



Master Recycler volunteer at the Forest Grove Farmers Market

Eat Smart, Waste Less Challenge 2015 Pilot Campaign Evaluation

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Executive summary

Situation

- Food accounts for nearly 30 percent of all household garbage going from the Metro area to the landfill.
- Many people live, work and recreate in different jurisdictions.
- Within the Metro Wasteshed, only Washington County and the cities of Beaverton and Gresham are offering the same information, tools and resources, and follow-up support in a consistent manner to help residents prevent food waste.

Background

Washington County, Beaverton and Gresham piloted a residential food waste prevention outreach campaign called the “Eat Smart, Waste Less Challenge,” from April through October 2015, based on EPA’s “Food: Too Good to Waste” toolkit. People were asked to make a commitment to prevent food waste at home, were given tools to reduce the barriers to the behaviors and provided follow-up emails as support. There were four strategies to choose from that cover the four phases in the consumption process — pre-shop planning, shopping, storage and eating. Partners promoted one primary strategy — store fruits and vegetables properly. Partners conducted one-on-one outreach at 60 days of outreach at events and 17 presentations.

Results:

- Partners had one-on-one conversations with 2,519 people. Thirty-two percent of people staff and Master Recyclers talked to committed to try at least one of four strategies to prevent food waste at home — 847 households.
- People committed to try more strategies at presentations than at events.
- It took seven minutes to get someone to pledge at a presentation compared to 51 minutes at an event. It seems presentations are the most effective outreach method.
- On average, it cost \$9.37 to get one household to commit to trying one of the strategies to prevent food waste.
- Partners distributed over 14,000 products and tools to reduce the barriers to adopting new behaviors. The most popular tool was the fruit and vegetable storage guide magnet.
- Seven hundred and forty-five unique visitors went to the www.EatSmartWasteLess.com website. Many of them navigated to one of the other seven pages.
- Participants were asked what they thought about the program by survey. Though survey responses were not enough to apply them about all who pledged, they gave good feedback.

Assessment

Overall, the campaign was viewed as a success and should be repeated in 2016 with some adjustments and expanded to reach more residents.

Residents within the region benefit when food waste prevention tools, resources and follow-up support are provided within the Metro Wasteshed.

Recommendation

- Host a third-party website — cross-branded by all partners — to support the campaign. Individual jurisdictions feature brief content about the campaign on their individual websites that redirect to www.EatSmartWasteLess.com.
- Coordinate to provide one set of email follow-ups, one set of surveys and bulk purchasing to improve efficiency and save more money.
- Purchase enough resources so that residents in all jurisdictions can be served. Continue to support Master Recyclers to conduct outreach for jurisdictions. Offer more presentations over expanding event outreach.

Introduction

In order to reduce wasted food being sent to the landfill by the residential waste stream and help residents eat more of the food they purchase, Washington County and the cities of Beaverton and Gresham created and developed the [Eat Smart, Waste Less Challenge](#) (ESWLC) campaign.ⁱ The ESWLC is based on the previous work of the West Coast Climate & Materials Management Forum — convened by the Environmental Protection Agency, Regions 9 and 10 — and its [Food: Too Good to Waste](#) (FTGTW) toolkit.ⁱⁱ All local governments within the Metro Wasteshed developed food waste prevention goals and objectives, determined the focus audience, and drafted a primary position statement. ESWLC partners used this work to create the pilot campaign in 2014 as part of coordinated regional outreach.

The Eat Smart, Waste Less Challenge pilot campaign ran from April through the end of October 2015. Partners ran similar campaigns and shared common resources. At the conclusion of the campaign, partners pooled data. This report summarizes and shares results from the pilot campaign and makes recommendations for continued outreach.

Background

The problem with food waste

Food accounts for nearly 30 percent of all household garbage going from the Metro area to the landfill or over 82,000 tons.ⁱⁱⁱ Across the U.S., this costs more than \$1.3 billion to landfill all household food waste.^{iv} Meanwhile, Americans waste more than 28 percent, by weight, of all food purchased at the household level — averaging about 300 pounds per person each year. In economic terms, more than a quarter of all food purchased at the consumer and retail level each year — \$162 billion — is wasted.^v And 25 percent of U.S. freshwater supplies go to producing food that is ultimately wasted.^{vi} Also, the land used to grow food that is wasted globally is one and a half times larger than the size of the U.S.^{vii} Yet, Americans waste 1,249 calories in food, per person, every day. At the same time, more than 509,000 Oregonians are food insecure.^{viii} The good news is that a family of four can save more than \$1,600 a year by making small shifts in how they shop, prepare and store food.^{ix} In short, food is too valuable to waste.

Governing structure

The Metro Wasteshed is an Oregon Department of Environmental Quality (DEQ) area of waste recovery — sharing common solid waste disposal systems, planning and reporting. The Metro Wasteshed is made up of Washington and Clackamas counties and Portland, Gresham and Beaverton. Within Clackamas and Washington, the county provides education and outreach for the cities and to residents in unincorporated parts of the county. Beaverton — which is within Washington County — provides its own education and outreach. Metro is the governing authority for the wasteshed. Metro commonly leads the development and administration

of regional campaigns. Local governments within the watershed commonly cooperate on shared campaigns and outreach materials.

Trained volunteers from the Master Recycler Program help implement campaigns and outreach across the region. The Master Recycler Program is a community education and outreach program on thoughtful consumption, toxics, composting and recycling administered by Portland with support from Metro and Clackamas and Washington counties.

Local waste prevention and materials recovery campaigns and programs follow state and Metro rules. The 2008 Regional Solid Waste Management Plan (RSWMP) — which operates within the framework of state waste reduction laws — directs the work of local governments. The RSWMP directs programs to focus on food scraps recovery — home composting and exploring curbside recovery. State laws dictate that programs adhere to the solid waste hierarchy of reduce, reuse, recycle and compost, energy recovery and finally disposal. The Oregon DEQ [2050 Vision and Framework for Action](#) — published in 2012 — describes a vision and actions to support sustainable consumption of materials including food.^x The 2050 Vision will inform the next RSWMP update.

Campaign development

Partners used [community-based social marketing](#) (CBSM) strategies in developing a campaign to help participants prevent food waste.^{xi} The CBSM campaign components included using compelling messaging with a focus audience, tools that reduce barriers to changing behaviors and provide sufficient support to help make and sustain the change. The food waste prevention outreach pilot campaign is called the “Eat Smart, Waste Less Challenge”. ESWLC partners conducted one-on-one outreach with members of the focus audience. Partners asked people to pledge to try one or more strategies to prevent food waste at home.

The Eat Smart, Waste Less Challenge was not limited to a specific period of time, but was meant to be a pledge to change in behavior that is sustained over time at the household level — with the exception of a four-week measurement study as described under “Four week measurement study.”

