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To	EXECUTIVE
Date	10 th June 2008
Executive Member	Councillor Jean Pearson

Agenda Item	12	Key Decision	Yes
Ward (s) affected	N/A		

Subject	Review of the Food Waste Trial conducted in Mole Valley in 2007/8
<p>RECOMMENDATIONS</p> <ol style="list-style-type: none"> 1. To note the results of the Food Waste Trial and the contribution it can make to the Council's Environmental Priority. 2. To approve the continuation of the Food Waste Trial in accordance with Option 1. 3. To encourage the Portfolio Holder for Environment and officers to continue efforts to gain access to larger scale food waste facilities through lobbying the County Council to develop facilities and through exploring other possible routes. 4. To test the new developments outlined in the continuing trial and report the findings to the Executive. 	

<p>EXECUTIVE SUMMARY</p> <p>The Food Waste Trial has proved to be a huge success both in terms of popularity with the public and in providing a potentially 10% increase to the recycling rate. However the trial has also outlined some potentially significant costs if implemented districtwide. Interestingly recent new developments could provide substantial reductions in these costs. Officers are suggesting that a modified trial be allowed to continue so that these new developments be tested. Opportunities have also been highlighted to extend the number of properties covered under the existing resourcing of the trail which officers are also suggesting be taken up.</p>

The Executive has the authority to determine the Recommendations

1. BACKGROUND

- 1.1 In early 2007 Mole Valley DC was awarded funding by the Waste Resources Action Programme (WRAP) and the SLGA to run a trial of separate food waste collection trial. A trial area of about 4,000 properties in Bookham and Fetcham was selected with the aim of examining a number of issues:
- Determine the amounts of food waste that are collected.
 - Measure the participation rates in the collection service by householders.
 - Examine how the provision of free food waste liners affects public participation.
 - Test the productivity levels associated with using a small dedicated vehicle.
 - Examine the issues around tipping into a 'containerised' transfer station.
- 1.2 The trial was conducted in partnership with Elmbridge and Guildford Borough Councils and Surrey County Council with similar activities taking place in the other local authorities.
- 1.3 Each resident in the trial area was provided with two dedicated bins; a small 7litre caddy for use in the kitchen and a larger 20litre bin for putting out for collection. Once the 7litre bin was filled the contents were transferred by residents to the larger 20litre bin for collection. Some residents were provided with free biodegradable corn starch bags to be used as liners in the caddy while other residents had to line their caddies with newspaper.
- 1.4 In Mole Valley collections were based over four days with three days having food waste collected on the same day as their wheeled bins while the remaining day was collected on a different day. Food waste was collected weekly using a small dedicated vehicle. The table below details the variations for all three authorities:

Collection Round	Frequency of refuse collection	Liners provided	Same day as refuse
Mole Valley Monday	Fortnightly	Yes	Yes
Mole Valley Tuesday	Fortnightly	Yes	Yes
Mole Valley Thursday	Fortnightly	No	Yes
Mole Valley Friday	Fortnightly	Yes	No
Elmbridge Wednesday	Weekly	No (but can buy)	Yes
Elmbridge Thursday	Weekly	Yes	Yes

Elmbridge Friday	Weekly	Yes	Yes
Guildford Monday	Weekly	Yes	Yes
Guildford Tuesday	Weekly	Yes	Yes
Guildford Wednesday	Weekly	No	Yes

1.5 The amounts of food waste collected were monitored each day using weighbridge records as food waste was tipped. Participation was also monitored twice during the trial by contractors provided by WRAP. This involved the monitoring staff accompanying the collection crews and counting the bins that were put out for collection.

2. RESULTS OF THE TRIAL

2.1 A summary of the tonnages of food waste collected by each local authority is presented in the table below. Mole Valley have collected the greatest tonnage per household in our part of the trial. This may well be a reflection of the fact that we have a fortnightly refuse collection service while Elmbridge and Guildford still do weekly refuse collections. Interestingly though the best participation rate lies with Guildford at 78% of households putting out food waste for collection. When the weight per household is considered in terms of participating households only Mole Valley have a considerably higher weight per household than the other authorities.

	No. of properties	Average monthly collection (tonnes)	Extrapolated annual collection (tonnes)	Weight per household pa (kg)	Average participation (%)	Weight per participating household pa (kg)
Mole Valley	3,897	27.30	323.96	83.15	72	115.50
Elmbridge	2,950	17.09	204.75	51.84	57	90.95
Guildford	2,928	19.54	236.40	80.74	78	103.51
Total	9,775	63.93	765.11	78.26	71	110.23

2.2 The WRAP organised participation monitoring is summarised in the table below for the two monitoring exercises. There has been a reduction in most collections monitored between the July and November exercises. However WRAP have commented that the authorities in Surrey have the highest participation level of all the trials that are being run nationally. The provision of liners to residents does not seem to have a strong influence on participation as this group forms both the highest and lowest participating areas.

