, waste to landfill	Total domestic waste generated	Total domestic recovery rate	Domestic kerbside dry recyclables and organics	Total domestic kerbside waste to landfill	Total domestic kerbside waste generated	Total domestic kerbside recovery rate
			tonnes	tonnes	tonnes	%	tonnes	tonnes	tonnes	%
1250	Broken Hill	4	3,196	6,942	10,139	31.5%	1,213	6,942	8,156	14.9%
1350	Byron	4	6,467	7,234	13,701	47.2%	3,316	5,410	8,726	38.0%
1400	Cabonne1	1	592	18,887	19,479	3.0%	592	0	592	100.0%
1600	Carrathool	6	0	2,056	2,056	%0:0	0	806	908	0.0%
1700	Central Darling	6	0	009	009	%0:0	0	009	009	0.0%
1730	Clarence Valley	4	14,893	27,098	41,991	35.5%	8,379	11,258	19,637	42.7%
1750	Cobar	10	3	1,599	1,602	0.2%	0	1,544	1,544	0.0%
1800	Coffs Harbour	4	11,525	15,744	27,269	42.3%	11,525	12,371	23,896	48.2%
1860	Conargo³	∞	0	0	0	%0:0	0	0	0	%0:0
2000	Coolamon	6	160	1,500	1,660	%9.6	0	1,500	1,500	%0:0
2060	Cooma-Monaro³	10	1,300	1,409	2,709	48.0%	0	0	0	%0:0
2150	Coonamble	6	71	1,040	1,111	6.4%	11	1,040	1,051	1.1%
2200	Cootamundra	10	1,428	2,545	3,973	35.9%	272	2,545	2,817	9.7%
2310	Corowa		789	2,174	2,963	26.6%	789	2,174	2,963	26.6%
2350	Cowra	1	2,170	4,694	6,864	31.6%	908	3,502	4,308	18.7%
2500	Deniliquin	4	1,226	4,689	5,915	20.7%	0	2,622	2,622	%0:0
2600	Dubbo	4	1,472	14,337	15,809	9.3%	31	12,691	12,722	0.2%
2700	Dungog	10	1,057	3,250	4,307	24.5%	657	1,650	2,307	28.5%
2750	Eurobodalla	4	5,250	10,473	15,723	33.4%	4,091	10,073	14,164	28.9%
2900	Forbes	10	2,226	2,604	4,829	46.1%	222	2,600	2,822	7.9%
2950	Gilgandra	6	958	800	1,758	54.5%	624	800	1,424	43.8%

3020	Glen Innes Severn	9	823	1,979	2,802	29.4%	551	1,979	2,530	21.8%
3050	Gloucester	6	481	2,700	3,181	15.1%	231	2,700	2,931	7.9%
3310	Goulburn Mulwarree	4	8,302	4,000	12,302	67.5%	8,262	4,000	12,262	67.4%
3350	Greater Taree	4	9,260	10,745	20,005	46.3%	4,554	10,294	14,848	30.7%
3370	Greater Hume	=	701	1,650	2,351	29.8%	108	1,650	1,758	6.1%
3400	Great Lakes	4	7,040	15,220	22,260	31.6%	3,000	8,914	11,914	25.2%
3450	Griffith City	4	55	9,182	9,237	%9:0	0	9,131	9,131	0.0%
3500	Gundagai	6	243	263	506	48.1%	203	263	466	43.6%
3550	Gunnedah	1	2,974	6,473	9,446	31.5%	2,974	2,731	5,705	52.1%
3650	Guyra	6	485	462	948	51.2%	485	462	948	51.2%
3660	Gwydir	10	344	4,658	5,002	%6.9	127	1,248	1,375	9.2%
3700	Harden	6	189	1,383	1,572	12.0%	0	1,383	1,383	%0:0
3750	Port Macquarie- Hastings	4	24,886	14,891	39,778	62.6%	14,255	10,914	25,169	%9'99
3850	Нау	6	0	1,310	1,310	%0.0	0	1,310	1,310	%0:0
4200	Inverell	=	2,133	005'6	11,633	18.3%	1,736	6,500	11,236	15.5%
4250	Jerilderie	∞	0	832	832	%0:0	0	832	832	0.0%
4300	Junee	10	574	531	1,106	51.9%	360	526	988	40.6%
4350	Kempsey	4	2,434	11,128	13,562	17.9%	0	10,036	10,036	0.0%
4550	Kyogle	10	407	2,481	2,888	14.1%	0	1,338	1,338	0.0%
4600	Lachlan	10	0	1,796	1,796	%0:0	0	1,796	1,796	%0:0
4750	Leeton	11	0	4,198	4,198	%0:0	0	4,198	4,198	%0:0
4850	Lismore	4	8,737	13,642	22,379	39.0%	3,986	6,794	10,780	37.0%
4880	Lithgow	4	838	3,767	4,605	18.2%	838	3,767	4,605	18.2%
4920	Liverpool Plains <sup>1</sup>	10	1,037		1,037		240	0	240	100.0%
4950	Lockhart	6	0	260	260	0.0%	0	260	260	0.0%
5270	Mid-Western	4	900'5	6,812	11,818	42.4%	3,439	2,700	6,139	26.0%
5300	Moree Plains	11	2,961	4,307	7,268	40.7%	1,155	2,904	4,059	28.5%
5500	Murray	10	263	970	883	29.8%	263	620	883	29.8%
5550	Murrumbidgee	6	0	525	525	%0:0	0	525	525	0.0%
5650	Muswellbrook	=	1,474	4,116	5,590	26.4%	1,045	3,974	5,019	20.8%

