

Future Collection Scheme Options for the Waste and Recycling Service

Cabinet Member Cllr Clive Eginton
Responsible Officer Head of Environmental Services

Reason for Report: To consider and agree the recommendations for Cabinet on the refuse and recycling scheme commencing in October 2015.

RECOMMENDATION(S): That the PDG recommends to the Cabinet to:

- **Provide free and limitless boxes for recycling, including one additional per property of a different colour to permit greater separation**
- **Remove card from garden waste and collect in black boxes as kerbside recycling**
- **Remove food from garden waste and collect in a caddy as kerbside recycling**
- **Collect mixed plastics, excluding film, as kerbside recycling**
- **Collect household refuse and recycling fortnightly from each premises**
- **Retain the garden waste (which now excludes card and food) as a fortnightly, chargeable service**
- **Re-use the brown wheeled bins for residual waste containers**
- **Retain existing paid for bulky waste collection service and the Waste Electrical Equipment (WEE) collection**
- **Retain the contracted out clinical waste collection service**
- **Retain assisted collections and update eligibility for the service every two years**

Relationship to Corporate Plan: Maintaining front line services in the face of the ongoing funding cuts requires the redesign of services to enable them to continue to be affordable.

Financial Implications: The service budget is £2.5m per annum making it a substantial part of the Council's overall expenditure. The report excludes trade waste and street cleansing operations which account for approximately £0.5M of this total. There are costs associated with the changes proposed in this report, however long term revenue reductions are also recommended.

Legal Implications: There is a duty to collect all household waste and four kerbside dry recyclates from 2015. The size and type of collection receptacles used, where they are placed and the frequency they are emptied, are all for the Council to decide. There is no obligation to collect from private roads or to collect garden waste.

Risk Assessment: Members of the PDG have agreed that, without considering and implementing changes to service delivery, the Council will face the risk that it runs a service that is not affordable or will require deeper cuts to other services to support it. Attention has also been drawn to the health & safety implications of continuing a refuse service that relies on manual handling for most of the time. The proposals are not without risks; introducing a service which customers have to pay for has no guarantee that customers will take up the service.

1.0 Introduction and current scheme

1.1 Members will recall from previous reports, a number of potential options for changes to the waste and recycling collection service were brought from a Members' working day on 24 July and reported to the PDG in November 2013 as an options report.

1.2 This report sets out potential arrangements that could be implemented from October 2015.

1.3 In summary the current collection scheme is:-

- a population of more than 76,000 people in approximately 34,500 households of which 80% have an alternate weekly collection of household rubbish (black sacks) and compostable organic waste (card, food waste and garden waste combined in a brown wheelie bin or bio bag) and 20% are currently provided with a weekly household rubbish collection as they have no organic compostable collection.
- 100% of households have a fortnightly dry recycling collection covering paper, tins & cans, glass bottles & jars, plastic milk bottles, carrier bags, cartons (tetrapak), household batteries, clothing & shoes and aluminium foil.
- Three collection passes per fortnight are made at each household, two completed by a refuse lorry and one by a smaller recycling lorry (kerbside or stillage). 300 properties with severe narrow access are serviced by two passes per fortnight using a small light commercial vehicle.
- 55 litre black recycling boxes (no limit on number) and all containers for organic compostable material (which for the majority is a 240 litre wheeled bin (some smaller properties or those with storage access issues have either a single 180 litre wheeled bin or six rolls of bio bags) are provided free of charge.
- There is no policy on the quantity of household (residual) rubbish or the containers to be used and all household rubbish is currently landfilled at Broadpath tip. Mid Devon District Council (MDDC) pays for all collection costs and Devon County Council (DCC) pays for all disposal costs.

- All compostable material is currently composted at Broadpath. MDDC pays for collection costs and DCC pays for treatment costs. The Council earns no income from compostable material and it is not eligible for Government recycling credits, however this is material diverted from landfill and therefore can be discounted from the overall percentage of material we landfill which is reported nationally each year.
- All dry recycling material is processed at the Silverton Mill depot. Collection costs are paid by MDDC and an income is gained from recycling credits and material sales. Separate arrangements are being made to re-locate the recycling depot to Tiverton and nothing in this report is compromised by a change in site.

