

Save Water Swindon Phase 1 Evaluation

Final report, September 2012
Dani Jordan, Waterwise



Waterwise Project
Camelford House, 3rd floor
89 Albert Embankment
London SE1 7TP
United Kingdom
T: +44 (0)20 3463 2400
E: info@waterwise.org.uk
W: www.waterwise.org.uk



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Published by Waterwise, September 2012

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1 Executive Summary

Save Water Swindon, a partnership between Thames Water, Waterwise and WWF, was the first time that a 'whole-town' approach to water efficiency had been taken. Swindon residents were asked to take the '20 litre challenge', pledging to save water through behavioural changes or by installing free water efficiency devices.

During the first year of Save Water Swindon just under 900 home makeovers were completed, and 900 self-install kits were given out to residents of Swindon. In total nearly 6000 water saving devices were distributed and installed, resulting in estimated water savings of nearly 50,000 litres/day.

This evaluation report focuses on the first phase of Save Water Swindon which ran between June 2010 and June 2011, and aims to identify the achievements of this first year, creating a record of the project as well as ensuring that any lessons can be learnt and taken forward into future water efficiency programme planning. Some of the findings include:

- Home makeovers were prioritised in the first year of the project. While it appears that the motivations to have a home makeover or receive a self-install kit are similar, self-install kits do not encounter the same barriers as home makeovers.
- There were notably more devices on average provided during a home makeover compared to those given away in the self-install kits.
- Overall reaction to the devices was positive, with little variation between the devices. Hanging basket gels appear to be the favourite for both home makeover and self-install kit recipients.
- The estimated water savings indicate that home makeovers saved over twice the water of self-install kits per household.
- Perceptions of the water saved did not differ in the same way as the estimated savings. Overall, 56% and 60% of follow-up survey respondents felt that they had saved water after receiving a self-install kit or having a home makeover respectively.
- An encouraging number of follow-up survey respondents reported making positive behavioural changes. The behaviour reportedly changed by the largest number of residents is the length of time spent in the shower, with respondents trying to take shorter showers.

Insight provided by project team members raised practical considerations for future water efficiency initiatives, and drawn together with other information gathered for evaluation purposes is presented in the report in order to inform future activities. Overall recommendations are summarised below:

- **Target a receptive audience:** Selecting the correct audience to target is crucial, not only to project delivery but also to the success of evaluation activities.
- **Address common barriers in recruitment:** By addressing barriers in recruitment materials, and arming staff with appropriate responses, barriers that may otherwise have stopped someone from participating can be addressed immediately.
- **Optimise the feedback loop:** Clear lines of communication between the staff on the ground and the project manager are vital to ensure that new knowledge is optimised throughout the project.

- **Home makeovers over self-install kits:** Home makeovers are preferable as they offer certainty of installation, as well as providing the chance to install the products that offer the largest water savings, specifically the dual flush converter. Being in the home also gives the opportunity to engage directly with the resident.
- **Measuring product use and removals:** As far as is practicable, it is important to measure the extent to which products are used or removed following installation.

2 Introduction

In June 2010, WWF, Waterwise and Thames Water launched Save Water Swindon. The project aimed to raise awareness about the importance of saving water and deliver large-scale water savings. Through a communications campaign, letter mailings, road shows and other avenues, Swindon residents were asked to take the '20 litre challenge', pledging to save water through behavioural changes or by installing free water efficiency devices (either themselves or by a professional fitter). This was the first time that a 'whole-town' approach had been taken, with the first phase of Save Water Swindon acting as a pilot for later activities.

This report focuses on the first phase of Save Water Swindon which ran between June 2010 and June 2011, with the programme continuing to be taken forward by Thames Water after this date. The evaluation aims to identify the achievements of the first year of the project, as well as ensure that any lessons learnt can be taken forward into future water efficiency programme planning. This follow-up evaluation of Save Water Swindon examines the impact of the interventions, both water saving kits and home makeovers, in order to assess their impact on attitudes and behaviours where possible, as well as how products were received and later used.

The total cash budget for the project was £180,000, with contributions from Thames Water and WWF. As the cash budget was limited, a clear aim for project was to generate in-kind support, without which delivery of the project on the scale achieved would have been impossible. In-kind support was provided by Thames Water, Waterwise, WWF, Eaga, Swindon Borough Council, local supermarkets and others. The support ranged from installation of retrofit devices, call centre facilities, staff time on key aspects of the project (e.g. media and communications) and provision of office space and equipment, through to endorsement of the project and facilitation of promotional events such as road shows.

3 Approach and methodology

The evaluation was approached from a number of different angles, examining both qualitative and quantitative data. Project records and other data gathered throughout the project were drawn upon, as well as new information collected specifically for evaluation purposes. Below is a breakdown of the methods that were used to evaluate the first phase of Save Water Swindon.

Follow up survey

Questionnaires were sent to all households that received a home makeover or self-install kit as part of Save Water Swindon (up to March 2011). Slightly different surveys were sent to these two groups, as they were involved in the project in fundamentally different ways, and so different questions were necessary in order to maximise the usefulness of the data collected. This amounts to approximately 900 households that received a home makeover, and 900 that requested a self-install kit. The survey was conducted in January 2012.

A self-completion postal survey was used. The surveys were sent out in multiple mailing steps in order to boost response rates:

1. Survey pack sent (included survey, FAQs, cover letter, return envelope)
2. Reminder postcard sent to non-responders
3. Second survey pack sent to remaining non responders

Entry to a prize draw to win high street vouchers was also employed as an incentive to increase response rates.

A 41% response rate was achieved for the home makeover survey (366 responses), and a 26% response rate for the self-install kit survey (223 responses).

Product data

Data collected during each home visit was analysed in order to determine which products were fitted, and in what quantities. This information was presented in the form of frequencies.

Project staff interviews

Key staff from each of the partner organisations involved in Save Water Swindon were interviewed. These interviews asked the project staff to reflect on the first phase of Save Water Swindon but also focused on lessons that could be taken forward for the future. Eight telephone interviews were carried out, with each interview lasting approximately one hour. Interviews were recorded and transcribed verbatim. Detailed analysis was carried out on interview transcripts using the Framework Method¹. This is a systematic, transparent, rigorous theme-based approach to analysing qualitative data.

Project recruitment

Findings of an additional Resource Futures² report were synthesised with information available through project records (specifically how each individual involved in the project was signed up).

¹ Ritchie, J and Lewis, J (2003) *Qualitative Research Practice: A guide for Social Science Students and Researchers*. London: Sage.

² Recruitment specialist employed to boost uptake

Customer satisfaction

Satisfaction with the home makeovers delivered by Eaga³ was measured via a telephone survey they conducted. Sixty-one telephone interviews were conducted in May 2011 for the sole purpose of measuring customer satisfaction (full results can be found in the appendices). Results of the Eaga customer survey were presented as frequencies, alongside other relevant information gathered during the surveys.

3.1 Baseline activities

Baseline survey

Before Save Water Swindon was launched in 2010, a postal baseline survey was sent to over 2,500 household in the original target areas (although a 'whole-town' approach, efforts were to be focused on specific areas). The survey achieved a 46% response rate, with 1286 responses in all.

The original intention was to re-survey these same households at the end of the first phase; however Save Water Swindon evolved to focus on different areas of the town as uptake in the original target area was disappointing. Only a handful of the baseline survey respondents went on to have any involvement in the project. Some project team members highlighted the original area selection as problematic, with the initial target areas reportedly being made up of more affluent households who it was hoped would be interested in the energy measures being offered at a cost alongside the free water efficiency home makeover.

Due to the low take-up of home makeovers among baseline survey respondents, an alternative plan was devised for the follow-up, focusing on those that had received a home makeover or self-install kit. This revised approach allowed the survey to examine the impact of the intervention itself.

As the groups surveyed at baseline and follow-up were completely different, it was not possible to compare the results. The baseline survey results have been published separately.

Water logger data

It had been intended to examine water logger data as part of the evaluation process. As with the baseline survey, efforts were focused on the initial target area. Unfortunately only a small number of monitored households went on to take part in Save Water Swindon, too few to gain a valid understanding of any potential impacts on water consumption.

3.2 Limitations

A major limitation of the evaluation is the lack of measured water savings as a result of too few logged properties participating in the project. Assumed water savings have been reported based on the products given and installed, however this is not as accurate. In a similar vein, the small number of baseline survey respondents going on to take part in the

³ Contractor that delivered home makeovers

project meant that it was not possible to examine water using behaviour before and after the project, instead relying on recollection and self-reported change.

The usual limitations of surveys apply, particularly the possibility of non response bias. An additional limitation of the surveys is that the individual who completes the follow-up questionnaire is not necessarily the same member of the household who made the decision to sign up for a home visit, and so the survey results may not be a true reflection of any changes within a household.

4 Water saving home makeovers

In the first phase of Save Water Swindon, a total of **892 water saving home makeovers were completed**. A home makeover involved a professional installer fitting water efficient devices within a household. The devices on offer were:

- Dual flush converter
- Cistern displacement device
- Tap inserts
- Shower head
- Shower regulator
- Shower timer
- Hose gun
- Hanging basket gels

Which devices were installed within a particular household depended upon suitability, as well as the residents' preference.