The campaign goal and objectives were written to be positive statements. The main goal for the pilot campaign was that food purchased by residents in the campaign area is eaten and not wasted. The campaign had a series of short to long-term objectives — see Appendix 1 for full list. One short-term objective was to reach 2,500 families and make them aware of the program. Partners planned for 50 percent of those families to take the ESWLC. To address change in wasted food, partners tried to look at the food being eaten instead of wasted. If 28 percent is lost, then 72 percent is not lost. The long-term objective of the campaign is that the focus audience eats 85 percent of the food they purchased — by weight — equivalent to a 13 percent reduction in food waste by family. Another way to say this would be the audience is only wasting 15 percent of the food purchased.

Through the West Coast Climate Forum, the EPA led the [development of four behaviors](#) that cover the four phases in the consumption process — pre-shop planning, shopping, storage and eating.^{xii} The workgroup identified that it is unlikely that any one behavior by itself will dramatically reduce food waste. It ranked the behaviors based on impact of the behavior, potential for penetration with the audience and the probability of changing behavior. **Properly storing fruits and vegetables ranks highest** with the best balance of benefits to barriers and the highest ratings for impact, penetration and probability of change.

Modeled after the FTGTW campaign, the ESWLC labeled the waste food prevention actions:

- SMART STORAGE — Keep fruits and vegetables fresh
- GET SMART — Measure how much food your family throws away over four weeks
- SMART SAVING — Eat what you buy
- SMART SHOPPING — Buy what you need
- SMART PREP — Prepare now and eat later

In order to keep the ESWLC campaign more tightly focused and encourage early adoption of food waste prevention behaviors, campaign partners decided to first focus on one strategy at a time. They assumed that offering more than one strategy at a time could potential overwhelm someone and they wouldn't want to pledge anything at all. Leveraging outreach around food storage tips and the SMART STORAGE strategy seemed like a good idea as the primary message. GET SMART was the secondary message. All other behaviors were listed and supported, but they were not the main messages. Partners also assumed adopting one of these behaviors will lead to increased benefits of food waste prevention and to some participants trying other behaviors as well. Further campaigns were planned to focus on the secondary positions.

Four week measurement study

The GET SMART strategy is an opportunity to learn more about household food waste over four weeks. FTGTW pilot implementers found households participating in a measurement challenge felt that when a household measured their waste it raised awareness of the issue and motivated households to make changes. As a result ESWLC implementers determined that GET SMART would be secondary strategy if there was an opportunity. Participants who chose to try the strategy were given the choice of one of four methods to track food waste including:

- Estimate or take a picture
- Use a kitchen scale
- Estimate with a large container
- Use a graduated container

Participants were asked to report the amount of waste or relative change at the end of each week for up to four weeks.

Products

ESWLC partners developed versions of products from the FTGTW toolkit to give out to participants taking the ESWLC. Partners developed a pledge form, food storage guide card and magnet, a meal planning and shopping list pad, leftover-prompt decals and food-prep labels — see Appendix 2 for all products. All products were developed in English only, with the exception of the food storage guide card, which Beaverton and Gresham printed in Spanish and distributed to residents. Washington County purchased and gave out four-quart graduated measurement containers with lids and Beaverton gave out two-quart containers — see Appendix 3 for images.

All products shared the www.EatSmartWasteLess.com website, which directed back to a Washington County-hosted page. From there, participants could navigate to their specific jurisdiction. Partners developed and shared the same content and images with the exception of Gresham which didn't have the IT support necessary to create all the pages. There were nine pages total including the home page — see Appendix 4 for examples of the Washington County pages. Gresham condensed content to one page — see Appendix 5 for illustration.

Focus audience

The focus audience was families living in Washington County (including Beaverton) and Gresham, with children under 18 who belong to groups — such as a parent support group — and attend neighborhood-level or multifamily community meetings or community events. There are over 160,000 families with children under

18 living in the ESWLC campaign area according to 2010 U.S. census information and surveys — 112,000 in Washington County (excluding Beaverton),^{xiii} 14,000 in Gresham^{xiv} and 22,000 in Beaverton.^{xv} On average there are 3.14 individuals in each family.

Planning the scope of outreach

Partners individually determined the type and amount of outreach they conducted. All partners planned to offer outreach at events and information in publications — as described in “Campaign methods.” Washington County planned to conduct presentations as well.

Other jurisdictions

Metro and the City of Portland and Clackamas County are members of the Metro Wasteshed, but did not participate in the Eat Smart, Waste Less Challenge pilot. Portland prioritized creating a parallel outreach effort as part of their [Climate Action Now](#) program.^{xvi} “Your Food” is one of five themes of that campaign. Clackamas County prioritized raising awareness about the issue. Clackamas published information in its newsletter and [website](#) including resources for proper food storage, mindful purchasing and meal planning.^{xvii} Master Recyclers and staff gave out resources at events.

Campaign methods

Events

Eat Smart, Waste Less Challenge outreach was designed for one-on-one interactions with residents at events or presentations. Partners conducted outreach at community and neighborhood events such as area farmers markets and community presentations. Partners focused on farmers markets as the main type of event to have an outreach table. Partners believed that audiences might be more receptive with the assumption that people shopping at farmers markets care about food and are thinking of food when at the event.

Partners engaged people to learn more about the SMART STORAGE strategy and to take action to prevent food waste in their home. If there was interest, time or relevance to a conversation about why food was being wasted, staff and volunteers described the other strategies. After a participant (Challenger) signed up for the ESWLC, they were informed that they would receive similar follow-up emails for four weeks with tips and resources from each jurisdiction — see Appendix 6 for Washington County’s emails. All emails were in English.

All the partners used a paper form to encourage people to make a written commitment to change — as shown in Appendix 2. Participants checked the boxes of actions they pledged to try and provided their information. Staff and volunteers tore off the bottom of the pledge form and kept it for records and then gave the top portion with tips and resources to the participant.

Challengers were given the appropriate product that matched the strategy they pledged to try on the pledge form. Washington County had all the tools available at the table. Beaverton and Gresham did not purchase or provide all tools at its tables — see Appendix 23 for full details of items purchased. Additionally, Beaverton often only provided the pledge form, magnet and food storage card at its booth.

Washington County set up a 10 x 10 foot booth at events with a tent, table, banner and a magnet activity as shown to the right and in Appendix 7. Staff and Master Recyclers engaged people in various



ways — mainly inviting them to play a food sorting game. People sorted produce magnets into three storage areas on a printed image of a kitchen on an aluminum board. Staff and volunteers engaged people in a discussion about the ESWLC and the opportunity to make them aware of some benefits to preventing food waste. Staff and volunteers explained that there would be follow-up emails and opportunities to win prizes including a reusable snack bag, reusable produce bag or a plastic storage container — see Appendix 8 for all details.

Beaverton used a fridge display to draw interest and start conversations — see Appendix 8. The display asked people to guess how much the average household in the U.S. wastes every year. After signing up for the ESWLC, staff explained they will receive follow-up emails. Challengers were told that if they completed a survey at the end of four weeks, they would receive a reusable produce bag prize.

