



**ORKNEY**  
ISLANDS COUNCIL

## INTERNAL AUDIT

### Introduction of the Alternate Weekly Waste Collection

#### Audit Report

2014/15

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#### Contents

Executive Summary	1
Introduction	3
Background	3
Audit Scope	4
Audit Findings	5
Action Plan	16
Appendix 1: Timeline	20
Appendix 2: Bin costs	22
Appendix 3: Mini-recycling centres	23

## **EXECUTIVE SUMMARY**

- During 2012, the Council introduced an Alternate Weekly Waste Collection (AWWC) to the Orkney mainland and linked south isles. This audit has reviewed the process which was followed for selecting this type of service and then for the roll out of the service.
- The key waste trends were reported to the Development and Infrastructure Committee on 11 November 2014. Since then, there has not been a significant change to the waste to disposal figures however household recycling has increased from 4.9% in 2009/10 to 17.5% in 2013/14. It is noted that from the 2015 satisfaction survey 75% of respondents scored the service delivered favourably.
- There were two main drivers for the introduction of an AWWC scheme. Firstly there were proposed Zero Waste (Scotland) Regulations 2011 issued by the Scottish Government for consultation. These proposed regulations would require the separate collection of recyclable waste from domestic properties, unless the separate collection and carriage would not be technically, environmentally or economically practicable. Secondly savings on the Operational Environmental Services budget had been proposed by the Service for the three years commencing 2011/12. It is noted that the savings were taken in advance of the AWC roll-out in 2011/12 and progressively afterwards.
- In order to comply with the proposed regulations and to deliver the proposed budget savings, the AWWC was the only option for waste services considered in detail. There were no options appraisals carried out to consider alternative methods for the collection of waste and recyclates.
- The Zero Waste (Scotland) Regulations 2012 which came into force in May 2012 contained an exemption regarding the separate collection of dry recyclable waste in rural areas, where the collection would not be environmentally or economically practicable. This exemption applies to Orkney which is classed as a rural area.
- The AWWC was approved although at no point were the full costs of the implementation of the scheme considered or presented to Council. Only the capital outlay for the bins was quantified, in order to gain approval to proceed.
- The introduction of the scheme was based on a trial which had been conducted in Westray. This trial was considered successful. However it was different in method and significantly different in scale and therefore was not indicative as to how the roll out of the scheme on the mainland would be managed.
- The scale of the roll out of the scheme had not been realised beforehand. There was insufficient staff resources dedicated to managing the roll out. There was inadequate planning and poor communication between different sections within Development and Infrastructure.
- The period over which the AWWC was introduced coincided with the time of the Council's departmental restructure. There were a number of changes in the Senior Management positions and periods when there were vacancies in these posts. This disruption to management continuity impacted on the introduction of the scheme.
- There was insufficient reporting on the progress of the roll out to Members.

- It was agreed by the Management of Waste Member Officer Working Group that the default size of bins to be provided to households for residual waste and recyclates would be 140L with the option of providing 240L bins if requested.
- Householders were then offered the option of different bin sizes for both refuse and recycling. There was also an option of using bags when this had been assessed by officers as appropriate. Offering alternative options had a significant impact in two ways. Firstly an increased level of stock was required in order to be able to offer all sizes of bin. Secondly the complexity of the roll out increased as there was the associated administration, assessments and deliveries with providing alternative bins or bags.
- There was no calculated basis to determine the quantities of the bins ordered, in particular those which were the non-default size.
- A large stock of bins remains and this stock is not recorded in the Store stock control system. The storage arrangements for the surplus stock was found to be poor and caused the deterioration of an estimated relatively small proportion of the remaining bins so that they can no longer be used. There were also health and safety issues with the storage arrangements that were highlighted to the Head of Roads and Environmental Services during the audit, and these issues are now being addressed.
- The current collection routes are not efficient. This was realised early in the implementation and was reported to the Development and Infrastructure Committee in 2013 and 2014.
- There has not been a review carried out of the use of mini-recycling centres, as agreed by Council on 10 May 2011; and therefore no report to Committee in order to consider whether these shall be closed in order to achieve budgetary savings.
- The report includes recommendations which have arisen from the audit. The numbers of recommendations are set out in the table below under each of the priority headings. The priority headings assist management in assessing the significance of the issues raised. The report includes nine recommendations which have been made to address the high priority issues identified.
- Responsible officers will be required to update progress on these agreed actions via Aspireview.
- There were no medium or low priority issues identified.

<b>Total</b>	<b>High</b>	<b>Medium</b>	<b>Low</b>
<b>9</b>	<b>9</b>	<b>0</b>	<b>0</b>

- The assistance provided by officers contacted during the course of the audit is gratefully acknowledged. Equally it is noted that this retrospective review of the roll-out process highlights issues that should be addressed should similar projects be undertaken. Timing of this report is opportune given the possibilities of further AWC based changes in the outer islands should the Council approve the development of solutions for implementation from April 2016 onwards.

## **INTRODUCTION**

The Alternate Weekly Waste Collection (AWWC) introduced a service whereby a residual waste collection takes place on the first week and recyclable items are collected on the second week.

The AWWC service was taken forward and gained approval as a Spend to Save (STS) project. The aims of the project were to increase the tonnage of material recycled and therefore increase the receipts for their sale. A further objective was to reduce the tonnage of residual waste which requires to be shipped to Shetland and therefore reduce costs.

The roll out of the AWWC commenced in May 2012 and continued until October 2013. The roll out included the mainland and the linked south isles.

A timeline of key dates is included in Appendix 1.

This audit report was requested by the Executive Director of Development and Infrastructure in January 2014 and addresses events which took place mainly during the period 2011-2012. Since that time there have been two reports to the Development and Infrastructure Committee on 12 November 2013 and 11 November 2014 which provided a full account of the operational and management activity during these later years to adapt and develop the project to address some of the issues which have now been recorded retrospectively in this audit report. The audit report action plan provides details of the actions which have been implemented by the Development and Infrastructure Senior Management team to address the shortcomings which became apparent during 2013/14 and have been identified through this retrospective audit report.

