

## **Report of the Strategic Director (Place) to the meeting of Environment and Waste Management Overview and Scrutiny Committee to be held on 31 October 2017**

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### **Subject:**

The management of waste and recycling activities within the District

### **Summary statement:**

This report provides a description of the current management of waste, and gives an update on the work programmes undertaken in 2017, and those planned for 2018, to improve the management of waste to more sustainable levels in line with the Waste Strategy (Municipal Waste Minimisation and Management Strategy 2015).

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Place Strategic Director

### **Portfolio:**

**Environment, Sport and Culture**

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### **Overview & Scrutiny Area:**

**Environment & Waste Management**

## **1. SUMMARY**

This report is in two halves, the first provides details of the current management of waste by providing a description of waste service operations, the second provides an update on the work programmes (established in 2015) undertaken in 2017, and those planned for 2018, to manage waste to more sustainable levels (e.g. minimise residual waste and increase recycling) in line with the Waste Strategy (Municipal Waste Minimisation and Management Strategy 2015).

## **2. BACKGROUND**

The Council has statutory responsibilities for the following wastes which are currently managed by waste services:

- kerbside collections of residual household waste from residents
- kerbside collections of recycling from residents;
- bulky waste collections upon request from residents (paid for service);
- clinical waste collections upon request;
- provision of Household Waste Recycling Centres (HWRCs) across the district;
- provision of a network of community recycling sites known as Bring Sites;

In addition to the above, waste services also provide the following services:

- Kerbside collection of garden waste (a non-statutory paid for service upon request);
- Chemical advisory services to residents;
- Trade waste services to commercial businesses (paid for service); and
- Clinical waste collections to commercial businesses (paid for service).

All the above services are provided by in house operations (described below), which are supported by several external contracts with the private sector for treatment of recyclates, residual waste and disposal services.

### **2.1 Current Services (2017)**

#### **Kerbside Collections**

The collection service has during 2017 moved from a weekly collection of residual waste and a fortnightly collection of recyclates requiring 28 residual rounds and 13 recycling rounds: a total of 41 collection rounds, to an Alternate Weekly Collection regime (AWC) where residual is collected on one week, and recycling the next, requiring only 32 rounds. As such the residual and recycling rounds mirror each other, thus the same vehicle and crew collect both the residual and recyclates collections using the standard 3 axle 26 tonne gross weight refuse collection vehicles with a driver and two loaders.

The rural areas of the district are serviced with 2 rounds operating on smaller and narrower 2 axle vehicles of a driver and loader, with a gross weight up to 14 tonne.

The typical receptacle for residual waste and recyclate is a standard 240L wheeled bin.

### **Kerbside Recycling**

As part of the move to AWC, there has been an increase in the types of recyclates collected at the kerbside, which has also dispensed with the caddy insert, meaning all the recycling is simply deposited by the householder into the grey coloured recycling bin. Shown in Appendix A is the marketing activity summary that highlights the publicity associated with improved kerbside recycling collection, which makes our system one of the simplest systems for the householder to use.

### **Garden Waste Collections**

This is a non statutory paid for service which commenced in June 2016, and has proved very popular, with over 34,000 customers signing up for the service in 2016, and over 35,000 to date in 2017. This service currently utilises 5 collection rounds using 26 tonne gross weight refuse collection vehicles. This provides a 12 x 4 weekly collection cycle, with no collections from early December to early January. The present annual charge for this service is £35 paid for up front.

### **Bulky Waste Collections**

This service is provided to domestic residents via a request system, for which an up-front charge is levied. The scale of charges relates to the number of items requiring removal, and a collection date is now provided at the point of service request. Collections are provided by a single team working Tuesday to Friday, with demand for the service remaining fairly consistent at some 10,430 requests producing around 1,167 tonnes annually (1,021 tonnes in 2015/16).

### **Clinical Waste Collections (domestic)**

The Council has a duty to collect certain clinical waste free of charge from residents who are treating themselves at home. The service uses a single driver/operative and a specialised collection vehicle.

### **Chemical Advisory Service**

The chemical advisory service via one operative and a van provides to householders within the district an inspection, consignment, and transportation to correctly collect and dispose of small quantities of unwanted hazardous wastes that may be found at domestic premises, such as:

- Chemicals;
- Pharmaceuticals;
- Herbicides;
- Poisons;
- Chemical reagents;
- Unidentified powders and liquids.