Gresham promoted two program opportunities at its table — taking the ESWLC and signing up for online and mobile collection calendars and alerts — see Appendix 8. This was significantly different than other partners and is important to note this when looking at the difference in results. Staff offered participants a chance to win a glass storage containers if they took the ESWLC — see Appendix 8.

Presentations

Washington County developed and delivered presentations to community groups. The main audience was family-oriented groups with membership and regular meetings. This audience was selected because it could be the most successful as they could take the ESWLC as a group and provide internal support for themselves. The presentation was designed to be 25 minutes long with time for questions. The presentation included information about the issue of food waste and resources, reasons why food is wasted, benefits to preventing food waste and steps to take including taking the Eat Smart, Waste Less Challenge — see Appendix 9. SMART STORAGE was the main focus of the presentation, although all strategies and tools were shared. Presenters demonstrated storing produce correctly and answered questions. Then people signed up to take the ESWLC and tools were given out. At the end of the presentation, the presenter gave away prizes to three of the Challengers.

Other outreach

Overall, the Eat Smart, Waste Less Challenge was shared online through the individual program websites and on Facebook. Additionally, jurisdictions shared articles in print recycling newsletters and e-news.

Washington County shared the ESWLC in newsletters, through social media and a video. An article was shared in the print edition of the [Recycling Update](#) — mailed to over 153,000 addresses in Washington County — excluding Beaverton. Articles were also shared in the [Recycling Update e-news](#) — sent to over 1,200 subscribers.^{xviii} The Washington County Department of Health and Human Services shared the ESWLC in an internal newsletter to more than 1,800 staff. Facebook posts were shared on the Washington County Health and Human Services Facebook page — see Appendix 10. Washington County taped and shared an [interview on Tualatin Valley Community Television](#).^{xix} The video was [posted on a Washington County webpage](#) and aired on TVCTV.^{xx}

Beaverton included an article in its [Every Day is Recycling Day](#) newsletter — mailed to 57,000 Beaverton addresses.^{xxi} Beaverton also published an article in the May/June 2015 [Your City newsletter](#) — also mailed to 57,000 addresses.^{xxii} Beaverton shared slides on City Hall lobby monitors and at the library. And Beaverton shared a post on Facebook — see Appendix 10 for the post.

Gresham published an article in its fall newsletter, [Gresham](#).^{xxiii} Gresham shared posts on Facebook — see Appendix 10. Gresham also shared information in a utility billing insert.

Follow-up support

Partners supported Challengers who called during office hours or inquired by email. Additionally, Master Recyclers ran a [Facebook group](#) to support any participants who had questions or wanted to find others like them for support — see Appendix 11 for an example of a post.^{xxiv} The purpose of the group was for Challengers to connect with other Challengers and volunteers in the area. They were invited to ask questions, share solutions and celebrate how they prevented food waste at home. They were invited to use #EatSmartWasteLessChallenge in their posts. Challengers needed to request to join the closed group. Administrators then approved new requests.

Evaluation objectives and methods

Purpose

The purpose of this evaluation is to determine any early successes or challenges from the Eat Smart, Waste Less pilot outreach campaign and determine the course for future outreach. Objectives were analyzed including how many families were contacted, how they were reached and the actions they took. Most of the mid to long-term objective data is still being collected — to be completed by the end of 2016.

Overall results are shared as well as those of individual jurisdictions when there was a significant difference in results. Comparisons are made to gain insight for future campaigns and not as a judgement of success.

Questions

Partners looked at a series of process, outcome and impact questions as part of the study — see the complete evaluation plan in Appendix 12. Partners examined which tools were requested the most, how much it cost to implement, how many people were contacted, how many took the ESWLC and more.

Methods

Information was collected by staff and volunteers at the time of outreach and by participants self-reporting after contact. At the time of an event or presentation, most staff and volunteers counted the number of people they had an exchange with around the topic. Pledges were collected by hand on paper forms. Some participants also pledged to take action by filling out an online ESWLC survey. They checked the strategies they wanted to try and usually provided their email and zip code. Forms were tallied and entered by staff. In follow-up emails, participants were asked to fill out online follow-up surveys — see Appendix 13 for full content.

Surveys included:

- Demographic survey
- Food waste data reporting surveys
- Week four survey
- Three-month survey
- Six-month survey

Data collected by all partners:

- Number of events and presentations
- Number of contacts at presentations
- Number of participant email addresses
- Number of follow-up emails
- Number of staff and volunteer hours at events and presentations
- Time spent at events
- Inventory of products and tools given out
- Amount of money spent
- Reason took the ESWLC
- If measured food waste and why not
- Change in food waste over four weeks
- What products, tools or activities were helpful
- How household was affected by taking ESWLC
- Any strategies they planned to try over next period

Limitations

Partners were not able to collect and process all data from participants. Gresham implemented a limited version of data collection due to staffing and resource limitations. Gresham did not collect information from participants about what they pledged to do or where they lived. Gresham also didn't share the demographic survey or the three-month survey with participants. And it didn't have an online sign-up form. Instead, Challengers were instructed to download the pledge sheet and return the information by email. Beaverton did not consistently count their contacts at events. Four Washington County events didn't have contact counts. Data that was collected by some but not all partners is listed below.

Data collected by some partners:

- Number of contacts at events
- Actions pledged by Challengers
- Zip code of Challengers
- Date ESWLC was taken
- Method of ESWLC — event, presentation or online
- Methods for sharing the ESWLC beyond events and presentations
- How Challengers learned of campaign
- Type of housing
- Residence by jurisdiction
- Number of people in household
- Number of children in household
- Age range of children in household
- Language spoken at home
- Language read at home
- Race or ethnicity
- If measuring waste motivated change
- Which practices using at three months
- Change in food waste over three months
- Amount of food waste at weeks one through four
- Method for measuring waste

Another limitation was that one of the ways for Challengers participating in the Get SMART measurement strategy to measure food waste is by weight. Partners did not provide kitchen scales to weigh waste. Calculations of the weight of food waste by volume are not as accurate. This limits the ability to measure if long-term objectives are truly met.

Lastly, there was no analysis of residential community-wide food waste before or after conducting outreach. There wasn't funding for a residential food waste study before the campaign began or after it was completed. No baseline for the campaign was established. Without a community-wide study, it will be difficult to assess the reach and impact of this campaign toward the long-term objectives.

Results

Project timing

Overall, the campaign was implemented on time. Metro Wasteshed jurisdictions began scoping goals and objectives in July 2014. The campaign plan was completed by partners by February 2015. Products and tools were designed by February 2015. Outreach began in April 2015. The campaign was completed the end of October 2015, though it was originally scheduled to be completed by the end of September. Evaluation was completed in December 2015. The evaluation was originally scheduled to be completed by the end of October, but was extended with the later campaign completion date. It also took longer than anticipated to pull together information from busy partners and because there weren't shared surveys. The complete timeline is at Appendix 14.

