

**Executive – 10 April 2008**

## **WASTE COLLECTION AND RECYCLING SERVICES**

### **Report of Strategic Director (Operations)**

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

**Financial Implications:** The present level of service and associated operating budget was set by the Executive in July 2004 (Min. E29/04). Since 2004 waste collection and recycling services have been rolled-out to provide an alternate weekly collection of organic and mixed waste for 80% of properties with wheeled bins. The remaining 20% of properties remain on a weekly black sack collection service due to access or storage issues. Additionally and in line with the decision taken in 2004 100% of properties receive a dry recycling sack collection.

Since 2004 the participation rate and consequent quantity and volume of separated household materials has increased to the extent that the South Hams is leading the way as one of the top performers for recycling in the UK with a recycling rate of over 55%.

It is also now possible to identify with greater accuracy the true cost of the service that the council agreed to provide. That figure needs to be part of the core budget for the Authority. Members are therefore requested to consider the setting of a supplementary budget of £290,000 for the household waste & recycling services, which form part of the Environment Services block. The existing approved gross budget for Environment Services' is currently £7.2 M (£1.7M net).

### **Purpose**

To consider a supplementary budget requirement for Environment Services in respect of the household waste and recycling collection services. The delivery of environmental services and waste/recycling collections supports the Council's Priority of maintaining a clean environment (CP4).

### **RECOMMENDATION**

**That the Executive RECOMMENDS TO COUNCIL that:**

- (i) Proposal C as set out in this report be approved;**
- (ii) a supplementary budget of £290,000 for Environment Services be approved for 2008/09 and incorporated within the Council's base budget thereafter; and**
- (iii) that delegated authority be granted to the Strategic Director (Operations) in conjunction with the Strategic Director (Resources) to evaluate and make arrangements for the most cost-effective method of procurement for the future renewal of the vehicle fleet; and**
- (iv) that the revised Vehicle Replacement Programme attached to this report (Appendix A) is approved.**

## Background

1. Members have been presented with comprehensive reports on the progress of implementing changes to the Council's waste collection services (Min. SC.55/06, Min. SC.04/07 and Min. SC.52/07).
2. Also in October 2007 the Environment Policy Development Group (EPDG) reviewed the policies which support the household waste collection service, the current level of service, its cost and performance (Min. EPDG. 7/07). As part of that review Members noted the high level of performance which had produced a recycling/composting rate of 48% which placed the South Hams in the top ten councils nationally for the level of recycling in 2006/07.
3. The EPDG also considered the options for future delivery of these services in light of the overspend at that time and impending council budget pressure from 2008/09 onwards. A number of scenarios for round re-organisation were explained in relation to working practices to identify the best routeing for collection vehicles from existing depots to processing/disposal plants.
4. Since then work has been taking place to improve the internal processes, procedures and systems that enable delivery of the council's household waste collections service and re-launch of the service in May 2008.

## Round Review

5. The current 'zoned' waste and recycling collection rounds have been mapped and measured in terms of productivity, efficiency and cost and a series of scenarios set-up and tested to identify an optimum set of collection rounds for mixed waste (grey bin waste), organic waste (brown bin waste) and dry recyclable collection rounds (recycling sack waste). Those properties continuing to require a weekly collection, owing to vehicular access problems or lack of space at the property to accommodate wheeled bins, were also overlaid onto the scenarios.
6. In terms of modelling work a number of key physical factors effect the way the service can be organised and delivered in the South Hams. In turn these factors impact upon the cost of collection:-
  - The location and size of depots dictates how many vehicles we can actually park and utilise from each depot.
  - The Council's Operator's Licence limits us on how early vehicles can commence their rounds from depots near local residential areas where noise may be an issue in the early morning.
  - The location of landfill sites cannot be altered and are some distance outside the South Hams boundary.
  - Similarly the number of processing plants and/or transfer sites is limited albeit that there is some scope to alter drop-off points for the organic and recyclable waste streams through the Council's negotiations with the County Council as Waste Disposal Authority and use of its own assets.
  - The permutation in the number of drop-off or transfer points for South Hams' waste adds complexity to round modelling.
  - The largely rural nature and even the highway access in our towns means that vehicle size has to be restricted in some places of the South Hams.