This service also collects hazardous waste (as listed above) deposited by the public into special purpose containers located at the Household Waste Recycling Centres

(see below). The service also undertakes some commercial collections to other establishments within the district, such as Schools and Hospitals.

### **Household Waste Recycling Centres (HWRCs)**

The Council currently provides household waste and recycling services to the district's residents at eight locations across the district, accepting waste, some of which is not normally collected from households by the refuse collection service. These sites are staffed and open 362 days per year, providing a wide range of containers to encourage recycling. A van permit scheme was introduced in 2006 to combat abuse of such sites by traders. In 2013 a residents' only permit scheme was introduced to control cross border activity. Originally permits had to be obtained from any of the 8 sites. By the end of 2016 some 90,000 permits had been issued. However this has now changed with every household in the district issued with a permit as part of the annual council tax papers sent to all 225,000 households in March this year. This now makes HWRC permits universally available to all our residents, and encourages responsible management of domestic wastes and promotes greater recycling. This initiative was also important in supporting the move to AWC later in 2017.

Materials accepted at HWRCs include; residual waste, paper, cardboard, metal, glass, green waste, wood, plastics, cartons, tyres, shoes, textiles, books, oil (both engine oil and vegetable oil), paints, carpets, mattresses, plaster board, push bikes (which go to a reuse scheme) soil bricks and rubble, polystyrene, batteries, light bulbs, florescent tubes, electrical equipment and unwanted household chemicals. Certain HWRCs, with prior notice, also accept tyres, gas bottles and bonded asbestos waste from residents.

These sites also provide a local outlet for some precinct sweepers to reduce their travel time to tip.

### **Bring Sites**

Bring sites are a network of mini-recycling sites which provide a series of recycling banks often located in public areas, such as supermarket car parks. There are 55 sites with varying numbers of recycle Banks across the district which provide facilities for residents to recycle glass bottles, jars, textiles, plastic bottles, paper, cans etc., and 6 sites which include WEEE Banks for small electric items. On a few occasions there have been instances of fly tipping at some of the larger Bring Sites located within the supermarket car parks, these are often cleared and dealt with by the individual supermarkets. Unfortunately earlier in the year we were requested by the Management of Morrison's, Mayo Avenue, to close this site because of persistent fly tipping. If evidence of fly tipping has been found it has been reported to the Enforcement Team for further investigation. The Bring Sites provide a valuable service to residents who do not have room for recycle bins, they also reinforce the message that Bradford Council is trying to make it as easy as possible for all residents to recycle.

### **Nodes**

2016 saw 2 Recycling Collection Nodes piloted in Bradford City Centre for residents living in multi occupancy accommodation. There are now four Nodes within the City Centre placed strategically for residents and pedestrians to recycle, glass, cans, plastic bottles, paper and cardboard. In the coming months the signage on the Nodes

will be changed to reflect the increased amount of materials which can then be recycled. The Nodes are collected fortnightly by the Rear End Loader (REL) wagon and the Trade Waste Paper/Cardboard wagon. There have been some instances of contamination of non-recyclable material on occasions but it has not been a major problem. It is currently being considered that the 2 further Nodes will be sited at newly refurbished Multi Occupancy buildings in Keighley.

### **Trade Waste Collections**

The Council operates a trade waste collection service to local businesses. The trade portfolio has some 3,600 customers, collecting around 19,500 tonnes per annum of trade waste plus around 800 tonnes of recyclables via 6 collection rounds using a wide range of receptacles from small blue coloured sacks, to wheeled bins, skips and large containers.

### **Clinical Waste Collections (commercial)**

The Council offers trade waste collection contracts to collect clinical wastes from commercial establishments utilising spare capacity from the domestic clinical collections. The Council collects approximately 21 (25 in 15/16) tonnes of clinical waste each year from both households and commercial establishments which require specialized treatment and disposal via a treatment contract.

### **Waste Treatment**

There are several contracts in place for the treatment of recyclables and residual waste. During 2017 a number of the contracts with recycling merchants have come to an end, and have/are being retendered e.g. glass, cardboard, plastics, steel and aluminium, whilst the paper has been using a monthly spot market, as the quality and thus the price remains difficult to gauge until AWC is fully bedded in, and the paper quality output from the Materials Reclamation Facility (MRF) can be guaranteed, at which time a longer term contract will be procured.