Training and volunteer recruitment

Washington County's AmeriCorps member contributed to the first part of the campaign and event outreach. The County also secured a limited term 1.0 FTE staff to help with events and presentations during the campaign. This hiring wasn't accounted for and contributed to the increase in events and presentations from Washington County's planned outreach.

Washington County outreach staff were initially trained in an office setting by explaining the campaign and tools. Later in the campaign, staff shadowed experienced staff in the field and received feedback after trying the outreach themselves.

Master Recycler volunteers were recruited through events, newsletters and a volunteer calendar hosted on the Master Recycler website. The Master Recycler Program hosted an information session in the late winter 2015 for interested volunteers to hear about food waste prevention campaigns and upcoming volunteer opportunities. Additionally, Washington County hosted a spring 2015 training for interested Master Recyclers to get information about the campaign. The fall 2015 Master Recycler training for new volunteers included modeling the presentation and the event booth with an opportunity to practice the booth activity with each other. Partners also shared upcoming tabling and presentation opportunities for inclusion in the Master Recycler e-newsletter and on the Master Recycler volunteer web calendar.

Master Recyclers and staff were trained in advance and at the time of outreach. At Washington County's spring training, Washington County and the city of Beaverton staff shared a presentation, provided an opportunity to see the new display and tools, and modeled how to sign people up to take the ESWLC. When volunteers signed up to help with outreach, partners emailed talking points to staff and Master Recyclers prior to the event — see Appendix 15. Trained staff oriented new volunteers one-on-one on how to use the display and sign people up to take the ESWLC at the beginning of each outreach shift. Master Recyclers who wanted to help with presentations attended a presentation at least once before presenting it themselves. Staff shared talking points for the presentation in advance.

Activities

Partners collectively devoted 60 days to outreach events at area farmers markets and other community, neighborhood or workplace events and 17 community presentations. This includes several days of events planned and conducted by Master Recyclers. This was more outreach than was planned for by 24 percent — see Table 1 for more details. Beaverton conducted 120 percent more events than planned. Washington County conducted 124 percent more presentations than planned and 26 percent more events. See Appendix 16 for a full list of the events and presentation groups.

Table 1

Outreach conducted				
	Washington County	Beaverton	City of Gresham	Overall
Number event days planned	23	2	22	47
Number event days conducted	30	8	22	60
Number presentations planned	4			4
Number presentations conducted	17			17

Washington County did experience some trouble finding and recruiting groups to present to within the focus audience. Staff recruited groups through existing networks and by reaching out to online contacts including faith-based organizations. Of the 18 presentations Washington County offered, only one matched the focus

audience. Many of the presentations were to people in their workplace, civic organizations, youth groups and at libraries. There were several requests to offer the presentation at events or classes. Some of these requests were from government social service agencies, whose clients are predominately Hispanic. Some were potential partnerships with grocers in nutrition classes they offer.

Though the presentation was designed to be 25 minutes long, it varied depending on the group and the number of questions. The average length in Washington County was 38 minutes. It proved logistically challenging for a single presenter to give out tools quickly by themselves, especially for large groups. This took extra time. Some groups were as large as 30-40, though the average size was 18.

Outreach kits were available for check-out by Master Recyclers in Washington County including several kits for events and one for presentations. The kits were checked out for three events that were independent of the campaign outreach plan.

Number of Challengers and contacts

Overall, partners met the short-term reach outcome of 2,500 families being aware of the program and having access to tools and support to practice food waste prevention — see Table 2. Partners reached over 2,519 people — Washington County and the city of Beaverton underreported its number of contacts as some events didn’t have contact counts. It should be noted that it is unclear how many of these contacts were from the same household. Partners counted individuals at events and presentations and made the assumption that most of them were distinct households.

Table 2

	Number of Challengers				Number of contacts			
	Washington County	City of Beaverton	City of Gresham	Overall	Washington County	Beaverton	City of Gresham	Overall
Number	508	253	86	847	1589	412	518	2519

Where people took the ESWLC

The main method for recruiting Challengers was at events — as shown in Table 3. Nearly 70 percent of people taking the ESWLC were recruited through event outreach. Nearly 25 percent of Challengers were recruited at a presentation. Almost six percent of people took the ESWLC online.

Table 3

Households who took the ESWLC					
Where people took the ESWLC	Washington County	Beaverton	City of Gresham	Overall	Percent
Events	280	225	86	591	69.8%
Presentations	209			209	24.7%
Online	19	28		47	5.5%
Total	508	253	86	847	100%

Rate of conversion and contacts

Overall approximately 32 percent of families contacted committed to taking at least one of the promoted strategies to prevent household food waste — compared to the campaign plan objective of 50 percent — see Appendix 1 for objectives.

Fifty-four percent of contacts at Washington County’s presentation signed up to take the ESWLC. This is higher than the rate at events. It is possible that the audience is more engaged at a presentation than at an event. People at events are not usually expecting to encounter someone who wants to talk to them and might be more guarded with their time.

Twenty-seven percent of people contacted at events signed up to take the ESWLC. This varied by jurisdiction with a high of 52 percent for Beaverton and a low of 17 percent for Gresham at its events — see Table 4.

Table 4

Rate of contacts taking the ESWLC				
Where people took the ESWLC	Washington County	Beaverton	City of Gresham	Overall
Events	24%	52%	17%	27%
Presentations	54%			54%
Total	31%	52%	17%	32%

Washington County’s rates — shown in Table 5 — do not reflect Challengers from events or presentations where contacts were not counted, events where the booth was next to loud music and presentations to youth.

Partners were able to contact five people on average for each person-hour at an event and 17.3 people for each person-hour at a presentation. Overall, 1.6 people took the ESWLC at events for each person-hour. Washington County signed up 9.3 Challengers for each person-hour at a presentation.

Table 5

Where people took the ESWLC	Rate Challengers per person-hour				Rate contacts per person-hour			
	Washington County	Beaverton	City of Gresham	Overall	Washington County	Beaverton	City of Gresham	Overall
Event	1.55	3.02	0.41	1.23	6.16	5.78	2.48	4.49
Presentations	9.3			9.3	17.26			17.26
Overall	10.87	3.02	0.41	1.6	23.43	5.78	2.48	5.06

For Washington County, there was a difference in converting contacts to Challengers at events depending on the staff or volunteer tabling — see Table 6. “Staff A” was involved early in the pilot while “Staff C” was later in the pilot. “Staff B” was involved in developing the campaign. Staff C had opportunities to shadow experienced staff and had more training than Staff A.

