Introduction

Herefordshire and Worcestershire Councils submitted a joint bid to WRAP in 2008 and received funding to deliver a local Love Food Hate Waste (LFHW) campaign running from November 2008 through to the end of March 2009. The aims of the campaign were to raise awareness of the need to reduce food waste, reduce the level of food waste being sent to landfill and help residents to save money. The campaign objectives were:

1. to increase the percentage of committed food waste reducers in Herefordshire and Worcestershire by 10% from October 2008 to April 2009; and

2. as a result of Objective One, to divert 2,340 tonnes of food waste from landfill by April 2009.

Background to campaign

The Herefordshire and Worcestershire councils work together to promote waste prevention, reuse and recycling throughout the counties. The results of a waste composition analysis reinforced a need to focus on reducing food waste, and to aid households in doing this. The concurrent media coverage of the ‘credit crunch’ highlighted food waste reduction as a good way of encouraging people to save themselves money. Food waste reduction links well with action on climate change because wasted food represents wasted emissions from all stages of food production, transport and storage; and decomposing food in landfill generates methane. Worcestershire County Council has been awarded Beacon Authority Status for its work on tackling climate change.

Key Facts

- Campaign spend was 29p per household at a total cost of £90,000.
- A door to door engagement approach (‘doorstepping’) was trialled as part of the campaign but results indicated this to be less effective than other engagement methods such as roadshows and the Women’s Institute Love Food Champions project.
- Committed Food Waste Reducers (a metric used to monitor the impact of food waste reduction initiatives) rose from 13% to 23% in 5 months.
- An estimated 2,340 tonnes of food waste was diverted from landfill during the year following the campaign.
- The cost of the campaign was equivalent to £38.46/tonne in 2008/09 and is likely to reduce to £16.02/tonne over 3 years (2008/09-2010/11); this is less than the cost/tonne of disposing of food waste to landfill.
- In 2008/09, the net saving (avoided disposal costs) was over £24,000, and total net savings are estimated at £220,000 for the period 2008/09-2010/11.
- Recognition of the LFHW brand increased amongst residents from 10% in the pre-campaign survey to 21% post-campaign, and awareness of the campaign similarly rose from 23% to 40%.
About Herefordshire and Worcestershire

- There are 309,000 households across the two counties.
- Herefordshire and Worcestershire are largely rural with centres of population in Hereford and Worcester cities and a number of small to medium towns.
- Herefordshire is a unitary authority. Within Worcestershire there are seven local authorities (Worcestershire County Council (Waste Disposal Authority), Bromsgrove District Council, Malvern Hills District Council, Redditch Borough Council, Worcester City Council, Wychavon District Council and Wyre Forest District Council).
- In 2008/09 Herefordshire had a recycling and composting rate of 33% and Worcestershire 42%.
- One of the councils, Wychavon, operates a food waste collection which was rolled out during the LFHW campaign period.

The Approach

The campaign was led by Herefordshire Council and Worcestershire County Council, working in partnership with the six waste collection authorities. Local and countywide activities were planned, some of which were run by individual authorities and others jointly.

All households within the two counties were part of the promotional campaign but households with children were a particular focus. The campaign was a mix of advertising, community engagement, and PR. This included:
- billboards - 11 billboards for 4 weeks;
- bus advertising - bus back/sides;
- door to door engagement trial (21,700 households visited and 7,000 canvassed);
- editorials - articles in district magazines and staff newsletters
- campaign launch with accompanying press opportunity;
- 20,000 leaflets printed for roadshows and events;
- posters in community locations;
- press adverts - 7 x 1/2 page press adverts x2 (Nov 08 and Jan 09);
- PR local links - press articles;
- pull up banners for roadshows and events;
- radio advertising - 4 weeks radio advertising using the national Love Food Hate Waste radio ads; and
- over 30 roadshows – residents were asked to fill in a food waste questionnaire and in return they could take away a free prize e.g. branded jute bag, recipe cards. The questionnaires provided the councils with useful information to base their future work on.