## Appendix 3: Recovery rates (continued)

			T (ker	Total domestic recovery (kerbside, clean up, drop off)	c recovery up, drop of	f)		Domestic recovery (kerbside only)	recovery de only)	
				05-06	9			02-06	90-	
ABS	Council name	DLG group no.	Domestic kerbside, clean up, drop-off, dry recyclables and organics	Domestic kerbside, clean up, drop-off, waste to landfill	Total domestic waste generated	Total domestic recovery rate	Domestic kerbside dry recyclables and organics	Total domestic kerbside waste to landfill	Total domestic kerbside waste generated	Total domestic kerbside recovery rate
			tonnes	tonnes	tonnes	%	tonnes	tonnes	tonnes	%
5700	Nambucca	-	1,354	8,299	9,653	14.0%	740	7,814	8,553	8.6%
5750	Narrabri	11	922	000′9	6,922	13.3%	922	4,000	4,922	18.7%
5800	Narrandera	10	0	848	848	%0:0	0	848	848	%0:0
5850	Narromine	10	528	2,100	2,628	20.1%	528	2,100	2,628	20.1%
6110	Oberon	10	16	1,080	1,096	1.5%	0	1,080	1,080	%0:0
6150	Orange	4	8,091	15,532	23,623	34.3%	7,937	13,327	21,264	37.3%
6180	Palerang		397	925	1,322	30.1%	364	925	1,289	28.2%
6200	Parkes	11	909	9,339	9,945	6.1%	909	6'336	9,945	6.1%
6470	Queanbeyan	4	8,644	900'8	16,650	51.9%	5,204	7,546	12,750	40.8%
6610	Richmond Valley	4	1,959	5,137	960'/	27.6%	0	5,137	5,137	%0:0
7000	Singleton	4	2,916	21,100	24,016	12.1%	1,521	5,423	6,944	21.9%
7050	Snowy River	10	479	1,500	1,979	24.2%	213	1,500	1,713	12.4%
7310	Tamworth Regional	4	14,584	23,340	37,924	38.5%	5,802	12,416	18,218	31.8%
7350	Temora	10	2,695	3,210	2,905	45.6%	630	1,560	2,190	28.8%
7400	Tenterfield	10	069	1,200	1,890	36.5%	0	1,200	1,200	%0:0
7450	Tumbarumba	6	0	3,350	3,350	%0:0	0	750	750	0.0%
7510	Tumut	=	420	3,400	3,820	11.0%	0	3,400	3,400	%0:0
7550	Tweed	5	6,275	24,900	31,175	20.1%	6,128	23,394	29,522	20.8%
7620	Upper Hunter <sup>2</sup>	11	1,252	4,500	5,752	21.8%	0	4,500	4,500	0.0%
7640	Upper Lachlan¹	10	120	25	145	82.7%	43	0	43	100.0%
7650	Uralla	10	848	720	1,568	54.1%	794	720	1,514	52.4%