Table 6

	Staff A	Staff B	Staff C	More than one staff and volunteer
Overall rate of conversion	16%	43%	38%	19%

Number of strategies pledged

The highest percentage of Challengers — 37 percent — only pledged to try one strategy at events. The second largest proportion was people who pledged all five strategies — see Figure 1. Anecdotally, it seemed

like event-goers had either limited time or interest to talk to staff or plenty of time or interest to learn about all the strategies. At presentations, Challengers tended to pledge for more strategies with all five strategies being

Figure 1

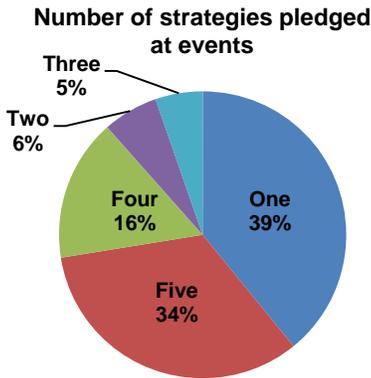
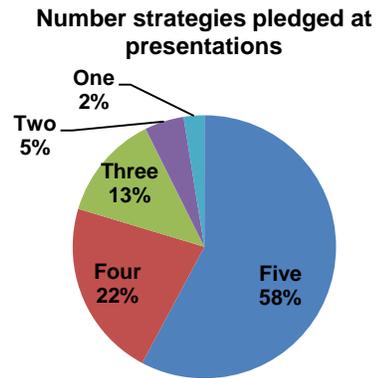


Figure 2



the highest proportion, followed by four in order on down to one — see Figure 2.

Survey response rate

Challenger responses to all the surveys were low. Responses to Beaverton’s week four survey were the best at nearly 20 percent. Overall, responses were 4.4 percent on average — see Table 7. The sample sizes for all the surveys were too small to make any conclusions about all Challengers.

Table 7

	Washington County	Beaverton	City of Gresham	Overall
Survey	Response rate	Response rate	Response rate	Response rate
Demographic	5.1%	11.9%		6.7%
Four-week	1.1%	19.1%	3.5%	7.6%
Food waste data	0.9%	2.4%		1.2%
Three-month	3.2%	1.4%		2.1%

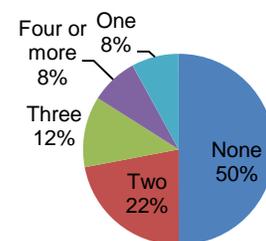
Audience demographics

Washington County and Beaverton sent the demographic survey to participants by email. Less than seven percent of Challengers took the demographic survey — 50 respondents. In order to have statistically valid information about all households who took the ESWLC, partners needed 266 responses for a 95 percent confidence level and a five percent margin of error. Plus, this information was provided by a self-selecting audience so there might be biases.

It is unclear if partners truly reached our focus demographic audience of families with children. Of the people who responded, half of the households had at least one child — see Figure 3 and Appendix 17 for all responses.

Figure 3

Number of children under 18 years in household



Forty-two percent of respondents have three to four people living in their household. Thirty-eight percent have one to two people — see Figure 4 and Appendix 17.

Sixty-four percent of respondents live in single-family homes. Thirty-four percent live in multifamily homes — see Figure 5 and Appendix 17.

Three out of 21 respondents from Washington County’s survey said they spoke Spanish most often at home and two read Spanish most often. The only material in Spanish was the food storage guide card provided by Beaverton and Gresham.

Figure 4

Number of people in household

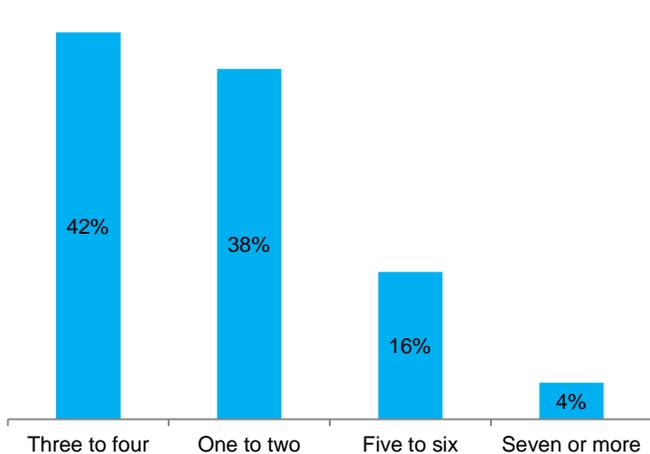
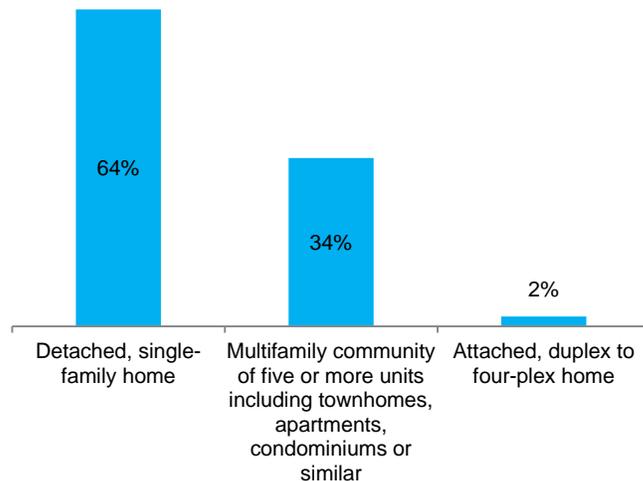


Figure 5

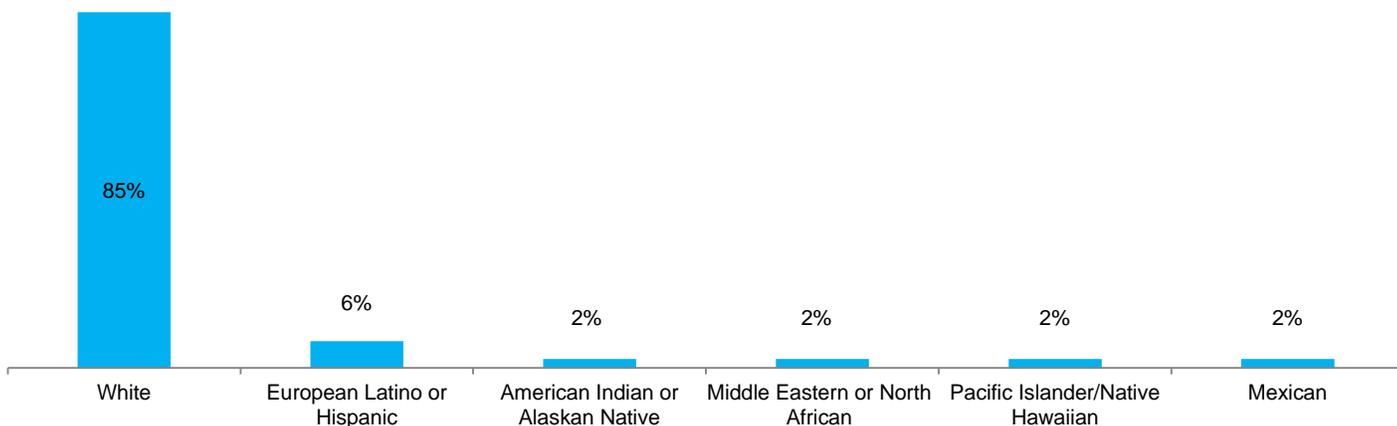
Type of housing



A majority of respondents to the survey were white. Less than 15 percent were non-white.— see Figure 6 and Appendix 17.