Collection round	Number of properties	Liners provided	Same day as refuse	July participation (%)	November participation (%)	Average participation (%)
Mole Valley Mon	969	Yes	Yes	69.5	69.1	69.3
Mole Valley Thu	1,010	No	Yes	66.6	60.9	63.7
Mole Valley Fri	794	Yes	No	83.8	82.5	83.1
Elmbridge Fri	1,022	Yes	Yes	61.9	52.6	57.2
Guildford Mon	896	Yes	Yes	89.2	81.1	85.1
Guildford Wed	1,108	No	Yes	78.3	62.2	70.2

2.3 The use of these findings for a wider districtwide food waste collection requires a balance between the 'weight per household' and 'weight per participating household' figures. It can be reasonably assumed that the 'weight per household' figure could be applied to any current plans however as public participation increases then this figure will increase towards the figure shown in the 'weight per participating household'. For example in Mole Valley (36,300 households) the predicted annual tonnage of food waste being collected would be in the range 3,018 tonnes (current average participation) to 4,193 tonnes (100% participation). Even assuming the lower tonnage figure, implementing a food waste system districtwide would add 10% points to the Districts's recycling rate taking its combined recycling and composting rate to mid 50%.

2.4 Finally, an analysis of start times, tipping times and return journeys to the depot show that crews were completing the work in an average of 5½ hours indicating that there are considerable productivity improvements that can be made. It is expected that at least 400 properties could be added to each collection day so that a vehicle with driver and one crew could collect from 1,400 properties in a suburban environment in a day. In comparison a standard RCV will empty about 1,050 wheeled bins in a day.

3. IMPLICATIONS OF THE TRIAL

3.1 The trial has shown that collecting food waste separately can add significantly to the Council's recycling rate. Anecdotal evidence has shown that it has also been incredibly popular with residents in the trial with some stating that, 'It is the best thing that we have done!'. However there are issues that will have an influence on how we take forward food waste collections.

3.2 Currently collected food waste is transported to Surrey County Council's Leatherhead Transfer Station where it is tipped into a dedicated skip before being transported to Dorset. There is not the capacity for such an arrangement to accommodate all of Mole Valley's food waste. Thus there is a need for the County Council to develop new facilities to deal with this demand. The Portfolio Holder for Environment and officers will continue to

lobby the County Council for the need for new facilities to allow food waste collections to take place. However it is also suggested that officers do scoping work to identify any options that exist for Mole Valley to gain access to a processing plant for food waste.

- 3.3 The trial has provided officers with a better feel of the likely costs of providing a weekly food waste collection service based on using dedicated vehicles. The dedicated vehicles are relatively cheap and the expected cost of leasing one would be about £7k per annum. It is expected that the vehicles would have to be staffed with one driver and one loader which with on costs and fuel would cost about £60k per vehicle per annum. By scaling up these costs officers predict the revenue costs for district wide implementation in the table below.

Factor	Annual cost (£k)
Provision of 6 vehicles @ £7k each pa	42
Provision of 6 drivers & crew @ £60k per pair pa	360
Sub-total	402
Provision of free sacks (3 sacks p/w per household)	170
Total	572

- 3.4 Since the trial started there have been developments and changing practices around food waste collections in terms of technologies and equipment which officers feel could have a beneficial impact on the costs above.
- 3.5 Firstly, suppliers of the corn starch bags have approached officers regarding their distribution. They have indicated that in many areas they sell the corn starch bags through local retailers at a similar price to that charged in supermarkets. In these areas the local authorities do not provide the corn starch bags for free. This system has similarities with the Council's own wheeled bin system where residents buy black bin bags if they want to use them. It is suggested that the Council should trial this system with a view to making the districtwide implementation of food waste collections more affordable.
- 3.6 Secondly, officers have found a new type of vehicle system for collecting food waste. The vehicle is a standard RCV but with a dedicated food waste pod between the cab and the main refuse/recycling unit. This type of vehicle system is also being explored by Guildford and Epsom & Ewell Borough Councils. In the Mole Valley situation it would mean that food waste could be collected while either the recycling or refuse were being collected. This would mean that a weekly food waste collection could take place alongside the alternating week refuse and recycling service using the same vehicle.

- 3.7 While this vehicle will not cover as many properties in a day as a dedicated food waste vehicle overall it would provide savings in the additional staff costs as fewer drivers would be needed. It would also mean that an additional type of material could be collected for recycling without any additional vehicle improvements thus providing a further environmental benefit. Officers have been offered access to the vehicle in the near future once it has been built. It is suggested that officers take up this offer and test it in the Mole Valley situation.

4. FUTURE WORK

- 4.1 The Council has budgeted £30k in 2008/9 for the potential continuation of the trial with a further £30k being match funded by Surrey County Council. Officers request that the trial be allowed to continue though with a view to adjusting the existing arrangements. Officers have gained access to free food waste bins through WRAP to facilitate this. The principle changes shall be:

- a. The coverage of properties for each day is extended to neighbouring properties to a total of 1,400 per day.
- b. The supply of free corn starch sacks is ceased but that local retailers be encouraged to stock them.
- c. Access to the new 'pod' vehicle is utilised to allow testing in Mole Valley.

- 4.2 The cost of continuing the trial under these arrangements would be £60k revenue per annum and therefore within the budget for 2008/9. The Council has gained long term free access to the existing food waste vehicle along with the free additional food waste bins.

5. OPTIONS

Option One –To follow the officer recommendations and continue the trial with some adjustments and extension of properties covered.

Option Two – To continue the trial as it stands.

Option Three – To cease the trial.

6. FINANCIAL AND RISK IMPLICATIONS

- 6.1 Option 1 will not require any additional revenue support. Option 2 will require an additional £14k of revenue support, the difference to option 1 being the purchase of corn starch sacks for 3,000 households. Option 3 will require no extra funding but will bring the risk of negative reactions from residents. It will also give a negative message to Surrey County Council who are meant to be planning new facilities.

7. BACKGROUND PAPERS

- 7.1 None.