

Environment Policy Development Group – 31 October 2007**REVIEW OF HOUSEHOLD WASTE COLLECTION SERVICES****Report of Strategic Director (Operations)**

Statutory Powers: Environmental Protection Act 1990 Sections 45, 46.

Financial Implications: The 2007/08 budget for the collection of household waste including recycling is £2,123,000 which is the net cost of the service excluding inflation. Should the method of delivering existing waste collection services continue then it is estimated that in the light of known circumstances an overspend of £450,000 will occur.

Purpose

To provide Members with information on the current household waste collection services to enable decisions to be taken on the future delivery of these services in light of the current overspend position and impending council budget pressure from 2008/09 onwards.

Recommendations

That the Environment Policy Develop Group agrees the ongoing Waste Review Programme and as part of that Review, recommends to the Executive any amendments to the level of waste service provision in respect of:

- (a) Dry recycling services;**
- (b) Organic waste collection services; and**
- (c) Policy amendments;**

subject to full consideration of this report.

Background

1. From updates to the Scrutiny Committee (Mins. SC.55/06 and SC.04/07) Members will be aware that since September 2006 since refuse vehicle collections of organic material and mixed waste to landfill were re-organised, the household waste collection service has failed to operate to its previous high standards and cost discipline. Issues contributing to this include inefficient productivity levels, vehicle reliability and longer route timing/manpower issues. In addition to this there has been a greater take up of the number of households requiring an assisted collection which is higher than budgeted for.

2. At the same time the volume of material requiring a recyclable collection has far outweighed estimations in terms of tonnage and public participation. Hence the Council's non-compaction caged vehicles for the collection of blue and clear sacks of recyclable material do not have sufficient volume capacity to cope with the amount of material being collected. Coupled with distance travelled in and around the district to facilitate onward sorting and recycling, the current service cannot to operated within existing financial restraints.
3. That said the Council is achieving a high recycling/composting rate of 48% in 2006/07 and 56% in the first half of 2007/08 making it one of the top ten best UK performing recycling districts.
4. To inform the further review of waste collection methods and also to assess the merits and/or need to introduce weekly organic collections as per the Motion to Council in June 2007, '*That the Council investigates the viability of introducing a weekly collection of organic waste during the summer months at the earliest opportunity*', Members are asked to advise upon the following information.

National Waste Strategy

5. Since the last re-organisation of collection rounds, the Government has published its updated National Waste Strategy for England (May 2007) and the Devon-wide Municipal Waste Management Strategy of which South Hams is a partner, will need to reflect upon the points raised in this new national document. There is also potential for the three partnership authorities of South Hams District Council, West Devon Borough Council and Teignbridge District Council to consider the merits of a joint waste strategy document. Members may wish to consider if further research should be undertaken on the potential for such an initiative.
6. The key points of the National Waste Strategy are as follows:
 - Subject to further analysis and consultation, to exceed the European target set for the year 2020 which only allows 35% of the 1995 landfilled level of biodegradable waste. There is a suggestion that landfill targets will be reived and become even more ambitious.
 - An increase in the landfill tax escalator by £8 per tonne per year from 2008 until at least 2010/11 - announced by the Chancellor in March. Partly as a result of this, business waste landfilled is expected to fall by 20 per cent by 2010 compared with 2004.
 - Increasing the amount of energy produced by a variety of energy from waste schemes, using waste that can't be reused or recycled. It is expected that from 2020 a quarter of municipal waste - waste collected by local authorities, mainly from households - will produce energy, compared to 10 per cent today.
 - Financial incentives for householders who recycle and charging householders who do not recycle.

- A strong emphasis on waste prevention with householders reducing their waste (for example, through home composting and reducing food waste) and business helping consumers, for example, with less packaging. The Government has agreed with the Direct Marketing Association to develop a service so that people will be able to opt-out of receiving unaddressed as well as addressed direct mail.
 - Working with retailers for the end of free single use bags. This could involve retailers only selling long-life bags, or retailers charging for disposable bags and using the proceeds to sell long-life bags at a discount.
 - A challenge to see recycling extended from the home and office and taken into public areas like shopping malls, train stations and cinema multiplexes, so that it becomes a natural part of everyday life.
7. What remains clear is that local authorities have little option but to ensure biodegradable waste material in the municipal waste stream does not end up in landfill given the Landfill Directive and costly fines (circa. £150/tonne) through LATS (Landfill Allowance Trading Scheme).
8. The conundrum for Councils facing increasing budget pressures is how to balance the Best Practical Environmental Option for managing waste streams with the public's desire for more services and to do so in the most financially viable way possible.