## **BACKGROUND**

At the Policy and Resources Meeting of 1 February 2011, savings targets were approved over a three year period on the Operational Environmental Services budget. The savings targets were £150,000 for year 1 (2011/12) and £350,000 for years 2 and 3. Against this target, the original range of savings proposals put forward by the Service identified the potential to achieve savings of £271,200 over the 3 year period, being £141,200 in year 1, with further savings of £130,000 across years 2 and 3. These savings were applied in advance of the AWC process being fully rolled-out.

These proposals were then revised, in a report to the Transport and Infrastructure Committee on 12 April 2011, for the introduction of an AWWC and changes to the operation of recycling centres with the result that savings of £235,900 over 3 years were predicted, being £165,900 in year 1, with further savings of £70,000 across years 2 and 3. This meant a reduction in savings of £35,300 over the 3 year period.

The STS application, which was approved by Council in December 2011, stated that the introduction of an AWWC would enable the Council to a large degree to meet new duties expected to be in force by Spring 2012 arising from the Zero Waste (Scotland) Regulations 2011. These regulations were in draft at that time and subsequently replaced by the Zero Waste (Scotland) Regulations 2012.

The STS application detailed savings figures. It was estimated that £109,600 would be saved in 2012/13 and £139,600 per annum thereafter giving a total saving of £1,366,000 in the first ten years.

A report to the Development and Infrastructure Committee on 11 November 2014 outlined the costs after a full year of operating the AWWC service. It is stated within the report that "on the whole the indications are that despite initial pressures to roll out the new service which have been largely contained within the Service budgets (which have already been reduced by some £270,300 since 2011) the AWC method is delivering savings to the Council".

The report details that there has been a cumulative overspend relative to the approved budget of £131,971 for the three year period 2011 – 2014.

The report also states that the AWWC process is not complete and the impact in cost/efficiency and savings is also incomplete, and that while the 12 month review is helpful it is not a conclusive indicator of success or failure. It therefore has been agreed that a programme is established to manage the Service in undertaking a continuous review of performance and service efficiency over the next three years. This is to include an annual report on the service activity with the next report due in November 2015.

The key waste trends since the introduction of AWWC were reported to Development and Infrastructure on 11 November 2014 as follows:-

Category description	2009/10	2010/11	2011/12	2012/13	2013/14
Waste to disposal (tonnes)	10,006	10,335	10,090	10,162	10,085
Household Recycling (%)	4.9	5.1	9.8	12.5	17.5
Income from recycling (£)	20,670	57,390	77,720	50,980	62,142
Growth in Housing Numbers (13/14)	0*	100*	150*	175*	579** (or 5.25%)
*Indicative for illustrative purposes, 2013/14 accurate, ** This is the total number of houses over the period Note income from recycling is dependent on market price for recyclates which is variable					

The figures in the table above have not been audited.

## **AUDIT SCOPE**

The purpose of the audit is to review the introduction of the AWWC focussing on the decision making process and the project management arrangements. The purchasing of the bins has been examined as part of the audit and the reasons as to why the Council had a large volume of bins held in stock following the roll out to date of the AWWC.

A detailed examination of the financial impact of the introduction of the AWWC has not been completed.

## Audit Findings: High Priority

### 1.0 Project management: Determining the scheme

- 1.1 The introduction of an AWWC was a significant change in the service provision, significant both in financial terms to the Council and in the service received by householders.
- 1.2 There were two drivers to the introduction of AWWC. Firstly, new duties expected to be in force by Spring 2012 arising from the draft Zero Waste (Scotland) Regulations 2011. These regulations were linked to the Scottish Government long term target of 70% recycling for all waste arising in Scotland by 2025.
- 1.3 Secondly, Development and Environment Services had responded to the impact of future budgetary constraints by identifying savings that could be realised by changing to the AWWC. This was included as part of the savings proposals identified by the Service in the budget setting process for the three years commencing 2011/12. The total savings identified was £235,900 over the three year period.
- 1.4 The Management of Waste Member/Officer Working Group (MOWG) was in place in 2011/2012. This group discussed changes to the waste collection services.
- 1.5 Minutes of the meeting of the MOWG on 21.2.11 show that two options for waste collection services had been discussed. These were the use of recycling centres or the use of kerbside collection. At this meeting further information on costs was requested for both of these options. At the next meeting it was again noted that the MOWG needed cost options regarding centres within a 3-5 mile radius as opposed to alternate weekly collections being progressed. The former Assistant Director (Operations) stated at that meeting that “this would never be instead of – will be kerbside waste”.
- 1.6 At following meetings of the MOWG the AWWC option using wheelie bins was discussed further. The discussions included limited information on costs and a focus on meeting savings targets. There is no evidence of any further discussions of alternative solutions. The STS application states that “the AWWC was considered to be the cost effective option alternative to the Council having to sort the mixed waste, after it has been collected, and prior to disposal”. There were no options appraisals completed for the alternatives detailed in 1.5. This should have been done in order to allow a fully informed decision to be taken and would have been particularly relevant given that concerns were raised during MOWG meetings regarding the use of fortnightly wheelie bin collections.
- 1.7 The AWWC was the only option presented to the Transport and Infrastructure Committee in April 2011. The Council approved in principle, subject to securing additional funding and following consultation and engagement with the community and residents’ associations, an AWWC service to be introduced throughout Orkney during financial year 2011/12.
- 1.8 When planning significant changes to service provision, all of the alternative solutions should be considered. This should include estimating the costs and benefits of each option. Potential future changes to the service should be considered and the overall budget changes that would be required to implement each option. This should be presented to any relevant MOWG and to the service committee to allow a fully informed decision to be taken.

