

## **HIGH PEAK BOROUGH COUNCIL**

### **Report to The Executive**

**9 August 2018**

<b>TITLE:</b>	<b>Glossopdale Biodegradeable Liners Trial Update</b>
<b>EXECUTIVE COUNCILLOR</b>	<b>Cllr Emily Thrane – Executive Councillor for Finance and Operational Services</b>
<b>CONTACT OFFICER:</b>	<b>Nicola Kemp – Operations Manager (Contract Management)</b>
<b>WARDS INVOLVED:</b>	<b>Simmondley, Dinting, Gamesley, Hadfield South, Howard Town, Old Glossop</b>

#### **Reason for the Report**

- 1.1 To update the Executive on the Glossopdale compostable liners trial which sought to investigate the impact providing residents with compostable liners had on the amount of food waste recycled and the impact on wider recycling performance.
- 1.2 To advise the Executive of proposed amendments to the trial and expansion on to another collection round to provide comparative performance data.

#### **2. Recommendations**

- 2.1 That the Executive note;
  - the proposed amendments to the original trial,
  - the proposed continuation of the trial in Glossopdale,
  - the proposed expansion of the trial to a further collection round in Buxton.

#### **3. Executive Summary**

- 3.1 The estimated recycling rate of High Peak BC in 2017-18 was 47.7% (unaudited results). Derbyshire has aspirations to achieve a 55% recycling rate by 2020 as per the adopted Joint Municipal Waste Management Strategy (JMWMS) for the county. The recently adopted Circular Economy Package (legally binding from 4

July 2018) has raised the target reuse and recycling rate for EU member states to 55% by 2025. In addition by 31 December 2023 there is a requirement for separate collection of biodegradable waste.

- 3.2 A 2017 waste compositional analysis showed 36% of black bin waste in the High Peak is food waste. This equates to over 6,500 tonnes of waste per annum which if diverted for composting would take the High Peak recycling rate to over 60%.
- 3.3 National research by the Waste & Resources Action Programme (WRAP) indicates the only way to significantly increase participation in food waste recycling schemes is to provide compostable food bags, stickers and leaflets and run a high profile campaign.
- 3.4 As a result a bioliners trial was introduced in the Glossopdale area to approximately 7,000 households in September 2017. The aim of the trial was to increase the amount of food waste recycled by residents of the High Peak and to determine the impact on food waste recycling by residents who were provided with a kitchen caddy and supply of liners versus residents that only receive a supply of liners.
- 3.5 Based on initial sampling, householders were expected to generate between 0.1 and 0.5 kilograms of food waste per household per week as an average across the trial area. In assessing the success of the trial the average weight of food waste actually diverted was 0.48 kilograms per household per week. This equates to a total diversion of 3.3 tonnes per week or 167 tonnes per annum by the Glossopdale householders on this trial. The trial therefore demonstrated that the campaign engaged the public and diverted food waste from disposal supporting both the County's recycling performance alongside that of High Peak.
- 3.6 As a result of the positive outcomes on the Glossopdale bioliners trial, DCC approached Officers at High Peak to extend the existing scheme by supplying a new stock of bioliners to households on the Glossopdale round but also to determine High Peak's interest in expanding the scheme to a further refuse collection round.
- 3.7 The Glossopdale trial area included households in Gamesley, which benefitted from a concentrated recycling education campaign in 2016 as part of Derbyshire's thriving community project. DCC were keen to build on the work undertaken within this community and specifically requested the inclusion of Gamesley in the initial trial area. To determine if this previous communication campaign had any effect in increasing participation and diversion of food waste, than would be ordinarily expected, DCC are keen to extend the trial to another area of the High Peak.
- 3.8 The round identified by Officers of High Peak will focus on Buxton and include the areas of Fairfield and Burbage. This round was selected on the basis that it

has similar socio economic demographics to the initial trial area and will enable Officers to determine if the promotional campaign undertaken in Gamesley did have any impact on the outcomes of the initial trial.