2017 has seen the conclusion of the procurement for waste treatment services, following the announcement at Easter this year of the Preferred Bidder AWM for the 12 year contract. This new contract will commence in April 2018, and is the subject of a separate report to this Committee.

### **MRF**

2017 has seen further development of the Materials Reclamation Facility (MRF) located at the existing Bowling Back Lane site, in order to support the move to AWC and the co-mingling of recyclates from the kerbside. A mix of mechanical and manual picking separates out various recyclates and contamination, to produce mixed glass, cardboard, mixed papers, steel tins/can, alloy tins/cans and mixed plastics. As recyclate tonnages increase, further mechanical development is being considered for 2018.

## 2.2 Work Programmes

### **Municipal Waste Minimisation and Management Strategy (MWMMS)**

The Council's Municipal Waste Minimisation and Management Strategy was approved by the Executive in January 2015, and highlighted future waste policy development and the need to manage waste to more sustainable levels, by minimising waste, encouraging re-use and improving recycling at the kerbside and reducing levels of residual waste.

### **Waste Programme**

The Domestic Waste & Recycling Policy (aka the Bin Policy) was successfully rolled out across the whole district in 2016. The policy specifies how domestic waste and recycling will be collected by the Council, and formed an intermediate step to achieving AWC. The policy continues to operate, its aim being to support the diversion of a greater percentage of recyclable waste from the residual (green) bin to the recyclable (grey) bin at the kerbside. The policy only allows the emptying of one 240L residual (green) bin per household, or one 360L (for a household with 7 or more residents) every other week and no side waste or overfilled bins presented at the kerbside.

#### Alternate Weekly Collection

To make the bin collection service more efficient and reduce the amount of waste going to landfill, in October 2016 we trialled alternate week bin across the Wyke Ward areas, which was a great success. Following on from this we have now rolled AWC out across the whole District except for rural rounds. We are currently planning and preparing to roll-out AWC to all properties (6,500) that are currently on rural rounds.

The introduction of the Bin Policy and AWC is the biggest change to the collection service since the introduction of a wheeled bin collection method 20 years ago. The changes have had an impact on up to 225,000+ properties across the whole District.

In order to assist residents in the preparation for the move to AWC, all in one recycling was introduced in February 2017 prior to the commencement of AWC across the Keighley areas on the 2nd May 2017. Similarly all in one recycling was introduced in Bradford in May prior to commencement of AWC on the 2 July 2017.

This means all residents (except rural) now have the same collection day but on alternate weeks for both residual and recycling. The same crews and vehicles follow the same rounds each week just collecting a different bin which means we have a more consistent, efficient and cheaper waste collection service.

The service has been working hard to ensure residents have means to recycle and since the implementation of the Bin Policy over 76,000 recycling bins have been delivered to residents across the District.

The 2017/2018 preliminary waste tonnages are shown in Appendix B. The preliminary tonnages show that for the period April to August recycling has increased by 37% compared to the same period in the previous year. This represents an increase of 3062

tonnes. Preliminary results for residual tonnages show a reduction of 13.75% against the same period which represents a reduction of 7,431 tonnes.

#### Engagement & behavioural change

Changing behaviours through education, engagement and enforcement are key, as is improving and introducing a systematic and consistent approach to communications across the district in respect to waste and waste management. This is achieved through a wide range of formats i.e. leaflets / posters / letters /stickers / website / press / radio/ CouncilAPP /Facebook /Twitter /Stay-Connected / and Road shows held at events and throughout the communities.

#### Recycling Advisors

The promotion of recycling is a vital part of reducing the amount of residual waste the Bradford District needs to dispose of. We have four Recycling Advisors who work across the District visiting households and advising them of how to manage their waste in line with the Bin Policy. This has proved to be an invaluable way of engaging with residents. The advisors will look at the households needs and advise them on how they can reduce the amount of residual waste they produce by simply recycling. They also advise on what items can be recycled and will order as many recycling bins as the residents need to manage their waste effectively. The recycling advisors will also visit residents who have requested a larger 360L residual bin to ensure the household meets the criteria of 7 or more residents in the property.

