The impact of Love Food Hate Waste

Following a Love Food Hate Waste campaign in West London avoidable food waste decreased by 14% in just six months. The reduction in food waste overall could save the Boroughs of West London around £1.3 million pa in disposal costs (including gate fees and landfill tax).

Between October 2012 and March 2013 Recycle for London (RfL) delivered a pan-London Love Food Hate Waste campaign supported by local Borough activity. The Greater London Authority (GLA) and WRAP worked in partnership to deliver the RfL programme, funded by the London Waste and Recycling Board (LWARB).

One of the local campaigns was carried out in the six Boroughs of the West London Waste Authority (WLWA) area. This campaign provided an opportunity to further understand the impact of Love Food Hate Waste in reducing food waste and funding was available from Defra to monitor changes in behaviours and food waste levels.

The campaign included radio, digital and print advertising along with supporting PR activity, events and community engagement such as cookery classes and engagement through a network of volunteers.

The full research report can be found at www.wrap.org.uk. Read on to find out more...
About

In 2012 / 13 RfL developed and ran a London-wide Love Food Hate Waste campaign, in response to the volume of food wasted by London households and the costs associated with its disposal.

In London alone, an estimated 890,000 tonnes of food is thrown away per year, of which 540,000 tonnes is avoidable. The cost to London Boroughs of reprocessing/disposing of this food waste is estimated at over £50million per annum. It costs consumers £1.4billion per year to purchase the food and drink thrown away in London, and generates the equivalent of 2.1 million tonnes of CO₂e.

The campaign and approach were developed using the ‘4 E’s’ behavioural change model: enabling people to make a change; encouraging action, engaging in the community and exemplifying what’s being done by others. MINDSPACE, a checklist for behaviour change\(^1\), was also used.

Activity was delivered on three levels, each aimed at contributing to the impact of the campaign in London:

- National activity – delivered in line with the national Love Food Hate Waste campaign calendar including activity from Love Food Hate Waste partners (WRAP).
- London-wide – awareness raising activity (enabling, exemplifying and encouraging) in line with key bursts of national activity (GLA).
- Local / community engagement – communications activity at a Borough level and community engagement activity supported by the volunteering sector (WLWA and WRAP).

Based on national research, which shows that saving money is the main motivator in encouraging consumers to reduce food waste, the core message of the London campaign was ‘You could save up to £50 per month by throwing away less food.’

London wide activity followed key themes from the national campaign including “Harvest and water”, Christmas & New Year and “Fresher for Longer”. Above the line advertising included radio adverts (November 2012), digital adverts and London underground posters and Metro advert (January 2013), and encouraged consumers to visit lovefoodhatewaste.com.

Three London wide events were held to generate PR; the “Food Waste Challenge” (November 2012), the “Alternative Valentines Banquet” (February 2013) and the “Feaster” banquet (March 2013). The latter

\(^1\) MINDSPACE: [http://www.instituteforgovernment.org.uk/sites/default/files/publications/MINDSPACE.pdf](http://www.instituteforgovernment.org.uk/sites/default/files/publications/MINDSPACE.pdf)
events were delivered in partnership with partner organisations and used surplus food to create three course meals for diners.

London specific pages were created on the national LFHW website, and events held in London were listed on the national website events page. RfL and LFHW used social media channels to support activity and engage with the target audience.

All London Boroughs were involved in the London campaign, either individually or through their waste disposal authorities. The level of activity carried out locally varied from Borough to Borough and included vehicle livery, advertorials in Borough magazines and local newspapers, cookery skills workshops and demonstrations, social media, council websites and local PR.

LFHW and RfL worked alongside Greater London Volunteering to recruit and train volunteer Food Waste Champions in local communities across the city. Volunteers were fully trained in LFHW messaging through WRAP’s cascade training programme and supported to cascade messages into their local communities. This enabled the campaign to reach a wider audience and to encourage behaviour change at a local level. Food Waste Champions generated a total of 11,839 volunteer hours across the whole of London, which had an economic value of £185,514.

One area of London was monitored to help measure the impact of a comprehensive LFHW campaign.

**Measuring the impact of a comprehensive Love Food Hate Waste campaign**

The work of WRAP and its partners (including the LFHW campaign), increasing food prices and difficult economic conditions have all helped to reduce the amount of food wasted from our homes, but determining the extent to which each of the various factors have played a role is extremely challenging. WRAP wished to provide further evidence for its partners about the impact of running a comprehensive LFHW campaign.

