Policy Committee – 16 September 2014

FEASIBILITY OF INTRODUCING KERBSIDE FOOD WASTE COLLECTIONS



Report of the Director of Services

Wards affected: ALL

- 1. **<u>Purpose of Report</u>** To consider the feasibility of introducing a kerbside collection of food waste in the district.
- 2. <u>**Recommendation**</u> Members are recommended to accept the findings of the report and not introduce food waste collections at this time.

3. Background -

- 3.1 The Council does not currently collect food waste as part of its kerbside recycling scheme.
- 3.2 Two compositional analyses conducted by MEL Research in October 2013 and April 2014 highlighted food waste content as high as 40% of the residual waste in the green wheeled bins. This figure is consistent with research conducted by the Waste and Resources Action Programme (WRAP).
- 3.3 Diversion of food waste from disposal is becoming a priority for local authorities in the UK. At this time 47% of local authorities in the UK are providing a food waste collection service to householders and an increasing number are looking to collect food waste from small businesses and schools.
- 3.4 The Council introduced a subscription based garden waste scheme in July 2013. Craven was the first Council in North Yorkshire to implement such a scheme. In the last 12 months both Ryedale DC and Richmondshire DC have introduced such schemes based on Cravens success. The percentage uptake is now 60% of the households that were on the scheme when it was free of charge. This is one of the highest participation rates in the country and enables the Council to recover the costs of operating the service. The Waste and Resources Action Programme (WRAP) have confirmed that this uptake is amongst the highest in the country for such a scheme
- 3.5 In order to build on the success of the scheme the Council wished to explore further opportunities to divert organic waste from landfill and increase its recycling performance to achieve the EU 2020 Waste Framework Directive target of 50% recycled/composted. The Council currently recycles/composts 42.6% of its total waste arisings. As part of the Greener Craven priority in the Council Plan 'exploring

the feasibility of introducing kerbside food waste collections in Craven' is one of the Waste Management actions that will work towards reducing waste and increasing recycling levels in the district. As in 3.2 food waste is compositionally the most significant fraction of domestic waste and the separate collection thereof presents an opportunity to explore options around residual waste collection frequencies and waste volume restrictions

3.6 In conjunction with WRAP a report was commissioned to help identify opportunities to increase kerbside recycling levels in the district.

4. The Report –

- 4.1 A project inception meeting was held with WRAP, their consultants Ricardo-AEA and Waste Officers. At this meeting various collection options were selected for modelling. The options are fully described at Annex A but are summarised below. Residual waste is collected fortnightly unless stated.
- **Baseline**: current service
- Option 1: four-weekly paper and card collections in a 240ltr wheeled bin, with a separate weekly food waste collection, and residual waste wheeled bins reduced to 140ltr capacity
- Option 2: three-weekly cycle of refuse, paper and card, and CGP (co-mingled cans, glass and plastic bottles) collections, with a separate weekly food waste collection
- Option 3: as the Baseline but with a weekly separate collection of food waste and residual waste wheeled bins reduced to 140ltr capacity
- Option 4: weekly recycling and food waste collected on RRVs, with residual waste wheeled bins reduced to 140ltr capacity at a fortnightly frequency.
- Option 5: no glass collection, fortnightly co-mingled collection of cans, plastic bottles, paper and card, and residual waste wheeled bins reduced to 180ltr capacity
- Option 5a: as Option 5 but with a weekly separate food waste collection and residual waste wheeled bins reduced to 140ltr capacity
- Option 6: separate four-weekly collection of glass in a 180ltr wheeled bin, separate weekly food waste collection, four-weekly co-mingled collection of cans, plastic bottles, paper and card, and residual waste wheeled bins reduced to 140ltr capacity
- **Option 6a**: as Option 6, but with glass collected fortnightly in a box.
- 4.2 Craven District Council is predominantly rural, with the majority of the population (around 55,457 in 26,670 households) located in the South (in and around Skipton) and the Western corridor (including Settle and Ingleton). Indeed Craven is one of the ten most sparse districts in England which presents its own logistical challenge in waste collection terms. Because of the uniqueness of the district, and to accurately model resource requirements, it was necessary to model **three** different round types. It was acknowledged that the Council operated rounds with vastly differing travel timings, collection round sizes and crewing levels. Again this was a departure from normal modelling which would factor in two round types (urban and rural). In this instance an 'extra-rural' round had to be included.