- 3.9 DCC Officers are presenting a report to their Cabinet Member for Highways, Transport & Infrastructure on the 26<sup>th</sup> July. If the project is agreed, from September 2018 the further collection round will also be supplied with compostable liners to encourage participation in the food recycling scheme. This will be in addition to the provision of a supply of further liners to the households on the original trial, but reducing from two to one liner per week.
- 3.10 This trial is of particular interest to Derbyshire County Council (DCC) as the Waste Disposal Authority (WDA). DCC have to make a saving of £4.5 million in 2018/19, as a result they are exploring options to reduce disposal costs and are the main financial contributor to the project costs. HPBC's contribution will primarily be in the form of Officer time, supported by colleagues at AES who primarily will deliver the project.

#### **4. How this report links to corporate priorities**

This report links to the corporate aim to protect and improve the environment and our Priority Outcome to achieve high recycling rates.

#### **5. Implications**

##### 5.1 Community Safety - (Crime and Disorder Act 1998)

Not Applicable

##### 5.2 Workforce

Expansion of the trial will require continued support from Officers of both AES, DCC and HPBC in regards to publicity and monitoring the collected waste in order to calculate the quantity of food waste recycled.

##### 5.3 Equality and Diversity/Equality Impact Assessment

This report has been prepared in accordance with the Council's Diversity and Equality Policies.

##### 5.4 Financial Considerations

As detailed within the report.

##### 5.5 Legal

There are no legal implications.

5.6 Sustainability

The increase in recycling rates will contribute towards national sustainability principles. Diversion of waste from disposal to composting will help High Peaks recycling performance.

5.7 Internal and External Consultation

Ward members have previously been provided with information relating to the current Glossopdale trial round. If the expansion goes ahead communication will occur with members whose wards are affected by the trial expansion.

5.8 Risk Assessment

To date there has been no negative impact on the quality of the compost produced at the IVC by the inclusion of compostable liners. Monitoring will continue and will alert Suez of any changes to the quality of their product. If quality drops and the trial is deemed to have negatively affected the overall quality of compost at the IVC, the trial will have to cease.

**Keith Parker**  
**Head of Operational Services**

**Web Links and  
Background Papers**

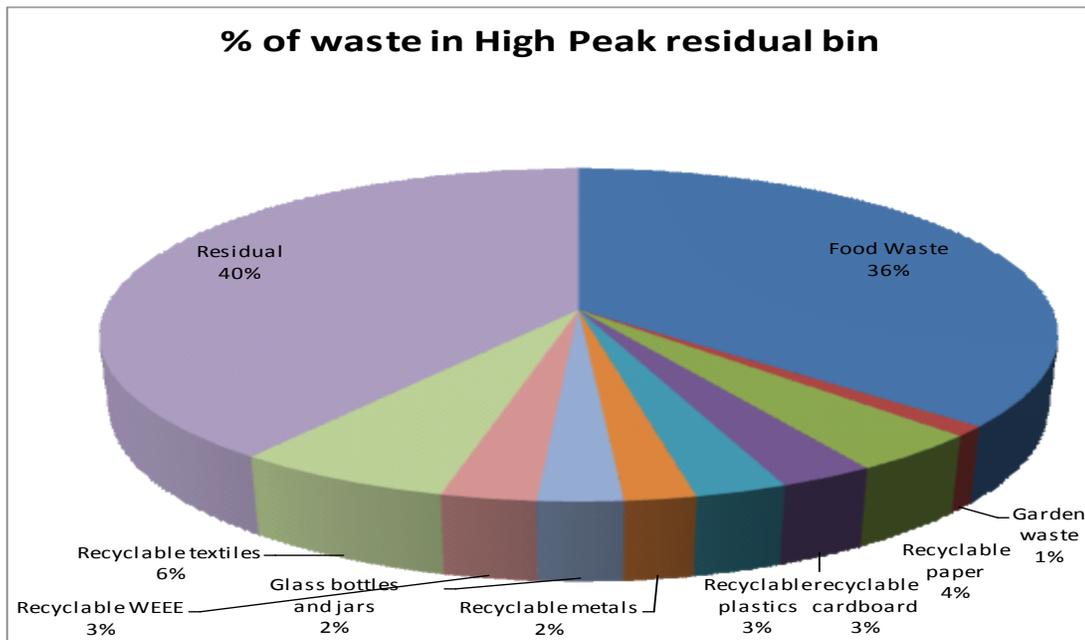
**Location**

**Contact details**

Nicola Kemp  
Operations Manager  
(Contract Management)