2.0 **Key principles to be included in a new scheme**

- 2.1 The new scheme proposed is to have a fortnightly residual waste collection and a fortnightly recycling collection on the same day across the entire District, not the 80/20 split at present.
- 2.2 Members and customers have expressed the wish to improve recycling, not only the rates but also the products collected. Kerbside recycling permits sortation into vehicles and the rejection of non-recyclable materials. Provision of unlimited boxes will assist without boxes being heavy from overfilling. Kerbside sortation has proven to be the best way of dividing recycling materials with minimum contamination.
- 2.3 There are significant health and safety benefits to crews loading household rubbish via wheeled bins compared to the manual lifting hazards associated with sacks and dustbins. Any new scheme should therefore provide for wheeled containers to be used in handling residual waste.
- 2.4 Members have given a commitment to retain a garden waste service and options for this are included at 5 below.
- 2.5 The aim is to increase recycling rates by approximately 10% in the first five years.

3.0 **New scheme proposals**

- 3.1 A proposal based on the points at 2 above is therefore:
- To provide free and limitless boxes for recycling, including possibly one additional per property of a different colour to permit greater separation
 - Remove card from garden waste and collect in black boxes as kerbside recycling

- Remove food from garden waste and collect in a caddy as kerbside recycling
- Collect mixed plastics, excluding film, as kerbside recycling
- Collect household refuse and recycling fortnightly from each premises
- Retain the garden waste (which now excludes card and food) as a chargeable service
- Reuse the brown bins for residual waste containers
- Retain the existing bulky domestic collection or WEE (Waste Electrical Equipment) collections
- Continue to provide the contracted out clinical waste collection service
- Retain assisted collections for those with physical difficulties and update eligibility every two years

4.0 Impact of changes to plastic collections

- 4.1 The collection of plastic bottles (those with a neck and a screw cap e.g. fizzy drinks and juice bottles) as well as milk cartons has been examined and would be possible with little loss of income. Currently milk containers (HDFE) are worth approximately £410 per tonne, whereas plastic bottles (if combined) would reduce the price to approximately £230. It is an assumption as to the yield because they are high volume and low weight. This could however result in more frequent return trips by collection vehicles to the depot as the silos on the vehicle fill up.
- 4.2 If all mixed plastics (excluding film) are collected, again there is the volume issue, but the price derived from the mixed plastics is likely to be less than the recycling credit, i.e. we would pay the re-processors to remove as is the case for carrier bags at present. This type of mixed collection relies on re-processors sorting various grades from the mass to maximise income.
- 4.3 It is proposed therefore that mixed plastics are collected and removed from the waste stream, the more expensive collection option, and sortation by our staff on the baling belt, will be used to preserve HDFE as much as possible. Crushing in vehicle may render the produce unable to be sorted and so will not be employed.
- 4.4 Members' wishes to increase materials collected would therefore extend to mixed plastics (excluding film) and food waste, adding to the existing range of glass, card, paper, tetra packs, textiles, batteries, cans, tins and foil.

5.0 Proposals for garden waste

- 5.1 Brown bin waste currently takes garden waste, cardboard and food. Key to the proposal to re-use the brown bins for residual waste is that card and food are removed and treated as recycling, leaving only the garden waste which although we have been collecting for nine years, there is no statutory

obligation to collect this. Garden waste is not considered as household waste and its collection and disposal incurs additional discretionary cost for both us and DCC.

- 5.2 Previous reports and the current work examining a Devon Waste Partnership by Eunomia and WRAP proposed that garden waste should be a charged for service. By doing so, the cost associated with removal of a non-mandatory waste product can be recovered in the same way as bulky items or WEE.
- 5.3 Having provided a garden waste service thus far it would be difficult to cease and Members have committed to retaining a service. Both Cornwall and the Somerset Partnership charge for garden waste collection with the customer being responsible for replacing lost bins. Somerset charges £30 + bin charge in first year and Cornwall charges £46.50 per annum.
- 5.4 To retain a fortnightly, free of charge garden waste service with reduced material, as card and food are now excluded, would provide neither savings nor income, but potentially cost more to collect less material as collection charges remain. This option misses out on a potential £500k income (as projected in these assumptions) and there would be a cost in providing new receptacles for residual waste of £935k to give some efficiency and remove health and safety risks of manual handling.
- 5.5 Alternatively, a fortnightly charged service could be provided and yield an income, based on the assumptions, of £500k annually which would make the service self-funding within two years (see table 6.7).
- 5.6 A seasonal April-October fortnightly charged service would require a lower fee, eg £30 per year, which would only cover the cost of the bin. Seasonal services according to WRAP data are less attractive than all year services and if we make a prudent assumption of 20% take-up, or 6,900 properties, the income would be £207k which is less than half of an all year round service income.
- 5.7 The recommended receptacle for the fortnightly garden waste collection would be a 240 litre coloured, wheeled bin. Any additional garden waste which is not in a wheeled bin will be collected either in paid for compostable bags or a second paid for wheeled bin purchased from the Council.