### **Recommendation 1**

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- 1.9 The decision to progress the AWWC was based in part on the draft legislation, Zero Waste (Scotland) Regulations 2011. These draft regulations included the requirement for waste collection authorities to provide receptacles for the separate collection of waste and a number of stated recyclates. This however would not apply to the extent that separate collection and carriage would not be technically, environmentally or economically practicable.
- 1.10 Whilst the legislation was referenced in the report to the Transport and Infrastructure Committee in April 2011, there was no specific mention of the exemption to the regulations. Therefore the Members were not fully informed in that report of the proposed legislative requirements and exemptions when making the decision to introduce AWWC.
- 1.11 The Scottish Government had earlier issued a consultation document on the draft legislation. The Council provided a response to this which was approved at a Special General Meeting of the Council on 8 March 2011. In answer to a question regarding whether the Government should mandate more specifically what actions waste collection authorities must take to improve recycling of waste from households, the Council responded "No. Local Authorities should be free to determine the appropriate services required to improve the recycling of waste within their locality having regard to technical, environmental and economic practicability." This therefore stated a preference for the exemption included within the draft legislation.
- 1.12 Following the consultation, the Zero Waste (Scotland) Regulations 2012, came into force on 17 May 2012. These regulations contained an exemption regarding separate collection of dry recyclable waste and food waste which stated: -
- 1.12.1 "(2) An authority must, from 1<sup>st</sup> January 2014 arrange for there to be provided to the occupier of every domestic property in its area such receptacles as will enable the separate collection of dry recyclable waste from the property.  
(3) An authority need not arrange for a receptacle to be provided under subsection (2) if-  
(a) the property is in a rural area, and the authority considers that the separate collection of dry recyclable waste from the property would not be environmentally or economically practicable; or  
(b) the authority considers that dry recyclable waste if not presented in a receptacle will be deposited at a bring site.  
(4) An authority, if satisfied that dry recyclable waste will not be mixed with other waste that cannot be recycled, need not comply with subsection (2) to the extent that it considers that the amount of material recycled from such waste in its area will not be significantly less, and the quality of material recycled will not be significantly lower, than would be the case were the authority to comply.
- 1.13 Orkney is classed as a rural area according to the Scottish Government definitions and therefore this exemption applies. The exemption included in the legislation is in line with the Council's response to the consultation.
- 1.14 The Council, therefore, approved a policy based in part on draft legislation, which then differed in part from the final legislation issued. The decision was taken by Council without considering the exemption detailed in the draft legislation, as mentioned in paragraph 1.7, or the Council's response to the consultation.

- 1.15 By the time the legislation came into force in May 2012 the AWWC had been approved by the Council as had the STS case to purchase the bins. Bins and caddies had been purchased and the pilot scheme in Area C, Holm and Kirkwall (South) was due to commence. It would however have been prudent to report back to committee on the legislation implemented, and provide an opportunity to take stock and confirm the way forward. In this case however, had the AWWC policy been reversed either in full or in part, the service would have had a budget shortfall to address, while significant STS funds would have been freed up for investment in other projects.
- 1.16 Where Council policy is being formed on the basis of draft legislation, reports to members should emphasise that the legislation is draft. This could include the option to report back to committee on any material change to the legislation when introduced, particularly where this may affect a policy decision taken, and/or affect a service delivery. Care should be taken before finalising policy decisions and making any financial commitments.

***Recommendation 2***

**2.0 Project management: Costing the Scheme**

- 2.1 The AWWC was the subject of an STS application, and funding of up to £961,275 was approved by the Council in December 2011 for the purchase of wheelie bins, caddies, and microchips for refuse and recycling. The application did not include revenue costs involved in the roll out of the scheme, such as the staff costs and fuel costs for delivering the bins. Instead the application assumed that net budget savings would arise as a direct result of the project being rolled out. It was estimated that £109,600 would be saved in 2012-13 and £139,600 per annum thereafter giving a total saving of £1,366,000 in the first 10 years.
- 2.2 The application stated that there were no staffing implications. There was however considerable staff time required for receiving, building, labelling and delivering the bins. These costs were funded from the Waste budget as they occurred. This can be seen in an update report to Development and Infrastructure on 12 November 2013 which mentions that the roll out required 6,100 hours of unbudgeted hours in 2012/13 and 2013/14 to date. Staff overtime for the period April 2012 to February 2014 totalled £151,068.
- 2.3 Subsequent expenditure incurred on the scheme, not identified in the application, included £55,740 for improving the bin lifting mechanisms on two vehicles and £35,800 for the extension of contracts for four temporary staff to assist with the roll out for a six month period. This was funded by an underspend on the approved STS budget for the scheme. Additionally, the administrative burden associated with organising the service restructure and fielding enquiries from customers was overlooked.
- 2.4 Although the Council decision taken was that the STS application should be for the bins and a refuse wagon, the revenue cost implications of rolling out the scheme should have been considered and included in the application.
- 2.5 Where any significant change is planned to a service delivery the full financial implications should be considered, including all capital and revenue costs, at the time of implementation and in the future.

***Included within recommendation 1 of the action plan***

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### **3.0 Project management: Roll-out and Project Team**

- 3.1 The roll-out of the service was a significant logistical task. The update report on AWWC presented to Development and Infrastructure Committee in February 2013 stated that “the effort involved in delivering the bins was under scoped at the outset of the project and adhering to the original timeframe was difficult”, and that “final areas receiving the service six months behind the original schedule due to the greater than envisaged complexity of the roll out and supply issues”.
- 3.2 A trial for fortnightly refuse collection and separated recyclates collection had been carried out in Westray during 2010 which informed and influenced the process of establishing the AWWC. The scale of the roll out on the mainland and linked south isles was significantly different to that required for the trial in Westray. Due to the small scale of the Westray trial it was containable within the service’s resources. The scheme operated in Westray differed in that coloured bags were used for recycling rather than green bins; the refuse bins were staked in place rather than being emptied via the refuse carts mechanism. Therefore the operation of the scheme in Westray was not particularly informative as to how the roll out would be managed, or indicative as to how efficient the collection rounds would be.
- 3.3 The responsibility for the roll out sat with the Waste Services Team. This is a small team with two members of staff. The period over which the AWWC was introduced coincided with the time of the Council’s departmental restructure. There were a number of changes in the Senior Management positions and periods when there were vacancies in these posts. This disruption to management continuity impacted on the introduction of the scheme.
- 3.4 Several key problems have been identified with the roll out including insufficient planning, poor communication and the lack of involvement of the staff in the Stores Team, the Roads Team and the Administration Team from the start. As the input from these teams had not been planned, they had to react when their services were required, whereby planned jobs had to be put to one side in order to assist with the roll out. This led to certain stages of the roll out being executed in an inefficient manner, and without the proper checks and balances being in place. Improvements in some areas did happen towards the end of the roll out.
- 3.5 The roll out was problematic and weaknesses in the procedures followed included: -

#### *3.5.1 Ordering and receiving the deliveries of bins*

- Orders were placed by the Waste Team and not the Stores Team. This meant that the receipt and issue of bins and therefore the stock was not recorded through the stock control system.
- No formal plans were made as to who would receive the deliveries. Receiving the bins from the delivery company was a time consuming task, e.g. it took three men, approximately 6 days to unload the first delivery of 30 containers of bins and caddies.
- There is no evidence of checks having been completed on the stock received to confirm that the correct numbers of items were received. This should have been done prior to certifying the payment of the corresponding invoice.
- Storage areas had not been identified for the deliveries.