West London was selected for this research due to the level of internal resource (both staff and funding) that the West London partners could dedicate to the campaign project; this combined with RfL support meant that there was a comprehensive campaign with a wide range of communications activity delivered across the area, which was required for the evaluation (a minimum level of activity and behaviour change is needed to be able to measure its impact). The Boroughs of West London were keen for this evaluation research to take place. RfL provided funding and advisory support for the communications activity and WLWA also contributed significant internal resource to the project. In addition to direct funding support

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1 Using the Volunteering England formula for calculating the economic value of volunteering (number of volunteers X average hours worked X average hourly rate) and the average hourly wage for London of £15.67.
from RfL, West London also benefited from targeted volunteer coordinator activity. This involved recruiting and training Food Waste Champions within communities and encouraging them to cascade practical messages about how to reduce food waste and save money to their own networks.

The research had two principal elements:

- Measuring any changes in the amount of food waste generated by West London households using waste compositional analysis; and
- Investigating changes in attitudes, awareness or behaviour relating to household food waste using a quantitative questionnaire survey (household interviews).

The campaign

Activity in West London focused on raising awareness of the issue of food waste locally, offering simple everyday solutions and community engagement to influence relevant behaviours. Activities were planned to amplify the impact of the national and London wide activities. Activities during the campaign period included:

- **Local radio adverts** – radio adverts placed on LBC Radio in January 2013, followed by adverts on Radio Jackie, Hayes FM and Sunrise Radio in March 2013. The minimum reach of these adverts is estimated to be 1.1million people
- **Let’s Get Cooking Clubs** – 28 Let’s Get Cooking Clubs were set up across West London, engaging 800 people. The purpose of the Clubs is to provide practical cookery skills and information to enable people to make the most of the food that they buy.
- **Internal communications** – targeting staff within the Boroughs of West London through internal magazines and the intranet at key points throughout the year. This activity took place in Ealing, Hounslow and Harrow, and targeted 9,000 staff members.
- **Social media** – WLWA delivered an on-going programme of social media, communicating directly with residents about LFHW (99 LFHW related tweets were put out by WLWA with 61,859 opportunities to see for WLWA followers and 138,519 retweets).
- **Local online advertising** – LFHW digital adverts included on the websites for local news, linked to the LFHW website to direct people to the national campaign (113,634 page impressions with 609 people clicking on the link and following through to LFHW.com)
- **Website** – the WLWA website included local and targeted information about LFHW including 9 comprehensive articles and a direct link to the national website.
Janice Weir a Food Waste Champion said "At Foodtruly Ltd, our customers have said that LFHW is more than just an education, it’s a journey into the culinary unknown and very exciting really especially knowing we can go to a website and create recipes. We also waste less food so the savings are spent on family outings."

Press Adverts and Advertorials in the local press/Borough magazines – half page adverts were placed in 4 of the Borough magazines, with half page adverts placed in the local press for the other two Boroughs (for which Borough magazines were not available). This activity was delivered in October 2012. A further round of press adverts ran in January 2013 across local press and one Borough magazine. The local newspaper and Borough magazines would have reached 689,445 people.

- **Vehicle livery** – LFHW vehicle livery on eight refuse vehicles in the London Borough of Harrow.
- **Posters** – posters were displayed in local shops and community noticeboards to promote key messages.
- **Bus and outdoor adverts** – 75 bus-back adverts were displayed for a period of 8 weeks (53 of these remained on until January) from October 2012. Twenty four 6-sheet adverts were placed across the six Boroughs for a period of two weeks during October 2012 as well as ten 4-sheet adverts for 4 weeks.
- **European Week of Waste Reduction (EWWR)** – local zero waste challenge run by WLWA challenged local residents to reduce their food waste
- **Community Engagement activity** – WLWA delivered fifty events and community talks, directly engaging 900 residents, providing information primarily about food waste prevention but also included how to recycle the food they couldn’t use
- **PR** – regular press releases to support local and London wide activity supported by national PR to help raise awareness
## Costs

<table>
<thead>
<tr>
<th>Support</th>
<th>Total direct funding</th>
<th>Funding per HH in West London (601,000HH)</th>
</tr>
</thead>
<tbody>
<tr>
<td>West London proportion of London wide activity</td>
<td>£17,798</td>
<td>0.03p</td>
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<tr>
<td>West London proportion of volunteer network</td>
<td>£26,545</td>
<td>0.04p</td>
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<tr>
<td>West London funding from RfL</td>
<td>£51,760</td>
<td>0.09p</td>
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<tr>
<td>WL WA funding(^3)</td>
<td>£72,369</td>
<td>0.12p</td>
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<tr>
<td><strong>Total</strong></td>
<td><strong>£168,472</strong></td>
<td><strong>0.28p</strong></td>
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## Return on Investment per annum