7700	7700 Urana Shire	∞	0	2,198	2,198	%0:0	0	1,098	1,098	%0:0
7750	Wagga Wagga	4	15,824	10,566	26,390	%0:09	15,824	10,213	26,037	%8'09
7800	Wakool	6	398	880	1,278	31.2%	327	880	1,207	27.1%
7850	Walcha	6	361	908	1,167	30.9%		780	891	12.4%
7900	Walgett	10	431	1,820	2,251	19.1%	0	1,820	1,820	%0:0
7950	Warren Shire	6	0	1,800	1,800	%0:0	0	1,800	1,800	%0:0
8020	Warrumbungle <sup>2</sup>	=	0	500	500	%0:0	0	200	200	%0:0
8100	Weddin	6	0	1,500	1,500	%0:0	0	1,500	1,500	%0:0
8150	Wellington	10	0	3,500	3,500	0.0%	0	3,500	3,500	%0:0
8200	Wentworth	10	0	298	598	0.0%	0	298	298	%0:0
8400	Wollondilly	9	14,251	12,370	26,621	53.5%	080′9	7,330	13,410	45.3%
8710	Yass	11	1,249	540	1,789	69.8%	873	530	1,403	62.2%
8750	8750 Young	11	1,532	3,240	4,772	32.1%	871	1,544	2,415	36.1%

<sup>1</sup> No kerbside waste data reported

<sup>2</sup> No kerbside recycling data reported <sup>3</sup> No kerbside services

# Appendix 4: Household yield by council

ABS	Council	DLG Group No.	Kerbside dry recycling kg/hh/wk	Kerbside dry recycling kg/ca/wk	Kerbside residual waste kg/ hh/wk	Kerbside residual waste kg/ ca/wk
	NSW		5.00	1.81	12.12	4.47
60	Albury	4	3.08	1.37	10.11	4.50
110	Armidale Dumaresq	4	5.51	1.63	12.64	3.73
150	Ashfield	2	5.51	2.05	12.79	4.76
200	Auburn	2	4.19	0.88	13.02	4.25
250	Ballina	4	4.14	1.51	15.45	5.65
300	Balranald	9	0.00	0.00	23.68	6.59
350	Bankstown	3	4.99	1.58	13.00	4.12
470	Bathurst	4	0.94	0.31	14.10	5.43
500	Baulkham Hills	7	6.23	2.03	16.99	5.52
550	Bega Valley	4	4.65	2.12	5.99	3.05
600	Bellingen	11	4.94	1.41	8.70	2.49
650	Berrigan	10	4.57	1.40	30.13	13.99
750	Blacktown	3	4.94	1.56	12.39	3.97
800	Bland	10	0.00	0.00	25.44	8.40
850	Blayney	10	5.01	1.40	20.32	5.68
900	Blue Mountains	7	3.82	1.58	14.53	6.03
950	Bogan	9	0.00	0.00	26.41	7.09
1000	Bombala	9	15.01	4.56	3.62	1.10
1050	Boorowa <sup>2</sup>	9	0.00	0.00	14.66	3.85
1100	Botany Bay	2	3.91	1.36	13.84	4.80
1150	Bourke	9	0.00	0.00	43.49	9.83
1200	Brewarrina	9	0.00	0.00	4.80	1.06
1250	Broken Hill	4	0.00	0.00	14.09	6.61
1300	Burwood	2	4.77	1.70	12.41	4.41
1350	Byron	4	5.62	2.07	9.14	3.37
1400	Cabonne <sup>1</sup>	11	4.34	0.90	0.00	0.00
1450	Camden	6	6.56	2.08	12.38	3.93
1500	Campbelltown	7	5.15	1.76	11.25	3.85
1520	Canada Bay	2	5.79	2.49	9.32	4.02
1550	Canterbury	3	5.18	1.69	13.68	4.46
1600	Carrathool	9	0.00	0.00	19.23	4.73
1700	Central Darling	9	0.00	0.00	23.99	4.80
1720	Cessnock	4	4.67	1.49	17.47	5.58
1730	Clarence Valley	4	3.93	1.49	11.56	4.37
1750	Cobar	10	0.00	0.00	18.60	5.92
1800	Coffs Harbour	4	4.25	1.51	8.75	3.53
1860	Conargo <sup>3</sup>	8	0.00	0.00	0.00	0.00
2000	Coolamon	9	0.00	0.00	24.26	6.99
2060	Cooma-Monaro <sup>3</sup>	10	0.00	0.00	0.00	0.00