- The level of population sparsity in some areas of the South Hams requires a greater amount of vehicle resource especially in outlying areas.
  - The types and location of some properties also means that as well as operating an alternate weekly pattern of collections for 80% of households, the remaining 20% of households still on a weekly sack collection service require additional collection resources on brown bin week.
7. One of the critical factors in this scenario modelling was to ensure that residents received the most reliable and straight forward service possible within the confines of the service budget. This means ensuring that as far as possible, residents' day of collection is the same day of the week regardless or whether it is grey week or brown bin collection week.
  8. Given the issues listed in paragraph 6, of the scenario models presented to EPDG, the Council's advisors determined that the optimum solution for the district was the use of all three existing depots rather than operation out of only two of them as at present.
  9. The next phase of the analysis then concentrated on the organisation of resources for collection rounds out of the three existing depots:
  10. Proposal A – This produced the best financial return for the Council of a potential saving of £102,000. Proposal A also maintains the existing service level and frequency for residents. However there are significant issues and operational risk attached to the delivery of this level of saving:-
    - The rounds were not mirrored in that the same crew undertakes the same round as week one on week two. Indeed some of the rounds had mixed days within one week. For example week one might contain some days on organic collections and some on grey rounds.
    - From the customer's perspective the effect of un-mirrored rounds would mean that the grey bin collection from a household would be on a different day of the week from their brown bin and recycling collection.
    - Collection crews would be required to deal with round information for more than five days of route knowledge. This could seriously affect the number of missed collections.
    - Some rounds on some days would be working in areas not located near their own depot base. For example a Totnes Depot crew may be working in an Ivybridge Depot area.
    - This methodology could have additional issues in relation to maintaining knowledge within crews for cover on sickness and holiday.
    - Some of the savings on the organic\refuse rounds would need to be reinvested into the recycling.
    - The net saving is £102,000. This is achieved by reducing the number of vehicles on the grey and organic collection rounds, effectively taking advantage of the different composition and dynamics of waste in each collection round i.e. weight and volume differences between grey waste and organic waste.

11. Proposal B – Proposal B also maintains the existing service level and frequency for residents but delivers a smaller financial saving of £39,000 and the potential service change in relation to collection days is significant:-
- The rounds are mirrored in that week one rounds are also the same as week two.
  - Rounds where possible would be located near to depot bases and certainly have shown an improvement on the previous proposal.
  - The knowledge required by the grey and organic crews is limited to five days' worth of rounds. This is the existing requirement.
  - Recycling rounds still require some additional resource input on some days.
  - Approximately 85% (35,700) of households will suffer a change of collection day should this proposal be taken forward.
  - The saving on the grey\organic rounds would be limited to one vehicle. This equates to £39,000 per annum net saving.
12. Proposal C - Having assessed both of the above Proposals A and B further thought has been given to the level of budget required to operate the existing collection service. Proposal C maintains the existing service level and frequency of collections for residents but examines existing rounds and makes improvements in relation to fine-tuning. This will enable collection rounds to be better matched to local geographic areas and operated out of the optimum local depots to reduce distance travelled. This alternative proposal would use the foundation of the analysis from the scenario modelling work and deliver the equivalent of £39,000 of savings:-
- All three depots being utilised for waste collections which has been proved to be the optimum choice for service delivery.
  - The rounds will be mirrored so that the customers' day of collection is the same regardless of the alternate collection cycle.
  - Changes will be undertaken in a progressive way facilitated by the purchase of new round management software.
  - Percentage of change to the households will be kept to a minimum e.g. by switching parts of say an Ivybridge Friday Round to a Totnes Friday Round. It is estimated that any changes should be restricted to only 20% of the households (8,400).
  - The knowledge required by the grey and organic crews will continue to be limited to five days' worth of rounds.
  - Each round will have its own specific workload and be measured on that workload.
  - The principal of zoning will be set aside.
  - An estimated saving of £39,000 can be made which is the equivalent to one collection vehicle.