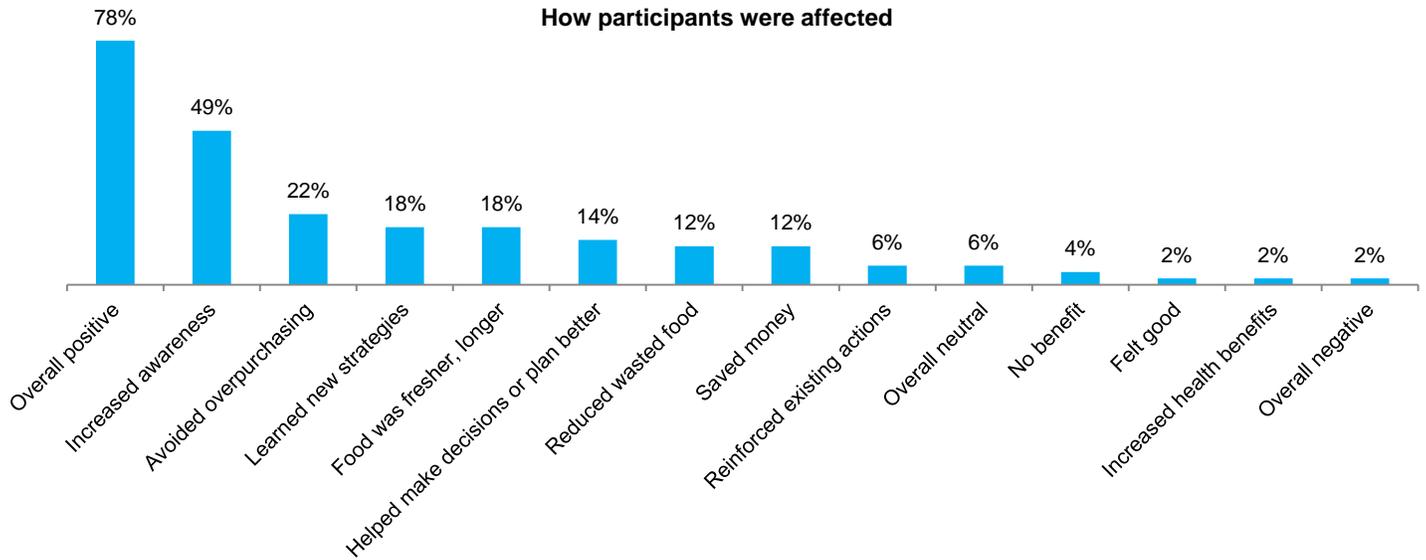
Figure 6

Ethnicity or race



Benefits received

Figure 7

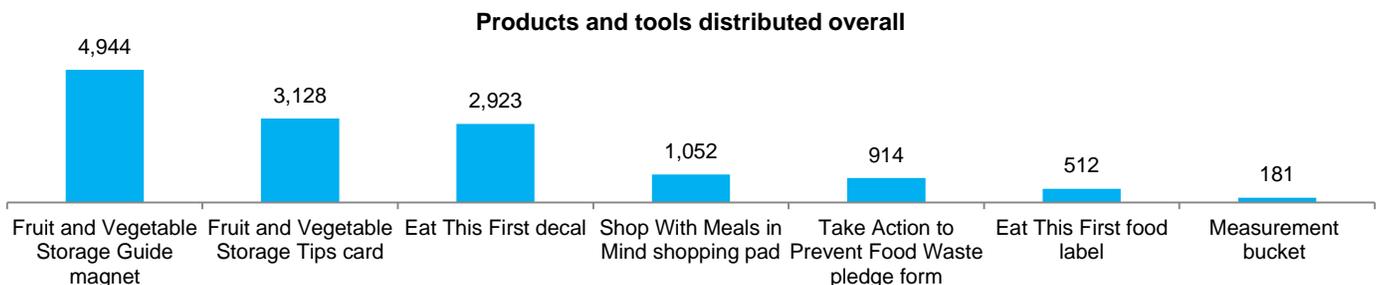


The week four survey only had 52 responses. The three-month survey had seven responses. Results here are not representative of all Challengers. They may provide some insight into how respondents felt the ESWLC benefited them. Overall, the benefits were positive — see Figure 7. Forty-nine percent said they increased their awareness of the issues. Twenty-two percent felt it helped them avoid over-purchasing groceries. Eighteen percent said it helped their food stay fresher, longer. Twelve percent felt it saved them money. See Appendix 18 for all responses.

Products and tools distributed

Overall, partners distributed nearly 14,000 products and tools. The food storage magnet was the most frequently distributed tool, followed by the food storage guide card and the “Eat This First” decal as shown in Figure 8. Of the tools that *all jurisdictions* provided, the meal planning and shopping pad was the least distributed.

Figure 8



In Washington County, the storage magnet and the storage card were the top two products distributed, followed by the “Eat This First” decal. Washington County also purchased liner bags for the buckets but they were the least distributed item after the measurement buckets. Beaverton’s top products were the magnet and pledge form. Its least distributed products were the “Eat This First” decal followed by the measurement bucket. Gresham’s top products were the magnet and “Eat This First” decal. Gresham’s least distributed product was the pledge form. See Appendix 19 for more information.

Preferred tools and resources

Respondents also provided feedback on what they thought about the products, tools and resources. A majority indicated taking a pledge — the Eat Smart, Waste Less Challenge — was helpful as was receiving follow-up emails, resources on the website, talking to staff or volunteers at an event booth, and using the fruit and vegetable storage magnet — see Table 8. No one indicated the Facebook group was helpful. Of the responses from Washington County, 75 percent felt that playing the storage magnet game at the booth was helpful. It is unclear if this is the same for all Challengers due to the small sample sizes.