ABS	Council	DLG Group No.	Kerbside dry recycling kg/hh/wk	Kerbside dry recycling kg/ca/wk	Kerbside residual waste kg/ hh/wk	Kerbside residual waste kg/ ca/wk
	NSW		5.00	1.81	12.12	4.47
2150	Coonamble	9	1.15	0.04	13.91	4.24
2200	Cootamundra	10	1.86	0.69	17.27	6.42
2310	Corowa	11	3.54	1.37	9.76	3.78
2350	Cowra	11	4.49	1.18	15.64	5.11
2500	Deniliquin	4	0.00	0.00	17.03	6.17
2600	Dubbo	4	1.23	0.02	17.90	6.22
2700	Dungog	10	4.15	1.50	10.42	3.76
2750	Eurobodalla	4	2.88	1.65	9.31	5.32
2850	Fairfield	3	3.81	1.16	14.69	4.56
2900	Forbes	10	1.58	0.43	18.50	5.01
2950	Gilgandra	9	10.45	2.57	13.40	3.30
3020	Glen Innes Severn	6	3.97	1.21	12.64	4.36
3050	Gloucester	9	2.93	0.90	34.16	10.56
3100	Gosford	7	6.65	2.77	8.86	3.69
3310	Goulburn Mulwarree	4	17.69	5.86	8.56	2.84
3350	Greater Taree	4	4.53	1.86	10.25	4.21
3370	Greater Hume	11	3.23	0.20	13.64	3.02
3400	Great Lakes	4	3.94	1.66	9.57	4.95
3450	Griffith City	4	0.00	0.00	23.88	6.98
3500	Gundagai	9	4.76	1.04	6.16	1.34
3550	Gunnedah	11	6.76	2.06	14.27	4.35
3650	Guyra	9	7.28	2.09	6.93	1.99
3660	Gwydir	10	1.90	0.44	18.75	4.34
3700	Harden	9	0.00	0.00	26.60	7.05
3750	Port Macquarie-Hastings	4	4.83	1.76	8.16	2.97
3800	Hawkesbury	6	5.26	1.86	15.64	5.54
3850	Hay	9	0.00	0.00	19.04	7.13
3950	Holroyd	3	4.00	1.42	14.81	5.79
4000	Hornsby	7	6.18	2.15	10.22	3.56
4100	Hunters Hill	2	5.95	1.94	14.41	4.70
4150	Hurstville	3	4.75	1.82	11.24	4.31
4200	Inverell	11	7.02	2.11	34.36	11.57
4250	Jerilderie	8	0.00	0.00	37.21	8.55
4300	Junee	10	4.28	1.17	5.56	1.71
4350	Kempsey	4	0.00	0.00	17.93	6.72
4400	Kiama	4	6.39	2.44	8.46	3.23
4450	Kogarah	2	6.03	2.24	9.93	3.68
4500	Ku-ring-gai	3	9.02	3.04	9.00	3.03
4550	Kyogle	10	0.00	0.00	9.38	2.67

