

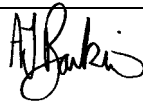

NORTH WEST REGION WASTE MANAGEMENT GROUP



ANNUAL REPORT 2004/05
STATUS: FINAL

DOCUMENT CONTROL SHEET

Client	North West Region Waste Management Group					
Project Title	Waste Management Plan					
Document Title	2004 Annual Report					
Document No.	BL553313/NWRWMG/Annual Report					
This Document Comprises	DCS	TOC	Text	No. of Tables	No. of Figures	No. of Appendices
	1	1	34	26	14	3

Rev.	Status	Author(s)	Reviewed By	Approved By	Issue Date
1.0	Draft for Approval	<u>J Murphy, Project Scientist</u> <u>C Glasgow, Graduate Scientist</u> <u>A Thompson, Graduate Scientist</u>	<u>K Giffen, Senior Scientist</u>	 <u>A J Baskin, Director</u>	30/09/05
1.0	Final	<u>J Murphy, Project Scientist</u> <u>C Glasgow, Graduate Scientist</u> <u>A Thompson, Graduate Scientist</u>	<u>K Giffen, Senior Scientist</u>	 <u>A J Baskin, Director</u>	04/11/05

CONTENTS

- 1.0 INTRODUCTION**
- 2.0 REVIEW OF CURRENT WASTE ARISING**
 - 2.1 KEY WASTE MANAGEMENT INDICATORS**
 - 2.2 CURRENT HOUSEHOLD WASTE ARISING**
 - 2.3 CURRENT HOUSEHOLD WASTE RECOVERY RATES**
 - 2.4 CURRENT MUNICIPAL WASTE ARISING**
- 3.0 IMPLEMENTATION OF INFRASTRUCTURE AND SERVICES**
 - 3.1 HOME COMPOSTING**
 - 3.2 EDUCATION AND AWARENESS**
 - 3.3 HOUSEHOLD RECYCLING CENTRES PERFORMANCE**
 - 3.4 KERBSIDE COLLECTION PERFORMANCE**
 - 3.5 INFRASTRUCTURE**
 - 3.6 IMPLEMENTATION ACTION PLAN PROGRESS**
 - 3.7 SERVICE CONTRACTS**
- 4.0 ASSESSMENT OF PROGRESS TOWARDS TARGETS**
 - 4.1 PROJECTED RECOVERY RATES**
 - 4.2 WET ACT TARGETS**
- 5.0 OTHER CONTROLLED WASTE**
 - 5.1 COMMERCIAL AND INDUSTRIAL (C&I)**
 - 5.2 CONSTRUCTION AND DEMOLITION (C&D)**
 - 5.3 HAZARDOUS**
 - 5.4 PACKAGING**
 - 5.5 PRIORITY WASTE STREAMS – TYRES, WEEE, ELV**
- 6.0 CONCLUSIONS AND RECOMMENDATIONS**

1.0 INTRODUCTION

This report has been prepared by the North West Region Waste Management Group (NWRWNG) in order to assess the progress that has been made within the sub region towards the implementation of the NWRWNG Waste Management Plan.

This report provides an update on the current waste arisings for the 2004/05 financial year and compares them against those stated within the Waste Arisings Surveys for NI and the 2003 Annual Report and Review. As with previous years, it also provides a review of the actions taken by the Group towards implementation of infrastructure and assesses the measures that have been set in place to secure contracts for the collection, reprocessing and delivery to end markets of material collected within the NWRWNG Region. The report also compares current and projected waste arisings against the Waste Management Strategy targets and WET Act diversion targets.

In order to assess the above, various assumptions have been made during the calculation of the projected recovery and diversion rates for the group. It is important that these are taken into account when considering the data within this review.

- The biodegradable fraction of municipal waste accounts for 71% of the total municipal waste arisings;
- The municipal and household waste arisings in the region will have a steady growth rate of 3% between 2003 and 2009/10. This figure is based on the UK average for waste growth;
- Growth of number of occupied households in the region has been estimated at 2% per Council area per year;
- Estimates of biodegradable municipal waste recovered in the North West Region from 2003 to 2009/10 have been calculated using a mass balance approach;
- The tonnages from individual Council Household Recycling Centres are based on the data provided in the KPI sheets, WasteDataFlow and estimates of current and future performance;
- A tonnage for central composting bins for urban areas have been assessed according to individual Council performance, based on the data provided in KPI sheets, WasteDataFlow and estimates of Council performance. A tonnage of 0.09 tonnes/bin/year has been assumed for rural areas;
- The tonnages from Recycling Banks are based on individual Council performance provided in the KPI sheets, WasteDataFlow and estimates of current performance;
- The tonnages from mixed dry recyclables bins and boxes are based on individual Council performance provided in the KPI sheets, WasteDataFlow and estimates of current performance;
- In situations where Councils have indicated a borough wide scheme of brown or blue bins, it is assumed that all new builds will be incorporated into the scheme;

2.0 REVIEW OF CURRENT WASTE ARISING

Information for this section of the review has been compiled using the 2004 Key Performance Indicator (KPI) Data Sheets returned from each of the seven local authorities for data from April to December 2004 and from WasteDataFlow for January to March 2005. The KPI data sheets have been presented in Appendix A. The data from previous years has also been included within this report as a means of allowing comparisons to be made against consecutive years and hence annual performance to be monitored at a glance. The data from 2002 and 2003 has been obtained from the 2002 and 2003 Annual Reports while the data from 1999/2000 and 2001 has been obtained from the Municipal Waste and Waste Industry Survey, carried out as part of the Northern Ireland Waste Arisings Study and the Waste Arisings Study Phase III, Municipal Waste Survey 2002.

2.1 KEY WASTE MANAGEMENT INDICATORS

Key waste management indicators have been presented below to provide an overview of municipal waste management within the North West group between 1999 & 2004/05.

Key Performance Indicators					
	1999/00	2001	2002	2003	2004/05
Household Waste					
No of Households ¹	108,393	110,798	113,448	115,999	120,543
% Growth rate in occupied household no's	-	2.2%	2.3%	2.2%	3.9%
Household waste (tpa) ²	152,430	155,796	174,135	166,521	166,357
Household waste growth rate	-	2.2%	11.8%	-4.4%	-0.1%
Waste per household (tpa)	1.41	1.41	1.53	1.43	1.38
Recovery ³ rate of household waste (%)	2.5%	4.1%	4.3%	9.9%	19.3%
Municipal Waste					
Municipal waste (tpa)	211,126	200,539	205,103	190,067	190,195
Municipal waste growth (%)	-	-5.1%	2.3%	-7.4%	0.1%
Municipal Waste Landfilled			197,292	173,389	157,169
Biodegradable Municipal Waste Landfilled			140,109	124,252	113,158

Notes:

1. No of households taken from The Rate Collection Agency for year ending December 2000, December 2001, March 2002 and March 2003. The figure for 2004/05 has been taken from Housing Statistics- Northern Ireland Housing Bulletin, Department of Social Development.
2. tpa= tonnes per annum
3. Recovery refers to household waste recycling and composting
4. Shaded area- information not available
5. Includes only C&I waste collected by Councils

2.2 CURRENT HOUSEHOLD WASTE ARISING

For the basis of this report, the definition of household waste used has been that given in the Municipal Waste Data Monitoring and Reporting: Interim Guidelines 2003. The definition in the Guidelines states household waste means waste arising from a domestic property (i.e. a building or self contained part of a building which is used wholly for the purposes of living accommodation), caravan, residential home, premises forming part of a university or school or other educational establishment and premises forming part of a hospital or nursing home.

2.2.1 Household Waste Production

The household waste arisings for each Council for the full financial year has been presented in the table below.

Household Waste Arisings (tpa) ¹					
	1999/2000	2001	2002	2003	2004/05
Ballymoney Borough Council	13,739	13,203	13,691	14,679	13,268
Coleraine Borough Council	31,123	34,674	37,793	43,388	44,261
Derry City Council	48,850	47,738	55,305	43,925	47,335
Limavady Borough Council	14,527	13,904	14,899	17,033	14,358
Magherafelt District Council	18,741	20,853	20,632	17,656	18,498
Moyle District Council	8,866	9,066	9,852	8,639	8,626
Strabane District Council	16,584	16,358	21,964	21,201	20,011
North West TOTAL	152,430	155,796	174,135	166,521	166,357

Notes: 1. Calculated to the nearest tonne

The table shows the variation in household waste arisings for the group between 1999 and 2004/05. The Waste Management Plan for the North West Region suggested a growth rate for household waste arisings of 1.91%. There has been a great deal of variation between years previously, with increases of up to 11.8% being seen between 2001 and 2002, and the growth percentage for the last year has being – 0.1% for the group.

A number of Councils, including Ballymoney, Limavady, Moyle and Strabane have seen a reduction in household waste arisings over the last year while Coleraine, Derry and Magherafelt have recorded increases. Derry City Council has the highest increase in household waste arisings with an increase over the last year of 7.8%.