## 6. Background

- 6.1 The estimated recycling rate of High Peak BC in 2017-18 was 47.7% (unaudited results). Derbyshire has aspirations to achieve a 55% recycling rate by 2020 as per the adopted Joint Municipal Waste Management Strategy (JMWMS) for the county. The recently adopted Circular Economy Package (legally binding from 4 July 2018) has raised the target reuse and recycling rate for EU member states to 55% by 2025. In addition by 31 December 2023 there is a requirement for separate collection of biodegradable waste.
- 6.2 Food waste is by far the single biggest waste stream in household waste bins. In High Peak 36% of black bin waste is food waste. This equates to over 6,500 tonnes of waste that could be recycled via the green lidded bin service. In Derbyshire as a whole, householders are placing over 57,000 tonnes of food waste in their general waste bins each year. This has a significant impact on the environment and costs Derbyshire Council Tax payers over £7.5m per year.



- 6.3 When we refer to the term “food waste” we mean:
- avoidable food waste that we could have eaten but have chosen not to,
  - unavoidable food waste such as fruit and vegetable peelings - banana skins, apple cores, cauliflower leaves, tea bags, egg shells etc.,
- 6.4 Whilst all householders in the High Peak are able to put food waste in their green lidded bins, research highlights a variety of reasons why the majority of the public don't participate in such schemes. These reasons include
- it's considered to be too smelly or messy
  - people don't have the time

- they don't see the point
- 6.5 National research by the Waste & Resources Action Programme (WRAP) indicates the only way to significantly increase participation in food waste recycling schemes is to provide compostable food bags, stickers and leaflets and run a high profile campaign.
- 6.6 WRAP research also shows that a typical household generates approximately 2kgs of food waste per week or 100kgs per year (more than the body weight of the average man) and until a household actually separates this waste most don't realise how much they produce.
- 6.7 Derbyshire County Council (DCC), as the Waste Disposal Authority, have a savings target of £4.5 million to achieve in the 2018/19 financial year and are keen to support initiatives that may see a reduction in overall waste disposal costs.

## **7. The Glossopdale bioliners trial**

- 7.1 The bioliners trial was introduced in Glossopdale to increase the amount of food waste recycled by residents and to determine the impact on food waste recycling by residents who were provided with a kitchen caddy and supply of liners versus residents that only received a supply of liners.
- 7.2 The chosen trial area covered 7,000 households in Glossop and the surrounding areas as serviced by a single refuse collection round. The trial commenced in September 2017 when 2,873 households received a kitchen caddy and supply of liners, a further 2,646 properties received only a supply of liners. Households on the trial were issued with a supply equivalent to two liners per week to encourage them to separate their food waste for recycling.
- 7.3 Apart from the provision of the caddy, promotional activities undertaken in support of the project were the same across all households. All were provided with an information leaflet explaining the trial and confirming types of food waste that could be placed into their green lidded bin. Stickers were also placed onto black and green lidded bins, the black bin sticker advised residents to put food waste in their green lidded bin; the green lidded bin sticker listed items suitable for composting. The trial was also promoted in the local media, on the council's website and via social media channels.
- 7.4 The financial cost of the initial six month of the trial to both DCC and HPBC are as detailed in the table overleaf:

	<b>DCC Contribution</b>	<b>HPBC Contribution</b>
Supply of bioliners	£3,469	
Supply of kitchen caddies		£2,117
Stickers for the green lidded bins	£319	
Sticker for the black Bins	£645	
Sticker distribution	£200	£780
Leaflet production and printing (caddy & no caddy versions)	£421	
PPE required for monitoring activities	£33	
Face book advertising	£1,000	
<b>Total</b>	<b>£6,087</b>	<b>£2,897</b>