The home makeovers were the primary intervention during phase one of the project, promoted over the self-install kit (see section 5) because of the increased certainty that a device had been installed and was therefore being used. Initially all home makeovers were carried out by Eaga installers. Later on an installer was employed directly by the project in order to allow instant appointment booking when recruiting face-to-face.

4.1 Recruitment

Households were recruited through a range of methods, including letters, door-knocking and road-shows. Project records detail the route via which each home makeover was requested, the details of which are shown in Table 1.

Table 1: Breakdown of route via which each home makeover was requested

| Method | Frequency | Percentage |
|---|------------|------------|
| Road-show | 391 | 43.8% |
| Door-knocking | 199 | 22.3% |
| Website | 75 | 8.4% |
| Warm Front scheme referral | 42 | 4.7% |
| Phoned into Thames Water call centre | 31 | 3.5% |
| Presentations (to local community groups etc) | 20 | 2.2% |
| Refer a friend prize draw | 7 | 0.8% |
| Telephone recruitment | 6 | 0.7% |
| Thames Water mail shot | 4 | 0.4% |
| Other | 117 | 13.1% |
| Total | 892 | |

Over 40% of home makeovers were requested at road-shows, where a stand was set up at a shopping centre, supermarket, library, community event or other location in order to directly engage with the public. A lot of time and effort was put into road-shows, as this was deemed by the project team to be the most effectual approach for continual recruitment, taking into account the limited resources available. The second largest group (22%) were recruited via door-knocking. Thirteen percent fall into the ‘other’ category, and there is no further information as to how these households were recruited.

In order to boost uptake of the home makeovers, Resource Futures, an organisation specialising in engaging the public, was employed for two weeks in October 2010. During this two week period nine road-show events were held and over 1300 properties were door-knocked, recruiting a total of 240 households (138 at road-shows, 102 through door-knocking).

It should be noted that these figures are indicative of how home makeovers were requested in the first phase of Save Water Swindon, but do not necessarily reflect the best recruitment methods for future projects; to do so it would be necessary to examine factors such as cost, resources and opportunities to recruit when comparing different methods.

4.1.1 Motivations to sign-up for a home makeover

The follow-up survey asked respondents why they had signed up to a home makeover (each respondent selected up to three reasons), the results of which are illustrated in Figure 1.

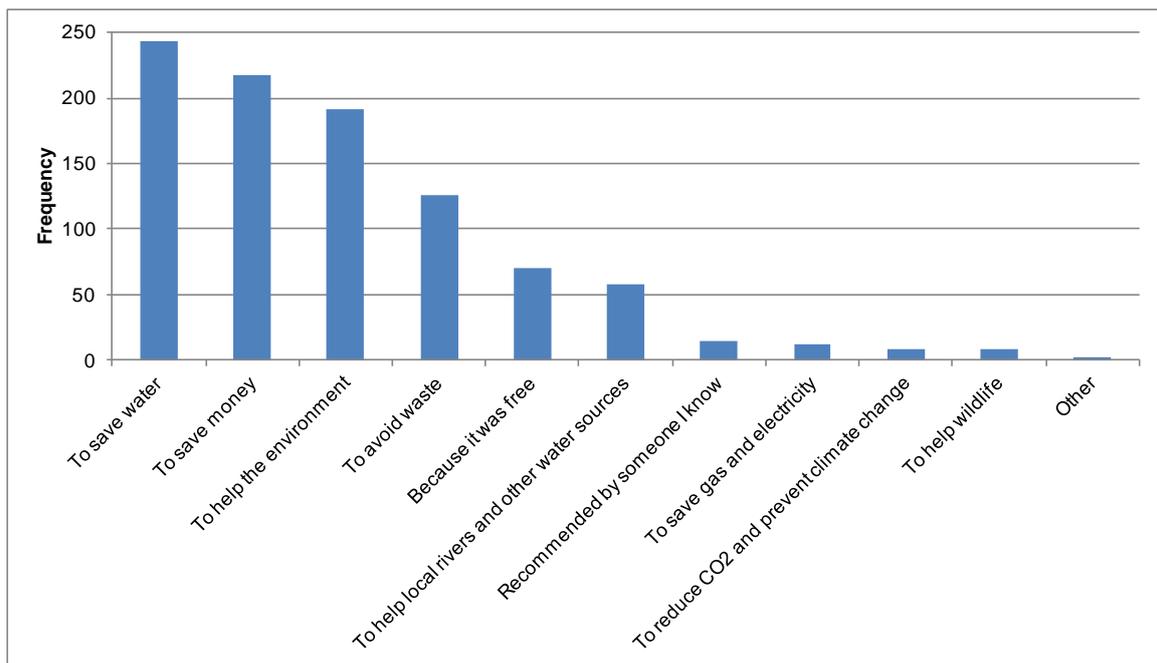


Figure 1: Motivations to request a water saving home makeover

Of the 372 respondents to the follow-up survey, 243 (65%) selected ‘to save water’ as one of the reasons, 217 (58%) selected ‘to save money’, and 192 (52%) ‘to help the environment’. ‘To help wildlife’ and ‘to reduce CO₂ and prevent climate change’ were the reasons selected by the fewest respondents, with each chosen 8 times (2% each).

4.1.2 Barriers to signing-up for a home makeover

Identifying common barriers helps shape future communications materials, as well as arming staff who are conducting face-to-face recruitment with possible responses. A range of barriers were identified through both the Resource Futures report and interviews with Save Water Swindon project team members:

- **I’m already water efficient.** Often people would say that they were already as efficient as they could be, and so there was no need to have a home makeover. This barrier was also recorded by Resource Futures as one of the most common barriers encountered on the doorstep.
- **What’s the catch?** People would often question why the home makeover was free, and were sceptical as to the motivations behind it.
- **It’s too much of a commitment and it’s inconvenient.** Having to arrange a time to be home to allow the installer in to complete the home makeover was asking too much for some.
- **I don’t understand what’s on offer.** Many Swindon residents had not come across the concept of retrofitting water efficient devices before, and so were uncertain of what could be expected.
- **I live in a rented property.** The most frequently encountered barrier for Resource Futures door knockers was that the property was rented, meaning the tenant could not make the decision about installation.

4.2 Customer satisfaction

Satisfaction with the home makeovers delivered by Eaga was measured via a telephone survey they conducted. Questions around satisfaction with the home makeover were also included in the follow-up survey, which took in responses from both Eaga visited homes as well as Save Water Swindon installer visited homes.

Both surveys indicate that overall satisfaction with the home makeover process was high, with 84% of the telephone survey respondents reporting that they were highly likely to recommend the home makeover to a friend. The majority of customers were happy with the time taken between initial contact and receiving the home makeover (72% from telephone survey, 87% from follow-up survey), as well as the available appointment times (89% from follow-up survey).

Customers felt the installer behaved professionally (93% satisfied from telephone survey), and were happy with the length of time taken to install the products in their home (90% from telephone survey). The information provided by the installers on both the products as well as other ways to save water was also satisfactory. Results from the follow-up survey are illustrated in Figure 2.

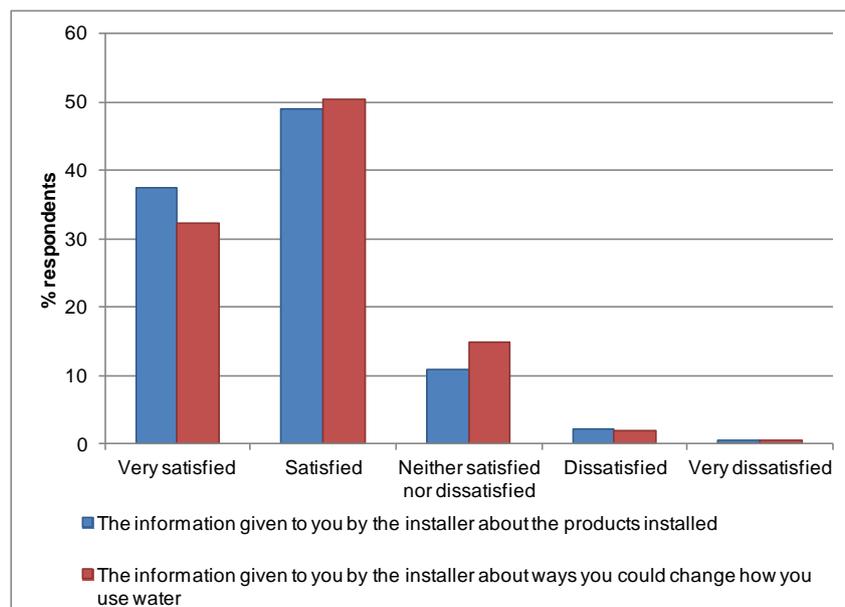


Figure 2: Satisfaction with information provided by installer

4.3 Devices

4.3.1 Devices installed

Installers fitted and/or provided different devices depending upon what was suitable for a particular home. Table 2 shows the total number of devices provided.