The household waste arisings for each individual Council for 2004/05, recorded on a quarterly basis, are shown in the table below:

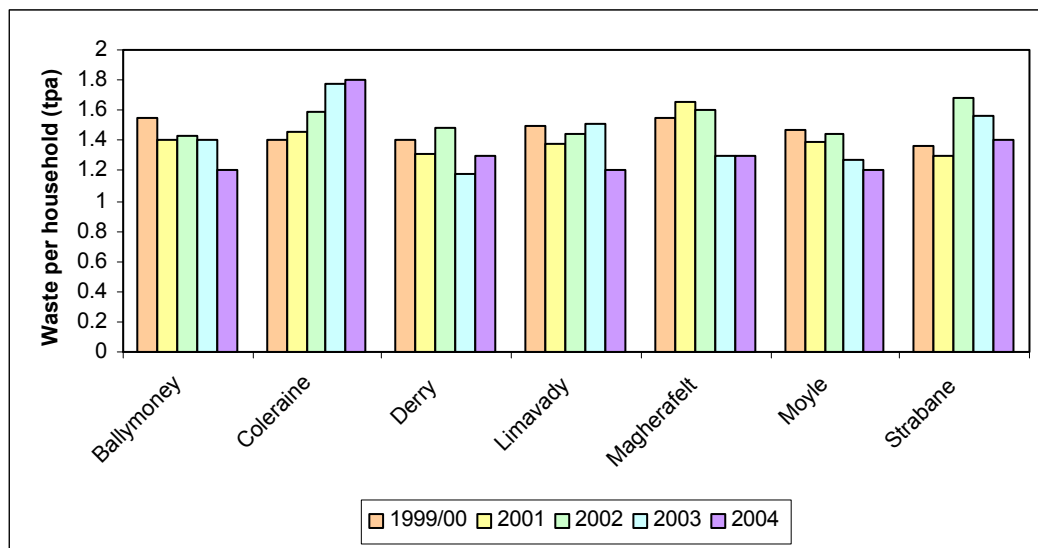
Household Waste Arisings 2004/05 Per Quarter (tpa)				
	April - Jun 04	Jul - Sep 04	Oct – Dec 04	Jan – March 05
Ballymoney	3,578	3,635	3,128	2,927
Coleraine	11,677	11,545	10,610	10,429
Derry	12,033	11,763	12,446	11,092
Limavady	3,699	3,620	3,575	3,463
Magherafelt	4,799	5,004	4,364	4,331
Moyle	2,377	2,300	1,978	1,970
Strabane	5,199	5,487	4,875	4,449

2.2.2 Waste Quantities Generated Per Household

The quantity of waste generated per household, calculated as the quantity of household waste produced in a region divided by the number of households, provides an indicator of trends in household waste arisings. The figure can be used to assess the performance of waste reduction activities and evaluate broad trends in household waste generation. The average quantity of waste generated per household in the North West Region for 2004/05 saw a slight decrease of 0.05 tonnes per household when compared to 2003/04 and is currently reported as 1.38 tonnes per household. It should be noted however that the source of household numbers has been changed from Rate Collection Agency to Housing Statistics- Northern Ireland Housing Bulletin, Department of Social Development.

This reduction provides an indication that the waste reduction initiatives, such as recent media education and awareness programmes, are beginning to influence the public's view on efficient waste management. This is demonstrated by the fact that 2003 is the first year since 1999/00 that the average waste growth per household has decreased within the North West Region.

Household Waste Generated per Household



As illustrated in the above figure, there has been a general reduction in the amount of waste produced per household from 1.43% in 2003 to 1.38% in 2004/05. Coleraine, Derry and Magherafelt Councils however show a slight increase in the amount of waste produced per household

2.3 CURRENT HOUSEHOLD WASTE RECOVERY RATES

A key target set out in the Waste Management Strategy for Northern Ireland is recovery of 25% of household waste by 2005 (of which 15% must constitute recycling and/or composting).

The following table shows a summary of the 2004/05 household recovery rates, as recorded through the Key Performance Indicators and WasteDataFlow for the North West Region.

Household Waste Recovery Rates 2004/05	
Ballymoney Borough Council	24%
Coleraine Borough Council	19%
Derry City Council	14%
Limavady Borough Council	27%
Magherafelt District Council	32%
Moyle District Council	11%
Strabane District Council	17%
Average North West Household Recovery Rate	19%
Waste Management Strategy 2005 Target	25%

The average household recovery rate for the North West Region during 2004/05 was 19%, an increase of over 9% on the 2003 waste arisings. A total of 32,103 tonnes of household waste was recovered in the North West Region. This rise has been due to the continued efforts of the Councils within the North West Region in the implementation and improvement of infrastructure and services. This is discussed further in Section 3 of this report.

A breakdown of these rates, illustrated on a quarter to quarter basis, is shown in the following table.

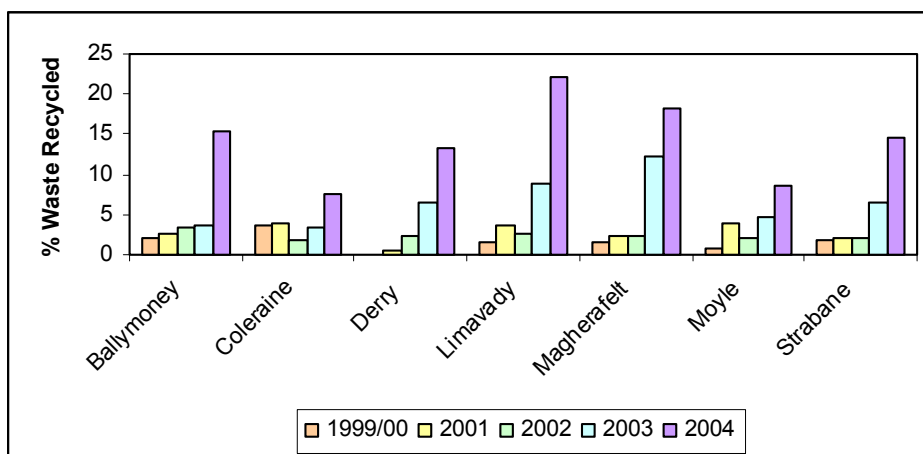
Household Waste Recovery Rates 2004/05 Per Quarter (tpa)				
	April - Jun 04	Jul - Sep 04	Oct – Dec 04	Jan – March 05
Ballymoney	26%	29%	23%	17%
Coleraine	12%	14%	30%	20%
Derry	10%	14%	14%	18%
Limavady	22%	22%	34%	32%
Magherafelt	32%	34%	30%	30%
Moyle	14%	11%	10%	10%
Strabane	18%	18%	16%	18%
NWRWMG Average	17%	20%	22%	21%

Note: 1 Estimated to nearest 0.1%

2.3.1 Household Waste Recycling & Composting Rates

The average percentage of household waste recycled in the North West Region during 2004/05 is estimated to be 13%, with a total of 21,899 tonnes being recycled. This figure has risen 7% since the same period in 2003/04. This increase in recycling is due to the increase in public awareness in waste management, generated through education and awareness campaigns as well as the provision of more facilities, both at the individual household level and at a Council level. All Councils within the Region have experienced an increase in recycling from the same period last year. The breakdown of these figures are illustrated below.

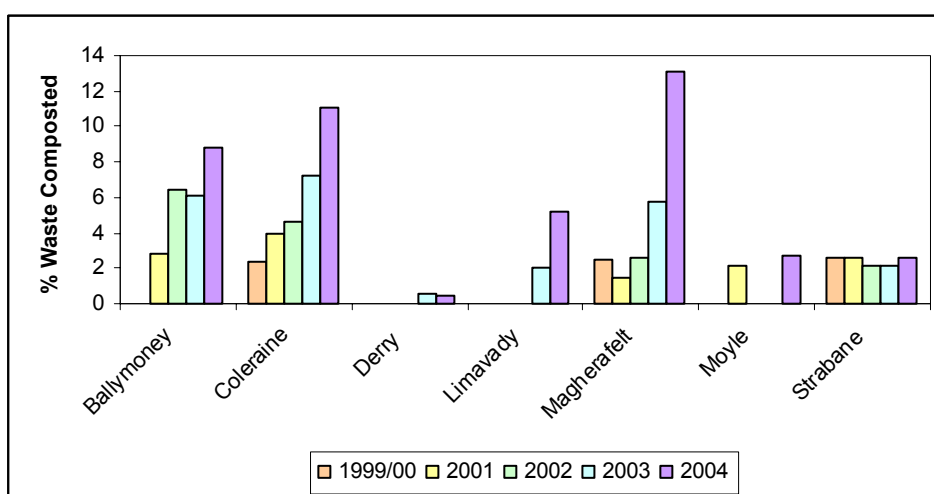
Household Recycling Rate (excluding composting)



The average household composting rate for the North West Region for 2004/05 is estimated to be 6%. This figure represents a rise of over 2% on 2003/04 figures. It is expected that the reason for this small rise in percentages when compared with the rise in recycling percentages is due to the fact that, as a result of the implementation of the Animal By Products Regulations, there is at present limited capacity for the treatment of composting waste. This is however anticipated to rise in the future with the conclusion and implementation of the current procurement process for the provision of the services for the treatment and delivery to end markets of biowaste.

Approximately 10,197 tonnes of household waste has been composted in the Region during 2004/05. The composting rates for each of the individual authorities in the Region are presented below.