13. Proposal D - to operate waste and recycling collection services within the existing budget the level of service would need to be reduced:-
- Continuation of existing rounds working out of the existing two depots.
  - The rounds would be mirrored so that the customers' day of collection is the same regardless of the alternate collection cycle.
  - Limiting recycling sack collections to urban areas only would save £168,000 revenue cost.
  - This would affect the 38% of households (15,960) living outside the main towns and surrounding areas.
  - The Council would also need to review the size of wheeled bins for the 38% of properties without a recycling sack collection service. This is due to the fact that there is some concern that the existing wheeled bins would be too small to hold the additional recyclable material.
  - The Council's recycling/composting rate would be likely to reduce back to 2005/06 levels which was in the region of 34% i.e. before the dry recycling scheme was expanded to 100% of households in the district. Having said that the Council would encourage residents living in outlying areas to make full use of their local recycling facilities.
14. In operational terms Proposal D above would involve reducing service levels. Should Members wish to pursue this avenue then further work would be required. Should Members wish to maintain the existing level of service then Proposals A, B or C will achieve that.
15. Regardless of the option chosen the conclusion of this modelling work is that operating out of all three existing depots based at Totnes, Torr Quarry and Ivybridge is the most effective way to deliver the service locally. On top of that the principle of local collection crews and vehicles delivering local service and travelling the least distance to tip should ensure improved reliability and therefore service resilience.

### **Other Improvements and Actions**

16. **Vehicles** – Up to now the Council has chosen to purchase and maintain its own fleet. The policy for vehicle replacement for all refuse vehicles is that they are replaced when they reach an age of seven years. An examination of the current fleet shows that the following issues have emerged:
- That separating trade waste from domestic waste rounds has required an additional vehicle due to the area that has to be served.
  - That the policy of replacing collection vehicles over seven years old has not been adhered to. The reason for this is that some older vehicles have been kept in-service in order to assist regular collection vehicles. This in itself has placed greater financial pressure on the service due to a greater number of vehicle breakdowns.
  - Consequently the regular fleet requirement is now 20 vehicles as opposed to 16 vehicles used in 2005.
  - That a seven-year renewal programme is in any event too long by industry standards.
  - The vehicle renewal capital programme is insufficient to cope with the size of the fleet and requires adjustment.

- The vehicle replacement programme has been reviewed and the appropriate capital resource allocation established to make ready for the procurement of a new specification of fleet during 2008.
17. Consequently research is underway to examine the most cost effective and efficient method of procurement for future fleet renewal. Operational leasing versus out-right purchase is being market tested with assistance from the Council's Procurement Officer.
  18. The other issues which have previously been highlighted to Members relate to the specification and capacity of vehicles. In particular, the existing cage vehicles are no longer fit for purpose due to their capacity restrictions and manual handling limitations.
  19. Clearly with a need to re-set the vehicle replacement programme and armed with improved management information relating to round efficiency, the Council has an opportunity to alter its fleet procurement specification in order to get the best type of collection vehicles in relation to local access problems and the need to carry additional capacity on recycling vehicles
  20. A vehicle replacement programme was approved by Members in January 2007 (E.99/06). Further examination of this programme shows that it now needs to be reviewed to take account of the number of refuse vehicles used at present. In addition the programme reflects the council policy of the renewal of vehicles every seven years. Attached at Appendix A is the new revised replacement programme for refuse vehicles.
  21. **Systems and Procedures** – All systems, processes and reporting procedures are being reviewed for collection services using 'lean systems' technique. In the first instance the review of process is dealing with those elements that have a direct connection to our customers. The ultimate outcome will be that any instruction given or request received touches the fewest persons in the system to ensure quick and effective delivery of service.
  22. New software is also being purchased that will be used to keep waste and recycling collection rounds up to date and provide improved performance management information. It will enable the Council periodically to examine and review the productivity level of each round.
  23. Reporting systems are also being improved to ensure crews completing round sheets receive feedback when there is a query regarding a collection. Similarly, households that persistently do not comply with the Council's collection requirements and therefore hinder a crew's ability to undertake a collection will be highlighted by way of the new round sheets. Such exception reporting will then be fed into both the Customer Service Team and Street Scene Team so that the householder can be contacted to resolve the issue.
  24. **Training** – A comprehensive modular programme of in-house training has been developed for staff in the frontline and back office responsible for delivering any part of the waste collection service. The five modules cover:
    - Module 1: An overview of service delivery and policy.
    - Module 2: Health and safety including manual handling and practical Reversing Assistant training.
    - Module 3: Customer Charter and customer awareness.