The Waste Team should have organised the ordering of the bins via the Stores Team. This would have allowed the Stores Team to firstly evaluate any logistical impact in resource terms and ultimately plan for the deliveries and organise the storage. The stock of bins would also have been managed via the stock control system. Therefore the Team who had the expertise and required facilities would have been better placed to manage the stocks and storage.

### 3.5.2 *Building and labelling the bins*

- Every bin had to be built, i.e. wheels and lids attached and three labels were produced for each bin. The time required for doing this had not been quantified or planned.
- The labels had to be made; this included having printed serial numbers and property addresses handwritten on each individual label. The labels then had to be applied to each individual bin. The staff time for doing this cannot be accurately quantified, however it has been indicated to audit that it took individual staff members several months, this cost being absorbed by Waste Services.

### 3.5.3 *Delivery of bins to households*

The distribution method used for the delivery of bins to each area was inefficient for the majority of the roll outs.

- The early roll outs were organised by the Waste Team who instructed the Roads Staff who were making the deliveries. This mainly involved deliveries being made direct from Hatston to individual properties using smaller trucks which could only hold bins sufficient for 4-6 properties. This was inefficient in terms of fuel and staff time.
- An adequate schedule for the distribution of the bins within each roll out area was not prepared, e.g. there were poor instructions on routes and how to get to properties.
- The deliveries took longer as specific bins had to be delivered to specific properties, due to the address labels which had been attached to the bins.

The delivery of the last two roll-out areas was organised by the Roads Team. For these two areas the Roads Team prepared logical delivery programmes and a much more efficient distribution method was used, whereby large consignments of bins were delivered to compounds within each roll out area for onward delivery by smaller vehicles. There were no additional compound costs incurred.

### 3.5.4 *Customer Requests / Issues Following the Roll Out*

- The Waste Team was unprepared for the large number of customer requests and issues received during and after the roll out. At the start of the roll out there was no system in place for logging and prioritising calls. This led to many householders having to call a number of times to have their issue addressed. The number of requests and issues raised by householders increased by offering the option to change bin size and collection method. This work had to be taken on by the Administrative Team within Development and Infrastructure.

3.6 The roll out of the bins to each individual area fell behind schedule, which is indicative of the lack of planning which took place and the reactionary nature of the roll out. A greater degree of pre-planning was needed by a project team to firstly establish a clear and dedicated resource (time limited) to coordinate, communicate and control this process. The team should have been brought together in sufficient time to plan both the roll out of the bins and the response required to householder queries.

3.7 In the event of further roll out of AWWC a project team should be established which includes key staff who have relevant experience and resources to effectively plan and manage the process. The Legal, Finance and Human Resources Sections should also be consulted at the start of any project for their input as required.

### ***Recommendation 3***

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**4.0 Project management: Roll-out and Oversight of the project**

- 4.1 During 2013 when the roll out was taking place there were no progress updates being submitted to any member/officer working group meeting or committee meeting.
- The final meeting of the Management of Waste MOWG took place on 24 January 2012. There were no meetings of the group during or after the roll out period.
  - A report was presented to the Transport and Infrastructure Committee in November 2011 and the next report was to the Development and Infrastructure Committee in November 2013.
  - No meetings of the STS Working Group took place between 19 December 2012 and 9 December 2013.
- 4.2 Whilst the Council had given approval for the scheme to go ahead, reporting to either the Management of Waste MOWG, the Service Committee, or the STS MOWG would have provided an opportunity for the progress of the roll out to be monitored, and for scrutiny to take place.

***Recommendation 4***

**5.0 Specific Issues regarding the Purchase of the Bins**

- 5.1 The procedures and decisions taken regarding the purchase of the bins have been examined due to the current excessive stocks of bins and caddies held. The value of bins remaining after the roll outs was £204,638. It was considered important to examine this part of the process although it is not expected that this process shall be repeated. There were weaknesses in the processes followed and decisions made.
- 5.2 The STS application estimated bin costs for 10,500 properties, which allowed for every property within Orkney to obtain bins; this was based on property data from the Assessor's office. The total number of bins included in the application was therefore 31,500 bins, 10,500 refuse bins and 21,000 recycling bins. This was the upper limit i.e. the maximum number of bins that would be required, and also represented an upper limit for the costs of the bins. There was an expectation that some categories of household would not want or be able to work with the revised service. This can be seen in the draft workings prepared by the former Assistant Director (Operations) for the STS application which estimated an 80% uptake for bins, and the total number of bins required noted as 21,400, being 7,200 refuse bins and 14,200 recycling bins. These estimates were not then recognised or used in the application.
- 5.3 Prior to the preparation of the STS application the 2011 Tough Times Tough Choices Survey also produced results that detailed that 30% of respondents would prefer to have black bags to contain their rubbish. These results were also not reflected in the STS application.
- 5.4 A meeting of the Management of Waste MOWG was held on 13 October 2011. It was proposed at the meeting that a trial would be undertaken providing 3 of the 240 litre bins. It was also noted at that meeting that during the public consultation people had expressed a preference for the 240L size of bin; and that the system could not be universal because people would have different requirements. The action points/summary of the meeting records that:
- the default size bins to be provided to households for residual waste and recyclates would be 140L with the option of providing 240L bins if requested;
  - a small trial would be undertaken whereby households received 3 of the 240L bins; and

- the Spend to Save application would be submitted with the higher costings, and it might be possible that savings would be made, dependent on the size of bins required by households.