<table>
<thead>
<tr>
<th>Investment</th>
<th>£168,472</th>
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<tbody>
<tr>
<td>Savings in disposal costs to Boroughs of West London</td>
<td>£1.3 million(^4)</td>
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<tr>
<td><strong>RoI for LA savings</strong></td>
<td>For every £1 invested West London Boroughs saved up to £8(^8)</td>
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<tr>
<td>Savings to Residents</td>
<td>£14.2 million(^6)</td>
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<tr>
<td><strong>RoI for consumer savings</strong></td>
<td>1:83</td>
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<tr>
<td>Economic value from Food Waste Champion volunteer hours</td>
<td>£21,507</td>
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<td><strong>Total savings</strong></td>
<td><strong>£15.5 million</strong></td>
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## Results and Impact

- The results from the composition analysis showed a statistically significant reduction of 0.4 kg per household per week - a 15% reduction in food waste - between the pre- and post-campaign analyses. The majority of this reduction is a result of decreases in food waste in the residual waste stream.
- Avoidable food waste decreased by 14% during this time.
- For households who reported that they were aware of the campaign and other food-waste messaging and claimed to be doing something different as a result (14% of the total number

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\(^3\) combination of direct funding and staff time equivalent

\(^4\) It should be noted that the disposal charge during the period of the campaign was £93 a tonne. The current disposal charge is £106.50 and has been used for the purposes of this report; based on reductions in total collected food waste.

\(^5\) Saving divided by Investment =£1,315,275/£168,472=7.8 = 1:8

of households), the reduction in avoidable food waste was 43%, a statistically significant change. The reduction in total food waste was 35%.

- Importantly the campaign successfully encouraged people to change key targeted behaviours which then reduced their food waste. A range of behaviours were monitored to give an indication of behaviour change in West London including planning meals in advance; checking levels of food in cupboard and fridge prior to shopping; making a shopping list; using the freezer to extend the shelf life of food; storing meat and cheese in appropriate packaging or wrapping; storing fruits and vegetables in the fridge; using up left-overs; portioning rice and pasta; and using date-labels on food. These behaviours cover a large proportion of the activities that could reduce food waste and are broadly applicable to the majority of households in the UK. Although this is not an exhaustive list, the behaviours act as a proxy for wider behaviours (e.g. storing apples in the fridge, thereby increasing shelf life, is used as a proxy for storing other fruit in the fridge) and can be seen as an indicator of real behaviour change.

- If the decrease in collected food waste is scaled up to all households in the six Boroughs of West London it is equivalent to a reduction of 12,350 tonnes per annum for all food waste and 5,250 tonnes per annum of avoidable food waste.
  - Residents of West London would have saved approximately £14.2 million per year not buying the good food and drink which was then wasted.
  - The greenhouse gas emissions associated with the reduction of avoidable food and drink waste is equivalent to 20,000 tonnes of CO₂e prevented.
  - With landfill tax currently £72 per tonne the reduction in avoidable food waste would offer savings of almost £378,000 in landfill tax and assuming a total disposal cost of £106.50 per tonne such a reduction would save the Boroughs of West London £559,000 per annum in disposal costs (including gate fees and landfill tax). The reduction in total disposal costs for all food waste in West London would be up to £1.3 million.

- The 14% reduction in avoidable food waste relates to 0.17 kg / hh / week. Scaling this up to the whole of London for a year (based on 3.33 million households) gives 29,400 tonnes of avoidable food waste. Using the figure of £2,700 per tonnes of avoidable food waste leads to £79 million cost saving to residents. The cost saving to LAs from avoided disposal costs (£106.50 per tonne) could be up to £7.3m for total food waste.

- It is estimated that Food Waste Champions generated a total of 1,373 volunteer hours across West London, which had an economic value of £21,507.

It should be noted that that the campaign will have mainly affected avoidable food waste: the campaign did not focus on behaviours or decisions relating to the unavoidable fraction of food waste (e.g. teabags,

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7 These reductions are significant at the 95% confidence level.
8 Guide to monitoring food waste impact: Love Food Hate Waste partners site http://partners.lovefoodhatewaste.com/resources/monitoring_love_food.rma
9 68,000 tonnes
meat and fish bones, banana peel etc). Results given are those from a representative sample of households in West London. However, a proportion of the reduction could be related to the research effect, whereby the act of being interviewed has an influence on behaviours and waste levels. Therefore the results presented should be seen as an upper limit on the impact of this campaign.

Sarah Ellis, West London Waste Authority "Whenever we talk to our residents at events they’re always amazed by the Love Food Hate Waste tips we can give them. We know they’re interested and take away at least one thing they can do so we’re really pleased with the results of this campaign. Not only will our residents benefit individually by saving money on their shopping they’ll benefit collectively too from the reduction in disposal costs. Reducing total food waste by 15% also gives us a solid business case to continue promoting LFHW."

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