Module 4: Systems, reporting procedures and adherence to council policy.  
 Module 5: Operation and familiarity of rounds and advanced driver training.

25. Clearly the role of each member of staff will determine which modules they will be required to undertake. However, all staff will be required to attend modules 1, 3 and 4.
26. Sixty front line staff have already undertaken modules 1 and 2 and the remainder of the staff will receive training prior to the re-launch of the waste collection service in May.
27. **Communications** – a Communications Plan has been developed to re-launch the waste collection service. The date of re-launch is week commencing 12 May 2008. Before that date, information will be provided to local ward Members, and also to Town and Parish Councils to explain the scale of change in their local area and what instructions and advice is being given to householders.
28. Residents will also be notified of the re-launch of the waste collection service together with information about whether their waste/recycling collection day will change. This information is being delivered to households using a direct and personal mail-shot to include an explanatory letter, information leaflet, calendar of future collection dates and a reminder fridge magnet.

### Service Performance

29. **Customer Satisfaction** – The recent local survey carried out to gauge general customer satisfaction with the Council indicates that there has been an improvement in satisfaction with household the waste collection service. Table 1 show that residents appear to be indicating that this year’s waste collection service was better than last year when the major re-organisation of collection days took effect. Strangely the provision of recycling facilities fairs marginally less well in comparison with the previous year.

BVPI	Un-weighted satisfaction score 2005/06	Un-weighted satisfaction score 2006/07	Un-weighted satisfaction score 2007/08	Difference 2006/07 – 2007/08
BV90a Household Waste	82.1%	72.8%	78.4%	+5.6%
BV90b Provision of Recycling Facilities	79.3%	77.9%	77.1%	-0.8%

**Table 1 - General (Local) Customer Satisfaction Survey 2007/08**  
**Comparison with un-weighted data 2005/06 and 2006/07**

30. **Service Reliability** – The number of missed collections for the month of February 2008 is running at an average of 73 per week. Therefore out of a total of 63,000 collections this represents 0.12%.

31. **Recycling/Composting Rate** – For the first half of this year (2007/08) the District has recycled or composted 57% of its household waste which is believed to be the best recycling rate in Devon. However maintaining this level of performance highlights some operational issues which have manifested themselves into the financial position we find ourselves in today.

### **Future Potential Shared Services Arrangements**

32. The three Waste Collection Authorities (WCAs) in the South Devon & Dartmoor area, South Hams District Council, Teignbridge District Council and West Devon Borough Council have started an exercise to examine partnership delivery of waste and recycling services within the context of the 5-year Shared Services Programme. Together with Teignbridge and West Devon, South Hams has received funding from the South West Centre of Excellence's LIFT South West Regional Waste Services support programme. An outline options appraisal and outline business case for the project is being conducted by waste management advisors Eunomia. Completion of this first commission will be June 2008.

### **Financial Implications**

33. In May 2007 the year end budget overspend for 2007/08 was predicted at a level of £540,000 based on a monthly overspend at that time of £45,000.
34. Having made significant improvement in systems and reporting procedures, training and vehicle allocation, the revised figure for the year end is now estimated to be approximately £300,000. Clearly the budget is still in deficit, but the overspend has been reduced by more than 40% during this financial year.
35. Turning to 2008/09 Members may wish to consider whether the base budget for waste and the remainder of the Environment Services' budget is sustainable in light of the outstanding budgetary pressures and the current level of service provision.
36. The process of vehicle replacement is also being reviewed. As stated above, a procurement exercise is underway to establish the cost effectiveness of both straight purchase and contract leasing. The details will be reported back to Members.
37. Consideration must now be given to what the budget requirement ought to be for the waste and recycling collection services for 2008/09 in the context of the wider Environment Services budget which is as follows:-