#### In cab technology

In-cab tablets have been installed into the bin waggon. This allows the crews to view their rounds and input information that is then received directly into the contact centre. This real time information enables the contact centre staff to deal with queries from residents with the most up to date information. The crews are also able to report any instances of residents not complying with the Bin Policy. This enables a very efficient way of processing the information, which in turn supports the enforcement staff processing and tracking compliance with the Bin Policy. The technology also supports the Operational Managers to more effectively manage workload and respond much quicker i.e. when a breakdown occurs. We are now seeing a decrease in the number of reported missed bins and the need to return to collect such bins as crews record when bins are not put out, if there is side waste or extra bins which in turn assists with the Enforcement process of the Bin Policy. This technology will shortly be rolled out across Trade Waste and the Garden Waste collection service.

#### Waste service infrastructure

This project will improve efficiencies within waste management through better ways of communicating, data collection and improved service delivery both internal and externally including routing systems and back office integration with oracle/arc GIS. This will replace current ad hoc systems with supported solutions. The routing of the residual and recycling rounds has been completed and we are currently working on the rural rounds which will be followed by the garden waste and trade waste rounds.

### Garden Waste Service

Many other local authorities already charge for garden waste collections or do not provide this service. Previously the cost of providing the garden waste service was met by all Council Tax payers and was not available to all residents who may have wanted to receive the service.

As part of the 2015/2016 budget process it was agreed that the Garden Waste Service would become an opt in chargeable service from 1 June 2016. The service is now available to all households across the District which can be accessed by a 26 tonne wagon.

This service is highly valued by many residents and is now in its second year. In the first year it exceeded the number of predicted subscriptions which resulted in more income. This year the service has already achieved and exceeded the predicted subscriptions and income. An automated payment option was introduced this year which has resulted in a much more efficient renewal process for residents who do not wish to sign up on-line. The service will become more efficient following the introduction of routing the rounds and in cab technology.

## **3. OTHER CONSIDERATIONS**

This report is for information and discussion only.

## **4. FINANCIAL & RESOURCE APPRAISAL**

There are no financial issues arising from this report which is for information and discussion only.

## **5. RISK MANAGEMENT AND GOVERNANCE ISSUES**

There are no significant risks arising from this report which is for information and discussion only.

## **6. LEGAL APPRAISAL**

There are no legal issues arising from this report which is for information and discussion only.

## **7. OTHER IMPLICATIONS**

### **7.1 EQUALITY & DIVERSITY**

N/A



## **7.2 SUSTAINABILITY IMPLICATIONS**

There are no sustainability issues arising from this report which is for information and discussion only.

## **7.3 GREENHOUSE GAS EMISSIONS IMPACTS**

This report is for information and discussion only, therefore there are no carbon footprint and greenhouse gas emissions arising.

## **7.4 COMMUNITY SAFETY IMPLICATIONS**

N/A

## **7.5 HUMAN RIGHTS ACT**

N/A

## **7.6 TRADE UNION**

N/A

## **7.7 WARD IMPLICATIONS**

N/A

## **7.8 AREA COMMITTEE ACTION PLAN IMPLICATIONS**

N/A

## **8. NOT FOR PUBLICATION DOCUMENTS**

None

## **9. OPTIONS**

N/A

## **10. RECOMMENDATIONS**

That Environment and Waste Management Overview & Scrutiny Committee consider the information presented in this report and request a further progress report in twelve month's time.

## **11. APPENDICES**

Appendix A Marketing activity summary  
Appendix B Preliminary waste tonnages

## **12. BACKGROUND DOCUMENTS**

Municipal Waste Minimisation and Management Strategy (Executive Report  
13<sup>th</sup> January 2015)