Household Composting Rate



2.4 CURRENT MUNICIPAL WASTE ARISING

The quantity of municipal waste, and particularly its biodegradable fraction, is a key indicator of waste management performance given its relationship to landfill diversion targets under the Landfill Directive (1999/31/EC). For the purposes of this report, the definition used for municipal waste has been taken from the Municipal Waste Data Monitoring and Reporting: Interim Guidelines, 2003. The definition in the Guidelines states municipal waste means household waste and any other waste under the control of (i.e. collected by) District Councils or their agents acting on their behalf.

2.4.1 Municipal Waste Production

A summary of the municipal waste produced by each Council has been presented in the table below.

Municipal Waste Arisings (tpa)					
	1999/00	2001	2002	2003	2004/05
Ballymoney Borough Council	18,683	22,244	21,563	18,876	14,778
Coleraine Borough Council	40,802	42,621	39,965	43,388	46,267
Derry City Council	73,760	54,911	63,305	51,925	54,922
Limavady Borough Council	15,567	16,714	16,417	18,556	17,901
Magherafelt District Council	24,561	25,594	27,204	22,383	22,605
Moyle District Council	11,066	11,266	10,833	9,666	10,326
Strabane District Council	26,687	27,189	25,817	25,273	23,396
NWRWMG TOTAL	211,126	200,539	205,103	190,067	190,194

As with household waste, municipal waste was estimated in the Waste Management Plan to be growing at a rate of 1.91% per year. The figures in the table above show a large degree of fluctuation in these growth rates. The growth rate over the past year has been calculated as 0.1%. Although the municipal waste arisings in the group as a whole have remained at a constant level, Coleraine and Derry Councils have seen a dramatic increase in municipal waste arisings in the past year, recording increases of almost 7% and 6% respectively.

A breakdown of these figures per quarter for each individual Council is shown in the following table.

Municipal Waste Recovery Rates 2004/05 Per Quarter (tpa)				
	April - Jun 04	Jul - Sep 04	Oct – Dec 04	Jan – March 05
Ballymoney	1,020	1,035	718	506
Coleraine	1,392	1,614	3,162	2,064
Derry	1,186	1,623	1,728	1,994
Limavady	905	883	1,329	1,192
Magherafelt	1,612	1,845	1,391	1,354
Moyle	322	245	203	205
Strabane	931	980	771	818
NWRWMG Total	7,368	8,225	9,302	8,133

2.4.2 Municipal Waste Recycling & Composting Rates

The approximate total amount of municipal waste recycled and composted, measured as a percentage of the total municipal waste arisings during 2004/05 was 33,027 tonnes or 17%. The breakdown of these figures for each Council is shown below. The figures can be calculated as the tonnage of municipal waste recovered divided by the total municipal waste tonnage.

Municipal Waste Recovery Rates 2004/05	
Ballymoney Borough Council	22%
Coleraine Borough Council	18%
Derry City Council	12%
Limavady Borough Council	24%
Magherafelt District Council	27%
Moyle District Council	9%
Strabane District Council	15%
Average North West Municipal Recovery Rate	17%

A break down of these figures for individual Councils, reported on a quarter to quarter basis, is shown in the table below.

Municipal Waste Recovery Rates 2004/05 Per Quarter (%) ¹				
	April - Jun 04	Jul - Sep 04	Oct – Dec 04	Jan – March 05
Ballymoney	26%	26%	21%	15%
Coleraine	12%	13%	28%	19%
Derry	8%	12%	12%	16%
Limavady	19%	20%	30%	28%
Magherafelt	28%	29%	27%	26%
Moyle	12%	9%	8%	9%
Strabane	15%	15%	14%	16%

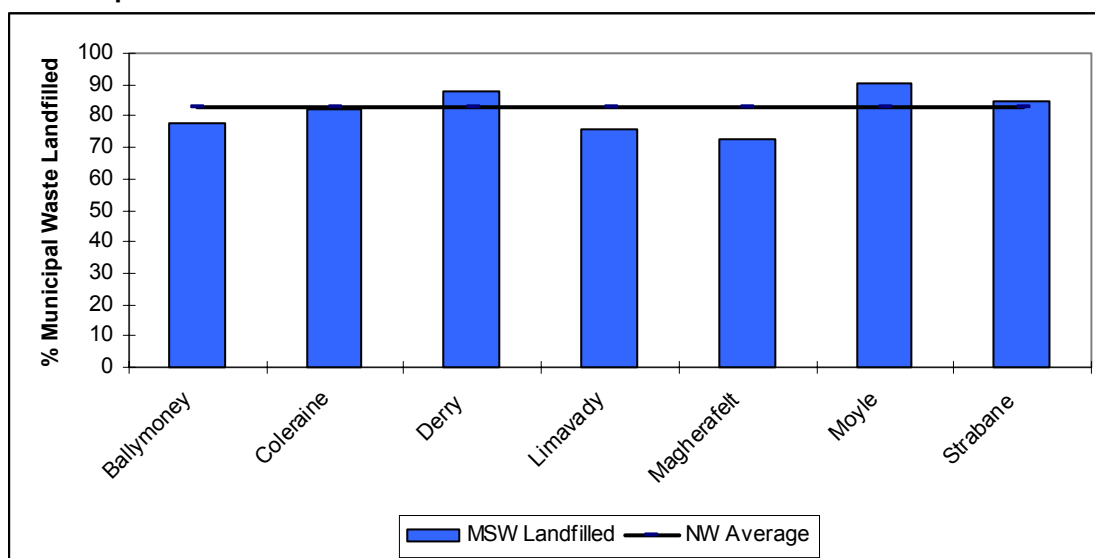
Note: 1. Calculated to the nearest 0.1%

All Councils have experienced a notable increase in the municipal recovery rates between 2003/04 and 2004/05 due to the continued implementation and improvement of infrastructure and services.

2.4.3 Municipal Waste Landfilled

The approximate percentage of municipal waste landfilled, as a percentage of total municipal waste arisings in the North West Region during 2004/05 was 82.6% or 157,169 tonnes. This figure represents a decrease of 10.3% on last year's total. The figures were calculated as the tonnage of municipal waste landfilled during 2004/05 divided by the total municipal waste arisings and are illustrated below.

% Municipal Waste Landfilled



2.4.4 Biodegradable Municipal Waste Landfilled

The approximate tonnage of Biodegradable Municipal Waste (BMW) landfilled in the North West Region in 2004/05 is estimated to be 113,158 tonnes or 84% of the total BMW in the Region. This figure represents a decrease of 7,993 tonnes from 2003. The table below shows the tonnages of BMW for the individual Councils within the North West Region and compares current BMW landfilled tonnages against the 2005/06 WET Act targets.

BMW Landfilled		
	BMW landfilled 2004/05	2005 WET Bill Target
Ballymoney Borough Council	8,318	12,968
Coleraine Borough Council	24,225	28,812
Derry City Council	34,677	36,273
Limavady Borough Council	11,051	12,255
Magherafelt District Council	12,545	14,230
Moyle District Council	7,257	6,889
Strabane District Council	15,086	17,412
North West TOTAL	113,158	128,839

The increase in waste recovery rates and hence the decrease in waste being landfilled have shown that there has been some progression in the past year towards meeting the BMW targets. There is a need however to not only ensure continued implementation of the Waste Management plan, but also to strive towards a decrease in waste arisings, in order to ensure that the WET Act targets can be met.

The need for infrastructure / contracts to be in place before segregated biowaste collections can be implemented has impacted on the amount of BMW that can be diverted in this financial year.

3.0 IMPLEMENTATION OF INFRASTRUCTURE AND SERVICES

The implementation of the Waste Management Plan for the North West Region required the continued provision of a range of enhanced services and facilities over the specified period of the Plan.

This section of the review compares and contrasts the infrastructure and facilities that have been implemented during 2004/05 or that are proposed for 2005 & 2006 with what was contained within the North West Waste Management Plan and highlights areas in which further development is required.

3.1 HOME COMPOSTING

To date Councils have issued a small number of home composting bins to households throughout the Region as summarised below (reported in the WasteDataFlow).

Home Composting Units	
Ballymoney	None issued.
Coleraine	Issued on demand – approximately 891 issued.
Derry	Issued on demand – approximately 3,920 issued.
Limavady	None issued.
Magherafelt	Approximately 700 issued.
Moyle	Issued on demand – approximately 226 issued.
Strabane	Issued on demand – approximately 634 issued.
Total Units Issued	Approximately 6,371 issued.

Although the number of composting units issued by each Council on a quarterly basis is recorded within WasteDataFlow, there remains no accurate way of measuring and recording performance of home composting units. For this reason therefore, home composting, although considered to be a good means of reducing residual waste within the home environment, remains to be excluded from the current recovery rates.

3.2 EDUCATION AND AWARENESS

There has been significant progress in the North West Region in 2004/05 with regard to the introduction of Waste and Education Awareness Initiatives.