Table 2: Devices provided and/or installed during home makeovers

| Product | Frequency |
|--|-----------|
| Dual-flush conversion device | 251 |
| Cistern displacement device – Save-a-flush | 426 |
| Cistern displacement device – Hippo | 28 |
| Tap inserts | 224 |
| Kitchen swivel tap aerator | 47 |
| Shower regulator | 346 |
| Shower head | 66 |
| Shower timer | 547 |
| Hanging basket gel | 1199 |
| Hose gun | 210 |
| Total number of products | 3344 |
| Mean number of products per household | 3.75 |

4.3.2 Device likes and dislikes

Respondents to the follow-up survey were asked to rate how much they liked or disliked each of the devices they had been provided. Figure 3 gives details of the response by device. It is clear that the overall reaction was positive, with little variation between the devices. Hanging basket gels do, however, appear to be the clear favourite, with 91% liking them and only one respondent disliking them. Looking at what was disliked, a number of devices score similarly, with between 12% and 13% of respondents reporting not liking the toilet conversion kit, shower head, shower regulator, Hippo bag and Save-a-flush bags. Kitchen tap inserts fair slightly worse, with 15% disliking them or disliking them a lot, while also being the least liked device.

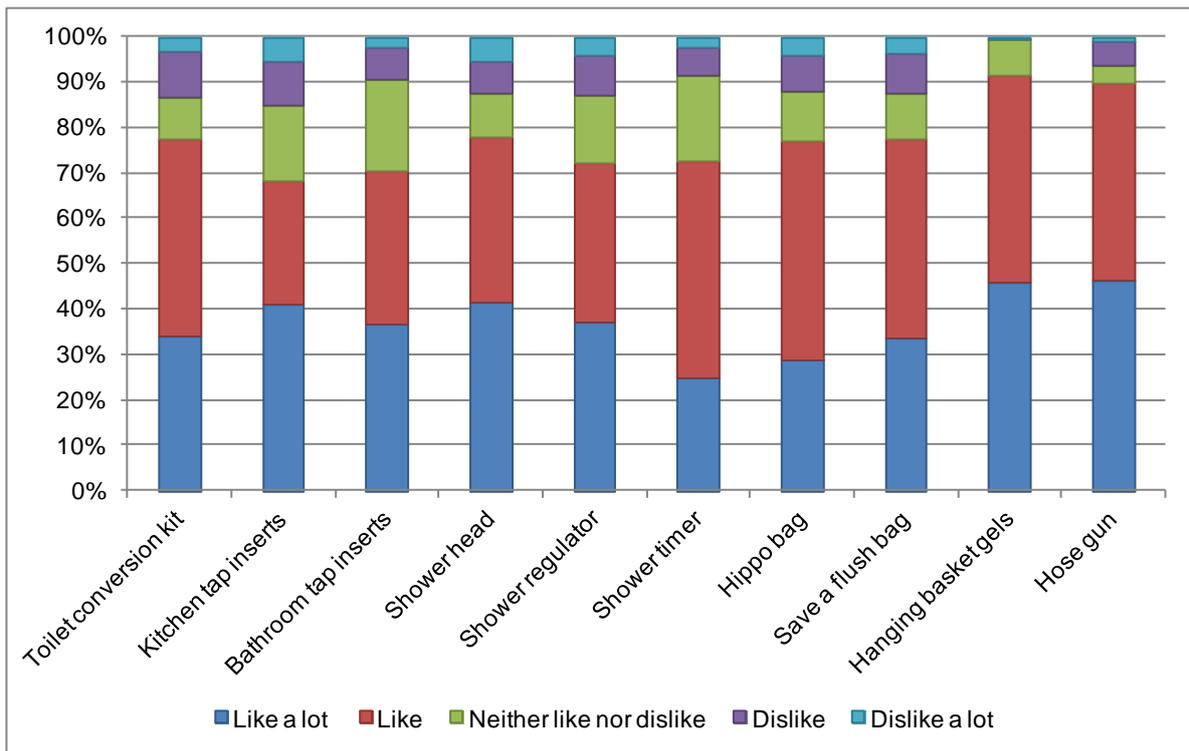


Figure 3: What people thought of the water saving devices

4.3.1 Devices removed or not used

The Eaga customer satisfaction telephone survey asked whether the devices provided were still in place, to which 84% of respondents confirmed that they were. The postal follow-up survey asked a slightly different question, ‘were there any products that you removed or did not use?’. Over a third (34%) of follow-up survey respondents reported that there were devices that had either been removed or never used. Of these, the majority commented further as to which devices were affected. Looking at devices that were removed, shower timers were the most frequently mentioned (17 respondents), followed by tap inserts (16 respondents), shower regulators (14 respondents) and cistern displacement devices (12 respondents)⁴. All other devices were mentioned by a handful of respondents.

Both surveys asked why a device had been removed or remained unused, and the most common answers from both are provided in Table 3.

⁴ Respondents are only included where it was clear which device was being referred to.

Table 3: Why devices were removed or unused

| | |
|--|---|
| Dual flush conversion device | Insufficient flush |
| Cistern displacement device – Save-a-flush | Insufficient flush resulting in blockage or repeated flushing |
| Cistern displacement device – Hippo | Insufficient flush resulting in blockage or repeated flushing |
| | Interfered with mechanism |
| Tap inserts | Disliked lower flow, on hot tap particularly |
| | Negative impact on basin filling time |
| Shower regulator | Found water pressure to be too low |
| Shower head | Took longer to shower as water pressure was too low |
| Shower timer | Cannot / don't want to shower in less than 4 minutes |
| | Already shower for less than 4 minutes |
| | Became wet inside and broke |
| | Did not stick to the tiles and fell off wall |
| Hanging basket gels | Have not yet had a chance to use |
| Hose gun | Have not yet had a chance to use |
| | Broke after a few uses |

4.4 Behaviours influenced

The Save Water Swindon project targeted a number of specific behaviours. Behavioural changes were promoted through the printed and electronic information provided about the project, as well as by project staff when speaking directly to members of the public. Any changes in the frequency of these key behaviours were investigated within the follow-up survey.

Figure 4 illustrates the proportion of respondents that reported an increase in the frequency of carrying out a particular behaviour after having a home makeover. For each behaviour, this is then split by the extent to which these changes were said to be a result of having water saving home makeover.

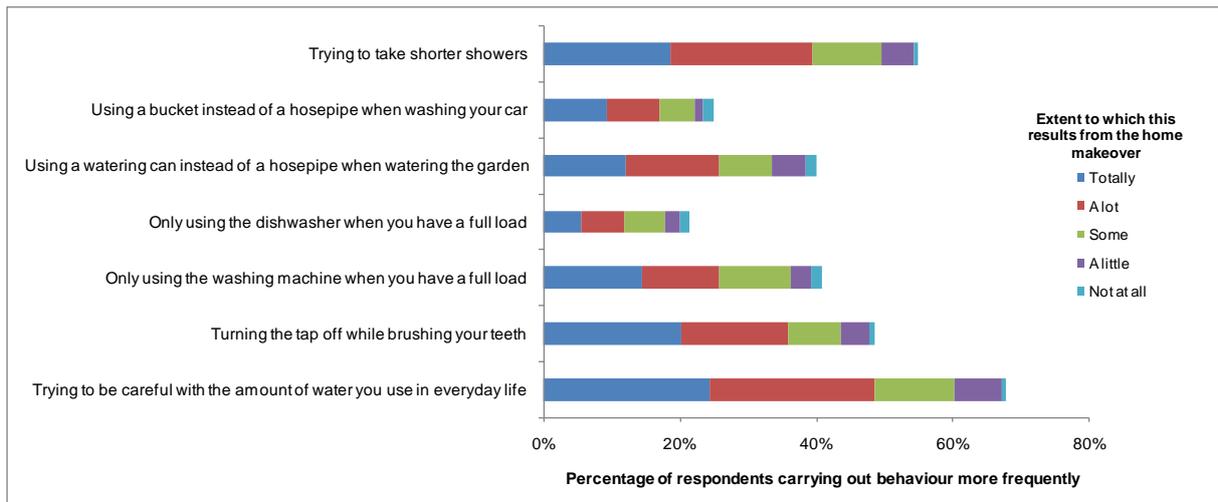


Figure 4: The stated increase in targeted behaviours and the degree to which this resulted from the home makeover

The largest overall change was seen in ‘trying to be careful with the amount of water you use in everyday life’, a catch-all statement that could cover any number of activities. Nearly three quarters (74%) of respondents said they were trying to be more careful, 94% of whom put this down to the home makeover to some degree. Of the specifically targeted behaviours, ‘trying to take shorter showers’ sees the largest increase, while ‘only using the dishwasher when you have a full load’ sees the smallest. It is clear from Figure 4 that where a positive change has been made, for the majority this has to some extent been a result of the home makeover. Further details of the results for each specific water efficient activity are found below.

- **Turn off the tap when you brush your teeth**

Follow-up survey respondents were asked if they had changed this behaviour over the previous year, and if so to what extent any change was a result of receiving a home makeover. Compared to the same time the year before, over half (55%) reported that they were turning off the tap when brushing their teeth more. Of these, 92% agreed that this was at least partly related to having received a home makeover, while 39% reported that this change was totally as a result of the home makeover.

- **Use your washing machine and dishwasher only when full**

It is important to note that different respondents may regard a ‘full load’ in different ways, and these may not be the same as the manufacturers’ guidance.