Table 8

Challengers found useful	Overall
Taking a pledge to practice SMART strategies to prevent food waste	67%
Receiving weekly follow-up emails	65%
Finding information and resources on the program website	62%
Talking to staff or volunteer in person at an event booth	58%
"Fruit and vegetable storage guide" refrigerator magnet	54%
"Fruit and vegetable storage tips" card	35%
"Eat this first" storage container label	21%
"Shop with meals in mind" tablet	19%
Measuring container	15%
"Eat this first" decal	12%
Reading articles in the recycling newsletter	8%
Playing the magnet game at an event booth -- sorting food items into storage categories	6%
Talking to staff or volunteer in person at a presentation	0%
Finding support and resources on the Facebook group	0%

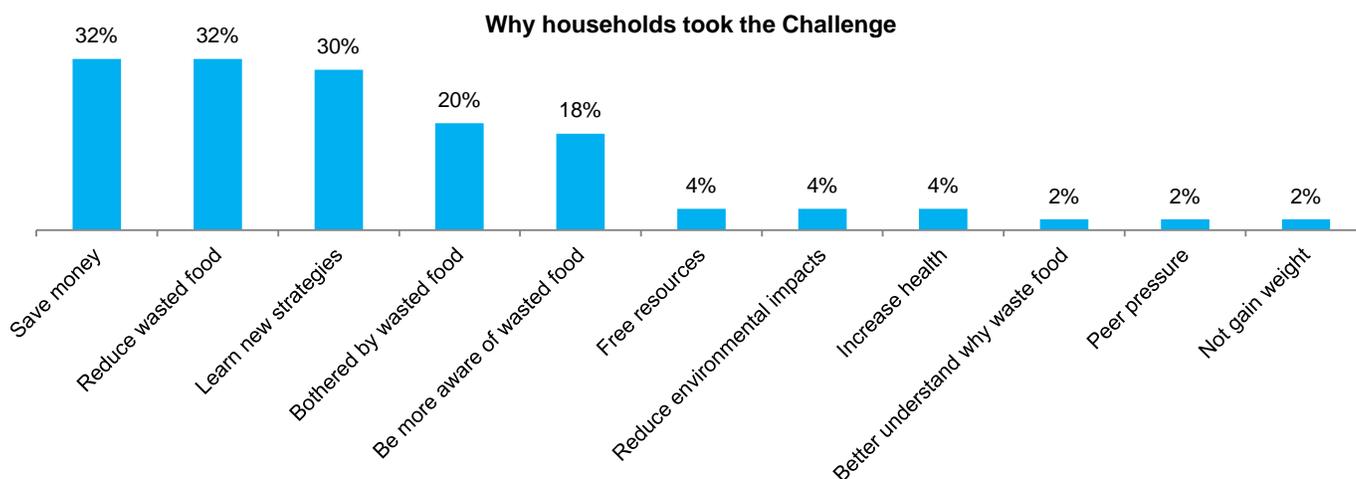
It's unclear if the "Eat This First" decal was also one of the most popular. It's likely that respondents confused the tools used for SMART SAVINGS with the tools for SMART PREP since the responses in survey were labeled similarly — "Eat this first decal" and "Eat this first food storage label."

It is possible that some of the items that were ranked least useful were because the respondents didn't receive them or they were unaware of the products or resources.

Challenger motivations

Respondents were motivated by a range of reasons. Thirty-two percent were motivated by the opportunity to save money and reduce wasted food. Thirty-percent wanted to learn new strategies. Twenty percent were

Figure 9



bothered by wasted food. Only four percent were motivated by environmental reasons — see Figure 9. Since the samples sizes were too small, it's unclear if this is the same for all Challengers.

Where Challengers came from

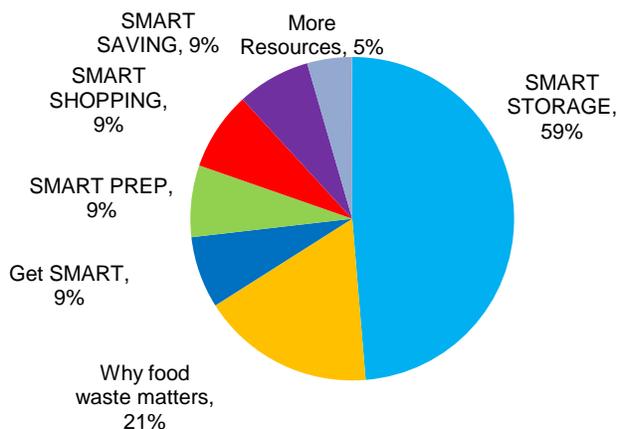
Challengers came from the entire Metro regional and beyond. Since Washington County and Beaverton recorded zip codes from the pledge form, we can see the distribution of Challengers across the region by zip code and jurisdictions. Washington County and Beaverton served more than 71 zip codes — see Appendix 20 for tables and Appendix 21 for a map. Zip codes do not follow geographic lines and often span several jurisdictions. Nearly 50 percent of Challengers live in zip codes spanning unincorporated Washington County and Washington County cities except Beaverton — see Figure 10. Nearly 24 percent were Washington County and Beaverton. Over three percent of Challengers live in Portland. Over two percent live in Clackamas County. Nearly three percent of Challengers live outside the Metro Wasteshed — see Appendix 20 for a complete distribution.

Website use

Visitors to the www.EatSmartWasteLess.com website had options to navigate to one of the partners' websites. The main home page had 745 unique visits — clicks from different computers. Four-hundred and ninety-nine unique visitors navigated from there to Washington County and Beaverton's "Take the Eat Smart, Waste Less Challenge" pages. From there, 59 percent visited the "SMART STORAGE" page and 21 percent visited the "Why food waste matters" page. The "More resources" page was the least visited — only five percent of the unique views from the main page — see Figure 11 and Appendix 22 for full distribution.

Figure 11

Percent of unique visitors to Washington Co. and Beaverton pages from Challenge page



Facebook group use

Fifty Facebook users joined the Eat Smart, Waste Less Challenge Facebook group. Ten of these were staff and Master Recycler administrators. The Facebook was used primarily by Master Recyclers and staff to share resources. Forty nine posts were shared to the group by administrators, partner staff and Master Recyclers. Two posts were shared by non-staff or Master Recyclers. The Facebook group was mostly mentioned as part of the follow-up emails. It doesn't seem that people want to join a Facebook group or feel comfortable sharing personal information online.

Cost and budget

Partners spent \$7,939 on outreach for the Eat Smart, Waste Less Campaign pilot campaign. Partners' expenses ranged from \$4,635 to \$320 each. Expenses included products and tools that were given out as part of the pilot phase and not items that were still in partners' inventories and could be used in future campaigns. Expenses were calculated on a per unit basis by the number given out. The greatest overall expenses were the products and tools as shown in Table 9. This value does not include items purchased and also used for other campaigns such as print or electronic newsletters and websites. See Appendix 23 for full details.

Table 9

	Washington County	Beaverton	City of Gresham	Overall
Product total	\$1,641	\$161	\$2,938	\$4,740
Prize total	\$374	\$119	\$46	\$539
Display total	\$2,289	\$39		\$2,328
Event fee total	\$100			\$100
Training total	\$231			\$231
Total	\$4,635	\$320	\$2,984	\$7,939

In terms of budgets, Washington County and Gresham created a budget for their outreach. Gresham was \$7 over budget and Washington County was \$405 over budget. Washington County ordered more products and tools than were necessary for most items. The only item that Washington County ran out of was the “Eat This First” food storage container label.

Washington County coordinated a bulk purchase order for products. Beaverton ordered with Washington County. Gresham was not ready to order at that time and purchased products separately. Washington County and Beaverton were able to purchase magnets at \$0.12 for each magnet. Gresham purchased magnets at \$1.28 for each magnet.