At a subsequent meeting of the Management of Waste MOWG held on 23 November 2011 it was confirmed that the default size of bins would be 140L with the option of trading up to 240L if necessary, at no extra charge.

5.5 The 140L was then the default size for both refuse and recycling bins in the pilot carried out, which was Area C, Holm and Kirkwall (South) in May 2012.

5.6 The bins and caddies were purchased in three tranches. Details can be seen in the table below:

Green Recycling Bins		140L			240L		
		Purchases	Issued	Stock	Purchases	Issued	Stock
16/02/12	1st Order	2000		2000	860		860
23/05/12	Pilot		1894	106		63	797
18/07/12	2nd Order	10000		10106	5000		5797
19/09/12 - 05/04/13	9 Areas Rolled Out		9924	182		139	5658
08/04/13	3rd Order	3960		4142			5658
22/04/13 - 22/10/13	3 Areas Rolled out		2188	1954		19	5639
<b>Totals</b>		<b>15960</b>	<b>14006</b>	<b>1954</b>	<b>5860</b>	<b>221</b>	<b>5639</b>

Grey Refuse Bins		140L			240L		
		Purchases	Issued	Stock	Purchases	Issued	Stock
16/02/12	1st Order	1000		1000	500		500
23/05/12	Pilot		767	233		250	250
18/07/12	2nd Order	3000		3233	6000		6250
19/09/12 - 05/04/13	9 Areas Rolled Out		386	2847		5328	922
08/04/13	3rd Order			2847	1000		1922
22/04/13 - 22/10/13	3 Areas Rolled out		45	2802		1470	452
<b>Totals</b>		<b>4000</b>	<b>1198</b>	<b>2802</b>	<b>7500</b>	<b>7048</b>	<b>452</b>

Caddies		19 L			40 L		
		Purchased	Issued	Stock	Purchased	Issued	Stock
16/02/12	1st Order	2160		2160	1050		1050
23/05/12	Pilot		1894	266		63	987
18/07/12	2nd Order	10152		10418	5040		6027
19/09/12 - 05/04/13	9 Areas Rolled Out		9926	492		135	5892
08/04/13	3rd Order	5616		6108			5892
22/04/13 - 22/10/13	3 Areas Rolled out		2188	3920		19	5873
<b>Totals</b>		<b>17928</b>	<b>14008</b>	<b>3920</b>	<b>6090</b>	<b>217</b>	<b>5873</b>

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- 5.7 The first stock was ordered in February 2012, after the STS bid had been approved. Part of this stock was then used in the Area C pilot. This first order included refuse and recycling bins, both of these in 140L and 240L sizes. The default sizes and non-default sizes were ordered as the Management of Waste MOWG had decided that there would be an option for householders to obtain a larger bin, as mentioned above in paragraph 5.4.
- 5.8 A second order was then placed in July 2012. This was nearing the end of the pilot, and approximately at the same time as the return date for completed surveys from the pilot area. During the pilot, there had been contact from householders requesting larger refuse bins. This contact was at a sufficient level for the Head of Service to allow the Waste Manager to change the default size for refuse bins from 140L to 240L. This decision was taken prior to the completion of the pilot, and without taking into account the full feedback received via the surveys returned from the householders in the pilot. The results of the pilot showed a 50/50 split in favour of either the 140L or 240L bin size.
- 5.9 There was no feedback to the Management of Waste MOWG or to the Service Committee following this pilot or regarding the decision to change the default size of refuse bin. This was an operational decision. Authority had already been given to purchase 240L size bins via the approval of the STS application, so therefore there was no need to revert to Council for this decision to be taken.
- 5.10 The second order which was intended to provide sufficient bins to complete the full roll out including the isles, was for a considerable number of refuse bins, recycling bins and caddies of all sizes which contributed significantly to the surplus stock. In particular large quantities of the non-default sizes of bins were ordered. This order included, for example, 3000 140L refuse bins and 5000 240L recycling bins. The Waste Team considered that these numbers of bins would be needed for those householders choosing the alternative size.
- 5.11 This order was not based on an analysis of the results of the pilot area. There is no evidence that consideration was given to adjusting the numbers of bins ordered in relation to the percentage uptake of the service and of the various bin sizes used in the pilot. There has been no confirmation obtained of calculations prepared to determine or justify the number of bins ordered.
- 5.12 The purchase of the 240L recycling bins is an example of this, where in February 2012, in the first order, 860 bins were ordered and although only 63 of these were used in the pilot, a further 5,000 bins were included in the second order in July 2012. Following the roll outs to date, 5,639 of these bins remained in stock, valued at £113,061.
- 5.13 Offering the option to change bin size increased the stock requirements. In this case the bin requirements for the alternative sizes had been substantially overestimated when the order was placed.
- 5.14 A third order was placed in May 2013, at a time when there were only three areas remaining to be rolled out. The order included bins and caddies. This order has resulted in a considerable surplus of caddies also being held as well as contributing to the surplus bin stocks, as can be seen in the table at 5.6. The surplus caddies at the end of the roll out included 3,920 19L caddies and 5,873 40L caddies in total valued at £42,597 (see appendix 2).

5.15 The main errors which occurred with the ordering were:-

- overestimating the number of householders who would participate in the AWWC;
- underestimating the number of householders who would use the bag options for refuse and recycling;
- overestimating the number of bins required in the non-default sizes; and
- not basing the numbers of bins ordered on the numbers of properties and predicted percentage of uptake of the alternative bin sizes.

5.16 These errors were made even though there had always been an expectation that a number of householders would not participate in the scheme and despite having the findings of the pilot which should have informed the purchase order sizes. There was an expectation held by the officers in the Waste Team that there would be demand for the numbers of bins ordered. In particular that there would be demand for the smaller refuse bins and larger recycling bins.

5.17 The approved STS application included the purchase of microchips, as a proactive decision to address potential future requirements should further legislation come into force requiring this. This was considered more economic than having to fit microchips to the bins or potentially replacing the bins at a later date. Microchips were then purchased with all of the bins. At present, only one of the eleven wagons in use has the required microchip readers and weighing equipment for using the microchips and there are no plans to obtain the required equipment. The cost of including this equipment on new refuse wagons purchased during the roll out was considered prohibitive by the Service and the equipment was therefore not included. The inclusion of microchips was not necessary in order to meet the expected requirements of the draft Zero Waste (Scotland) Regulations 2011. No reference was made in the STS application that the microchips were not essential and that there were no plans in the near future to use them. The total cost of the microchips was £26,656.