Nearly half of respondents (47%) to the follow-up survey reported that they only used the washing machine when they had a full load more frequently than they had a year before. In total, 89% of those that had made this positive change reported that it was to some extent because of the home makeover. A third of those who had changed (33%) had done so entirely as a result of the home makeover.

Only using the dishwasher on a full load elicited the largest don’t know / not applicable response of all the behavioural changes included in the follow-up survey, with over a third of

respondents selecting this option (this may relate to not owning a dishwasher, although this is not certain). Nevertheless, 29% of follow-up survey respondents reported that they now more regularly only use the dishwasher on full loads. Nearly a quarter (23%) of those who had made a change had done so solely because of their Save Water Swindon home makeover, while in total 83% agreed that this was at least partly the reason.

- **Use a watering can or bucket instead of a hosepipe**

Overall, 46% of respondents reported using a watering can in place of a hosepipe more than they had the year before. Of those who reported an increase in this behaviour, 29% related the change directly to the home makeover.

Washing their car with either a bucket or a hosepipe is an activity that 38% of follow-up survey respondents either didn't do, or had selected 'don't know / not applicable'. However, in total 29% of reported they were now using a bucket more often, a change that for most (89%) had resulted from the home makeover to some extent.

- **Reduce your shower time by one minute**

When asked to compare their showering time to the previous year, 61% of follow-up survey respondents reported that they are taking shorter showers more regularly. Of these, 33% had made this change as a direct result of receiving a home makeover, while all but a handful (96%) relate their more regular shorter showers to the home makeover to at least some degree, whether it be just a little or totally.

An additional question in the follow-up survey looked at the extent to which time in the shower had been reduced because of having the home makeover, with one fifth of respondents having cut down their time in the shower 'a lot'.

- **Fix any leaks you have at home**

Fixing drips and leaks was also targeted by the project. 43% of respondents to the follow-up survey report having had a dripping tap or leak in their home in the previous year. Of these, over three quarters were fixed immediately or within a few weeks, while only a handful put it off for more than six months or had no intention to get it fixed.

4.5 Estimated water savings

Using the estimated water savings assigned by Ofwat⁵, it is possible to calculate an assumed water saving figure based upon the number of devices installed and / or provided during the home makeover. Table 4 summarises the results of these calculations.

⁵ http://www.ofwat.gov.uk/regulating/gud_pro1204weffsavings.pdf

Table 4: Estimated water savings for home makeovers

| | |
|--|--------|
| Total water saving across all home makeover properties (l/day) | 34,869 |
| Mean water saving per property (l/day) | 39.09 |

These figures are based on a range of assumptions including occupancy rates and continued use, and do not take into account any reported removals (such as those described in section 4.3.1). In the home makeover scenario it is assumed that all devices are used, except the shower timer which is pegged at 70% use. The estimated water savings here only take into account the devices installed, and not potential savings made through changes in behaviour.

It is important to note that these estimated water savings are focused solely upon the products provided and installed, and do not take into account water potentially saved through changes in behaviour

4.6 Perceived household water and bill savings

The majority of respondents (81%) to the telephone survey reported that they had benefitted from the water saving devices they had received, however it is not clear from the data exactly how they had benefitted.

When asked if water was being saved in their home as a result of the home makeover, 60% of follow-up survey respondents reported a saving while only 8% felt that no water was being saved.

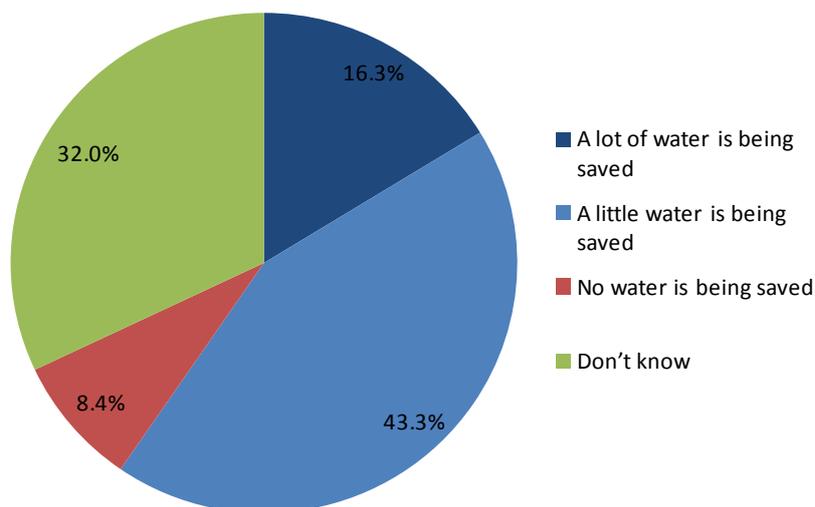


Figure 5: How much water people think they are saving as a result of the home makeover

Over a third (38%) of follow-up survey respondents also report saving money on their household bills as a result of the home makeover. Estimations ranged between £1 and £20 a month, the average saving being £4.91.

4.7 Awareness

Respondents were asked how much water they thought they used in a day. Half simply stated that they did not know, while 39% selected either 'under 50 litres' or '50 to 100 litres' (see Figure 6); the true average in the Thames region is 164 litres of water per person per day.

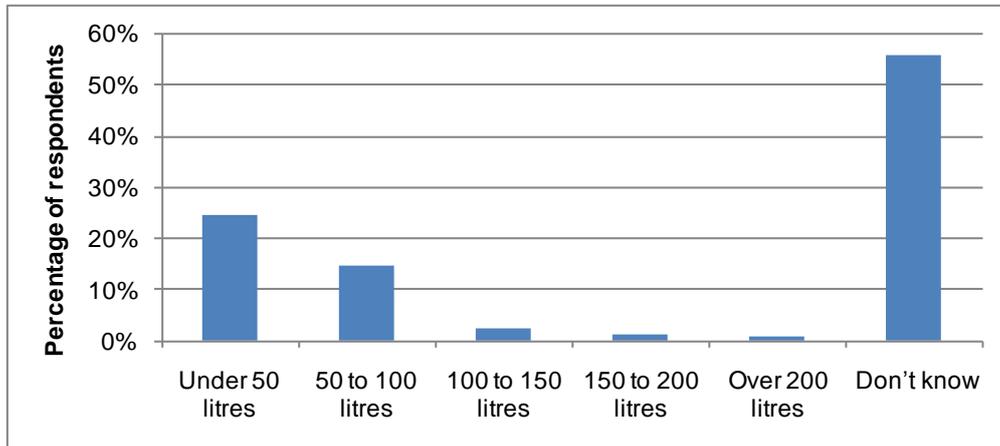


Figure 6: How much water people think they personally use each day (home makeover)

Looking beyond water use in the home, respondents were asked to rate the extent to which they agreed with two statements about the wider water situation. The first stated 'households' water consumption is damaging the environment', and the second 'there is not enough water to supply all the people in Swindon, now and in the future'. As illustrated in Figure 7, only a very small proportion of respondents disagreed with either statement. However 26% were not sure about how households' water use impacted upon the environment (combining 'don't know' and 'neither agree nor disagree' responses), rising to 35% for the statement about water availability in Swindon.

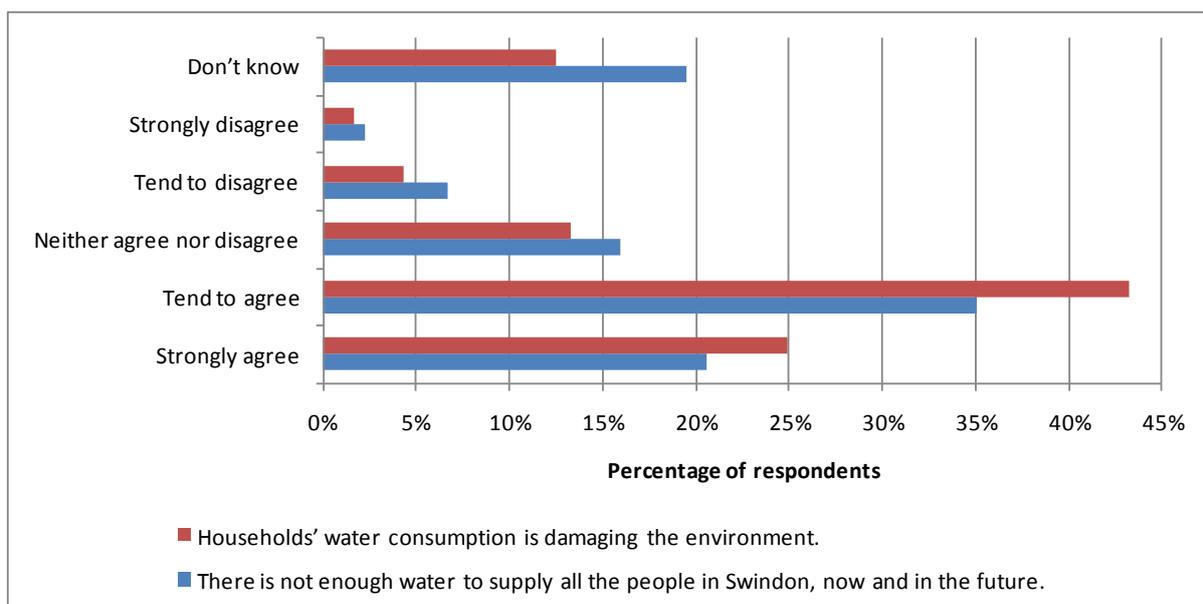


Figure 7: Understanding of the wider water situation (home makeover)

5 Water saving self-install kit

In total, **882 water saving self-install kits were given** away during phase one of Save Water Swindon. Self-install kits included a number of different devices that residents could fit in their own home:

- Cistern displacement device
- Tap inserts
- Shower head
- Shower regulator
- Shower timer
- Hose gun
- Hanging basket gel

Each kit was tailored to the individual household dependent upon which devices were selected by the resident. The main difference in terms of devices between the kits and home makeovers was the dual-flush toilet converter, which is not suitable for self-installation and so was omitted from the water saving kits.