The Current Operational Review

9. The scope of this review is summarised below:-
- To make refuse and recycling rounds efficient in terms of distance travelled, location of tip and weight of waste carried (on all 3 collection schemes) and number/type of vehicles we use.
 - To make the best use of Torr Quarry transfer facility.
 - To improve paperwork and IT links with crews for route lists.
 - To make sure that back office staff and managers in Operations support the frontline staff and adhere to policy.
 - To ensure vehicles carry equitable weight.
 - To understand the crew/driver's view of suggestions are for improvement. This could include limiting the number of different crews that collect from one house alone.
 - To improve communication with each and Town/Parish Councils and our own Members so they know precisely what changes we need to make and when and where householders should present their waste i.e. on the right week and at the right time of day.
 - To improve financial monitoring and also information data bases.
 - To ensure the current projected overspend in 2007/08 is not exceeded and that it is reduced where possible within a tight timescale.
 - To deliver a 2008/09 Budget that accurately reflects the approved service levels decided by Members.

10. The Council's internal processes are also being reviewed at the same time to ensure they are fit for purpose.

11. **Round restructuring** - It has to be recognised that no matter how one reviews the activities associated with waste collection the fundamental issue is that the collection rounds are not as effective as they should be. Work has therefore commenced to reschedule the rounds in a structured manner with expert assistance from Webaspex. This involves a massive effort by ourselves and Webaspex to ensure the base line data is in good shape. Much has been learned from similar exercises undertaken recently on how to get this base data in a usable form; confidence levels are high that this restructure will bring about the efficiency levels we are looking for.

12. A number of scenarios for round re-organisation have been proposed in relation working practices in order to identify the best routing from depot to processing/disposal plants:

Scenario	Description
1) Three depot scenario based on Torr Quarry, Ivybridge Depot and Totnes Depot.	<ul style="list-style-type: none"> ▪ Do not constrain by limiting the day of collection to the existing day. ▪ A 5 day week of 37 hours per week will be assumed. ▪ A check will need to be made on the limitations on number of vehicles that can operate out of each depot.
2) Two depot scenario based on two of the three existing depots.	<ul style="list-style-type: none"> ▪ Do not constrain the design by limiting the day of collection to the existing day. ▪ A 5 day week of 37 hours per week will be assumed. ▪ There will by default be a requirement to revisit the operator's licence as an assumption must be made that vehicle numbers per depot will be exceeded. ▪ It would be expected that three models will be produced under this scenario, i.e. one for each depot.
3) One depot scenario based on one of the three existing depots.	<ul style="list-style-type: none"> ▪ It would be expected that three models will be produced under this scenario, i.e. one for each depot. ▪ A 5 day week of 37 hours per week will be assumed.
4) Optimum location for one, two or three depots within the boundaries of the district. Not necessarily existing depot locations.	<ul style="list-style-type: none"> ▪ In this scenario a high level tactical review will be made for the optimum depot locations. ▪ Do not constrain the design by limiting the day of collection to the existing day. ▪ A 5 day week of 37 hours per week will be assumed.
5) Use of depots in adjoining districts.	<ul style="list-style-type: none"> ▪ This scenario was revised to evaluating the use of neighbouring authorities' depots, most likely in combination with one or more of the existing depots as is most appropriate. ▪ Do not constrain the design by limiting the day of collection to the existing day. ▪ A 5 day week of 37 hours per week will be assumed.

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| <p>6) Optimise vehicle fleet capacity by exploring employment hours based on the seasonality of the waste arisings.</p> | <ul style="list-style-type: none"> ▪ Simplify to a 4 day week arrangement (using summer organic yields). ▪ Produce an additional organic design for winter working to identify potential resource savings in winter. |
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Table 1 - Waste Scenarios within the Current Waste Review

13. In terms of timescale, the most practicable and therefore preferred scenario will be identified by the end of December and routes itemised for the preferred option in the New Year. This will enable a resource plan (men, vehicles and disposal or processing points), training provision and communications plan to be developed during late January and rolled out in February 2008. New rounds will be implemented from early March 2008.