## Waste & recycling marketing activity summary 2016 - 2017

Project	Category	Description	Details	Target Audience
AWC Wyke pilot Oct-16	Print	Letter	Letter to householders explaining changes	Householders
	Print	Leaflet	Leaflets explaining what can go in what bin	Householders
	Print	HWRC permits	Permit for each householder along with information about local HWRC	Householders
	Print	Folders	To hold all info together in branded folder	Householders
	Print	Posters	1pp A4 colour - new way to recycle	Householders
	Print	Bin hangers	To go on bins reminding of changes and dates	Householders
	Face to face	Roadshow	Mobile roadshow/display set up in areas where residents are likely to go, areas of high density housing etc	Householders
	Online	Social media messages	On all channels used by the Council - Facebook, Twitter	Followers
	Online	Website pages	Info about process and changes	All
	Online	Council App	Info about process and changes	All
	Media relations	Press releases	Sent to all local media - press and radio	All
	Communications	Various messages	Includes staff briefings, weekly updates, BradNet	Various
	Distribution	Letters/permits/sticker - pack	Mailed or hand delivered to householders in area	Householders
	Distribution	Posters	Distributed to local info points, libraries, community centres etc in Wyke	Householders
	Face to face	Door knocking in affected area	Explain changes, answer questions and offer support	Householders
All in one recycling - Keighley Feb-17	Print	Letters, posters, leaflets and bin hangers	Explaining changes to recycling system & what can go in your bin	Householders
	Distribution	Distribution of materials over 3 weekends	Hand delivered info to every household	Householders
	Media relations	Media release to Keighley News	Explaining changes to recycling & what residents are being asked to do	All
	Online	Social media messages	Explaining changes to recycling system & what can go in your bin	Followers

	Online	Posting on Parish Council, local community groups	Explaining changes to recycling system & what can go in your bin	Followers
	Online	Amends for website and App	Update to reflect changes	All
	Communications	Stay connected e-newsletter	Update and short articles of interest	Subscribers
	Communications	Various messages	Includes staff briefings, weekly updates, BradNet	Various
	Face to face	Keighley - briefing for Cllrs, Ward Officers, Wardens etc	Update and opportunity to ask questions	Invited audience
All in one recycling - Bradford  May-17	Face to face	Door knocking in affected area	Explain changes, answer questions and offer support	Householders
	Print	Letters	Letter to householders explaining changes	Householders
	Print	Leaflets	Leaflet explaining changes and what can go in the bin	Householders
	Print	Yes please bin stickers	Outlines what can go in the bin	Householders
	Online	Amends for website and App	Update to reflect changes	All
	Distribution	Distribution of materials over 6 weekends	Hand delivered info to every household	Householders
	Online	Social media messages	Explaining changes to recycling system & what can go in your bin	Followers
	Online	Posting on Parish Council, local community groups	Explaining changes to recycling system & what can go in your bin	Followers
	Online	Facebook pages	Explaining changes to recycling system & what can go in your bin	Followers
	Communications	Stay connected e-newsletter	Update and short articles of interest	Subscribers
	Media relations	Media release to T&A	Explaining changes to recycling & what residents are being asked to do	All
	Communications	Stay connected e-newsletter	Update and short articles of interest	Subscribers
	Face to face	Shipley - briefing for Cllrs, Ward Officers, Wardens etc	Update and opportunity to ask questions	Invited audience
	Face to face	Bradford - briefing for Cllrs, Ward Officers, Wardens etc	Update and opportunity to ask questions	Invited audience
	Face to face	Door knocking in affected area	Explain changes, answer questions and offer support	Householders
Garden waste renewals Apr-17	Print	Letter	Renewals letter to previous subscribers	Householders
	Print	Leaflet	General leaflet with updated info	Householders
	Print	Bin hangers	To encourage residents to subscribe	Householders

	Print	Licence stickers	For residents to stick onto bins to show they have subscribed	Subscribers
	Communications	Stay connected newsletter	Update and short articles of interest	Subscribers
	Print	Calendar postcards	Dates for collections for residents requesting them	Subscribers
	Online	Web pages	Updated info and charges	All
	Online	App push messages	To encourage residents to subscribe	Subscribers
	Online	Social media	To encourage residents to subscribe	Followers
	Online	Social media advertising	To encourage residents to subscribe	All
	Online	Videos	To encourage residents to subscribe	All
	Media relations	Media releases	Encouraging residents to take up garden waste service	All
	Print	Council tax insert	To go to every house with info about subscribing to garden waste service	Residents
	Print	Vehicle signage	Update signage on garden waste vehicles	Residents
	Communications	Various messages	Includes staff briefings, weekly updates, BradNet	Various
HWRC Feb-17	Print	Letter to be written to accompany replacement permits	To go with replacement permits	Householders
	Distribution	Replacement permits mailed	To residents requesting via contact centre	Householders
	Online	Amends for website and App	Updated info	All
	Online	Social media messages	Encourage use of HWRC and reminder to take permit	Followers
AWC rollout - Keighley Apr-17	Print	Letter and bin hangers to print	Informing of dates and changes	Householders
	Distribution	Distribution over 3 weekends	Hand delivered to households in affected areas	Householders
	Communications	Stay connected e-newsletter	Update and short articles of interest	Subscribers
	Face to face	Door knocking in affected area	Explain changes, answer questions and offer support	Householders
AWC rollout - Bradford Jun-17	Print	Bin hangers to print	Informing of dates and changes	Householders
	Distribution	Bradford 1 - bin hangers placed on bins	To go on bins in affected areas	Householders
	Media relations	Media releases	Update on changes	All
	Online	Social media messages	Update on changes	Followers
	Distribution	Bradford 2 - bin hangers placed on bins	To go on bins in affected areas	Householders
	Communications	Stay connected e-newsletter	Update and short articles of interest	Subscribers