#### Appendix 4: Household yield by council (continued)

ABS	Council	DLG Group No.	Kerbside dry recycling kg/hh/wk	Kerbside dry recycling kg/ca/wk	Kerbside residual waste kg/ hh/wk	Kerbside residual waste kg/ ca/wk
	NSW		5.00	1.81	12.12	4.47
4600	Lachlan	10	0.00	0.00	18.81	4.69
4650	Lake Macquarie	5	5.18	1.93	14.93	5.66
4700	Lane Cove	2	6.33	2.52	9.13	3.63
4750	Leeton	11	0.00	0.00	28.48	6.71
4800	Leichhardt	2	5.52	2.60	8.62	4.06
4850	Lismore	4	0.00	0.00	12.21	2.99
4880	Lithgow	4	2.19	0.77	9.84	3.47
4900	Liverpool	7	3.54	1.01	18.49	5.73
4920	Liverpool Plains 1	10	3.34	0.59	0.00	0.00
4950	Lockhart	9	0.00	0.00	12.29	3.06
5050	Maitland	4	4.59	1.64	16.13	5.77
5150	Manly	2	6.57	2.99	7.56	3.44
5200	Marrickville	3	5.08	2.21	9.38	4.08
5270	Mid-Western	4	13.03	2.99	8.38	2.34
5300	Moree Plains	11	4.64	1.39	11.67	3.50
5350	Mosman	2	6.77	3.02	9.42	4.20
5500	Murray	10	2.37	0.75	5.58	1.77
5550	Murrumbidgee	9	0.00	0.00	16.03	3.85
5650	Muswellbrook	11	4.23	1.33	16.09	5.04
5700	Nambucca	11	2.31	0.76	24.38	8.01
5750	Narrabri	11	16.88	1.25	21.30	5.43
5800	Narrandera	10	0.00	0.00	8.81	2.48
5850	Narromine	10	5.59	1.44	22.25	5.74
5900	Newcastle	5	4.46	1.72	15.30	5.90
5950	North Sydney	2	4.93	2.56	6.22	3.23
6110	Oberon	10	0.00	0.00	15.56	3.81
6150	Orange	4	3.75	1.50	16.36	6.78
6180	Palerang	11	4.63	0.61	11.76	1.55
6200	Parkes	11	2.39	0.77	36.89	11.95
6250	Parramatta	3	6.12	2.00	12.83	4.45
6350	Penrith	7	4.55	1.57	15.90	5.48
6370	Pittwater	2	8.69	3.15	10.42	3.77
6400	Port Stephens	4	3.52	1.55	5.74	2.53
6470	Queanbeyan	4	4.16	1.55	10.12	3.90
6550	Randwick	3	4.49	1.91	9.34	3.97
6610	Richmond Valley	4	0.00	0.00	17.38	4.72
6650	Rockdale	3	5.48	1.99	13.13	4.76
6700	Ryde	3	4.55	1.70	14.32	5.34
6900	Shellharbour	4	3.60	1.40	10.22	3.98

ABS	Council	DLG Group No.	Kerbside dry recycling kg/hh/wk	Kerbside dry recycling kg/ca/wk	Kerbside residual waste kg/ hh/wk	Kerbside residual waste kg/ ca/wk
	NSW		5.00	1.81	12.12	4.47
6950	Shoalhaven	5	4.72	2.31	9.00	4.46
7000	Singleton	4	4.37	1.31	14.16	4.68
7050	Snowy River	10	1.89	0.56	13.15	3.96
7100	Strathfield	2	4.92	1.72	14.49	5.05
7150	Sutherland	3	6.31	2.29	11.53	4.19
7210	Sydney	1	3.01	1.54	10.15	5.20
7310	Tamworth Regional	4	3.44	0.87	13.78	4.38
7350	Temora	10	7.57	1.91	18.36	4.73
7400	Tenterfield	10	0.00	0.00	15.67	3.39
7450	Tumbarumba	9	0.00	0.00	20.06	3.99
7510	Tumut	11	0.00	0.00	16.98	5.76
7550	Tweed	5	2.97	0.95	14.25	5.56
7620	Upper Hunter <sup>2</sup>	11	0.00	0.00	22.44	6.45
7640	Upper Lachlan 1	10	4.50	0.11	0.00	0.00
7650	Uralla	10	10.80	2.51	9.26	2.28
7700	Urana Shire	8	0.00	0.00	55.25	15.19
7750	Wagga Wagga	4	7.69	2.81	9.27	3.38
7800	Wakool	9	4.35	1.30	11.71	3.50
7850	Walcha	9	2.55	0.65	17.99	4.57
7900	Walgett	10	0.00	0.00	19.91	4.36
7950	Warren Shire	9	0.00	0.00	45.55	10.58
8000	Warringah	3	6.96	2.50	9.98	3.58
8020	Warrumbungle <sup>2</sup>	11	0.00	0.00	1.85	0.92
8050	Waverley	2	5.61	2.68	10.17	4.87
8100	Weddin	9	0.00	0.00	28.85	7.50
8150	Wellington	10	0.00	0.00	28.40	9.19
8200	Wentworth	10	0.00	0.00	5.38	1.58
8250	Willoughby	2	7.51	2.89	11.07	4.26
8350	Wingecarribee	4	5.29	1.80	6.04	2.23
8400	Wollondilly	6	5.15	1.66	10.56	3.40
8450	Wollongong	5	3.74	1.45	9.45	3.66
8500	Woollahra	2	4.60	2.73	7.46	4.43
8550	Wyong	7	3.02	1.26	9.62	4.03
8710	Yass	11	5.47	1.30	3.33	0.79
8750	Young	11	3.91	1.39	6.93	2.47

Figures based on Kerbside Collection with a Kerbside service.

No kerbside waste data reported
 No kerbside recycling data reported
 No kerbside services