

Committee(s):	Date(s):
Open Spaces, City Gardens and West Ham Park Committee	8 October 2012
Subject: Litter Management in the City's Open Spaces	Public
Report of: Director of Open Spaces	For Decision

Summary

The processing of waste across the Open Spaces Department takes up significant resources both in terms of labour and disposal costs. To see if it is possible to reduce this cost within the City open spaces and to contribute to increasing the City Corporation's recycling rates, the City Gardens section propose to undertake a trial for one year, replacing all current bins with a type that accepts only mixed recyclables. To ensure that this does not have an adverse impact on our service or on cleansing services for the City's streets, detailed data will be collected and analysed so that progress can be monitored throughout the trial period.

To ensure that the evidence collected is comparable with previous years, the trial will run from January to December 2013.

Recommendations

It is recommended that:

- Preferred option 5 is implemented and that all 27 'blast-proof' bins within the City's open spaces are replaced with recycling bins of the brand already used by Cleansing Services;
- I report back to this Committee in early 2014 with the results of the trial.

Main Report

Background

1. At a meeting of this Committee on 11 October 2011, a presentation was given on the problems and costs associated with litter collection and removal around the department's open spaces. Following discussion it was agreed that the City Gardens section should trial an alternative approach to waste management in its gardens within the Square Mile. This report was deferred until after the Olympic and Paralympic Games so that the results of the trial would not be skewed by increased visitor numbers.
2. The City Gardens team already has experience of managing a completely bin-free environment; in the 1980's, as a result of terrorist activity, nearly 1000 cast iron litter bins were removed from the City. A relaxation in the

security threat to the City led to the Security & Contingency Planning team, in consultation with the Police, allowing for the re-introduction of bins in the Square Mile. The caveat was that bins had to be of a blast resistant construction and that City Gardens had to be able to remove and store bins within a 48 hour period of the Police issuing such an instruction.

3. Cleansing services currently provides some 40 on-street litter bins at 27 different locations across the City. These have been chosen as places where people tend to gather or sit. In 2010, the Director of Environmental Services produced a report on litter bin provision for the Port Health & Environmental Services Committee. The trial undertaken as part of the report has led to the adoption of Cleansing's current policy which is that additional litter bins will not be installed on the City Streets other than at locations where people gather (e.g. around seating or near green spaces) and even then only after a trial period has demonstrated that litter bin provision has had a positive impact on the local environment.

Current Position

4. Litter collection and disposal is a major part of the service that we provide. There are currently 27 bins located across 16 of the City Gardens' sites (see Appendix 1 for locations). The table below shows the cost of disposal of the various waste streams to the City Gardens local risk budget for the years 2010-2012:

	2010/11		2011/12	
	Weight (tonnes)	Cost (£)	Weight (tonnes)	Cost (£)
Non-recyclable	401.43	33,382*	404.29	58,092*
Mixed recyclable	5.64	380	2.36	182
Green waste	20.92	1,193	34.46	2,058
Total	427.99	34,955	441.11	60,332

* Disposal costs almost doubled between 2010 and 2011 due to the closure of the landfill site at Mucking, Essex

Table 1 – waste tipping volumes and charges 2010-2012

5. There is also a cost associated with keeping these clean (washed-down once per week or on an 'as needs' basis) and re-securing the bins in the event of vandalism. The cost of cleaning is approximately £4,228 per annum, and to reinstate a bin costs approximately £50 per occasion.
6. In 2008, again under the agreement of the Security and Contingency Planning Officer and in liaison with the Police, the advice on types of

bins was downgraded and instead of blast resistant bins being required, other bins were also acceptable providing that they were of a design and made of a material that did not exacerbate an explosion should this occur. Therefore there is much greater freedom to find a new design of recycling bin that is better fit for purpose. This is beneficial as to replace one of the blast proof bins at the end of its useful life costs £2,500 per unit, where as other brands can now be purchased at a much more reasonable cost (£400-£500 per unit).

7. During the summer months at the City's two busiest gardens – St. Paul's Churchyard and Finsbury Circus – a member of staff is specifically assigned to emptying bins between the core lunchtime hours of 12pm to 2pm. This equates to approximately 160 hours just removing the summer lunch litter at these two sites, at a cost of £2,890 per year.
8. As can be seen from Table 1, by far the biggest cost is disposing of the waste itself. In 2011, City Gardens spent over £58,000 (excluding green waste) of its City Fund local risk budget on the disposal of waste, which equates to 5.4% of the net spend. In light of the recent 12.5% budget reduction, and with further reductions to come, this is clearly not sustainable and remains a key area under scrutiny with a view to further reducing expenditure. The current cost of the different waste streams is set out in Table 2 below:

Waste Stream	Cost per tonne (£)
Non-recyclable	£150.87
Mixed recyclable	£81.12
Uncontaminated green waste	£62.33

Table 2 – waste stream charges per tonne

9. From the table it is clear to see that one way of reducing costs would be to increase the amount of recycling. Although recycling bins have been trialled in the past in some gardens, success has been limited due to the amount of contamination of waste (public putting the wrong items in the wrong bins) leading to entire loads being refused at the City's Materials Recycling Facility (MRF) at Walbrook Wharf. This was predominantly due to poor design.
10. Some success has been achieved through the 'two-bag' method of litter picking; staff take 2 bags out with them when cleansing – one for mixed recyclables and one for non-recyclables. However as can be seen from Table 1, this has limited potential and needs to be used in conjunction with other recycling methods.

11. The design of recycling bins has greatly improved over the years and these are now available with reduced and variable apertures. Cleansing Services have undertaken research on this issue and have found that the Envirobank 140L is both the most acceptable aesthetically and the most successful at reducing contamination. These cost £429 per unit.
12. This report does not address green waste disposal which is composted outside of the City and not currently an issue for the City Gardens team.

Options

13. **Option 1** - remove all 27 blast proof bins from the City Gardens and place them in storage for a trial period of 1 year, with the aim of reducing the amount of litter deposited in gardens and improving recycling rates through the two-bag litter picking method. With no alternative place to leave litter there is a clear risk that users will merely deposit their litter in an on-street bin that is emptied by the Cleansing Services in the Department of the Built Environment (DBE), thereby displacing the problem - and cost - onto another department.
14. This option also conflicts with the recommendation of the 2010 Cleansing report (see paragraph 3 above). This is therefore not the recommended option.
15. **Option 2** – enter into an agreement with Cleansing Services to arrange for City Gardens’ bins to be emptied by Enterprise, the Cleansing term-contractor. Although this could be achieved either through an inter-departmental recharge or by a transfer of budget from Open Spaces to DBE, the substantial cost (circa £55,000 per annum) on top of the recent budget reductions would, in all likelihood, mean a reduction in the number of staff in the City Gardens team. Also, this option does not address the other key objective which is to increase recycling rates within the City Corporation. Option 2 is therefore not the recommended option.
16. **Option 3** – to replace all existing bins with *Renew* recycling bins. *Renew* are the company responsible for installing the large, rectangular on-street recycling units that have media screens on each end panel. Although *Renew* install these at no cost, they only place the bins where there is a high pedestrian footfall and a readily-available supply of electricity. Although gardens like St Paul’s and Finsbury are of some interest to *Renew* other, quieter gardens are not. Also, the appropriateness of a media screen in a garden where people go for peace and tranquillity can be questioned. Option 3 is therefore not recommended.
17. **Option 4** – remove bins from one garden, or a group of smaller gardens, and replace these with recycling bins to act as a trial area that could be closely monitored to ascertain impact before rolling out City-wide.

Although this may seem the most sensible approach, work undertaken by Cleansing Services has already demonstrated that there is a desire among City workers and visitors to use recycling facilities where provided. In light of this evidence we can feel confident that this project on any scale would be supported. However this option would not recognise the scale of savings necessary in the timeframe required. This is therefore not the recommended option.

18. **Option 5** – remove all 27 ‘blast-proof’ bins from the City Gardens and replace them with Envirobank 140L recycling bins. A waste audit has been undertaken of the contents of the garden bins and this has shown that contamination levels are currently around 10-15%. This demonstrates that contamination is already approaching a level that is acceptable to the MRF (tolerance <5% contamination).
19. The majority of our users display a responsible attitude in not dropping litter instead preferring to recycle or to take their litter back to their offices. By offering them a recycling option that reduces the likelihood of contamination, it should be possible to increase recycling rates.
20. Furthermore, it is possible to generate income from recycled materials, assuming they are of a sufficient quality. Although this would be a welcome source of income to help offset expenditure, this cannot be relied upon as reclamation costs vary and are entirely dependent on market demand for recycled materials. What is clear is that this option will help reduce City Gardens’ waste handling fees without the need to increase the labour resource on the ground. It will also contribute toward achieving the City Corporation’s recycling target (40% of total waste). Option 5 is therefore the recommended option.

Proposal

21. It is proposed that all 27 existing City Gardens’ litter bins are placed in storage from January 2013 for 12 months.
22. The key to making this trial a success is to ensure that the garden users understand what we are trying to achieve and why. Therefore, from November 2012 onward we will:
 - Implement an educational poster campaign. A range of posters will be displayed on noticeboards, at garden entrances, on City Gardens’ fleet vehicles and distributed to local businesses. These will be both positive – explaining the costs to the City and what we are trying to achieve – as well as illustrating the punitive measures available to the City through enforcement (akin to the ‘no ifs, no butts’ campaign undertaken by Cleansing Services).