- 4.3 It was also acknowledged very early in the baseline modelling that despite the challenges faced by the Council the existing service was operating as efficiently as it could be. This was because resources are currently shared between different collection types and between rounds. e.g Bring site collections are integrated into collection rounds which avoids the requirement for a dedicated service thus reducing revenue costs.
- 4.4 It is important to note that all options are more expensive than the baseline
- 4.5 Two methods of collecting food waste were identified in the body of the report
- 4.6 All options apart from options 4 and 5 has food waste collected in dedicated 7.5 Tonne vehicles requiring 5 vehicles, with a driver and one loader per crew, at a total additional cost of £369,000
- 4.7 Option 5 (no glass collection and a lack of a food waste collection) resulted in a reduced recycling rate (35.98%).
- 4.8 Option 4 would lead to the highest recycling rate (62.63% as it increased dry recycling to weekly collections with weekly food waste collections. However, as Option 4 modelled collections using Resource Recovery Vehicles (RRAs) the following costs were not included in the modelling:
 - A service to empty bring sites was not factored into the costs. Option 4 would need an additional vehicle to service the Council's bring sites and Commercial Recycling customers.
 - It would also likely require too spare RRVs to provide support to a front line fleet of Ten RRVs.
 - There would be additional staff support costs in Option 4 as there would be 38 front line operatives as opposed to the 23 in the current baseline.
 - Food Waste haulage costs would be expensive. At present the nearest operational facility suitable for treating food waste is an In-Vessel Composting facility located in Calderdale at Todmorden about 29 miles from Skipton.
- 4.9 The Council could consider procuring/building a dedicated facility though the small volume of food waste is unlikely to make this option cost effective. Co-collection of food waste and garden waste is not possible as the garden waste service is a subscription based one. Other local authorities within the York and North Yorkshire Waste Partnership (YNYWP) are faced with the same collection and disposal challenges for the collection of food waste ie they are prohibitively expensive to implement and maintain. If the Waste Facility at Allerton Park goes ahead (which is uncertain) then it will have the capacity to separate food waste and treat it through anaerobic digestion. However, even if Allerton Park does not proceed, the cost of implanting food waste collections far outweighs the benefits both financially and when measured against performance. To put this into context the top performing Council in Yorkshire for recycling is Calderdale MBC with a recycling percentage of 60% (13/14) and it provides a food waste collection. Ryedale District Council is the

top performing District Council with a recycling rate of 52.7% (13/14) and does not provide a separate food waste collection.

- 4.10 At this time it is recommended that the Council does not progress rolling out separate food waste collections as it is cost prohibitive.
- 4.11 However, it is clear that any local authorities that are **not** collecting food waste are unlikely to achieve the 2020 EU target of 50% recycling composting without significant infra-structure investment from Central Government.

5. Implications

- 5.1 **Financial Implications** It is not financially viable to collect food waste at the current time. This may change if Central Government invests in supporting local authorities roll out separate food waste collections.
- 5.2 **Legal Implications** There is no legal obligation to collect food waste separately though all Local Authorities are committed to achieving the EU's WFD target of recycling/composting 50% of waste by 2020.
- 5.3 **Contribution to Corporate Priorities** A Key action and efficiency within Waste Management's Service Plan WM 14/15 is to maintain Craven's household re-use, recycling and composting rates.
- 5.4 **Risk Management** There are no risks associated with this Report.
- 7.8 **Consultation with Others** WRAP Report Service Review Support to Craven District Council
- 8. <u>Author of the Report</u> Paul Florentine, Waste Manager, 01756 706429 <u>pflorentine@cravendc.gov.uk</u>
- 9 <u>Appendices</u> Annex A –