The objective of the education and awareness aspects of the plan was to stem the increase in waste arisings per household to 1998 levels by 2005, through a series of education and awareness actions which will encourage waste minimisation and assist in a cultural change in behaviour to waste. The education and awareness actions listed in the table below have been initiated by individual recycling officers within each of the Councils in the North West Group, and are not a result of activities of the North West Group as a whole

Schools

Objective ¹	Lead Organisations / delivered by / Target Time	Target Group	Benefits / Gains / General Information
Aim 1: Increase waste awareness within schools			
To ensure that adequate education officers for waste management are located throughout the group	District Council Recycling Officers	KS 1, 2, 3 and 4 if requested	Will provide a framework for environmental education within schools
Development of a waste minimisation campaign, including posters, stickers and leaflet for distribution in school.	District Councils	KS 1, 2, 3 and 4	Councils within the North West Group have encouraged and introduced recycling and waste minimisation schemes within schools in their Council regions
Education and day trips to civic amenity sites and transfer stations	District Councils	Primary and secondary schools	Education of pupils into the process of waste collection and the importance of recycling
Development of education programme including presentations and games	2 Recycling Officers	KS 1, 2 and 3	This programme identifies different recycling activities. Successful pilots where carried out in June with the programme due to commence in October
Aim 2: Increase waste participation within schools			
Textiles challenge	District Councils and Oxfam	Primary schools	Clothes collected by individual children (with the most clothes per bag winning a prize).
Introduction of waste paper collection from schools	District Councils Recycling Officers	Teachers	Encourages a recycling culture with a reward of recycled paper for school use

Businesses

Objective ¹	Lead Organisations / delivered by / Target Time	Target Group	Benefits / Gains / General Information
Aim 1: Raise awareness among businesses			
Environmental businesses clubs to raise awareness and recycling among businesses	District Recycling Officers	Small and medium sized businesses, however interest also shown by large companies.	To raise awareness in businesses and for managers to see recycling as benefit as apposed to a burden
Waste minimisation clubs, bimonthly meetings	District Councils, Arena and Invest NI	Small, medium and large businesses	Showing the benefits and cost savings of recycling and reusing waste
Aim 2: Help businesses with waste minimisation			
Assist businesses with environmental reviews and current environmental policy	District Recycling Officers	All businesses	Assists with questions and issues on businesses environmental reviews helping to make businesses more efficient

Communities

Objective ¹	Lead Organisations / delivered by / Target Time	Target Group	Benefits / Gains / General Information
Aim 1: Increase awareness of waste issues			
Group presentations to community organisations	District Council	Community groups	Raise awareness on recycling and waste minimisation issues
Aim 2: Increase participation in recycling			
Spring clean weeks	District Councils	Communities	Increases awareness of recycling and waste throughout the whole community as well as tidying the area.
Can collection	District Recycling Officers and Gateway	Learning disability groups	Collection of cans for recycling from businesses and restaurants etc increasing awareness
Community composting	District Councils	Communities	Reduced price home composters to increase participation in waste minimisation

General

Objective ¹	Lead Organisations / delivered by / Target Time	Target Group	Benefits / Gains / General Information
Aim 1: Increase awareness of waste issues			
Advertisements in local papers highlighting various waste issues	District Councils	Members of Public	Increase awareness of sustainability and recycling issues within their council area
Waste minimisation days/weeks		Communities in each Council region	Organised throughout the group to increase awareness
North West Group councils carrying out waste audits to reduce waste	District Councils	Council staff	Increases awareness in waste arisings and waste minimisation
Open days at civic amenity sites to raise awareness of the materials that can be recycled, and methods of recycling	District Councils	Members of Public	Increases awareness of facilities and how to use them as well as the materials they accept
Aim 2: Increase participation in recycling			
Councils using recycled paper	District Councils	Council staff	Councils within the group leading by example and using recycled paper therefore increasing awareness of recycling

3.3 HOUSEHOLD RECYCLING CENTRES PERFORMANCE

The performance of household recycling centres within the North West Region for 2004/05 is illustrated in the table below. The following table compares the total municipal waste tonnages being recovered at Household Recycling Centres in 2004/05 within each Council area with the equivalent projected within the Waste Management Plan for 2005.

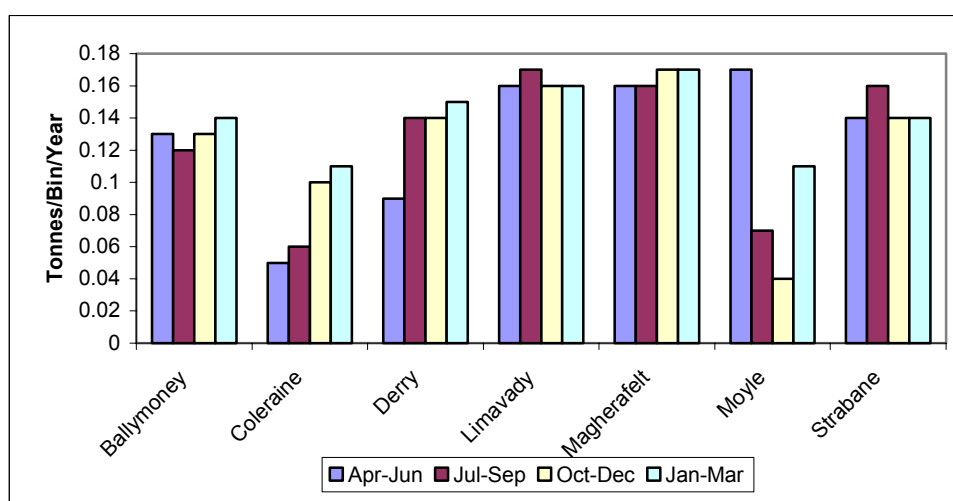
Recovered Tonnages at Household Recycling Centres – Municipal Waste			
	Recovered- 2004 (tpa)	Projected recovered - 2005 (tpa)	Target Achieved
Ballymoney	1,834	164	✓
Coleraine	5,708	1,250	✓
Derry	1,379	8,570	✗
Limavady	1,868	1,674	✓
Magherafelt	2,028	2,687	✗
Moyle	294	610	✗
Strabane	1,035	1,691	✗
N West TOTAL	14,146	16,646	✗

In terms of meeting the projections set out in the Waste Management Plan, the tonnages of municipal waste being recycled at Household Recycling Centres are generally not meeting those projected for 2005, with the exception of Ballymoney, Coleraine and Limavady. The Council areas Household Recycling Centres not meeting their projected tonnage of material collected and recycled (Derry, Magherafelt, Moyle and Strabane) each have plans to develop further Centres prior to 2005/06 to increase their tonnage of material collected. It should be noted however that a number of these Councils are working towards very large projected tonnages and therefore even though targets have been missed, the actual performance at these civic amenity sites has been good.

3.4 KERBSIDE COLLECTION PERFORMANCE

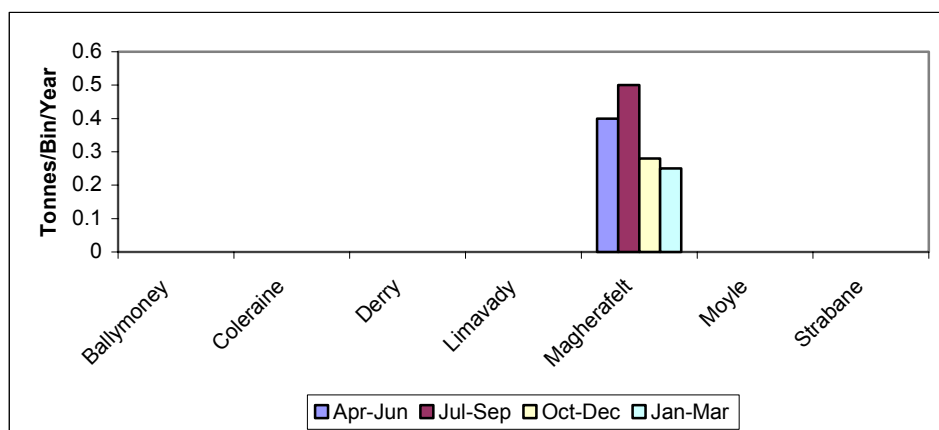
As assessment has been undertaken of the performance of the kerbside collection schemes within each of the individual District Councils, measured through the tonnages being collected in both the mixed dry recyclables bins and the compostable bins. The following graphs show the performance (measured in tonnes/bin/year) for each individual Council.

Kerbside Collection of Mixed Dry Recyclables



The figures show that Limavady and Magherafelt are the best performing Councils in terms of the tonnages collected within the blue/green bins while Ballymoney, Coleraine, Derry and Magherafelt are increasing this tonnage per quarter.

Kerbside Collection of Compostables



As can be seen from the graph, Magherafelt are the only Council in the North West to collect tonnages from brown bins at present and as anticipated, a seasonal fluctuation can be observed within the collection as a higher percentage of compostable waste is collected during the summer months.

3.5 INFRASTRUCTURE

The North West Region Waste Management Plan details the infrastructure that needs to be implemented either within each Council area or within the North West Region in order for waste management targets to be met. The Plan lists infrastructure such as: civic amenity sites, waste transfer stations, recycling points, landfill sites, open-windrow composting facilities and in-vessel/enclosed composting facilities. Details of the number of facilities projected under the waste management plan along with the current numbers of each facility and those proposed prior to the end of 2005 are provided below.

- 5 new recycling points developed in Derry.
- 2 new recycling points developed in Limavady.
- 1 new civic amenity site developed in Magherafelt.
- 3 new recycling points developed in Moyle.
- 1 new civic amenity site and 1 new recycling point developed in Strabane.