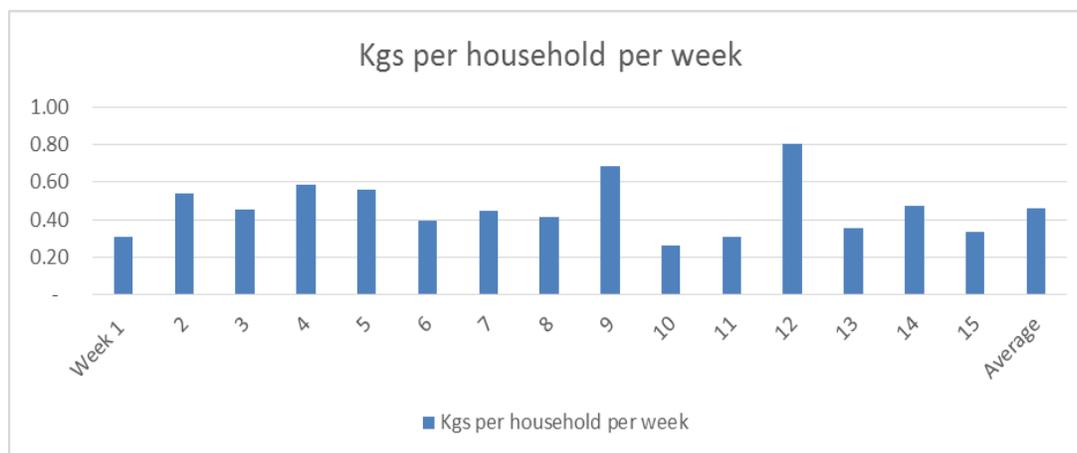
NB: Officer time/costs have not been costed in regards to the project.

- 7.5 DCC agreed to supply a further £7,989 in February 2018 to extend the trial and provision of bioliners to households on the scheme, to enable a full 12 month analysis to be undertaken.

## **8. Outcome of the trial**

- 8.1 The organic waste collected via green lidded bins in the High Peak is sent for composting at DCC's In-vessel Composting plant (IVC) at Waterswallows, Buxton. This facility is managed by Suez who constantly monitor the quality of the compostable material as it is critical all food and garden waste feedstock is quality controlled to enable them to produce a compostable product.
- 8.2 This monitoring intensified during the trial period to determine if as a result of supplying biodegradable liners, contamination of the feedstock increased. Suez have recently confirmed they are satisfied with the inputs from the trial and as a result they are able to continue to provide the compost for spreading on agricultural land in the Buxton area, replenishing farmland with nutrients and organic matter that reduces reliance on artificially produced fertilisers.
- 8.3 In order to monitor the amount of food waste presented in the green lidded bins by households from the trial area, Officers visited the IVC on each collection day to sort through a sample taken of waste from the collection load. Two 'scoops' of material would be separated from the main load and forked through by Officers to count the number of compostable bags visible. Two samples of 10 bags were then weighed to produce an average weight of diverted food waste for the whole load.
- 8.4 Based on initial sampling, householders were expected to generate between 0.1 and 0.5 kilograms of food waste per household per week as an average across the trial area.

8.5 As the following chart highlights, the average weight of food waste actually generated was 0.48 kilograms per household per week. This equates to a diversion of 3.3 tonnes of food waste per week or 167 tonnes per annum by the Glossopdale householders on this trial.



8.6 Data collated over the trial period also demonstrated that there was no significant difference in the amount of food waste recycled by households provided with a caddy and liners versus those supplied solely with liners.

8.5 In May 2018, a face to face survey was undertaken by Officers from DCC and HPBC to assess their view of the scheme and the quantity of bags that were provided. Officers door knocked properties in the trial area to obtain the views of the trial users. The survey results are as follows:

- 356 households completed the survey,
- 80% of respondents said they used the service regularly, 10% said they never used it,
- 43% of respondents using the service confirmed they are already buying their own liners from local shops and supermarkets,
- 83% of respondents said they would continue to use the service if they were supplied with fewer bags,
- 96% of respondents were satisfied with the food waste collection service.