<b>Saltaire infrastructure changes</b> <b>Apr-17</b>	Advertising	Plasma & Big Screen slides	Encouraging everyone to recycle	All
	Print	Pull up banners	Encouraging everyone to recycle	All
	Print	Wyke day change letter	Informing of dates and changes	Householders
	Face to face	Door knocking in affected area	Explain changes, answer questions and offer support	Householders
	Print	Saltaire letter to print	Explanation of changes and why they have been made	Householders
	Distribution	Letters distributed to affected residents in Saltaire	Hand delivered to properties in affected area	Householders
	Communications	Stay connected e-newsletter	Update and short articles of interest	Subscribers
	Face to face	Door knocking in affected area	Explain changes, answer questions and offer support	Householders
	Face to face	Menston Neighbourhood Forum		Residents
	Face to face	Burley Neighbourhood Forum		Residents
	Face to face	Dragon Boat Festival, Roberts Park		
	Face to face	Asda, Rooley Lane		
	Face to face	Morrisons, Girlington		
<b>Roadshows and events</b> <b>Various dates</b>	Face to face	Tesco, Queensbury		
	Face to face	Morrisons, Idle		
	Face to face	City Park, Bradford	Update and opportunity to ask questions	
	Face to face	Saltaire Festival, Roberts Park		
	Face to face	Easy Access Event, City Park		
	Face to face	St.Johns Church – drop in & food bank with Eastern European community		
	Face to face	Recycling vehicle photo shoot with Cllr Feriby in City Park		
	Face to face	Door knocking & DOA Knowle Park, Keighley		
	Face to face	Door knocking, recycling bin delivery and DOA – BD3 with Places for people		
	Print	Update recycling roadshow vehicle information panels	Ensure correct info being given out	Residents

<b>City Centre recycling</b> <b>Feb-17</b>	Print	Node postcards	Explaining new recycling facilities, where they are , how to use them	Householders
	Distribution	Distribution to: Broadway, Cheapside, Burnett Street and Valley Road	Hand delivered to apartments in the area	Householders
	Face to face	Door knocking in affected area	Explain changes, answer questions and offer support	Householders
<b>Social housing</b> <b>Jun-17</b>	Print	Letters	Letters to explain changes and responsibilities	Housing Providers & Landlords
	Print	Posters	To encourage residents to recycle	Householders
	Print	Large bin stickers	To explain what can go in each recycling bin - reduce contamination	Householders
	Face to face	Door knocking in affected area	Explain changes, answer questions and offer support	Householders
<b>Misc</b>	Online	Review website	Check navigation content ease of finding info simplify messages	All
<b>Various dates</b>	Print	Great Horton project leaflet	Included info on waste, recycling, HWRC and promoting App	Householders
	Print	Eastern European leaflet	Translated leaflet into 5 languages with waste and recycling messages	Eastern Europeans
	Print	Vehicle signage	Updated signage for new recycling vehicles	All
	Print	No side waste stickers	To be used by crews informing residents no side waste will be taken	Householders
	Print	Bulky waste	Leaflet reprinted as required	Householders
	Print	Litter vehicle signage	To go on street scene vehicles as they drive around the district	All
<b>Current</b>	Print	Landlord leaflet	To explain responsibilities and what info they need to give their tenants	Landlords
	Communications	Stay connected e-newsletter	Update and short articles of interest	Landlord & Agent subscribers