3.6 IMPLEMENTATION ACTION PLAN PROGRESS

As previously mentioned, an Implementation Action Plan, detailing the infrastructure and services planned for each of the individual Councils within the North West Group up to 2009/10. Consideration has been given to whether the infrastructure and services outlined for 2004/05 have been implemented. It is important that as accurate a representation as possible is gained in order to ensure that future projections are based on as accurate data as possible.

Each of the Councils within the Group was asked to confirm whether the infrastructure and services outlined within the IAPs had actually been implemented.

The information received from each of the Councils is outlined in the following table.

Implementation Action Plans			
	Target for 2005/06 (Total no of Facilities proposed)	Target Met	Comments
Ballymoney Borough Council	HRC: 0 Recycling Points: 2 MDR bins: 10,389 Brown Bins: 0	✓ ✓ ✓ ✓	One recycling point will be operational Nov05 the second by Mar 06
Coleraine Borough Council	HRC: 0 Recycling Points: 0 MDR bins: 25,444 Brown Bins: 0	✓ ✓ ✓ ✓	
Derry City Council	HRC: 2 Recycling Points: 5 MDR bins: 39,689 Brown Bins: 0	✗ ✓ ✓ ✓	1 complete awaiting waste management licence and 2 nd site operational by Sept 06
Limavady Borough Council	HRC: 0 Recycling Points: 0 MDR bins: 9,000 Brown Bins: 11,046		
Magherafelt District Council	HRC: 0 Recycling Points: 10 MDR bins: 13,778 Brown Bins: 7,000	✓ ✓ ✓ ✓	
Moyle District Council	HRC: 0 Recycling Points: 1 MDR bins: 2,660 Brown Bins: 0	✓ ✓ ✓ ✓	
Strabane District Council	HRC: 1 Recycling Points: 1 MDR bins: 14,038 Brown Bins: 0	✓ ✓ ✓ ✓	1 additional site

3.7 SERVICE CONTRACTS

All councils within the North West Region have secured short to medium term contracts for the collection, transfer and reprocessing of mixed dry recyclables. The Group as a whole also intends to procure services for the collection and treatment of compostable waste collected through kerbside collection (which Magherafelt, the only council with rolling kerbside collection for compostables, is presently doing). In addition to this, the group are currently in the process of securing a service contract for provision of landfill capacity to serve the waste disposal needs of the region for 20 years. Details of the service providers for each Council are provided in the table below.

Service Contracts		
	MDR	Compostables
Ballymoney	Glassdon	No kerbside collection of Compostables.
Coleraine	Glassdon	No kerbside collection of Compostables.
Derry	Glassdon	No kerbside collection of Compostables.
Limavady	Glassdon	No kerbside collection of Compostables.
Magherafelt	Glassdon	MDC invessel plant and Simpro
Moyle	Glassdon	No kerbside collection of Compostables.
Strabane	Glassdon	No kerbside collection of Compostables.

Due to the introduction of the Animal By Products Regulations, and the fact that guidance and certification is still being developed no Council within the region has procured the service of an in-vessel composting facility apart from Magherafelt District Council.

4.0 ASSESSMENT OF PROGRESS TOWARDS TARGETS

4.1 PROJECTED RECOVERY RATES

As previously stated in this review, one of the primary targets of the Waste Management Strategy for Northern Ireland was to recover 25% of household waste (of which 15% must constitute recycling and/or composting) by the end of 2005.

4.1.1 Projected Household Waste Recovery Rates

The following table show the estimated average quantity of household waste recovered (through recycling and composting), along with the target recovery rates as laid out in the Waste Management Plan, for the North West Region between 2004/05 and 2009/10. The values shown are calculated based on the information supplied by each of the Councils within the North West Region in the implementation Action Plans. These values can be used as an indication of the success of the local authority initiatives in progressing towards the 2005 targets. It should be noted however, that the values estimated are based on the full implementation of all infrastructure and services in the timescales identified within each of the individual Councils Implementation Action Plans.

The breakdown of the values for each individual local authority within this period is presented in Appendix C.

Projected Household Waste Recovery Rates						
	2004/05 (Actual)	2005/06	2006/07	2007/08	2008/09	2009/10
Ballymoney Borough Council	24%	24%	24%	29%	28%	28%
Coleraine District Council	19%	18%	23%	25%	25%	24%
Derry City Council	14%	14%	18%	20%	22%	22%
Limavady Borough Council	27%	36%	43%	44%	43%	42%
Magherafelt District Council	32%	38%	40%	44%	43%	42%
Moyle District Council	11%	15%	22%	27%	27%	26%
Strabane District Council	17%	19%	22%	21%	21%	21%
North West Group	19%	21%	25%	27%	27%	27%

It has been estimated that the projected quantity of household waste recovered (through both recycling and composting) in the North West Region for 2005/06 is 21% or 36,234 tonnes. As can be seen from the table, there are a large number of Councils failing to meet the 2005

target, with four of the Councils predicted to have recovery rates of below 20%. As a result of this, the group as a whole are expected to fall short of the 25% target by just over 3%.

There has however been a significant improvement in performance during the previous year, with the majority of Councils achieving higher than anticipated recovery rates and two Councils are anticipated to have recovery rates in excess of 30% for 2005/06. As can be seen from the summary sheets, presented in Appendix B, the increase in performance has been due to the phased implementation of a number of new facilities, including new civic amenity sites, recycling points, the introduction of brown bins and a large number of additional blue bins (estimated to be over 58,000 in 2003/04 and 42,000 for 2004/05).

4.1.2 Projected Municipal Waste Recovery Rates

The following Table shows the estimated average quantity of municipal waste recovered (through recycling and composting) for the North West Region between 2003 and 2005/06. As with the previous section, this is based on the information supplied in the Implementation Action Plan and is dependent on all infrastructure and services being rolled out in the timescales identified within the Plan.

The breakdown of the values for each individual local authority within this period is presented in Appendix B.

Municipal Waste Recovery (through recycling and composting)						
	2004/05 (Actual)	2005/06	2006/07	2007/08	2008/09	2009/10
Ballymoney Borough Council	22%	22%	22%	26%	26%	25%
Coleraine District Council	18%	17%	22%	24%	24%	23%
Derry City Council	12%	12%	15%	17%	19%	19%
Limavady Borough Council	24%	31%	36%	37%	36%	36%
Magherafelt District Council	27%	32%	34%	37%	36%	36%
Moyle District Council	9%	12%	19%	23%	22%	22%
Strabane District Council	15%	16%	19%	18%	18%	18%
North West Group	17%	19%	22%	24%	24%	24%

It has been estimated that the projected quantity of municipal waste recovered (through recycling and composting) for the North West Region for 2005/06 is 37,056 tonnes or 19%. The majority of Councils in the North West Region have a projected further increase in their recovery rates between 2004/05 and 2005/06.

All Councils in the North West Region have had a very significant rise in their municipal waste recovery rates and as a result of this; have exceeded the predicted rates set in the 2003/04 annual report. Further to this, the majority have predicted a further rise in recovery between 2004/05 and 2005/06 with one Council remaining at a steady rate.

4.2 WET ACT TARGETS

One of the targets set out for Northern Ireland is the Waste and Emissions Trading (WET) Act. The WET Act target for the United Kingdom sets out a series of targets for the diversion of Biodegradable Municipal Waste (BMW) from landfills as well as provision of a Northern Ireland Allowance Scheme, which will allocate landfill allowances to local authorities.

This Act will provide a cost effective and efficient way of helping the UK to meet its obligations under the Landfill Directive. This section provides details of the projected municipal and BMW landfilled quantities and assesses the BMW values against the current NI Allowances Scheme Targets.

4.2.1 Projected Municipal Waste Landfilled

The following table shows the projected amounts of municipal waste landfilled between 2004/05 and 2009/10 in the North West Region. A more detailed breakdown of the values for each individual local authority within the North West Region for this period is presented in Appendix B.

Municipal Waste Landfilled ¹						
	2004/05 (Actual)	2005/06	2006/07	2007/08	2008/09	2009/10
Ballymoney Borough Council	11,499	11,855	12,224	11,944	12,366	12,802
Coleraine District Council	38,035	39,361	38,135	38,301	39,675	41,091
Derry City Council	48,391	49,600	49,455	49,807	50,255	51,862
Limavady Borough Council	13,592	12,729	12,122	12,293	12,810	13,343
Magherafelt District Council	16,403	15,767	15,830	15,507	16,171	16,855
Moyle District Council	9,351	9,337	8,906	8,732	9,030	9,338
Strabane District Council	19,898	20,197	20,197	20,862	21,548	22,256
North West Group	157,169	158,845	156,867	157,446	161,856	167,547

Note 1. Municipal waste calculated to the nearest tonne.