A door to door engagement trial was carried out as part of the project. Eight ‘Food Champions’ spoke to residents on their doorsteps about the issues of food waste and offered them hints and tips to help them to waste less food, tailored to each conversation. The Acorn classification model was used to ensure a representative sample of households was visited across the two counties during the door to door engagement and the pre- and post-campaign surveys undertaken as part of the campaign monitoring process.
Results/Conclusion

The percentage of Committed Food Waste Reducers increased from 13% to 23% in 5 months, meeting Objective One (a 10% increase in CFWRs). In turn this meant Objective Two was achieved as the total estimated tonnage diverted by campaign was 2,340 tonnes at a cost of £38.46/tonne [2008/09]. Based on the cost of landfilling waste in 2008/09 (£54/tonne)\(^1\) this equates to a net saving (avoided disposal cost) of over £24,000. This is expected to increase to over £220,000 over three years (2008/09-2010/11)\(^2\). This would reduce the campaign cost to £16.02/tonne avoided.

The pre- and post-campaign surveys also established the following:

- Campaign awareness increased from 23% to 40%.
- Over 70% of those who were aware of the campaign felt that it was informative; over 50% felt it provided useful tips and practical advice; 45% felt that the campaign made them more reluctant to throw food away.
- There was a large increase in recall of the LFHW message from council publications (24% to 42%) and on billboards & other outdoor advertising (8% to 15%).
- Residents referred frequently to supermarket roadshows held by council staff as being positive and informative.

Local media and local authority publications covered the campaign very successfully. Following liaison between officers and journalists the local press attended a number of road shows which resulted in articles and pictures in the local papers. During the campaign a number of stories about the door to door engagement trial appeared in the national media but these were not accurate reflections of what was happening on the ground and there is no evidence that this media coverage had any impact on delivery of the campaign locally.

The door to door engagement element of the campaign had been included to test whether this communication method, which has been used successfully in many areas to explain recycling services to residents, could be a useful technique for waste prevention. In fact 26% of respondents to the post-campaign survey stated that they had been visited by a food adviser. As shown in Table 1, of those who stated they had been visited only 6% felt they threw away less food waste and a further 2% said they threw away much less.

Since your visit from the food waste adviser, would you say that the amount of uneaten food that you or your household throws away has increased, decreased or stayed the same? Do you...

<table>
<thead>
<tr>
<th>Response</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Throw away much more now</td>
<td>0%</td>
</tr>
<tr>
<td>Throw away slightly more now</td>
<td>1%</td>
</tr>
<tr>
<td>Throw away the same amount</td>
<td>91%</td>
</tr>
<tr>
<td>Throw away slightly less now</td>
<td>6%</td>
</tr>
<tr>
<td>Throw away much less now</td>
<td>2%</td>
</tr>
<tr>
<td>Don’t know/ can’t remember (unprompted)</td>
<td>0%</td>
</tr>
</tbody>
</table>

Table 1 - Effect of visit from a food waste adviser on respondents’ food waste arisings

“Many people we spoke to claimed not to waste food, perhaps because it is felt to be socially unacceptable, whereas the WRAP research\(^3\) found that almost everyone throws some food away. Although people were often happy to discuss food waste in general they were reluctant to talk about their own barriers to reducing food waste at the doorstep.”

A Herefordshire and Worcestershire Food Champion

The proportion of CFWRs (23%) in the post-campaign survey sample was very similar for those visited and not visited by a food waste adviser. This suggests, although does not prove, that the door to door engagement was not key to the increase in CFWRs; however it should be noted that the pre- and post-campaign survey responses were not necessarily from the same households and therefore other effects could explain this similarity.

Despite the campaign’s overall success, door to door engagement appears to be an inefficient method of directly engaging with members of the public regarding food waste. Reducing food waste involves more complex behaviours than recycling and it has been -

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2. See Note on avoided disposal costs (pg 5) for explanation of calculation.
3. WRAP (2007) The Food We Waste
Local Authority waste prevention case study: Hampshire

found that working with partner organisations such as established civil society groups using a team of food waste advisers is more successful, as in the Women’s Institute (WI) Love Food Champions project.

Herefordshire and Worcestershire councils are now developing the campaign through enhanced community engagement using their established network of Master Composters and through local groups such as Children’s Centres.

**Key Learning Points**

- Direct one to one engagement to help people waste less food is a positive and effective method of communicating at a local level. Door to door engagement appears to be inefficient. Working with local groups who wish to save money and waste less food is more cost effective and is preferred.
- Since the campaign Herefordshire and Worcestershire are continuing to promote LFHW and its messages, working with their local Children’s Centres and expanding the remit of their successful Master Composter programme.