	Optio	Option Descriptio	Refuse			Dry Recycling				Food Waste		
I									Vehicl			Vehicl
I	п	n	Recept	Freque	Veh	Recept	Freque	Materi	e/	Recept	Frequ	e/
I		,,	acle	псу	icle	acle	псу	als	Pass	acle	ency	Pass
	Baseli	Current	0.40	Fortnig	DOV			cans, glass				
	ne	ne service	240	htly	KUV	240	4- weekly	and plastic	RCV	-	-	-

Annex A – Collection Options

	Option Descriptio n	Refuse			Dry Recycling				Food Waste		
Optio n		Recept acle	Freque ncy	Veh icle	Recept acle	Freque ncy	Materi als	Vehicl e / Pass	Recept acle	Frequ ency	Vehicl e / Pass
							bottle s paper				
					Blue bag	Fortnig htly	and	RCV			
	4-weekly paper in 240ltr wheeled bin, with residual waste in 140ltr wheeled bin and separate weekly food	140	Fortnig htly	RCV	240	4- weekly	cans, glass and plastic bottle s	RCV	Kitchen caddy & 23ltr bin	Weekl y	Dedic ated food (7.5T)
1					240	4- weekly	paper and card	RCV			
2	3-weekly cycle with separate weekly food waste collection	240	3- weekly	RCV	240	3- weekly	cans, glass and plastic bottle s paper	RCV	Kitchen caddy & 23ltr bin	Weekl y	Dedic ated food (7.5T)
					240	3- weekly	and	RCV			
3	140ltr wheeled bin for refuse with weekly food waste	140	Fortnig htly	RCV	240 Blue bag	4- weekly Fortnig htly	cans, glass and plastic bottle s paper and card	RCV	Kitchen caddy & 23ltr bin	Weekl y	Dedic ated food (7.5T)
4	Weekly recycling and food collection on RRV, with a 140ltr wheeled	140	Fortnig htly	RCV	Box 1 Box 2	Weekly	glass cans and plastic bottle s paper	R.R.V	Kitchen caddy & 23ltr bin	Weekl y	R.R.V
5	bin for refuse Fortnightly dry recycling	180	Fortnig htly	RCV	Blue bag 240	Weekly Fortnig htly	and card cans and plastic	RCV	-	-	

	Option Descriptio n	Refuse			Dry Recycling				Food Waste		
Optio n		Recept acle	Freque ncy	Veh icle	Recept acle	Freque ncy	Materi als	Vehicl e / Pass	Recept acle	Frequ ency	Vehicl e / Pass
	with no glass collection (bring sites)						bottle s & paper and card (no glass)				
5a	As Option 5 with a 140ltr wheeled bin for refuse	140	Fortnig htly	RCV	240	Fortnig htly	cans and plastic bottle s & paper and card (no glass)	RCV	Kitchen caddy & 23ltr bin	Weekl y	Dedic ated food (7.5T)
6	Separate glass collection in 180ltr wheeled bin with 140ltr wheeled	140	Fortnig htly	RCV	240	4- weekly	cans, plastic bottle s, paper and card	RCV	Kitchen caddy & 23ltr bin	Weekl y	Dedic ated food (7.5T)
	bin for refuse				180	4- weekly	glass	RCV			
6a	Separate glass collection in box with 140ltr wheeled bin for	140	Fortnig htly	RCV	240	4- weekly	cans, plastic bottle s, paper and card	RCV	Kitchen caddy & 23ltr bin	Weekl y	Dedic ated food (7.5T)
	refuse				Вох	Fortnig htly	glass	RCV			