- Hold team briefings to ensure that staff are able to communicate the corporate message. A list of frequently asked questions (FAQs) will be drawn up and set responses provided to staff and for posting on our web pages. Providing staff with the customer-handling techniques and positive FAQ responses to any negative comments they may have levelled at them will be key to ensuring that they are suitably equipped to provide measured and professional responses.
 - Starting immediately, spread the message through our web pages, 'What's New' newsletter and dissemination to our contacts list, friends groups, St Paul's Cathedral, Churches and volunteers in order to foster positive engagement.
 - Emphasize the advantages of the proposal to the public, i.e. increased recycling will mean greater savings that will be spent on garden improvements.
 - Continue to engage with Cleansing Services to support them in an enforcement campaign and monitor recycling rates.
23. Investment in research and development is resulting in rapidly changing technology in this field. Whilst this report was being written, Cleansing Services have found and are trialling a new recycling bin, the "Big Belly". Big Belly is a solar-powered mini-compactor, similar in size to the blast-proof bin but able to contain 4 times as much waste. It also contains a chip that emails City Corporation officers when it reaches 80% capacity, enabling Cleansing Services to empty the bin before it overflows. In working closely with the Cleansing team, it is proposed to incorporate new developments in technology into the City Gardens trial, and report the findings to this Committee upon the conclusion of the trial.

Corporate & Strategic Implications

24. The proposal outlined in this report supports key objectives within the Municipal Waste Strategy for the City of London 2008-2020, notably:
- To minimise the amount of waste produced in the City through education and awareness raising;
 - To maximise on street recycling.
25. The proposal also supports key objectives within the Open Spaces Department Business Plan 2012-2015:
- Under *Quality* – achieve nationally recognised standards and deliver value for money in providing our Open Space service;
 - Under *Environment* – ensure that measures to promote sustainability, biodiversity and heritage are embedded in the Department's work.

Financial Implications

26. Washing-down and maintenance costs of any new bins will remain broadly in line with current expenditure. However the preferred option does require a one-off capital investment of £11,583. It is proposed that this be funded from City Gardens' local risk revenue budget.
27. Assuming the proposal is able to produce an increase in recycled waste of 50%, the projected savings from this option would be £13,800 ongoing, meaning that the project would be self-financing within one year. However it is recognised that any saving in real terms will reduce over time as waste handling costs continue to rise.

Other Implications

28. In order to avoid the risk of displacement, i.e. inadvertently causing an increase in waste placed in on-street bins managed by Cleansing Services, or 'abandonment' of litter in and around the gardens, we will be undertaking a coordinated approach to litter management throughout the trial period, closely monitoring any fluctuations in the waste figures of both departments.
29. DBE is also currently seeking ways in which to increase the City Corporation's recycling rates, with which this project should assist.
30. There is also a potential risk to the City's reputation should the project fail; increased amounts of 'abandoned' litter creating additional pressure on resources to clear the gardens within a reasonable timeframe. Increased site checks and waste monitoring will seek to minimise this risk.
31. If the trial proves unsuccessful and we are not able to reduce contamination of recyclables to an acceptable level, traditional litter bins will have to be reinstated in the gardens and waste disposal would continue to be a substantial burden on City Gardens' resources and alternative future savings would need to be investigated.

Conclusion

32. Litter collection and disposal takes up a significant resource within the Open Spaces department. In order to see if this can be reduced without impacting on other departments, and to help increase recycling rates, the City Gardens team will trial the replacement of all existing litter bins with recycling bins over the course of a year, gathering data in order to enable like for like comparison with previous years. The results of this trial will then be reported back to this Committee along with cost savings and any lessons learned.

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Background Papers

Report to Port Health and Environmental Services Committee 21 September 2010

Appendices

Appendix 1 – Schedule of litter bin locations within City Gardens’ sites

APPENDIX 1**Litter Bin Locations within the City’s Open Spaces**

Garden	Number of litter bins
Dunstan’s in-the-East	2
Seething Lane Garden	1
Portsoken Street Garden	2
St Magnus the Martyr	1
Postman’s Park	2
St Paul’s Cathedral	3
West Smithfield Rotunda Garden	1
St Bride’s, Fleet Street	2
St Dunstan’s in-the-West	1
St Andrew’s Garden, Holborn	1
Finsbury Circus	5
Christchurch Greyfriars West	1
St Botolph’s without Bishopsgate (garden)	1
St Peter’s Westcheap	2
Barber Surgeons Garden	1
Jubilee Garden	1
Total	27