	Distribution	Demo bins and banners	Demonstration bins and displays set up at Grange Interlink, Khidmet Centre, St Edmunds Childrens Centre, Girlington Community Centre, West Bowling Community Advice and Training Centre and Woodroyd Centre. More planned for future in conjunction with Ward Officers	Residents
Rural reorganisation	Print	Letters	Explanation of changes and why they have been made	Householders
Date to be confirmed	Distribution	Letters distributed to affected residents in small areas at a time	Hand delivered to properties in affected area	Householders
	Communications	Stay connected e-newsletter	Update and short articles of interest	Subscribers
	Face to face	Briefing for Cllrs, Ward Officers, Wardens in affected areas - to be held in Nov 2017	Update and opportunity to ask questions	Invited audience



## Preliminary waste tonnages

## Appendix B

CHART 1	Tonnes Recycled At The Kerbside (Dry)													% of Total Waste	Year (Loose Projected)
	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	Apr-Aug		
2012-13	1,073	1,378	1,142	1,176	1,209	1,067	1,199	1,218	1,090	1,390	1,103	1,055	5,978	42%	14,102
DIFF	12.22%	-10.33%	-4.25%	8.07%	16.20%	12.40%	22.94%	9.81%	30.31%	26.13%	18.73%	21.08%	3.87%	DIFF	13%
2013-14	1,204	1,236	1,094	1,271	1,405	1,199	1,474	1,338	1,421	1,753	1,310	1,278	6,210	39%	15,983
DIFF	22.41%	16.89%	23.03%	28.42%	-4.91%	16.85%	-0.35%	-1.09%	6.97%	-7.59%	2.67%	8.10%	16.47%	DIFF	8%
2014-15	1,474	1,444	1,346	1,632	1,336	1,401	1,469	1,323	1,520	1,620	1,345	1,381	7,232	42%	17,292
DIFF	4.17%	-6.85%	4.24%	-2.54%	-2.73%	7.83%	-4.10%	5.54%	17.17%	4.95%	0.56%	19.68%	-0.81%	DIFF	4%
2015-16	1,535	1,345	1,403	1,591	1,300	1,511	1,409	1,397	1,781	1,700	1,352	1,653	7,174	40%	17,977
DIFF	2.79%	16.85%	22.34%	2.09%	28.91%	13.74%	4.68%	23.35%	3.14%	20.32%	18.20%	23.41%	13.83%	DIFF	15%
2016-17	1,578	1,572	1,716	1,624	1,676	1,718	1,475	1,723	1,837	2,046	1,598	2,040	8,166	40%	20,603
DIFF	8.21%	28.72%	25.94%	58.80%	64.52%								37.50%	DIFF	37%
2017-18	1,708	2,024	2,161	2,579	2,757								11,228		28,329
CHART 2	Tonnes Recycled At The Kerbside (Green)													% of Total Waste	Year (Loose Projected)
	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	Apr-Aug		
2012-13	552	960	1,335	1,253	1,341	1,012	819	699	6	1	54	368	5,442	65%	8,400
DIFF	-37.36%	19.99%	-11.88%	-12.18%	-22.10%	-9.88%	9.86%	-8.29%	-88.89%	-100.00%	45.29%	43.37%	-11.43%	DIFF	-6%
2013-14	346	1,151	1,177	1,101	1,045	912	900	641	1		78	528	4,819	61%	7,878
DIFF	123.63%	14.26%	21.75%	32.40%	-6.00%	30.67%	9.39%	-0.62%	31514.29%	#DIV/0!	-55.07%	-16.47%	23.69%	DIFF	20%
2014-15	774	1,316	1,433	1,457	982	1,191	984	637	221	10	35	441	5,961	63%	9,480
DIFF	23.49%	-12.17%	8.49%	13.99%	35.83%	18.87%	15.37%	12.24%	20.03%			60.41%	11.73%	DIFF	12%