5.18 In February 2015, another order for 550 240L micro-chipped refuse bins was placed. At the end of the roll out there were 452 of this size remaining in stock. The Waste Team ordered these bins so that there are sufficient supplies in stock for rolling replacements. As there are no stock control procedures in place for the bins it has not been possible to confirm that there was a requirement to order this stock for rolling replacements.

5.19 The Waste Team are expecting the surplus of bins to be reduced through issue to the isles dependent on the consultation, to commercial premises, and to a small number of households requesting to switch to use wheelie bins. It should be noted however that the issue of bins for the commercial collection was not the purpose of the original STS application.

5.20 The maximum number of properties on the isles is 1,050 and to date the uptake of the commercial collection has been lower than expected with 72 commercial clients receiving the service.

5.21 Future bin orders should be tightly controlled. Orders should be placed only where stocks have sufficiently diminished, and be based on a calculated estimate of future requirements given the current policy to enable householders to specify preferred bin size.

#### **Recommendation 5**

### **6.0 Current Issues**

6.1 The bins currently held are not recorded in the stock system and due to the unknown number of bins returned or exchanged there is no accurate record of the exact number of bins held.

The total numbers of bins which were purchased are currently recorded in the Council's asset register.

6.2 The storage arrangements for the bins have been poor and the condition of an estimated small number of bins stored both inside and outside has deteriorated such that they will no longer be usable. There were also health and safety issues with the storage arrangements that were highlighted to the Head of Roads and Environmental Services during the audit, to enable issues to be addressed without delay.

6.3 The storage arrangements need to be improved. This shall include closing off the building so that it is not accessible to birds, assuming that the existing building continues to be used as the store. The bins will also need to be reorganised and cleaned where required. There is an ongoing requirement for all usable bins to be stored in a secure and clean environment and in accordance with health and safety requirements.

**Recommendation 6**

6.4 An assessment of the bins shall have to be made to determine those which are still usable and those which should be scrapped. Once this has been done the actual usable bin numbers should be incorporated into the stock system. This information must also be provided to the Accountancy Section so that an accurate figure for stock is recorded in the asset register.

**Recommendation 7**

6.5 It was identified in a Briefing note to members on 9 July 2012 that the collection routes may require alteration in order to improve the collection efficiency. This was then referred to in update reports to the Development and Infrastructure Committee. On 12 November 2013 it was noted within the recommendations that "further work is now required to optimise routes and vehicle operations in order to mitigate the greater effort required to collect by bins rather than from bags and boxes", and on 11 November 2014 that a number of elements are still to be rolled out including "route optimisation and post implementation round review".

6.6 The collection routes have increased in number and complexity following the introduction of AWWC, for example the recycling routes have been extended by the inclusion of all rural areas. This is demonstrated in the Waste Team's daily tasks sheets which detail staff rotas. In 2012 in a typical two week period, prior to the introduction of AWWC, there were 24 "worker shifts" allocated for recycling. In 2015 there were 55 "worker shifts" allocated to recycling rounds in a similar two week period, therefore representing a considerable increase to the manpower required to complete the recycling rounds.

6.7 There has been no additional staff resource provided for carrying out the refuse and recycling collections, although the workload has increased. Staff rotas are planned on a daily basis and at times in order to complete the refuse and recycling collection rounds staff have to be moved from street cleansing duties or from roads duties. This therefore affects service delivery in other areas. Whilst the staffing model has allowed for this to some extent, this should have been planned ahead where significant change or reorganisation is being rolled out. The introduction of the commercial recycling collection shall impact further on this.

6.8 The collection routes take longer due to the bins lifting mechanisms which are used. On busy days, a recycling wagon may become full part way through the round which means returning for emptying before completing the round; or either contacting another wagon which is already out on a route in order for that wagon to collect from the remaining properties, or alternatively sending out a smaller pick-up vehicle to collect the remainder.

- 6.9 There have been only been minor changes made to the routes since the roll out to date was completed. A full review of the routes should be progressed in order to improve the efficiency of the collection rounds.

**Recommendation 8**

- 6.10 When the introduction of AWWC was first being considered the closure of mini recycling centres was cited as a potential source of savings. Council agreed on 10 May 2011 that 12 months following the introduction of an AWWC a report should be brought to a meeting of the Transportation and Infrastructure committee on the usage of a number of mini-recycling centres and the possible phased removal of the mini-recycling centres (see appendix 3). This review was not carried out.

- 6.11 A review of the mini recycling centres should be carried out as required by the Council decision of 10 May 2011.

**Recommendation 9**

	<b>Recommendation</b>	<b>Responsible Officer</b>	<b>Service Management Comments</b>	<b>Agreed Completion Date</b>
	<b>Project Management</b>			
1	<p>When planning significant changes to service provision, all of the alternative solutions should be considered. A cost/benefit analysis should be prepared for each option.</p> <p>The full financial implications and overall budget changes should be considered for the alternative service delivery options including both capital and revenue costs.</p> <p>This information should be presented to the relevant member/officer working groups and Council committees who are making decisions on the service changes to enable fully informed decisions to be taken.</p> <p><b>High Priority</b></p>	<p>Head of Service and Env. Service Manager</p> <p>Head of Service and Env. Service Manager</p> <p>Head of Service and Env. Service Manager</p>	<p>Agreed, will form part of current work on option identification and appraisal for possible further AWC based island roll-out. To note that this work has already commenced with initial consultation feedback, members seminar, several committee reports.</p> <p>Agreed and part of the report to D&amp;I 10 September 2015 on future roll out</p> <p>Agreed and part of the current process which has taken place to inform the next phase of AWC roll out, first seminar held 2nd July 2015, followed by consultation feedback report to D&amp;I Committee 10<sup>th</sup> September 2015</p>	<p>April 2016</p> <p>April 2016</p> <p>April 2016</p>
2	<p>Where Council policy is being formed on the basis of draft legislation, reports to Members must emphasise that the legislation is draft and there should be an option to report back to Committee on material changes to the legislation when introduced.</p> <p>Care must be taken before finalising policy decisions and making any financial commitments.</p> <p><b>High Priority</b></p>	<p>Executive Director and all Heads of Service</p> <p>Head of Service and Env. Service Manager</p>	<p>Agreed, noting that the lead in period can sometimes mean there is a risk decisions will need to be taken "on balance" without legislation necessarily being enacted. Equally this should not be confused with efficiency targets that are not dependant on legislative changes. In either case members will be fully informed and have most current information and appraisals of the risks at the point of decision making – with any changes arising after the event being subsequently reported where these may have a material impact on the policy decision.</p> <p>Agreed</p>	<p>April 2016</p> <p>Ongoing</p>