The water saving self-install kits were treated as a secondary intervention during phase one of the project, promoted only after a home makeover (see section 4.1) had been refused. The preference of the project partners for home makeovers over self-install kits results from uncertainty around installation rates, and therefore potential water savings, when residents are required to fit a product themselves.

5.1 Recruitment

As shown in Table 5, the vast majority of self-install kits were requested at road-shows. A strategic decision was made that if they were to be given out, they would be primarily handed out at road-shows, as it was felt that by talking to people and explaining the kits, a higher proportion of devices would be installed (compared to simply being sent through the post).

Table 5: Self-install kit request routes

| Method | Frequency |
|---------------------|-----------|
| Road-shows | 797 |
| Website | 49 |
| Thames Water Office | 5 |
| Door-knocking | 2 |
| Presentations | 1 |
| Total | 882 |

5.1.1 Motivations for requesting self-install kit

The self-install kit follow-up survey asked respondents why they had requested a water saving kit (each respondent selected up to three reasons), see Figure 8. The 231

respondents to the self-install kit follow-up survey showed a very similar pattern to those who had requested a home makeover: 139 (60%) selected ‘to save water’ as one of the reasons, 120 (52%) selected ‘to save money’ and 115 (50%) ‘to help the environment’.

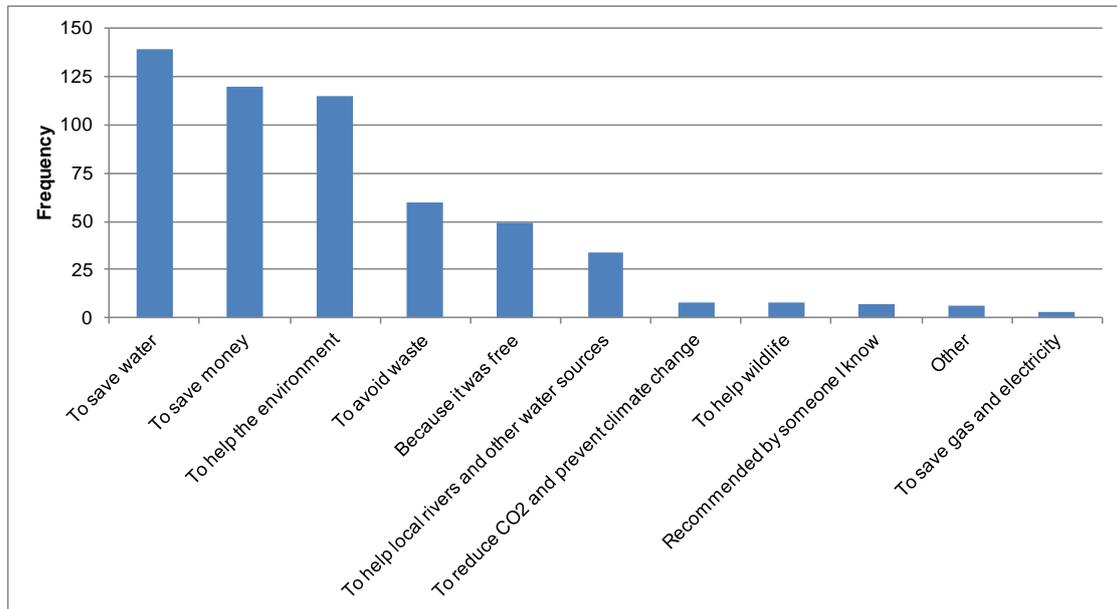


Figure 8: Motivations to request a water saving kit

Interviews with project team members highlighted that the self-install kits were a much easier ‘sell’ than home makeovers. The kits were described as ‘low commitment’ and more convenient than a home makeover, because the self-install kit could be taken away / ordered on the spot with no need to book an appointment and ensure somebody is home. However, a number of project team members raised concerns that because of this low commitment people did not actually think about whether they wanted or needed the devices on offer, just taking them because they were free.

5.2 Devices

5.2.1 Devices provided

The self-install kits were not a standard package, but rather customised to individual households, who chose which devices they would like and what was suited to their home. This helped to avoid sending unsuitable devices that would likely be wasted. The available data for devices provided in self-install kits is shown in Table 6.

Table 6: Devices provided in the water saving kits

| Product | Frequency |
|---|-------------|
| Cistern displacement device – Save-a-flush | 236 |
| Cistern displacement device – Hippo | 181 |
| Tap inserts | 26 |
| Kitchen swivel tap aerator | 25 |
| Shower regulator | 135 |
| Shower head | 174 |
| Shower timer | 392 |
| Hanging basket gel | 1176 |
| Hose gun | 229 |
| Total number of devices | 2574 |
| Mean number of devices per household | 2.9 |

5.2.2 Device likes and dislikes

Follow-up survey respondents were asked to rate how much they liked each of the devices they had received and used. Figure 9 illustrates that, as was the case for the home makeovers, the hanging basket gels were the most liked device, with 93% of respondents rating them positively. Looking at which devices were disliked, the shower head, tap inserts and kitchen swivel tap aerator were disliked or disliked a lot by the largest proportions of respondents, between 9% and 11% each.

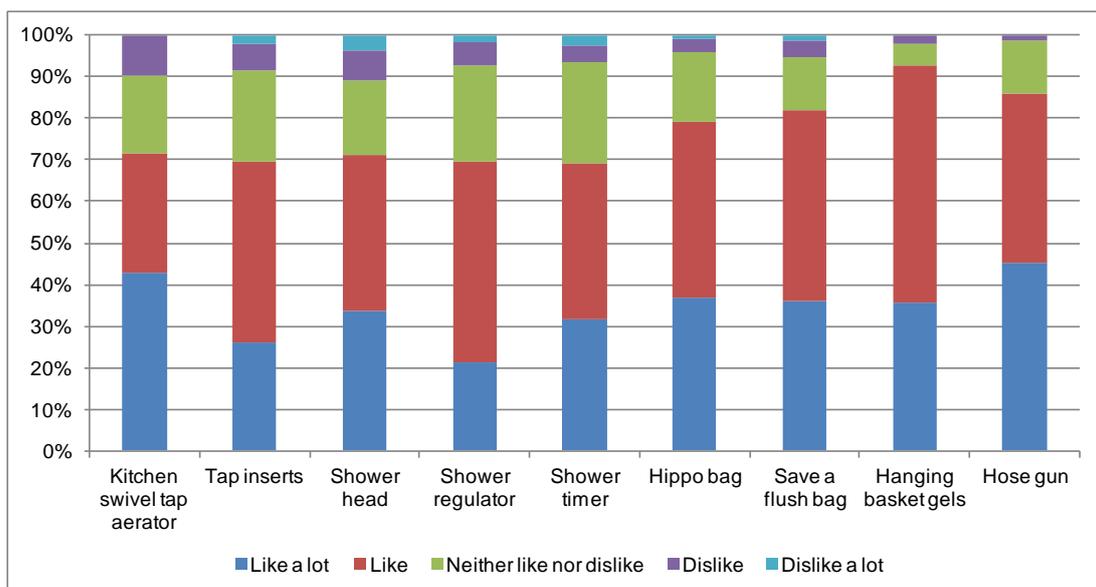


Figure 9: What people thought of their self-install water devices

5.2.3 Devices removed or not used

Forty two percent of follow-up survey respondents reported that there were devices they received through the self-install kit that had either been removed or remained unused. Respondents were asked to provide further details where this was the case, and the most common reasons are given in Table 7. Of those who provided comments, a smaller proportion reported removing devices compared to those which remained unused. The devices that had been removed included cistern displacement devices (6 respondents), shower heads (5 respondents), shower timers (5 respondents) and shower regulators (4 respondents).