2015-16	955	1,156	1,554	1,661	1,334	1,416	1,136	715	266			707	6,660	61%	10,899
DIFF	-12.86%	-1.05%	-27.82%	-43.19%	-34.82%	-35.35%	-44.59%	-21.41%	26.95%	#DIV/0!	#DIV/0!	-31.08%	-26.26%	DIFF	-26%
2016-17	832	1,143	1,122	944	869	916	629	562	337	202	41	487	4,911	61%	8,085
DIFF	-5.48%	-24.15%	-0.56%	-4.64%	11.75%								-5.49%	DIFF	-5%
2017-18	787	867	1,115	900	972								4,641		7,641
CHART 3	Tonnes Recycled At The Kerbside (Dry and Green)													% of Total Waste	Year (Loose Projected)
	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	Apr-Aug		
2012-13	1,625	2,337	2,477	2,429	2,551	2,079	2,018	1,917	1,097	1,390	1,157	1,423	11,420	51%	22,501
DIFF	-4.63%	2.12%	-8.36%	-2.38%	-3.94%	1.55%	17.63%	3.21%	29.62%	26.09%	19.96%	26.85%	-3.42%	DIFF	6%
2013-14	1,550	2,387	2,270	2,372	2,450	2,111	2,374	1,979	1,422	1,753	1,388	1,806	11,029	46%	23,861
DIFF	45.00%	15.62%	22.37%	30.27%	-5.38%	22.82%	3.34%	-0.94%	22.48%	-7.04%	-0.58%	0.91%	19.62%	DIFF	12%
2014-15	2,247	2,760	2,778	3,089	2,318	2,593	2,454	1,960	1,741	1,630	1,380	1,822	13,193	49%	26,772
DIFF	10.82%	-9.38%	6.43%	5.25%	13.60%	12.90%	3.71%	7.72%	17.53%	4.33%	-1.99%	29.54%	4.86%	DIFF	5%
2015-16	2,491	2,501	2,957	3,252	2,634	2,927	2,545	2,111	2,047	1,700	1,352	2,360	13,834	48%	28,876
DIFF	-3.21%	8.58%	-4.02%	-21.04%	-3.37%	-10.02%	-17.31%	8.21%	6.23%	32.20%	21.24%	7.09%	-5.47%	DIFF	-5%
2016-17	2,411	2,715	2,838	2,568	2,545	2,634	2,104	2,285	2,174	2,248	1,639	2,528	13,077	46%	28,688
DIFF	3.49%	6.46%	15.46%	35.48%	46.49%								21.36%	DIFF	21%
2017-18	2,495	2,891	3,277	3,479	3,728								15,869		34,814
CHART 4	Tonnes Of Residual At The Kerbside													% of Total Waste	Year (Loose Projected)
	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	Apr-Aug		
2012-13	9,680	12,024	10,943	11,155	12,367	9,919	10,878	10,855	9,309	11,917	9,984	9,321	56,168	44%	128,351
DIFF	11.77%	0.64%	-5.30%	6.32%	-5.40%	-0.54%	5.54%	-6.20%	13.75%	-2.22%	-3.32%	5.21%	1.20%	DIFF	1%
2013-14	10,819	12,100	10,363	11,860	11,699	9,865	11,481	10,182	10,589	11,653	9,652	9,807	56,843	44%	130,071
DIFF	5.45%	-4.20%	1.05%	4.81%	-10.87%	5.35%	-0.61%	-5.13%	-0.38%	-8.39%	0.37%	4.81%	-0.90%	DIFF	-1%
2014-15	11,409	11,593	10,472	12,431	10,428	10,393	11,410	9,660	10,549	10,675	9,687	10,278	56,333	44%	128,985
DIFF	1.76%	-7.35%	5.55%	1.66%	-1.54%	7.01%	-4.97%	3.27%	17.99%	1.21%	1.55%	8.58%	-0.04%	DIFF	3%
2015-16	11,609	10,741	11,053	12,638	10,268	11,122	10,844	9,976	12,446	10,804	9,837	11,160	56,309	42%	132,497
DIFF	-11.24%	-2.96%	6.72%	-14.88%	5.02%	-1.61%	-16.01%	4.89%	-15.39%	1.26%	-1.67%	4.99%	-3.99%	DIFF	-4%
2016-17	10,304	10,423	11,795	10,758	10,783	10,943	9,108	10,463	10,531	10,940	9,673	11,717	54,062	42%	127,437
DIFF	-13.30%	-4.61%	-7.86%	-30.72%	-12.51%								-13.75%	DIFF	-14%
2017-18	8,933	9,943	10,868	7,453	9,434								46,631		109,918