The net disposal saving over 3 years (see Table 2) has been calculated using the cost per tonne for disposal to landfill and allowing for the year on year increase in landfill tax. It allows for an assumed year on year drop off rate of 20% of the original tonnage saved so that 6 years after the campaign no additional tonnage diversion is attributed to the campaign (i.e. the number of CFWRs will have reduced to pre-campaign levels). This assumption is conservative and drop off rates may well be less that 20%, resulting in higher tonnage diversion and associated financial savings.

**Note on Monitoring and Evaluating Food Waste Programmes**

WRAP initiated a review of its committed food waste reducer metric in 2009. This metric was made up of three questions relating to a self-reported estimate of food waste generated; how bothered by food waste the respondent is; and how much effort to minimise food waste the respondent goes to. In late 2009, this started to show anomalous results – the proportion of CFWRs was decreasing, but levels of behaviours that reduce the amount of food waste (e.g. planning meals) were increasing. These anomalies were most likely the result of people doing more to tackle food waste, but building it into their daily routine, so not feeling that they make a special effort towards reducing food waste; becoming less bothered by food waste as they produce less of it; and making more accurate assessments of the quantities of food that they do waste as they become more aware of what they throw away.

**Note on avoided disposal costs**

<table>
<thead>
<tr>
<th></th>
<th>2008/09 (Year 0)</th>
<th>2009/10 (Year 1)</th>
<th>2010/11 (Year 2)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Estimated tonnes reduced</td>
<td>2340</td>
<td>1872</td>
<td>1404</td>
</tr>
<tr>
<td>Cost of disposal to landfill/tonne (W Midlands average)</td>
<td>£49</td>
<td>£57</td>
<td>£65</td>
</tr>
<tr>
<td>Gross saving in disposal costs</td>
<td>£114,660</td>
<td>£106,704</td>
<td>£91,260</td>
</tr>
<tr>
<td>Initial investment (campaign cost)</td>
<td>£90,000</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Net disposal saving</td>
<td>£24,660</td>
<td>£106,704</td>
<td>£91,260</td>
</tr>
<tr>
<td>Net disposal saving over 3 years</td>
<td><strong>£222,624</strong></td>
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*Table 2 - Disposal savings resulting from food waste tonnage diverted from landfill due to an increase in CFWRs*

Further analysis of existing datasets (which were not available when the metric was developed) showed only a weak link between the quantity of food waste generated by a household and either their stated level of effort or ‘botheredness’. However, a strong link was found between stated levels of food waste generated and measured levels of food waste. This new evidence indicated that an improved method for monitoring the impact of household food waste reduction programmes was needed.

Going forward WRAP recommends using a survey to monitor self-reported levels of food waste where compositional analysis (which is the most accurate method) is not feasible. WRAP is refining the recommended self-reported question but in the meantime the following question should be used both before a campaign and afterwards:

“Thinking about the different types of food waste we have just discussed, how much uneaten food, overall, would you say you generally end up throwing away? – Quite a lot, A reasonable amount, Some, A small amount, Hardly any, None, Don’t know”.

The original CFWR metric is still valid for those authorities who have already carried out monitoring or are midway through. For further information about monitoring your local Love Food Hate Waste campaigns please contact LAartwork@wrap.org.uk.

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Big Spaghetti Bolognese Sauce

1. Dry fry the mince in a large saucepan until brown. Add the tomato puree and herbs, and cook over the heat for 1-2 minutes. Add the onion, carrots and water or stock, and simmer until the meat is almost cooked, about 20-30 minutes. Add the peppers and mushrooms and cook for a further 10 minutes. Season well.

2. Divide the Bolognese sauce, keep half in the pan and spoon half into a dish or bag for freezing.

3. Meanwhile, cook the spaghetti in boiling water for about 10 minutes, drain and add the spaghetti to the meat sauce which stops it from going sticky, mix well together. Serve the spaghetti in bowls topped with grated cheese.

If you find yourself cooking too much spaghetti, try using a special spaghetti portioning tool.

Makes 2 meals for 2 adults and 2 children

900g minced beef
8 tablespoons tomato puree
2 teaspoons dried mixed herbs or a sprig of fresh thyme or rosemary
3 onions, peeled and finely chopped
4 carrots, peeled and finely chopped
1.2 litres water or chicken or lamb stock
3 red peppers, cored and finely chopped
350g button mushrooms sliced
300g spaghetti, broken into short lengths
350g any leftover hard cheese, such as Cheddar, Edam, Parmesan, grated

By Caroline Marson

Time saver
This recipe is quick and makes enough for a family meal today and one for the freezer.

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