Table 7: Why were self-install devices removed or unused

| | |
|--|--|
| Cistern displacement device – Save-a-flush | Have not got round to it |
| | Already have a dual flush toilet |
| Cistern displacement device – Hippo | Insufficient flush |
| | Unable to fit |
| Tap inserts | Not compatible with existing taps |
| | Already present in existing taps |
| Shower regulator | Found water pressure to be too low |
| | Leaked |
| | Unsuitable for existing shower |
| Shower head | Reduced shower performance |
| Shower head | Leaked |
| | Did not fit properly |
| Shower timer | Cannot / don't want to shower in less than 4 minutes |
| | Kept falling off the wall |
| | Became wet inside and broke |
| Hanging basket gels | Have not yet had a chance to use |
| | Forgot |
| Hose gun | Already have a hose gun |
| | No outside tap or hose |

5.3 Behaviours influenced

Follow-up survey respondents were asked if they had increased particular behaviours compared to the year before, and the extent to which these changes were a result of receiving a self-install kit. Figure 10 illustrates the proportion of self-install kit follow-up survey respondents that reported an increase in the frequency of carrying out a particular behaviour compared to the year before.

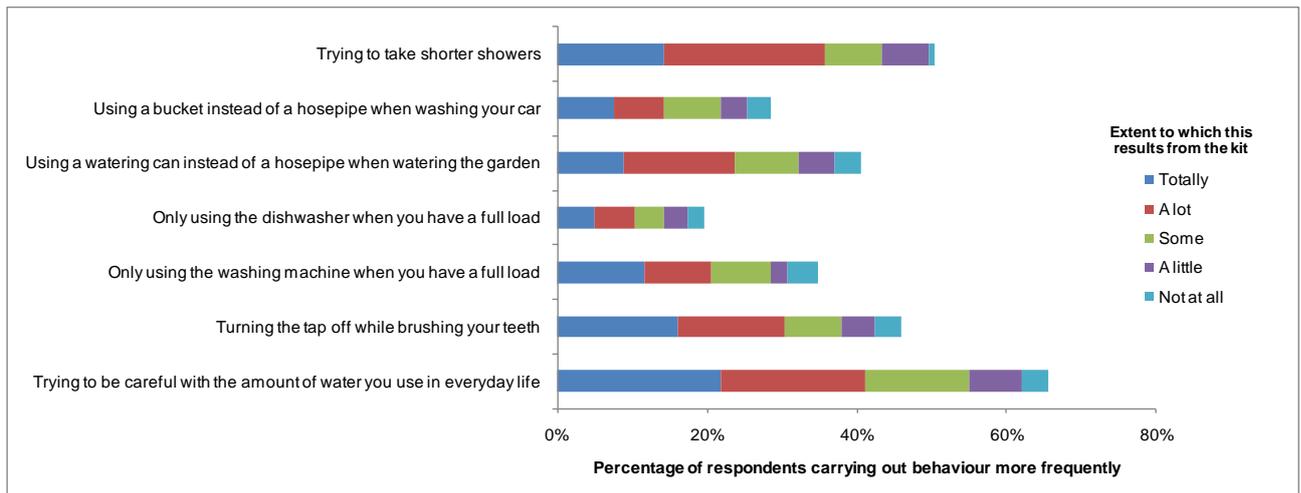


Figure 10: The increase in targeted behaviours and the degree to which this resulted from receiving the self-install kit

The greatest positive change is seen for ‘trying to be careful with the amount of water you use in everyday life’. Nearly three quarters (74%) of respondents said they were trying to be more careful, 90% of whom put this down to the self-install kit to some degree. Looking at specific behavioural changes, ‘trying to take shorter showers’ was the behaviour taken up by the largest proportion of respondents, while ‘only using the dishwasher when you have a full load’ was taken up by the fewest. Where a positive change has been said to have been made, this has often been influenced by having received the self-install kit. Further details of the results for each specific water efficient activity are found below.

- **Turn off the tap when you brush your teeth**

Just over half (51%) of self-install kit follow-up survey respondents reported that they were turning the tap off when brushing their teeth more frequently than they had been a year before. Of these, 90% said that this was at least to some extent a result of having received the self-install kit. For just under a third (32%), receiving the self-install kit had been the sole reason for changing their behaviour.

- **Use your washing machine and dishwasher only when full**

Overall, 43% of respondents reported that they were now using the washing machine only when full on a more regular basis. Of those that were doing this more, 30% were doing so as a direct result of the self-install kit, while in total 78% had changed at least partly because of receiving the kit.

Nearly a quarter (23%) of respondents were using the dishwasher only when full more often, 25% of whom had made this change over the previous year completely as a result of receiving the self-install kit. Dishwasher use had the least potential to change of all the behaviours featured in the follow-up survey, as it appears that nearly half of respondents (46%) do not own / use a dishwasher (based on selection of answer options 'don't do' and 'don't know/not applicable').

It is important to note that different respondents may regard a 'full load' in different ways, and these may not be the same as the manufacturers' guidance.

- **Use a watering can or bucket instead of a hosepipe**

Compared to a year before, 47% of respondents reported using a watering can more often (instead of a hose pipe) when watering the garden. When asked to what extent this had resulted from receiving the self-install kit, 87% reported that it had influenced the change to some degree, while for 21% it had been the sole reason for changing their behaviour.

A third (33%) of respondents reported using a bucket more and a hosepipe less when washing their car. A quarter of respondents who had made a positive change over the previous year had done so as a direct result of the self-install kit.

- **Reduce your shower time by one minute**

Over half (55%) of self-install kit follow-up survey respondents reported more frequently trying to take shorter showers compared to the same time the previous year. Of these, nearly all (98%) agree that receiving the self-install kit played some part in this change, while 28% relate their efforts entirely to the kit.

A second question asked respondents to assess the scale of the change they have made to their time in the shower. Nearly a quarter (23%) reported having cut down the time they spent in the shower 'a lot'.

- **Fix any leaks you have at home**

Fixing drips and leaks was also targeted by the project. Overall, 46% of self-install kit follow-up survey respondents indicated that they had a leak or dripping tap in the last year. Of those that did have a drip or leak, over 80% had it fixed immediately or within a few weeks.

5.4 Estimated water savings

Using the estimated water savings assigned by Ofwat⁶, it is also possible to calculate an assumed water saving figure based upon the number of devices provided in the self-install kit. Table 4 summarises the results of these calculations.

⁶ http://www.ofwat.gov.uk/regulating/gud_pro1204weffsavings.pdf

Table 8: Estimated water savings for self-install kits

| | |
|--|-----------|
| Total water saving across all self-install kits provided (l/day) | 14,502.80 |
| Mean water saving per property (l/day) | 16.44 |

These figures are based on a range of assumption including occupancy rates and continued use, and do not take into account any reported removals (such as those described in section 5.2.3). Devices given away in a self-install kit achieve lower estimated savings than the same devices installed in a home makeover, due to the uncertainty as to whether they have been used. In order to reflect this uncertainty, for the majority of devices it is recommended that a use rate of 70% is assumed.

As was the case with the home makeovers, these estimated water savings are based only on the products provided, and do not take into account any savings arising from changes to water using behaviours.

5.5 Perceived household water and bill savings

Over half (56%) of the follow-up survey respondents reported that the self-install kit was saving water. Around a third were not sure if it was saving any water, while 10% reported that it was not saving any water at all.

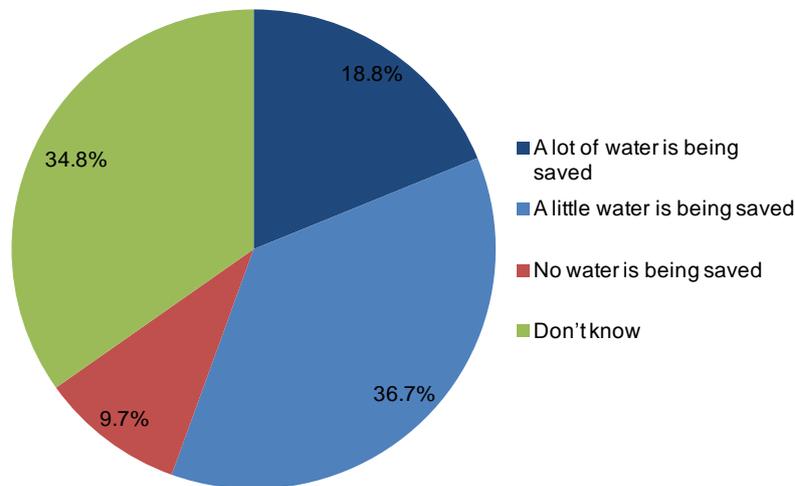


Figure 11: How much water people think they are saving as a result of the self-install kit

Thirty seven percent of follow-up survey respondents report that the water saving kit has helped them save money on their household bills, with estimates ranging from £1 to £20 per month and the average being £5.05.

5.6 Awareness

Respondents were asked to select from a number of options how much water they thought they used in a day (see Figure 12). Similarly to those respondents that had received a home

makeover, over half (53%) of respondents to the self-install kit follow-up survey selected that they do not know how much water they personally use in a day. Forty three percent selected up to 100 litres a day.