14. Having operated the current alternate weekly collection for organic and mixed waste and the district-wide kerbside collection of dry recyclable material for 18 months now, the Council is enjoying an extremely high recycling/composting rate.

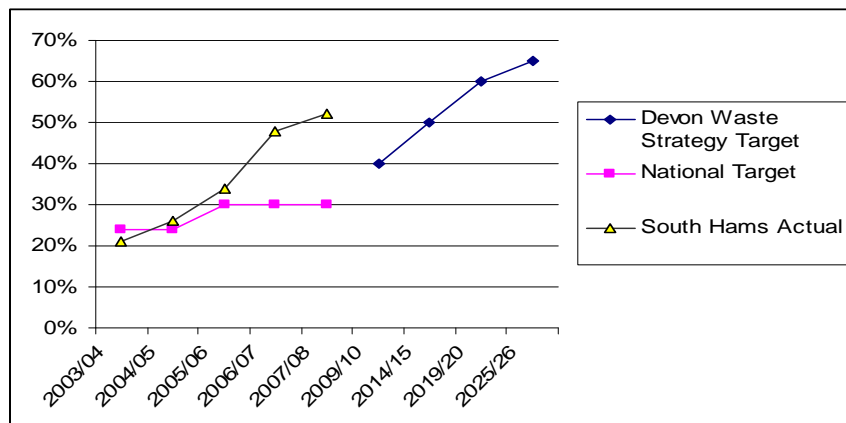


Table 2 - South Hams' Household Waste Recycling/Composting Performance

15. The Council achieved a Recycling/Composting rate of 48% in 2006/07 and data for 2007/08 shows that with the current collection systems a level in excess of 50% will be achieved in the current financial year. This means that South Hams has already achieved its statutory Recycling/Composting target which is 36% and is therefore comfortably within defined targets for future years. Indeed it is likely that by the end of this financial year of 2007/08 South Hams will have met the Devon Waste Strategy target for 2014/2015. However this has undoubtedly been a contributory factor to the current overspend forecast.

16. This level of performance is attributable to number of council-supported recycling and composting services:

Council Supported Collection	Material Captured	Percentage of the Recycling/Composting Rate
Organic wheeled bins	Kitchen and garden waste	18%
Dry recycling collection (sacks)	Plastic, mixed cans, paper & cardboard	18%
Recycling Banks	Glass, paper & card, textiles, mixed cans	8%
Street sweepings	Leaves	3%
Voluntary Groups	Paper, cans, textiles and organics	1%
Recycling/Composting Rate for 2006/07=		48%

Table 3 – Composition of South Hams' Recycling/Composting Rate

17. As well as 100% of households on the kerbside collection system for dry recyclables (i.e. paper and card in collected in a blue sack and plastic, mixed cans and foil collected in a clear sack), there are also 68 local recycling sites located throughout the district collecting a variety of materials depending on the location of the site:

- 65 Sites have glass facilities
- 31 Sites have paper facilities
- 22 Sites for textiles facilities
- 13 Sites for mixed can banks plus various other materials

A full list of recycling sites is provided at Appendix 1.

18. The Council also has a good track record of supporting voluntary community organisations that operate door to door collections.
19. As part of this review Members may wish to consider the types of materials the Council collects separately and the frequency of each collection. The current collection systems have proved popular with residents but have costs attached to them:

Material	Kerbside Collected		Collected via Recycling Banks	
	Tonnes	Cost/Income per Tonne	Tonnes	Cost/Income per Tonne
Paper & Card	5,416	£32	450	£17 income
Cans	564	£151	13	£322 cost
Plastics	346	£247	346 estimated	£145 cost estimated
Textiles	No figures available		101	£147 income
Glass	No figures available		2564	£26 income
Organic material	6,376	£109	63	£140 cost

Table 4 – South Hams' Cost/Income per Tonne of Material Collected

20. Table 5 below demonstrates the financial cost for each percentage point contributing to an overall recycling rate according to the type of material and method of collection.

Material	Kerbside Collected		Collected via Recycling Banks	
	%age Achieved	Net Cost per %age point	%age Achieved	Net Cost per %age point
Paper & Card	15%	£11,120	2%	£5,955 income
Cans	2%	£53,370	0.04%	£113,330 cost
Plastics	1%	£87,077	1% estimated	£19,000 estimated cost
Textiles	No figures available		0.3%	£51,937 income
Glass	No figures available		7%	£9,161 income
Organic material	18% ¹	£38,366	3% ²	£1,372 cost

Table 5 – Cost/Income per Recycling Percentage Point

¹ - based on the current alternate weekly collection service.