	<b>Recommendation</b>	<b>Responsible Officer</b>	<b>Service Management Comments</b>	<b>Agreed Completion Date</b>
3	<p>In the event of any further roll out of the AWWC a project team should be established to plan and co-ordinate the roll out. The team should include key staff with relevant experience and resources to effectively plan and manage the process.</p> <p>The Legal, Finance and Human Resources Sections should also be consulted at a start of any project for their input as required.</p> <p><b>High Priority</b></p>	<p>Head of Service and Env. Service Manager</p> <p>Head of Service and Env. Service Manager</p>	<p>Agreed and is currently underway through the practice in terms of the early stage of developing the possible further roll out and part of future committee reports to highlight the project management and other resource requirements.</p> <p>Agreed, initial consultation has taken place in preparation for the 10 September 2015 D&amp;I report. This contact will be maintained as the next phase of more detailed option development takes place at the point there is substance to discuss in terms of possible options, costs and legislative compliance issues.</p>	<p>Ongoing</p> <p>Ongoing</p>
4	<p>Whenever a large scale service change is being undertaken there should be progress reports to the appropriate member bodies to allow monitoring and scrutiny.</p> <p><b>High Priority</b></p>	<p>Executive Director and all Heads of Service</p>	<p>Agreed and the current practice in terms of the possible next steps of island roll out, reflected through the annual report for 2014,15,&amp;16 as committed in Nov 14, members seminar in June 2015, D&amp;I report Sept 15 and subsequent reports as further elements develop. Other D&amp;I issues since 2013 have also been addressed through this mechanism through the establishment of Project Boards (eg Capital Programme, Broad Street Improvements, Hydrogen Strategy).</p>	<p>Ongoing</p>
<b>Purchase of Bins</b>				
5	<p>Future bin orders should be tightly controlled. Orders should be placed only where stocks have sufficiently diminished, and be based on a calculated estimate of future requirements given the current policy to enable householders to specify preferred bin size.</p> <p><b>High Priority</b></p>	<p>Env. Service Manager</p>	<p>There is a degree of balance needed, as "robust data" tends to come at point of implementation rather than in the planning stages. The matters addressed in the audit report were in part a consequence of the Council adopting a relatively flexible approach to responding to public requests for alternative configurations, a matter which had been discussed with Member Officer Working Group at the outset of the project. Bin choice, if provided, is drawn from residents choices that can fluctuate as deliveries commence, if allowed. For example in driving grey bin waste down the smaller 140 ltr bin is preferred strategically, but not necessarily supported by the public at point of delivery.</p>	<p>Prior to next stage of AWC committee approved roll-out</p>

	Recommendation	Responsible Officer	Service Management Comments	Agreed Completion Date
			<p>Therefore if a bagged system with storage bins is part of a further AWC based outer island roll-out, the strategy should not change part through affecting stocks, without a clear audit trail of any revised decision consultation with members. A solution to this is to encourage residents to make a selection before bulk ordering, with the 140ltr bins as default, in the event of no reply. This is still difficult as the party line needs to be held, or we end up with an unknown level of additional stock, bought as "just in case" or "post initial implementation" leaving a returned stock to the depot of 140ltr bins.</p> <p>That said the process of securing the best estimate and the steps to minimise waste and fluctuating stock levels is critical. Processes and procedures will in future be agreed in advance as part of any potential roll-out prior to subsequent approvals.</p>	
<b>Current Issues</b>				
6	<p>All useable bins should be stored in a secure and clean environment and in accordance with health and safety requirements.</p> <p><b>High Priority</b></p>	Waste Facilities Manager	<p>Agreed and there was a concentrated effort during 2014/2015 to address these issues with a full review of stock and restacking etc. A new procedure was also put in place which includes periodic (Quarterly) review of storage arrangements by the manager to monitor storage and stock levels.</p>	Ongoing
7	<p>An assessment should be made of the bins held in stock to determine which of those are still usable and those which should be scrapped.</p> <p>Once completed, the actual usable bin numbers should be recorded in the stock control system and advised to the Accountancy Section.</p> <p><b>High Priority</b></p>	Waste Facilities Manager	<p>Agreed and in place as part of recommendation 6 process. First assessment data passed to Finance on 27 May 2015.</p>	<p>Initial H&amp;S assessment completed with stock assessments by December 2015 and quarterly afterwards.</p>

	<b>Recommendation</b>	<b>Responsible Officer</b>	<b>Service Management Comments</b>	<b>Agreed Completion Date</b>
8	<p>Work required to optimise routes and vehicle operations should be progressed in order to improve the efficiency of the collection rounds.</p> <p><b>High Priority</b></p>	Env. Services Manager	Agreed and planned noting need to see the roll-out of commercial waste which was introduced in early 2015 settles in to gauge numbers of new clients and thus impact on routes and resource levels. Equally impact of ongoing housing growth combined with waste awareness raising and enforcement activity planned in 2015/16. A combination of these variables leads to the optimum time for the next route optimisation work being completed for implementation for new financial year 2016/17.	April 2016
9	<p>A review of the usage of mini-recycling centres should be completed as agreed by Council on 10 May 2011.</p> <p><b>High Priority</b></p>	Head of Service and Env. Services Manager	Agreed and part of the D&I committee discussions initially September 2015 , post island consultation and then November 2015 in terms of annual report and subsequently next stage of island roll-out with option appraisal and identification of funding options including the future of recycling centres.	April 2016