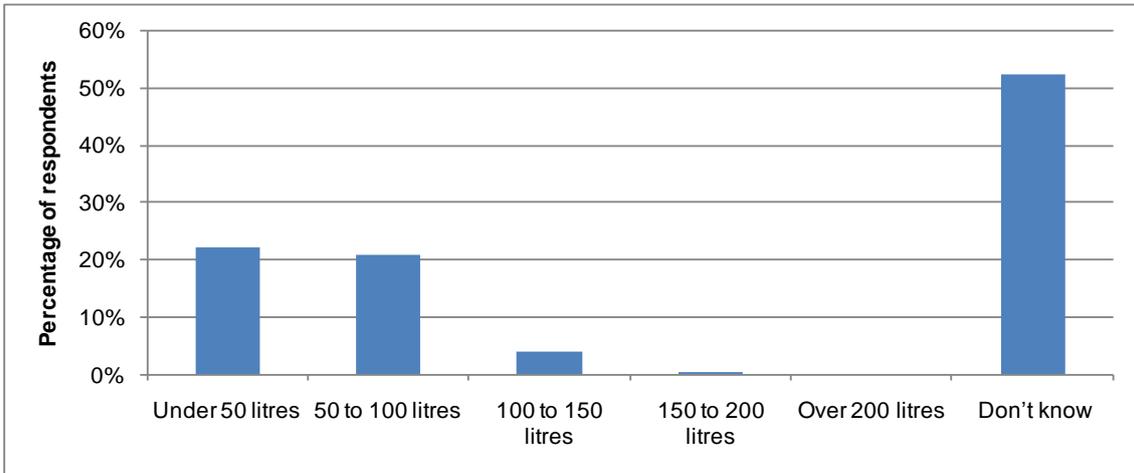


Figure 12: How much water people think they personally use each day (self-install kit)

Thinking about the broader context within which household water use sits, self-install kit follow-up survey respondents were asked to rate their agreement with two statements about the impact of water use and the availability of water. Over two thirds (67%) of respondents tend to or strongly agree with the statement ‘households’ water consumption is damaging the environment’, with only 5% disagreeing; however, 28% remain uncertain (combining ‘don’t know’ and ‘neither agree nor disagree responses’). While a large proportion (49%) also agree with the statement ‘there is not enough water to supply all the people in Swindon, now and in the future’, an almost equal number (43%) are uncertain as to what they think.

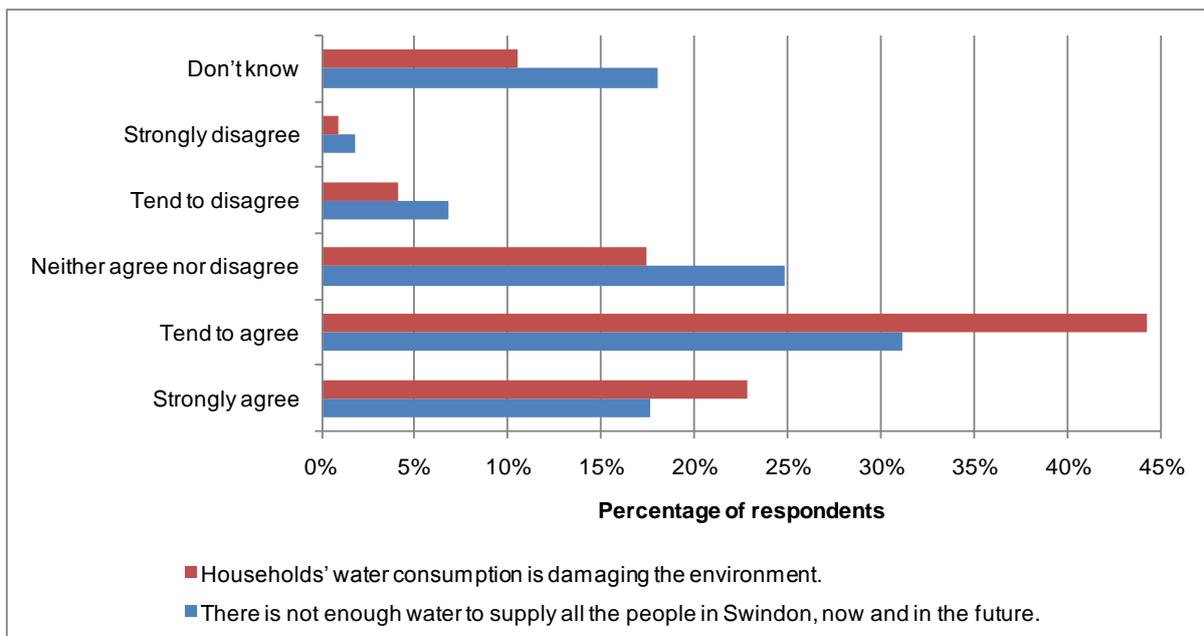


Figure 13: Understanding of the wider water situation (self-install kit)

6 Project delivery: Findings from the project team

One of the main objectives set out for the first phase of Save Water Swindon was that it would act as an exemplar project. Part of being an exemplar project involves ensuring that any lessons learnt can be carried forward and used in future projects. In line with this, project team members were asked in telephone interviews about what worked well, and less well, with various parts of the project. Key points from these opinions, combined with information taken from other parts of the evaluation, are presented in this section.

6.1 Project design and organisation

How a project is set up can have a huge influence on how easy or difficult it is to run, having the correct infrastructure in place from the outset is key.

Project database

An electronic project database would streamline project organisation and the recruitment process. In the first phase of Save Water Swindon, project records were kept in Microsoft Excel. These records included names and addresses of residents that had been sent a recruitment letter, those who had received a home makeover, what devices had been installed and much more. Paper forms would be completed by an installer during the home makeover, similarly records kept of recruitment activities such as road-shows and door-knocking were also paper based, all having to be entered manually into spreadsheets. Not only did this put a large administration burden upon project team members, but it also meant that there was a continual time delay in project records being up to date.

With a larger budget, it would be recommended that an electronic project database was set up and used from the outset. Such a database would not only allow all information to be kept in one organised place, but also opens up the possibility of installers and recruiters updating information instantly through a laptop, tablet, smart mobile phone or similar. The ability to update a project database electronically would remove the need for paper forms, therefore alleviating the administration burden, while also helping to reduce any time delay. Being a two way street, project team members would also be able to access the database instantly while on the move, allowing them for example to check whether an address has already received a home makeover as well as booking appointments on the spot.

Who delivers the makeovers

Deciding whether to outsource installations, or deliver them in-house is an important part of the project. In the first instance the home makeovers were delivered by Eaga installers. Eaga were delivering the home makeover installations at no cost, as they intended to make money from any hot water efficiency devices through CERT (Carbon Emissions Reduction Target) and were planning to upsell further energy efficiency measures once inside the home. However having an additional organisation involved in the project added a further level of complication and took away any direct control of the installations. Furthermore, Eaga were not able to upsell enough energy efficiency measures in practice, and so the model was not sustainable for them. Mid-way through the first phase of Save Water Swindon delivery switched to an installer employed directly by the project. Having directly employed

staff meant that there was complete control over the delivery cycle, from booking appointments through to the devices installed, and although this came with extra work for the project team overall it had a positive impact on the delivery process. There are advantages and disadvantages to both direct delivery and outsourcing installations, and the most appropriate approach should be decided on a case by case basis dependent upon the particular individuals, organisation and project involved.

6.2 Recruitment

The focus of the first phase of Save Water Swindon was the home makeovers. The home makeovers were promoted over the self-install kits, for two main reasons; firstly with a home makeover there was a certainty that products were installed (and installed correctly), and secondly some of the products, specifically the dual flush converter, were not suitable for self-installation. As a result, self-install kits were offered as a 'last resort', after the possibility of a home makeover had been exhausted. As the self-install kits are generally seen as an easy sell (see section 5.1.1), and were not the main priority, the lessons learnt from recruitment focus upon recruiting for water saving home makeovers. It should also be noted that due to time and budget restrictions, a lot of emphasis was placed upon face-to-face recruitment methods, specifically road shows and door-knocking.

Timing of recruitment activities

The timing of recruitment activities was highlighted by both project team members and the Resource Futures report as being highly influential upon success. The time of year can play a part, with school holidays being a good time to carry out face-to-face recruitment such as road-shows or door-knocking as more people are at home and road-show venues were busier. The day of the week is also worth considering. It was noted by project team members that people often visited supermarkets on the same day of each week, so when running road-shows at these venues it would be beneficial to be present every day for seven days in order to maximise exposure. Finally, the time of day is crucial to the effectiveness of recruitment activities. Some times of day present challenges for specific recruitment efforts, for example individuals visiting supermarkets at lunch time tended to be in a hurry and unwilling to stop at the road-show stand, while door-knocking during the school-run also proved to be less fruitful than other times of day. More generally, being able to recruit outside of normal working hours was identified by project team members as a key factor that should be considered for future recruitment, enabling those in full time employment to be recruited into the project (however, it must be noted that this would also likely require the delivery of home makeovers outside of normal working hours as well).

Keep it simple

Face-to-face recruitment should be focused on one key ask. On offer during the first phase of Save Water Swindon were water saving home makeovers and self-install kits, while people were also asked to change their behaviour and save water through the 20 litre challenge. Team members involved in face-to-face recruitment activities such as door-knocking and road-shows found that trying to recruit people to have a home makeover while also telling them about behavioural changes was difficult. This was supported by the Resource Futures report which recommended that if an individual was reluctant to sign up

for a home makeover on the spot, they should be provided with an informational leaflet to take away allowing them to arrange an appointment at a later date. Trying to promote both home makeovers and behavioural changes at the time of recruitment was not only time consuming, but also led to information overload and confusion. Face-to-face recruitment should be kept simple, focusing on the home makeover. One possibility would be to further engage with the individual and promote behavioural changes once inside the home carrying out the home makeover.