8.6 The trial has demonstrated that this campaign did engage the public and divert food waste from disposal which will support both the County's recycling performance alongside that of High Peak.

8.7 The diversion levels achieved demonstrates the project as delivering direct waste disposal savings to DCC despite there being significant costs for the provision of the food bags, leaflets and stickers, their distribution and marketing costs to promote the project.

## **9. Proposed service expansion**

- 9.1 As a result of the positive outcomes on the Glossopdale bioliners trial, DCC approached Officers at High Peak to extend the existing scheme by supplying a new stock of bioliners to households on the Glossopdale round but also to determine High Peak's interest in expanding the scheme to a further refuse collection round.
- 9.2 In continuing to supply households on the trial two bioliners per week, DCC highlighted that this provision will put the project into a negative cost scenario for them. In light of the positive response from those residents surveyed in May and the fact that six retailers have been identified in Glossop as selling compostable bags, it has been proposed that from September 2018 the trial changes as follows:
- households in the trial area are only supplied with one liner per week,
  - a limited number of liners would be made freely available at Council outlets in the area such as municipal buildings, libraries etc.
- 9.3 The Glossopdale trial area includes households in Gamesley, which benefitted from a concentrated recycling education campaign in 2016 as part of Derbyshire's thriving community project. DCC were keen to build on the work undertaken within this community and as a result specifically requested the inclusion of Gamesley in the initial trial area. To determine if this previous campaign had any effect in increasing participation and diversion of food waste than would be ordinarily expected, DCC are keen to extend the trial to another area of the High Peak.
- 9.4 On the basis of the proposed expansion as detailed above, DCC Officers are presenting a report to the Cabinet Member for Highways, Transport & infrastructure on the 26<sup>th</sup> July.
- 9.5 If the project is agreed by DCC members, from September 2018 a further collection round will also be supplied with compostable liners to encourage participation in the food recycling scheme. As a result of seeing no impact when a kitchen caddy has been provided in regards to food waste recycling, households will not be provided with a caddy.
- 9.6 The round identified by Officers will focus on Buxton and include the areas of Fairfield and Burbage. This round has been selected on the basis that it has similar socio economic demographics to initial trial area and will enable Officers to determine if the promotional campaign undertaken in Gamesley did have any impact on the outcomes of the initial trial.
- 9.7 The following table identifies the estimated actual costs to DCC in continuing the trial in the Glossopdale area and extending the trial to the proposed collection round in the Buxton:

	<b>12 month extension - Glossop Trial</b>	<b>12 month trial -Buxton round</b>
Supply of liners (52 per household on the trial and additional stock for outlets)	£7,338	£7,338
Stickers for bins		£1,385
Distribution of stickers		£980
Leaflets	£219	£365
Distribution of bags and leaflets	£2,150	£2,150
Marketing costs	£2,000	£2,000
<b>Total implementation costs</b>	<b>£11,707</b>	<b>£14,218</b>
Likely disposal savings to DCC	£16,695	£16,695
Likely net saving to DCC	£4,988	£2,477

- 9.8 This 'invest to save' trial has demonstrated that with strong public participation it is possible to create environmental benefit, increased recycling rates and produce some modest disposal savings to DCC. It is estimated that the expansion of the trial in the High Peak should produce modest savings of up to £7,465.
- 9.9 The expansion into the Buxton area will enable both councils to further understand household behaviour and commitment to this composting scheme. Monitoring of the trial will continue as it is essential to demonstrate the impact the trial is having and whether it provides value for money to DCC.
- 9.10 It is anticipated that the diversion of food waste from the Glossop and Buxton areas when based on the results from the initial trial area, should add approximately 0.5% to High Peak's recycling and composting rate, this being an estimated 47.7% in 2017/18 (unaudited results). This project could also add 0.05% increase to the Derbyshire county recycling rate.