² - made up of leaf sweepings collected via the mechanical sweeper and sent for composting.

21. Investment and return in relation to percentage recycled or composted varies greatly depending on the type of material and the methodology adopted for the capture of the material e.g. kerbside or recycling banks. For example plastic and mixed cans contribute the least amount in percentage terms given their low weight. Plastics and cans also take up a disproportionate volume in collection vehicles making them the most costly material types to collect.

22. Should Members decide that it is no longer viable to separately collect the contents of the clear sack, that material will still have to be managed by the Council in some way and this would still have cost implications. Considering whether or not to replace the current door step collection of plastics and cans in the clear plastic sack with strategically placed plastic and mixed can recycling banks should allow us to meet present recycling levels whilst reducing the cost of the operation. If this waste type was not collected on the door step it would mean that caged vehicles may not be required with associated cost reductions. The actual cost saving will need to be fully modelled as part of the ongoing Waste Review now being undertaken.

23. The Council has also made the decision that all households in the district should receive an equal level of service provision as far as practicably possible. However due to vehicular access restrictions in certain parts of the district and a lack of storage space for wheeled bins at some households, 20% of the district receives a different type of weekly collection which adds to the cost of service delivery.

24. Table 6 compares South Hams with the Devon family of districts and the top quartile of performance for waste and recycling services. The figures shown are for 2006/07 and relate to performance on cost, recycling/composting rate and customer satisfaction.

District	Total Waste Collection Cost per Household (BV86)	Recycling/Composting Rate (BV82a+ BV82b)	Customer Satisfaction with Household Waste Collection (BV90a)	Customer Satisfaction with Waste Recycling (BV90b)
East Devon	£33.07	18.36%		
Exeter	£39.79	33.91%	80.00%	78.00%
Mid Devon	£59.08	48.79%	79.00%	71.00%
North Devon	£66.77	35.81%	73.00%	82.00%
South Hams	£52.36	48.21%	71.00%	75.80%
Teignbridge	£45.81	50.44%	76.00%	74.00%
Torridge	343.73	32.49%	89.00%	79.00%
West Devon	£67.77	40.15%	91.00%	79.00%
Top Quartile Performance	£42.05	42.95%	86.00%	77.00%

Table 6 – Devon Districts' Waste Performance Indicators 2006/07

25. For rural districts there is a significantly higher cost ratio of implementing kerbside services in areas of a district outside the main centres of population. For example 40% of the cost delivers waste services to the 20% of properties outside the main towns in the South Hams. Similar sized rural districts compared with South Hams have historically had higher mixed waste collection costs due to this sparsity factor.

District	Recycling/Composting Rate BV82a+82b %	Cost of Waste Collection BV 86 (£)
Teignbridge	50.44%	45.81
South Hams	48.21%	52.36
Canterbury	43.55%	44.02
North Norfolk	43.51%	34.47
Wyre	40.74%	50.56
West Devon	40.15%	67.77
Shepway	39.50%	54.21
East Lindsey	36.67%	59.42
North Devon	35.81%	66.77
Carrick	33.45%	48.36
Torridge	32.49%	43.73
North Cornwall	32.04%	37.36
Kings Lynn	29.55%	39.31
Kerrier	27.68%	37.74
Caradon	27.35%	42.03

Lewes	22.77%	51.39
Sedgemoor	22.23%	37.44
Scarborough	18.70%	39.79
East Devon	18.36%	33.07
Rother	15.97%	43.01
Top Quartile		42.05
Bottom Quartile		55.06
Median		48.88

Table 7 – Waste Performance for Similar Sized Rural Districts 2006/07

26. The key to maintaining an affordable waste collection service into the future as part of this review is to ensure collection schedules optimise productive time e.g. hours in the day spent emptying bins, and minimise non-productive time e.g. time spent travelling from location to location or running to tip.

Waste Analysis

27. Another element of information for Members to consider is taken from a recent waste compositional analysis in 2007 of what material remains in South Hams' grey wheeled bins which as used for mixed waste. Table 8 shows the composition of this mixed waste in South Hams' grey wheeled bin which ends-up in landfill currently. However, if captured as part of a recycling collection scheme e.g. the householder is encouraged to recycle that element of material rather than simply dump it in the mixed waste wheeled bin, the potential further percentage possible on the Council's overall Recycling/Composting Rate.