Example devices

Showing people the devices they could have fitted helped persuade them to have a home makeover. Project team members highlighted example devices as one of the aspects that had worked well when carrying out face-to-face recruitment activities. It was important that people could see the products and touch them; a 'water efficiency home makeover' is a fairly intangible thing, but seeing the actual products that could be fitted is more effective than any written or verbal description could be alone.

6.3 Working in partnership

Working in partnership with multiple organisations brings benefits in terms of budget, knowledge and resources, however does require additional effort in order to ensure benefits are maximised and not outweighed by potential difficulties.

Gaining high level support

Receiving high level support within key organisations is crucial. In order to optimise the benefits of working in partnership, each organisation must be completely bought into the project. Being able to use the logo of a well trusted organisation is useful, but the deeper benefits to a project come through accessing the knowledge, information and influence of partners. High level support will usually mean that data and information can be shared more easily, the project is promoted more widely, and that all members of an organisation are aware of the project, being able to talk about it if asked.

Clear expectations

It is important to ensure that all partners are completely clear as to their involvement in the project and the level of input and/or support that is expected from them. Time spent setting out clear and detailed frameworks in the initial planning stages can avoid misunderstandings and disappointment later on.

Agreements (and disagreements)

Making decisions as a partnership takes time. Each organisation has different agendas and different ways of working, and so even though all share the same ultimate goals, reaching an agreement on different aspects of a project can be difficult. Project team members highlighted that this process was indeed time consuming during Save Water Swindon, impacting upon delivery. Additionally, the need to come to an agreement between partner organisations removed the power from the project manager to make on-the-spot decisions, which again affected delivery of the project. Sufficient time must be built into any project

involving partnership working in this way in order to allow agreement to be reached without impacting upon delivery.

Showing off the partnership

Working in partnership should be utilised to its full advantage. Different organisations will attract different audiences, while well known and well trusted logos can add authority and credibility to a project. It was standard practice to utilise the logos of the key partners on project materials, and project team members not only highlighted that this was important for recruitment, but also suggested practical ways in which they could be made more prominent. For example, the banners used at road-shows had the partner logos along the bottom, whereas they may have been easier to see and more effective higher up. Another suggestion was to have the partner logos and project branding on the back of clip boards, so that was what an individual could see when talking to a member of staff at a road-show or on the doorstep.

7 Discussion of findings

7.1 Recruitment methods

One of the challenges faced by the first phase of Save Water Swindon was recruiting individuals and households to take part in the project. Sending out letters alone was not enough to achieve the levels of recruitment hoped for, and financial restrictions limited not only the number of letters that could be sent, but also the amount of ambient advertising of the project that could be conducted around the Swindon area. As a result face-to-face recruitment methods, particularly in the form of road-shows, were relied upon to boost the number of households recruited. At the end of the first year, the majority of the nearly 1800 Swindon households involved in the project (through home makeovers and self-install kits) had been recruited in this way. However this is not to say that face-to-face recruitment is easy, even when professional recruiters were brought in, a good day for two staff members at a road-show would be 15 or 20 people signed-up.

The records available for the first phase do not allow a direct comparison of the recruitment methods used, and so it is not possible to comment on the use of one over another. However experience gathered during the project does provide useful information on effective face-to-face recruitment.

7.2 Home makeovers vs. self-install kits

Home makeovers were prioritised in the first year of the project, promoted over the self-install kit because of the increased certainty that a device had been installed and was therefore being used. A range of barriers were encountered when promoting the home makeovers, not least that people felt they were already water efficient (and therefore had no need to change), that people did not trust the motivations behind offering the makeovers for free, and that it was just plain inconvenient to have to organise. Home makeovers were more difficult to 'sell' than the self-install kits. While it appears that the motivations to have a home

makeover or take a self-install kit are fairly similar, self-install kits do not appear to encounter the same barriers as home makeovers. In terms of their appeal, the biggest difference between the two options may be in terms of convenience, with the individual being able to receive a self-install kit and fit the products as and when it suited them, rather than having to wait in for an appointment.

7.3 Devices

The feedback on all of the devices, whether provided through a home makeover or self-install kit, was positive overall. All of the devices were liked by the majority. The number of devices provided (including all devices fitted or given for self-installation) per household was more for home makeovers homes, averaging 3.75 devices per home compared to 2.9 devices per home for self-install kits. There is no clear evidence why this would be the case. A possibility is that installers were able to optimise their visit to a property, being confident in fitting devices where appropriate and giving confidence to residents to have devices installed that they may not have initially wanted or would have been unsure about.

Just over a third of (34%) of respondents who had a home makeover reported removing or not using devices they had been given, compared to 42% of respondents that had received a self-install kit. From the additional comments provided, it appears that for those that received a home makeover a higher proportion relates to removing an installed device, while for those that received a self-install kit a greater proportion did not use a device at all. However, this observation is based upon a relatively small sample and further examination of this issue in future projects would be advisable.

7.4 Saving Water

Even though a similar number of home makeovers were carried out as self-install kits given away, the estimated water savings based on devices installed and / or provided are very different. For home makeovers, the estimated savings average out at 39 litres/property/day compared to 16 litres/property/day for the self-install kits. This difference appears to stem from three main factors; firstly the number of devices provided per household was greater for home makeovers (see section 7.3), secondly as a result of the reduced confidence in installation the calculations only allow a 70% use rate to be assumed for most products provided in a self-install kit, and lastly the device allocated the largest water savings (the dual-flush conversion device) is only available through the home makeover for which it accounts for over a quarter of the estimated savings.

Perceptions of the water saved did not differ in the same way as the estimated savings. Overall, 56% and 60% of follow-up survey respondents felt that they had saved water after receiving a self-install kit or having a home makeover respectively. Around a third of respondents from both surveys stated that they were uncertain if they were saving any water as a result of their involvement with the project, while 8% and 10% definitely did not think they were saving any water after the home makeover or self-install kit respectively. The lack of confidence in water being saved is concerning, and future work would do well to monitor and if necessary investigate the case of this uncertainty.

7.5 Influencing behaviour

An encouraging number of follow-up survey respondents reported making positive behavioural changes with regards to reducing water consumption as a result of their involvement with Save Water Swindon, with similar patterns of change reported by both home makeover and self-install kit recipients. The behaviour reportedly changed by the largest number of residents is the length of time spent in the shower, with respondents trying to take shorter showers.

There are a notable proportion of follow-up survey respondents that report having made a change in the time since Save Water Swindon, but who do not attribute this change to their involvement in the project. For example, of the home makeover follow-up survey respondents that reported more frequently ensuring they used their washing machine or dishwasher only when full, 11% did not relate this change to Save Water Swindon at all. It is not possible from the available data and information to identify what other factors may have influenced this change.

8 Recommendations for future projects

An array of information has been gathered about the first phase of Save Water Swindon. Other than the practical issues identified by project team members (see section 6), below are the key recommendations drawn from the evaluation, aimed at providing guidance to those undertaking similar projects in the future.

1. Target a receptive audience

Selecting the correct audience to target is crucial. It appears that the original areas selected for intensive recruitment in Save Water Swindon were chosen based on the potential to up-sell energy measures. This decision not only had a negative impact on recruitment efforts, but also on monitoring and evaluation of the project. Very low uptake in the areas originally designated as core to the project meant that a baseline for water consumption and behaviours was set for a sample who did not go on to become involved in the project.

2. Address common barriers in recruitment

The experience of project staff involved in face-to-face recruitment was that similar barriers would be encountered over and over again. By addressing these barriers in recruitment materials, and arming staff with appropriate responses, barriers that may otherwise have stopped someone from participating can be addressed immediately. For example, a common concern is that people believe there is a catch, so being able to clearly explain why any of the companies involved would want to offer the service for free can disarm this barrier.

3. Optimise the feedback loop

It is clear that staff involved in this type of project develop a wealth of knowledge through their direct and hands on experience. Clear lines of communication between the staff on the ground and the project manager are vital to ensure that this knowledge is optimised

throughout the project. Flexibility within the project design is also required in order to be able to respond to new knowledge.

4. Home makeovers over self-install kits

While self-install kits are undoubtedly easier to sell to residents, the uncertainty around product installation is an enormous negative. Home makeovers are preferable as not only do they offer this certainty, but they also provide the chance to install the products that offer the largest water savings, specifically the dual flush converter. Being in the home also gives the opportunity to engage directly with the resident, a priceless opening to promote water efficiency, answer any questions residents may have and also present a positive image of the delivery organisation. However, this evaluation has highlighted that the picture around product removals is unclear, and to be completely certain of the impact of home visits this needs to be addressed.

5. Measuring product use and removals

As far as is practicable, it is important to measure the extent to which products are used or removed following installation. Knowing what has been used and remains installed helps to determine the impact a project is having. Official revisits offer the opportunity to record problems that have required the installer to return to a property, however many products will be removed or never used in the first place without the project team being aware. A follow-up survey offers an ideal opportunity to measure use and removal, and if a question is asked of each product, a clearer picture will emerge.