<b>Service</b>	<b>Gross Expenditure £000</b>	<b>Gross Income £000</b>	<b>Net Budget £000</b>
Household Waste Collection	1,948	(200)	1,748
Recycling	1,141	(586)	555
Trade Waste Collection	775	(904)	(129)
Street Cleaning	718	(4)	714
Public Convenience Cleaning	780		780
Beach Cleaning	64		64

Car Parks	1,102	(2,896)	(1,794)
Dartmouth Lower Ferry	664	(821)	(157)
Pannier Markets	38	(112)	(74)
<b>TOTAL</b>	<b>7,230</b>	<b>(5,523)</b>	<b>1,707</b>

**Table 2 - Existing Budget Provision – Environment Services 2008/09**

	<b>£000</b>
Operational Costs (Transport and Staffing)	300
Gershon Saving 2007/08	35
Trade Waste – additional tipping fees	44
Trade Waste – additional income	(50)
Round Review – minimum reduction	(39)
<b>TOTAL NET REQUIREMENT</b>	<b>290</b>

**Table 3 - Supplementary Budget for Waste and Recycling Collection 2008/09**

38. Members should be aware that with the establishment of the Environment Services (previously Business Development and Operations Services) it is proposed to transfer the responsibility for the grounds maintenance function to the Head of Landscape and Leisure. Historically, grounds maintenance staff have provided some cover for the waste collection service. An initial review has indicated that two members of the ground maintenance team can be released to work for Environment Services on a full time basis. The relevant budgets will be adjusted accordingly.

## **Conclusion**

39. The shared services review will challenge the services in each local authority. Various initiatives for collaboration will be explored including in house and external delivery of services. It is important that we establish the true cost of our services during this process so a valid set of findings is presented for consideration.
40. We are a high achieving council in relation to recycling. This has been achieved by securing the buy-in of the residents of South Hams and the staff of the Council. The issues of funding and the existing practices that are in place have had some negative effect on the morale of the workforce. It is important that we do not allow this to affect the standard of service delivery that the residents expect.

## Strategic Risk Assessment

To maintain high performance for recycling/composting of household waste and ensure waste collection services are of the highest standard possible having regard to finance available.	
<b>Risk Identified</b>	<b>Mitigating Actions</b>
That waste is not collected efficiently and cost effectively.	<p>Either further adjustments to the current collection rounds are necessary or the level of service is reduced.</p> <p>Any changes to the frontline service will only be undertaken once every eventuality has been considered.</p> <p>Service change will be carried out progressively with an adequate allowance of time for communication to take place with residents affected, Town/Parish Councils and Members.</p>
Customer satisfaction reduces due to the alteration of the service and unreliable collections.	<p>Further publicity and communication will be undertaken to highlight the correct use of the new services.</p> <p>Should the level of enquiries increase as a result of changes to collection services then Customer Services resources will either be increased or the workload of back office staff will be re-directed in order for them to assist with customer calls.</p>
The effectiveness of communication links and Information data systems is compromised.	<p>Improvements will be made to hardware updates and software systems in order to focus on delivery of a service the customer demands.</p> <p>Systems and reporting procedures have also been reviewed. New processes and training has been put in place to ensure effective service delivery and rapid customer service.</p>
Failure to adhere to waste policy or consistently to apply it.	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.
The waste & recycling collection service is unaffordable.	Subject to Members' decision, the existing level of service is either reduced or a supplementary budget is agreed to continue operating a existing service levels.
Failure to consider the needs of people who may have difficulty in meeting the new requirements for waste collection	Current waste policies ensure assisted collections are made available to those households in need.

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10 April 2008

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**Background documents:**

Proposal to the South West Centre of Excellence (SWCoE) - A Support Package for a Waste Collection Authority Tri-Waste Partnership, December 2007.