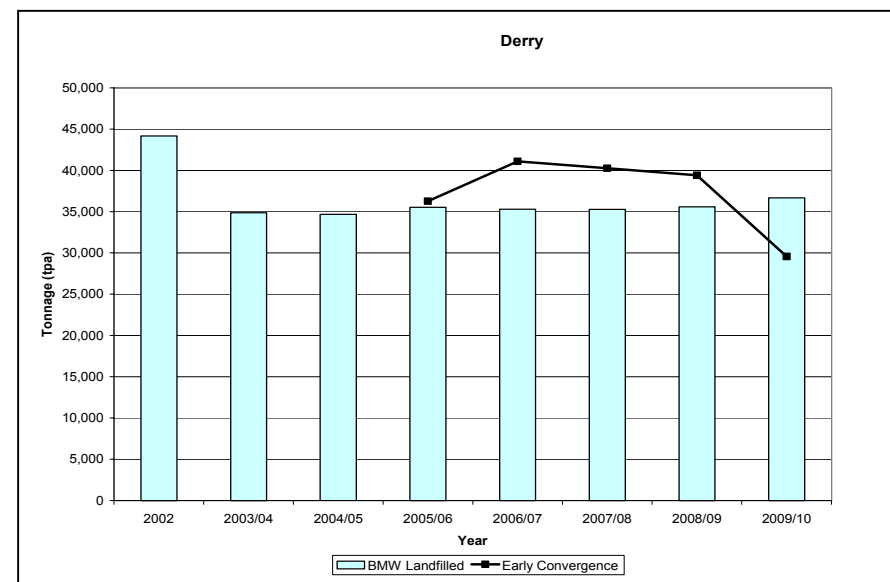
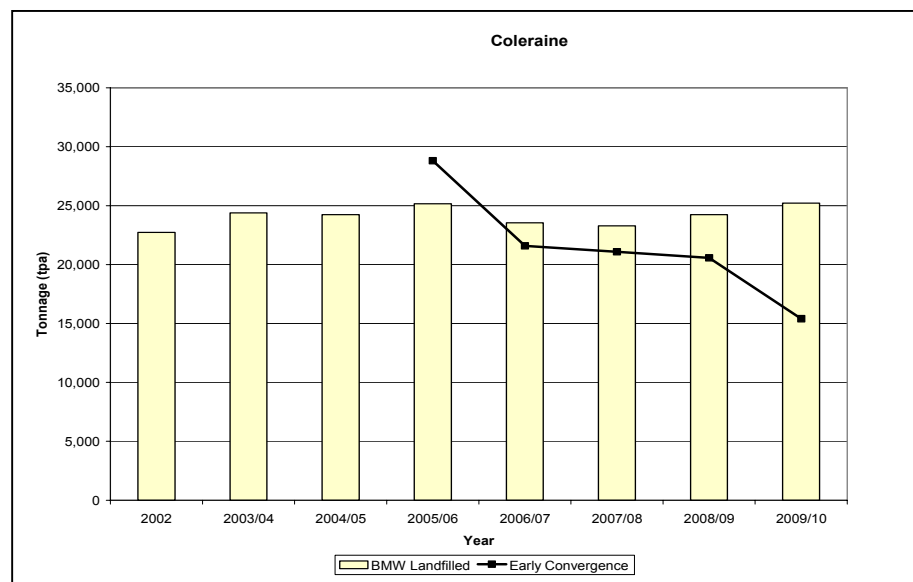
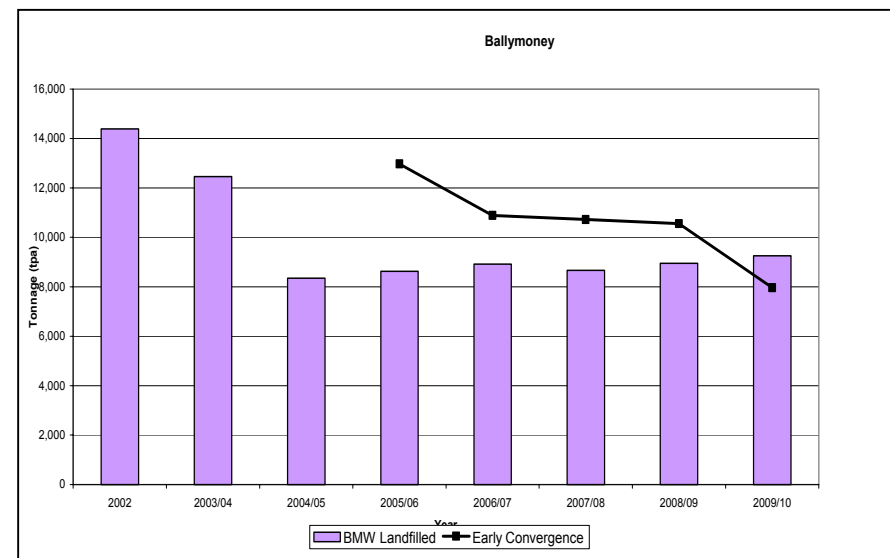
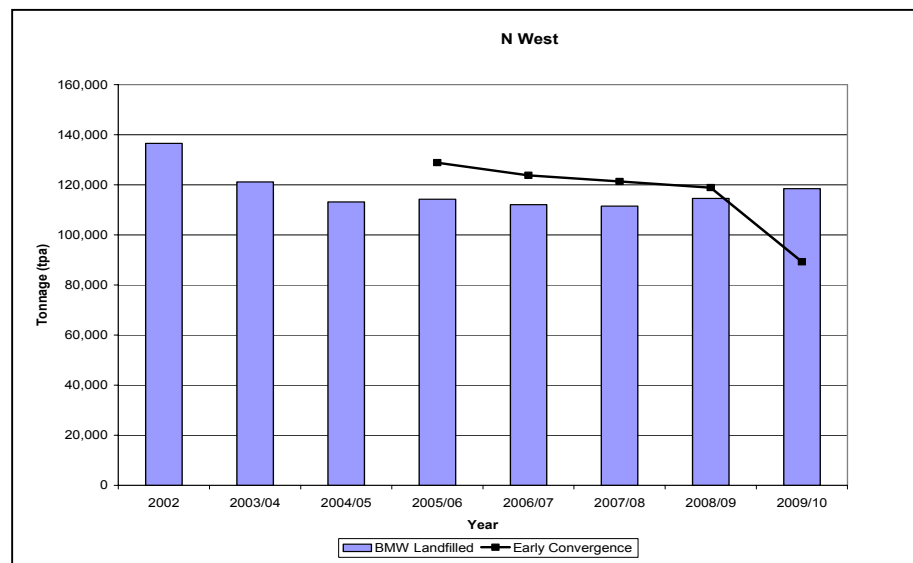
4.2.2 Projected Biodegradable Municipal Waste (BMW) Landfilled