6.0 **Additional investment and revenue cost implications**

- 6.1 Wheeled bins cost approximately £27 each. Discounts apply for larger orders, but based on latest estimates this is the assumed price.
- 6.2 80% of the 34,500 properties already have a brown wheeled bin, so to convert to 100% would therefore cost in the region of £189k.

- 6.3 Using the same cost, a new different coloured receptacle for garden waste would cost £270k for an estimated 10,000 property take up (i.e. approx. 30%).
- 6.4 Removing food from the garden waste stream would require a separate container. It is recommended that a 60 litre food caddy be provided free of charge which could be collected fortnightly on the recycling round. Caddies will cost approximately £10 each, therefore to provide for all 34,500 properties will cost £345k.
- 6.5 Providing an extra coloured box per household to contain extra bottles and card and permit some beneficial separation would cost £4 each = £138k. Beneficial separation is to have certain products in certain boxes to ease collection and prevent time lost sorting.
- 6.6 Assuming Members agree to a charge to householders of £50 per annum, an income of £500k in year 1 would cover the garden waste bins and staff and vehicle costs. The scheme would not commence until 2015 hence the suggested £50 charge.
- 6.7 **Scheme costs and savings**

	Year 1 costs	Year 2 onwards
Predicted garden waste income at £50 pa/ph based on 10,000		(500,000)
Cost of 7000 brown bins (20% currently without) @ £27	189,000	
Cost for 10000 coloured wheeled bins for garden waste @ £27	270,000	
34500 food caddies @ £10	345,000	
34500 coloured recycling boxes @ £4	138,000	
Income from garden waste scheme	(500,000)	(500,000)
Estimated annual sinking fund cost		50,000
Net deficit/saving	442,000	(450,000)

- 6.8 More detailed analysis and discussions are needed with Devon County Council as by providing them with pre-sorted single compostable products (food waste and garden waste) they will derive savings on disposal costs. Discussions also need to be held with DCC as to the potential for sharing any savings.
- 6.9 Additionally, there may be savings from reducing refuse, assuming bottles and plastics make up some 9% of residual refuse. This may arise from reduced waste vehicle trips to tip and fuel reductions for us on tip runs and fuel for us and disposal costs for DCC.

- 6.10 There is also the recycling credit gain from more recycling and additional income from materials that is yet to be estimated, together with savings for DCC from gate fees and landfill tax.
- 6.11 Trade waste and recycling has been omitted from this report, however recycling from commercial premises, village halls and schools is being explored with a view to more products being collected.

7.0 **Matters not to be taken forward**

- 7.1 Weekly recycling including food was trialled previously and could not be taken forward across the district because the predicted costs were prohibitive.
- 7.2 Weekly refuse collection, as proposed by the Secretary of State, would firstly not be conducive to increasing recycling unless that too became a weekly arrangement, as customers could simply opt for the more frequent collection service to dispose of all their refuse, and secondly the collection cost would double to effectively collect less waste weekly.
- 7.3 There is no recommendation to introduce a means or age related discount scheme for chargeable waste services. This will add a level of unnecessary complexity to the service for a minimal charge. Reductions will of course affect the viability of a charged service. It is therefore recommended that a reasonable charge of £50 per annum is levied for the proposed discretionary garden waste collection service.

8.0 **Conclusion**

- 8.1 There is a need to revise the refuse collection for the future both to reflect the new financial realities we face and respond to public demand for more recycling options. The proposals seek to address these competing demands by reducing the amount of refuse to landfill from bottles and plastics. It also aims to remove food and card from compostable waste and treat as a recycle, yielding more recycling credits and income from the waste and finally making the garden waste a better compostable product free from contamination.
- 8.2 In terms of finance, there are up-front costs for the containers which can be funded in time from the garden waste service. There are also costs associated with vehicles, mainly recycling lorries. These costs were inevitable as the fleet has now reached end of life and has scrap value only. The new recycling fleet should in time reduce the number of refuse lorries required which could show additional savings from year 2 onwards.

- 8.3 The Routesmart optimisation software that we have recently invested in can be used to design and test a new system without the need to do expensive 'on the ground' trials.
- 8.4 A project plan is being produced by the Chief Executive and a Project Board formed to oversee the project. Regular updates will be provided to future meetings of the PDG and Cabinet to ensure this change programme is delivered on time and to budget.

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