<b>Priority</b>	<b>Assessment</b>
<b>High</b>	<ul style="list-style-type: none"> <li>• Key control absent or inadequate;</li> <li>• Serious breach of regulations;</li> <li>• Significantly impairs overall system of internal control;</li> <li>• No progress made on implementing control;</li> <li>• Requires urgent management attention.</li> </ul>
<b>Medium</b>	<ul style="list-style-type: none"> <li>• Element of control is missing or only partial in nature;</li> <li>• Weakness does not impair overall reliability of the system;</li> <li>• Recommendation considered important in contributing towards improvement in internal controls;</li> <li>• Management action required within a reasonable timescale.</li> </ul>
<b>Low</b>	<ul style="list-style-type: none"> <li>• Control exists or on target to be implemented within timescales;</li> <li>• Minor weakness, does not compromise overall system control;</li> <li>• To be considered by management within a reasonable timescale</li> </ul>

**Note:**

**It should be recognised that where recommendations in the action plan are not implemented there may be an increased risk of a control failure. It should be noted however that it is the responsibility of management to determine the extent of the internal control system appropriate to their area of operation.**

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**Timeline**

- Jan – Sept 2010** Trial conducted in Westray for nine month period. Trial was considered successful with an approximate reduction in domestic waste of 20%, and increase in recyclates of 24%. Bin size preference was 240L for refuse. Coloured bags were used for recyclates.
- 1 Feb 2011** Savings targets approved over a three year period on the Operational Environmental Services budget.
- 28 Feb 2011** Return date for responses to the Consultation on the proposed Zero Waste (Scotland) Regulations 2011.
- 8 Mar 2011** Special General Meeting of the Council confirms agreement with the Council response to the Consultation on the proposed Zero Waste (Scotland) Regulations 2011.
- 12 April 2011** Meeting of Transport and Infrastructure Committee at which it was recommended to Council that in principle, subject to securing additional funding and following consultation and engagement with the community and resident's associations, an alternate weekly waste collection service would be introduced throughout Orkney during financial year 2011/12. Also, recommended to Council that following the introduction of alternate weekly waste collections, that mini-recycling centres would no longer be provided at a number of locations. The report proposed savings of £235,000 over 3 years.
- 10 May 2011** General Meeting of the Council at which it was agreed that in principle, subject to securing additional funding for the purchase of an additional recycling wagon and waste bins and following consultation and engagement with the community and residents' associations, an alternate weekly waste collection service be introduced throughout Orkney during financial year 2011/12. It was also agreed that the usage of mini-recycling centres should be monitored, and thereafter a report be submitted to a meeting of Transport and Infrastructure to be held twelve months after the introduction of the alternate weekly waste collections, regarding the possibility of phased removal of the mini-recycling centres.
- 15 August 2011** Return of Tough Times Tough Choice alternate weekly collection survey. Respondents showed a 61% preference for refuse wheelie bins and a 49% preference for recycling wheelie bins. The response for refuse bin size was that 33% preferred 140L and 41% preferred 240L. There was no question relating to the preferred size of recycling bin.
- 13 October 2011** Management of Waste Member/Officer Working Group meeting at which it was decided that the default size of bins provided for refuse and recyclates should be 140L, with the option of providing 240L bins if requested.
- 21 October 2011** Spend to Save Member/Officer Working Group. Alternate Weekly Waste Collection presented to group.
- 22 November 2011** Policy and Resources Committee meeting recommended approval of the Spend to Save application for funding up to £961,275 for Alternate Weekly Waste Collection.
- 6 December 2011** General Meeting of the Council approved the Spend to Save Application.

- 17 May 2012**      The Waste (Scotland) Regulations 2012 came into force.
- 23 May 2012**      Pilot Area C (Holm and Kirkwall South) rolled out.
- 19 Sept 2012**      Roll out of all other areas commenced, up to last roll out date of 22 October 2013.

The total number and costs of bins purchased are set out in the table below: -

Item	Quantity purchased	Cost (£)	Quantity distributed during roll out	Quantity remaining after roll out	Remaining stock value (£)(2)
Recycling 140L	15,960	273,738	14,006	1,954	33,901
Recycling 240L	5,860	117,493	221	5,639	113,061
<b>Total Recycling</b>	<b>21,820</b>	<b>391,231</b>	<b>14,227</b>	<b>7,593</b>	<b>146,962</b>
Refuse 140L	4,000	69,400	1,198	2,802	48,614
Refuse 240L	7,500	149,575	7,048	452	9,062
<b>Total Refuse</b>	<b>11,500</b>	<b>218,975</b>	<b>8,246</b>	<b>3,254</b>	<b>57,676</b>
(1) Microchips	5,000	4,000			
<b>Total all bins</b>	<b>33,320</b>	<b>614,206</b>	<b>22,473</b>	<b>10,847</b>	<b>204,638</b>
Caddy 19L	17,928	65,337	14,008	3,920	14,700
Caddy 40L	6,090	28,322	217	5,873	27,897
<b>Total all caddies</b>	<b>24,018</b>	<b>93,659</b>	<b>14,225</b>	<b>9,793</b>	<b>42,597</b>

Notes:

- (1) There were some invoices received for bins which did not include the cost of the integrated microchips. These microchips were then subsequently invoiced separately.
- (2) The cost per bin used to calculate the value of remaining stock includes the costs for the integrated microchips.

Extract of the minute of the General Meeting of the Council on 10 May 2011

It was agreed "that the Director of Development and Environment Services should arrange for usage of the undernoted mini-recycling centres, to be monitored, and thereafter submit a report, to a meeting of the Committee to be held twelve months after introduction of alternate weekly waste collections, regarding the possibility of phased removal of the mini-recycling centres: -

1. Deerness shop;
2. Dounby
3. Eday pier;
4. Flotta pier;
5. Holm Community Centre;
6. car park at Hordaland, Kirkwall;
7. Houton Pier;
8. Lyness Pier, Hoy;
9. Papdale Shop, Kirkwall;
10. Rousay pier;
11. Lady Village, Sanday;
12. Shapinsay pier;
13. Stronsay pier;
14. Toab shop; and
15. Pierowall, Westray."