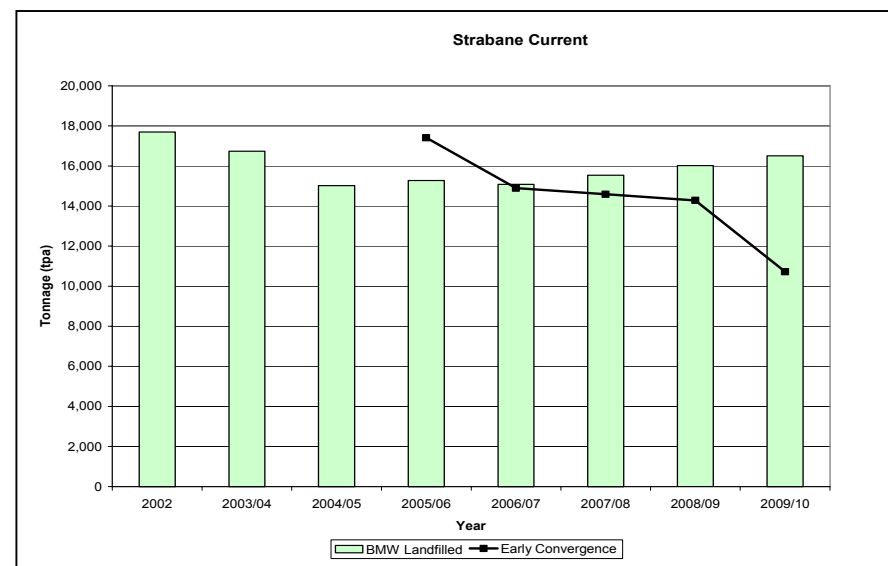
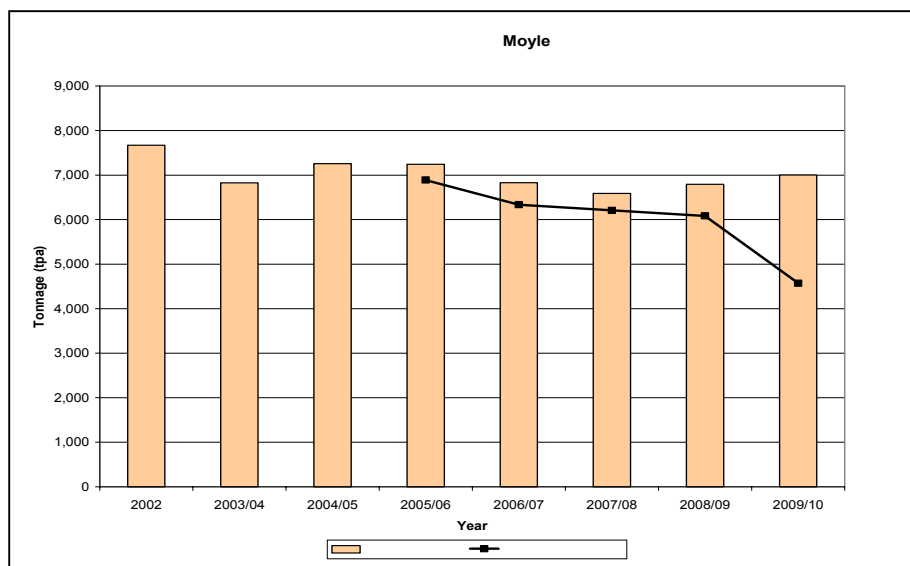
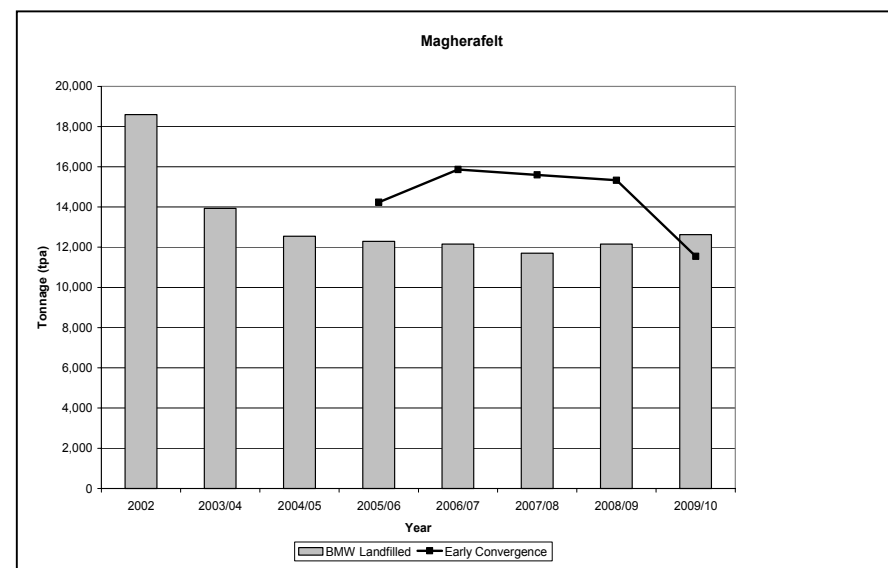
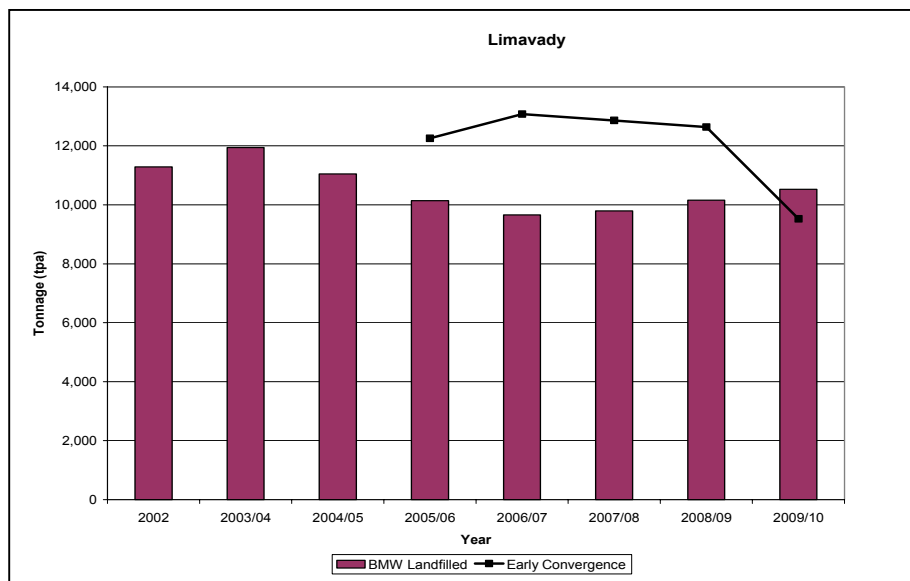
The following table shows the tonnage of BMW allowed to be landfilled and the potential fines faced by Councils in the North West Group for non-compliance.

WET ACT TARGETS						
		2005/06	2006/07	2007/08	2008/09	2009/10
Ballymoney Borough Council	Tonnage BMW allowed	12,968	10,889	10,721	10,550	7,960
	BMW allowed–landfilled	4,374	2,010	2,126	1,667	-1,220
	Potential Fines at £200/t	£0	£0	£0	£0	£244K
	Potential Fines at £150/t	£0	£0	£0	£0	£183K
Coleraine District Council	Tonnage BMW allowed	28,812	21,586	21,077	20,569	15,395
	BMW allowed–landfilled	3,650	-1,949	-2,211	-3,667	-9,819
	Potential Fines at £200/t	£0	£390K	£442K	£733K	£2m
	Potential Fines at £150/t	£0	£292K	£332K	£550K	£1.5m
Derry City Council	Tonnage BMW allowed	36,273	41,103	40,253	39,397	29,568
	BMW allowed–landfilled	623	5,692	4,866	4,062	-6,857
	Potential Fines at £200/t	£0	£0	£0	£0	£1.4m
	Potential Fines at £150/t	£0	£0	£0	£0	£1.0m
Limavady Borough Council	Tonnage BMW allowed	12,255	13,074	12,860	12,637	9,521
	BMW allowed–landfilled	2,116	3,451	3,102	2,525	-995
	Potential Fines at £200/t	£0	£0	£0	£0	£191K
	Potential Fines at £150/t	£0	£0	£0	£0	£143K
Magherafelt District Council	Tonnage BMW allowed	14,230	15,863	15,597	15,326	11,545
	BMW allowed–landfilled	1,941	3,706	3,898	3,170	-1,082
	Potential Fines at £200/t	£0	£0	£0	£0	£216K
	Potential Fines at £150/t	£0	£0	£0	£0	£162K
Moyle District Council	Tonnage BMW allowed	6,889	6,334	6,207	6,081	4,569
	BMW allowed–landfilled	-354	-492	-383	-713	-2,435
	Potential Fines at £200/t	£71K	£98K	£77K	£143K	£487K
	Potential Fines at £150/t	£53K	£74K	£57K	£107K	£365K
Strabane District Council	Tonnage BMW allowed	17,412	14,896	14,591	14,287	10,725
	BMW allowed–landfilled	2,067	-247	-1,009	-1,785	-5,834
	Potential Fines at £200/t	£0	£49K	£201K	£357K	£1.2m
	Potential Fines at £150/t	£0	£37K	£151K	£268K	£875K
North West Group	Tonnage BMW allowed	128,839	123,745	121,307	118,847	89,283
	BMW allowed–landfilled	14,418	12,172	10,390	5,260	-28,203
	Potential Fines at £200/t	£0	£0	£0	£0	£5.6m
	Potential Fines at £150/t	£0	£0	£0	£0	£4.2m

Note: 1. Calculated to nearest £1,000

The following Graphs show the quantities of Biodegradable Municipal Waste (BMW) landfilled for North West Region between 2004/05 and 2009/10 and assess the projected tonnages against the NI Landfill Allowances. The breakdown of the values for each individual local authority within the North West Region, along with the estimated cost implications associated with non-compliance, for this period is presented within Appendix B.





The projected BMW landfill projections are calculated on a Mass Balance approach to ensure as accurate data as possible.

It can be seen from the current projections, detailed in Appendix B, that the North West Region is expected to meet the NI Landfill Allowances up to 2008/09. They are anticipated to fall short of the 2009/10 target by approximately 28,000 tonnes and this will generate potential fines in the region of approximately £4.2m (assuming a £150/tonne fine) in 2009/10. This is based on the assumption that there will be free transfer or movement of surplus allowances between the Group. Should this be prohibited, then Moyle will fail to meet their targets and hence incur fines from 2005/06 while Coleraine, Moyle and Strabane will fail to meet their targets and hence incur fines from 2006/07 up to 2009/10.

5.0 OTHER CONTROLLED WASTE

5.1 COMMERCIAL AND INDUSTRIAL (C&I)

The C&I producing industries are being encouraged to become involved in the BPEO process. This process includes a mix of options such as landfill, recycling, recovery, re-use and reduction, and therefore be part of the solution for dealing with this waste stream.

Individual Councils within the North West Group have also provided segregated collection services for C&I wastes or provisions for the collection of C&I waste at civic amenity sites.

The following table details the tonnages of municipal Commercial and Industrial Waste Arising per North West Council area. These figures have been obtained from the Environment and Heritage Service 2002 Commercial and Industrial Waste Arisings Survey.

Commercial and Industrial (C&I) Wastes		
	C&I Waste Arisings, 2002	% of Northern Ireland Total
Ballymoney	6,400	1.00
Coleraine	20,900	3.30
Derry	39,000	6.10
Limavady	8,900	1.40
Magherafelt	10,900	1.70
Moyle	3,000	0.50
Strabane	10,100	1.60
NWRWMG TOTAL	99,200	15.60

At present a survey of Commercial and Industrial wastes in Northern Ireland is currently being carried out on behalf of EHS. This survey will accurately measure present Commercial and Industrial Waste Arisings and will fulfil the obligations of the EC Waste Statistics Regulation (No. 2150/2002) and amendment (No. 574/2004), which requires that National reports on current waste arisings be submitted by each Member State every two years.