Material	Percentage of Material Remaining in the Mixed Waste Grey Bin (by weight)	Additional Percentage Uplift on Recycling/Composting Rate if Diverted
Organic waste	28%	16%
Paper and card	12%	6%
Glass	6%	3%
Textiles	5%	2%
Plastic	19%	9%
Cans\Metals	5%	2%
Miscellaneous	25%	0%
	100%	

Table 8 – Composition of South Hams' Mixed Waste (2007)

Organic Material

28. A specific request has been received from members to look at introducing a weekly collection for organic waste. This is on the basis that some residents may have concern about flies/maggots and smells relating to the storage of organic material in the brown wheeled bin during the summer months.

29. The Council advises householders on how to manage their organic material by double wrapping it in newspaper and ensuring the lids of the bins are kept closed. The Council also provides kitchen caddy and wheeled bin compostable liners for sale, which significantly improve the ease in which kitchen waste can be managed. In addition, the Council advises that wheeled bins should not be stored in direct sunlight during warm periods of weather.
30. In practice the data from the waste analysis (Table 8) shows that in reality not all organic waste is being deposited by householders in the brown bin only for onward composting. In actual fact statistical evidence suggests that some households are continuing to deposit organic material, especially kitchen food waste, in whichever wheeled bin is due to be emptied in that week which conflicts with Policy 6 covering the separation of waste into the correct container. In essence, residents will take advantage of the brown wheeled bin collection in week 1 and use the grey wheeled bin in week 2 (Table 9). Accordingly Members may wish to generalise this particular policy as in paragraph 39.

Material Type	Collected in Brown Bin	Remaining in Grey Bin	Total
Kitchen organics	21%	79%	100%
Garden organics	83%	17%	100%

Table 9 – Organic Material in Brown and Grey Wheeled Bins

31. Teignbridge District Council has just completed a trial for weekly collection of organic waste and their findings are still being finalised as they await their waste compositional analysis. It is known that the total waste collected from the Teignbridge properties in the trial that were participating increased by 150 tonnes during the period of the trial. However given households were given an extra collection of organic waste and the total waste increased, it must be assumed that the extra material collected was predominately garden waste. The waste analysis will however inform us better on the types of material collected.
32. During this summer rainfall levels have been exceptionally high with corresponding humidity. The temperatures reached have also been within the range that would produce conditions in bins that would cause an odour problems noticeable by the public. According to data supplied by the Council's Customer Service Team customer complaints regarding this issue are down this year. It may well be that the majority of householders have accepted to change their waste habits and accommodated the wheeled bins and in doing so, they have adapted to managing their waste in the correct manner and have become familiar with the arrangements.

33. The cost of kerbside collecting kitchen and garden waste using wheeled bins is shown below depending on the frequency of emptying:

Kerbside Collection with Wheeled Bins	Total Cost	Cost per Household
26 alternate weekly collections in the year (the existing service level)	£922,000	£22.16
20 alternate weekly collections and 12 weekly collections in the year (i.e. an additional weekly collection for 3 months for the year)	£1,150,478	£27.65
52 weekly collection in the year	£1,843,384	£44.30

Table 10 – Cost of Organic Wheeled Bin Collection

34. Members may wish to consider if there is a need to introduce an additional collection for organic waste given the level of calls regarding odour and the potential cost of £228,478 to introduce weekly summer collections.

Policies

35. Members agreed sixteen waste related policies in March 2005 that were formally adopted by the Council after previous consideration and comment by the Environmental Development Policy Group (Min. EPDG 19/04). These policies inform officers, Members and the public on how waste will be managed. A full copy of the policies together with guidance is contained in Appendix 2.

Policy 1	The provision of Additional Containers.
Policy 2	Replacement Containers.
Policy 3	Provision of Containers to New Developments
Policy 4	Provision of Containers to New Developments
Policy 5	Waste Not Stored in a Suitable Container
Policy 6	Contamination of recyclable material & non-separation of Waste.
Policy 7	Assisted collections.
Policy 8	Location of containers.
Policy 9	Waste placed out on the wrong day of collection.
Policy 10	Missed collections.
Policy 11	Point of collections
Policy 12	Wavering charges for waste collection services.
Policy 13	Abandoned vehicles.
Policy 14	Fly tipping.
Policy 15	Dropping of litter.
Policy 16	Holiday / Second Home Waste.