5.2 CONSTRUCTION AND DEMOLITION (C&D)

The Construction/Demolition industry is one of the largest producers of waste, but in general, as an industry the producers and handlers of this waste have not kept records of quantities or types arising, nor disposal destinations. For this reason there is insufficient data available on C&D waste. However, it is known that at present an increasing quantity of C&D waste produced is recycled and/or reused on site due to the costs associated with disposal.

A survey of C&D waste was undertaken in Northern Ireland in 2002. This survey sample gives an indication of the total C&D waste produced, reused, recycled and disposed of in Northern Ireland but the analysis shows that the results are highly variable, with a total estimated waste arisings of 5,000,000 tonnes and a confidence range of nearly 6 million tonnes. This large range highlights that the estimated total is statistically highly variable.

However, with the implementation of the Duty of Care Regulations, better data on the quantities of C&D waste being produced, recovered and landfilled will become available and additional facilities to reprocess this material developed.

5.3 HAZARDOUS

The total hazardous waste arising for Northern Ireland in 1999/00 was approximately 44,350 tonnes. The following table details the tonnages of hazardous waste arisings in the North West region per European Waste Catalogue (EWC) chapter headings.

Hazardous Wastes produced in the North West Region and Northern Ireland			
Waste Description	North West	NI Total	% of NI total
Mining & Minerals	-	-	-
Agriculture & food production	-	19	-
Wood & paper production	2	35	0.005
Leather & textile production	-	-	-
Petrol, gas & coal refining/treatment	-	-	-
Inorganic chemical processes	5,702	8,326	12.9
Organic chemical processes	2,058	4,845	4.64
Paints, varnish, adhesive & inks	65	1,586	0.15
Photographic industry	-	146	-
Thermal processes waste (inorganic)	45	975	0.10
Metal treatment & coating processes	920	3,432	2.07
Shaping/treatment of metals & plastics	13	416	0.03
Oil & oil/water mixtures	1,070	15,621	2.41
Solvents (organic)	89	443	0.2
Packaging, cloths, filter materials	-	5	-
Not otherwise specified	683	2,508	1.54
C & D waste & asbestos	129	1,485	0.29
Healthcare	3	363	0.007
Wastewater & water treatment industry	21	2,959	0.05
Municipal & similar commercial	9	587	0.02
Unspecified	83	604	0.19
Total	10,893	44,353	24.6

To deal effectively with hazardous waste generated, and to reduce the relatively constant levels of hazardous waste produced from year to year, a Northern Ireland wide Hazardous Waste Forum has been established. The aim of this forum is to produce a strategy to identify the preferred waste management solutions for hazardous waste. The North West Group have been participating in this Forum.

5.4 PACKAGING

Packaging waste arises from two principal sources, namely household waste stream and the commercial and industrial waste stream. The total packaging waste generated from these two sources can therefore be estimated from available data.

A study of the composition of the household waste in Northern Ireland was undertaken during 2000, which indicates that packaging waste represents 22% of the household waste stream in Northern Ireland. Adopting that assumption, the estimated total tonnage of packaging waste generated in Northern Ireland in 2000 from household and commercial & industrial waste streams is displayed in the table below. An estimated total of approximately 412,000 tonnes of packaging waste was generated in Northern Ireland in 1999/00, with approximately 65,000 tonnes produced in the North West region.

Total Packaging Waste (tonnes)			
Region	C & I	Household	Total
North West	32,000	34,000	65,000
SWaMP	58,000	45,000	103,000
Arc21	139,000	104,000	244,000
TOTAL	229,000	183,000	412,000

Recycling and recovery of packaging waste from the municipal waste stream are a requirement of the EU Packaging Waste Directive. To deal effectively with packaging waste, to minimise its production and to comply with the EU Packaging Waste Directive, a Northern Ireland wide Packaging Waste Forum has been set up, the aim of which is to produce a strategy to deal with this waste stream. The North West group have been participating in this Forum.

5.5 PRIORITY WASTE STREAMS – TYRES, WEEE, ELV

5.5.1 Tyres

In order to meet the requirements of the Landfill Directive, which bans landfill operators accepting whole, used or shredded tyres, the North West Group along with the Southern Waste Management Partnership (SWaMP) have joined together to procure services for the collection of tyres from designated points within each council area. The tyres are delivered to a reprocessing facility, processed to render them suitable for delivery to end markets and then distributed onwards to end markets. This service was procured by both the groups in June 2004 and is being carried out by the company R4.

Tyres		
	Tonnage of Car Tyres	Tonnage of Other Tyres
Ballymoney	0	0
Coleraine	0.68	0.46
Derry	0.75	0.46
Limavady	0.97	0.12
Magherafelt	0.22	0.38
Moyle	0	0
Strabane	0	0
NWRWMG TOTAL	2.62	4.42

5.5.2 Waste Electrical and Electronic Equipment (WEEE)

To prepare for the introduction of the requirements of the WEEE Directive two pilot schemes have been implemented within Northern Ireland. These schemes took place between June 2004 and January 2005. One scheme was carried out within Banbridge Council area at Dromore Community Recycling Centre (CRC) in Co. Down and the other at Alexandra Park Avenue Household Recycling Centre (HRC) in north Belfast.

For the purposes of this pilot scheme, WEEE was separated into four categories, white goods, fridge/freezers, WEEE containing cathode ray tubes and small WEEE. The total WEEE collected at the Alexandra Park HRC site totalled to 229,150 kg and at the Dromore CRC was 71,238 kg.

The WEEE Directive requires a WEEE collection target of 4 kg per inhabitant per year from private households; this target must be reached by 31 December 2006.

Data produced from the pilot scheme has shown that the annual equivalent minimum collection rate was 3.8 kg per head of population and the maximum collection was 11.86 kg per head of population. Using this data the estimated household waste arisings in Northern Ireland can be expected to range from 6,470 – 20,193 tonnes. These figures are likely to be conservative as the WEEE Regulations are yet to be implemented in Northern Ireland. Introduction of the WEEE Regulations accompanied by an extensive public awareness campaign may lead to a higher level of arisings than indicated by the pilot scheme.

5.5.3 End of Life Vehicles (ELV)

The End of Life Vehicles (ELV) Directive was due to be transposed into national law in all member states by 21 April 2002, although the UK and other member states missed this deadline. As a requirement of this Directive, producers will be required to take responsibility for the vehicles which they place on the market. It is recognised that further facilities will be required to deal with this waste stream in due course, it is anticipated that these will evolve in response to market requirements.

6.0 CONCLUSIONS AND RECOMMENDATIONS

The annual report for the North West Region for 2004/05 has shown a very considerable and encouraging increase in performance within the Group as a whole over the last twelve months. All seven of the Councils within the Group experienced a notable increase in household waste recovery rates with the result of this being that the North West Household Recovery rate has risen by 9.4% from the same period last year and is now 19.3%. There has been a similar rise in municipal waste performance between the two consecutive years with the recovery rate rising by 8.6% up to 17.4% in 2004/05. These increases have been due in large to the continued implementation of infrastructure and services, as outlined within the Implementation Action Plan. This implementation however needs to be maintained to ensure that the North West Group and the individual District Councils continue to strive towards the meeting of waste management targets.

Although there has been a considerable increase in performance, the North West Group as a whole are still anticipated to fall short of the Northern Ireland Waste Management Strategy target of recovery of 25% of household waste by 2005, with a performance prediction of 21.1% for 2005/06. Magherafelt and Limavady however, are anticipated to make this 25% target. It is recommended therefore that the lower performing Councils use the higher Councils as a benchmark, in order to determine potential areas in which performance can be improved.

According to the reported values, over the last two years there has been a decrease in both the recorded household waste arisings and municipal waste arisings within the North West Group. In the past this has been attributed to improvements in reporting mechanisms for District Councils. With the exception of the introduction of WasteDataFlow this year which has served to improve reporting mechanisms further, the Key Performance Indicator sheets has been consistent over the past two years which may prove difficult to attribute this difference simply to changes in recording. Coupled with this has been a decrease of approximately 0.03 tonnes of waste produced per household. These together provide an indication that waste reduction activities, such as recent media and awareness campaigns are beginning to influence the publics' view on efficient waste management.

In terms of progression towards meeting the targets set out in the Landfill Directive for the diversion of biodegradable municipal waste from landfill, the Group as a whole are anticipated to meet the Landfill Allowance Targets up to 2008/09 but are anticipated to fall short of the 2009/10 target by approximately 28,000 tonnes, generating potential fines approximating to £4.2m (assuming a £150/tonne fine). This however is on the assumption that there will be free transfer or movement of surplus allowances between the Group. Should this be prohibited, then it has been shown that there are a number of Councils who are not anticipated to meet their targets.

In summary therefore, although there has been a marked increase in the recovery rates of both household and municipal waste, there are still a number of Councils not anticipated to meet their 25% recovery targets by 2005 or the NI Landfill Allowances Targets. It is therefore imperative that the Group as a whole continue to improve performance in terms of reducing waste arisings and increasing waste recovery rates through the improvement and implementation of infrastructure and services, in order to minimise the threats of infraction proceedings and fines. It is recommended that the Implementation Action Plans are revisited and monitored on a regular basis in order to allow remediation measures to be introduced wherever it is considered necessary.