Table 11 – Waste Related Council Policy

36. Having now had experience of implementing each of these policies, Members may wish to consider adjustments in some areas to take account of certain circumstances when a greater flexibility would result in an improved customer service.

37. **Policy 1: Provision of Additional Containers** - There have been some instances where households of four members have struggled to accommodate all their waste in one 180 litre grey container. This is due to the fact that there may be at least two children in nappies. Although the Council could indeed take the moral high ground and state that the household should use real nappies, one has to be realistic and accept that some households through choice, convenience or financial circumstances use disposable nappies. For this reason and similar circumstances an additional container is issued until such time as the waste reduces.
38. It is therefore suggested that an addition to the existing policy be added (as shown in italics)
- An additional 180 litre container will be supplied to households providing they meet the following criteria;
 - Full use is being made of all recycling services available to them.
 - The family size is five or more persons.
 - *Households with more than one child in nappies or a member of the household with a medical condition which would generate a similar amount of waste.*
39. **Policy 6: Contamination of Recyclable Material/ Non-Separation of Waste** – should Members view the practice of households placing organic material in either the grey or the brown bin depending on the week of collection the following replacement wording is suggested:
- The Council *may* use the powers under the Environmental Protection Act 1990 to ensure that householders separate waste into the designated containers supplied.
40. **Policy 7: Assisted Collections** – It is suggested that this policy is extended, as shown in italics, to cover individuals who are immuno-compromised patients residing in the South Hams. As such they may suffer from weakened immune systems:
41. The Council will offer assisted collections to individuals who are not physically capable of bringing their waste to the designated collection point, as nominated by the Council. Individuals who require this concession must complete a signed declaration stating;
- Medical condition.
 - That there is no other person in the household who can complete the task.
 - If the medical condition is permanent or temporary.
 - *If the medical condition has resulted in a weakened immune system.*
 - The location of the containers on the property and that there is safe direct access to the containers.
 - That the individual must inform the Council if their circumstances change.
 - Date of Birth.
 - Name and address of their doctor.
 - Assistance will be given to individuals in completing the form if so requested.

42. **Policy 8: Location of Containers** - There are some properties that have been converted to flats and have communal areas for their waste. For the purposes of collection the communal storage area will become the designated location for collection. The amendment to this policy is shown in italics:

- The Council will not collect waste from domestic premises that have not placed the material at the designated location.
- All households must place their waste out for collection by 07:00 on the day of collection.
- *Where properties are in multi occupancy such as flats or properties that store containers in one central location, the boundary for the purposes of collection may be designated as the location where the containers are stored centrally.*

Risk Assessment

Risk Identified	Mitigating Actions
That waste is collected efficiently and cost effectively.	Further adjustments will be necessary to the current collection rounds. Any further changes to the frontline service however will only be undertaken once every eventuality has been considered.
The review of the collection rounds does not bring the cost of service within budget.	That further funding may have to be considered. That a change in service level may have to be considered.
Customer satisfaction reduces due to the alteration of the service and unreliable collections.	Further publicity and communication will be undertaken to mitigate any actions.
Adherence to waste policy and consistent application of policy.	Method statements for operatives will be amended to ensure policy is applied consistently. Staff at all levels will receive training and support on the waste policies in place.
Compliance on the grounds of equality	Current waste policies ensure assisted collections are made available to those households in need.

Conclusion

43. This report has captured a number of elements associated with the task of managing household waste. The waste collection service has been changed dramatically over the past three years to accommodate changes in customer expectation and legislation imposed on local authorities. Clearly the residents of the South Hams want to recycle and compost their waste and this is reflected in the Council's high Recycling/Composting Rate. However, there are substantial financial issues relating to the ongoing delivery of this service that need to be resolved.

44. As set out in this report the strategy to deal with the current year's overspend together with exploring the detail of future service costs are being addressed with a view to making further changes to waste collection services in March 2008.
45. Given the Council's ongoing budget pressure which is being driven by central Government for 2008/09 and the foreseeable future, this waste review will enable Members to ensure the Council's future waste collection services are sustainable, affordable and best serve the needs of South Hams residents.

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31 October 2007

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Background Documents:

Waste Strategy for England 2007
Review of Waste changes report Scrutiny 22 February 2007
Review of Waste changes report Scrutiny 21 June 2007