Partners did not measure campaign development or administrative time. Staff and volunteers contributed nearly 550 person-hours in delivering outreach including setup — see Table 10 for more information.

Table 10

Person-hours for outreach				
	Washington County	Beaverton	City of Gresham	Overall
Person-hours events	241	71.25	209	521.25
Person-hours presentations	28.33			28.33
Total person-hours	269.33	71.25	209	549.58

Investment to get Challenges and contacts

Campaign partners spent money and contributed staff and volunteer time to reach campaign objectives. Overall, it cost \$9.21 in products, equipment, fees and other expenses to recruit one household that committed to at least one strategy to prevent food waste at home. The cost to recruit Challengers varies from \$34.70, for a household by Gresham, to \$1.26, by Beaverton — see Table 11. This value does not include staff salaries for program development, administration or implementation.

Table 11

Dollars spent for each household committing to use strategies to prevent food waste				
	Washington County	Beaverton	City of Gresham	Overall
Spent	\$4,635.23	\$319.51	\$2,984.00	\$7,938.73
Number of Challengers	508	253	86	847
Investment per pledge	\$9.12	\$1.26	\$34.70	\$9.37

Across the region, it took on average 40 minutes of staff and volunteer time to get a household to take the ESWLC at an event or presentation including time talking to all contacts, explaining the program, giving out tools, setting up and taking down equipment — see Table 12 and Appendix 24 for full details. This value does

not include staff time for campaign development or administration. In Washington County it took 41 less minutes to recruit a Challenger from a presentation than at an event.

Table 12

Person-hours spent for each household committing to use strategies to prevent food waste				
	Washington County	Beaverton	City of Gresham	Overall
Investment events	0:48	0:19	2:26	0:51
Investments presentations	0:07			0:07
Investment per pledge	0:31	0:32	2:26	0:40

From the perspective of the number of contacts at an event or presentation, it cost \$7,938.73 to help more than 2,732 people to be potentially aware of the food waste prevention efforts and make tools available for them — \$2.91 for each person — see Table 13. Because the quality of the contact varies, especially at events — even brief, one-way conversations were counted — it is unclear if a contact is fully aware of the opportunity to prevent food waste. Plus, not all contacts were recorded at all events.

Overall it took 0.19 person-hours for each contact — 11 minutes — see Table 14 and Appendix 25 for full details. In Washington County it took 0.1 less person-hours — 6 minutes — to contact someone at a presentation compared to an event.

Table 13

	Washington County	Beaverton	City of Gresham	Overall
Spent	\$4,635	\$319.51	\$2,984	\$7,939
Number of contacts	1739	412	581	2732
Investment per contact	\$3	\$1	\$5	\$3

Table 14

Person-hours spent for each contact				
	Washington County	Beaverton	City of Gresham	Overall
Investment events	0.16	0.17	0.36	0.22
Investment presentations	0.06			0.06
Total investment	0.14	0.17	0.36	0.19

Completed four weeks of the ESWLC

Overall, it seems like Challengers may still be practicing SMART strategies after four weeks. However, there were only 52 responses to the four-week survey so the results can't be applied to all Challengers because the sample size was too small. Of those respondents, all of them indicated they were still practicing at least one behavior at the end of four weeks. Respondents were practicing on average, three behaviors — see Table 15

Table 15

Challengers at four weeks				
	Washington County	Beaverton	City of Gresham	Overall
Percent taking action after four weeks	100%	100%	100%	100%

Committing to action for three months

From the week four survey, a majority of respondents said they planned to use some of the SMART strategies over the next three months. It's unclear if most Challengers will do the same because of the low response rate — see Table 16.

Table 16

Challengers at four weeks				
	Washington County	Beaverton	City of Gresham	Overall
Percent plan to use SMART strategies for next three months	100%	96%	100%	98%

Actions at three months

All seven of the respondents to the three-month survey said they were still practicing at least one SMART strategy after three months — practicing nearly four strategies on average — see Table 17. It's unclear if this can be said about everyone who took the ESWLC because of the low response rate to the survey.

Table 17

Challengers at three months			
	Washington County	Beaverton	Overall
Percent taking action after three months	100%	100%	100%

Measuring household food waste

Two-hundred and sixteen Challengers recruited by Washington County and Beaverton indicated they would try the four-week Get SMART portion of the ESWLC. One-hundred and eighty-one measurement tools — 2 and 4-quart graduated containers — were distributed to them. Eighteen Challengers reported food waste for at least one week. Eight respondents reported using a graduated container to measure waste. Six respondents estimated or took a picture. No one used a kitchen scale to measure waste — see Table 18.

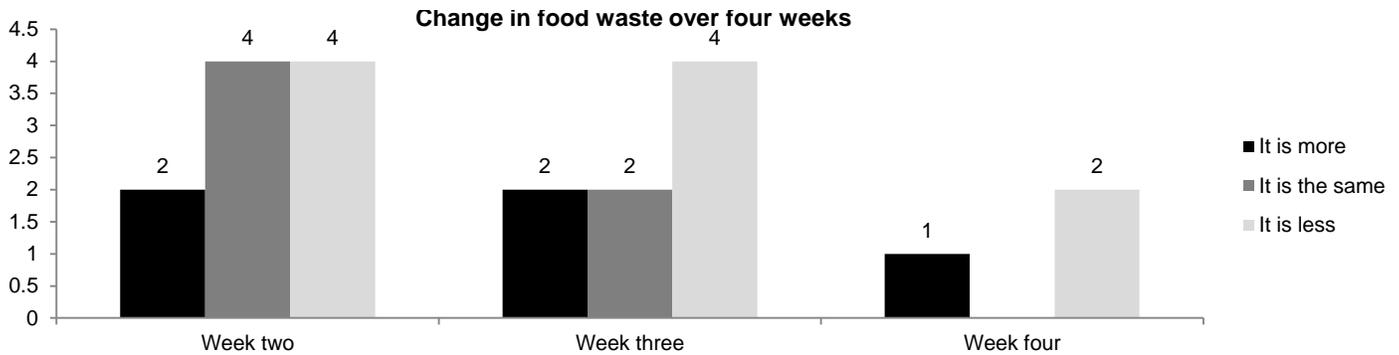
Table 18

Method for measuring food waste			
	Washington County	Beaverton	Overall
Measured with a graduated container	2	6	8
Estimated or took a picture	2	4	6
Other	3		3
Measured in portions of a large container -- quarter, half or more	2		2
Measured with a kitchen scale			0

From week to week, the change in food waste isn't apparent. Ten respondents reported waste data on week one. By week four, only three people had reported food waste data including that they had no waste. Figure 12 shows the relative change from week to week of respondents.

Some of the respondents reported the amount of waste. Between five and eight people reported the volume of their food waste over the four weeks. On average, the amount of household food waste decreased from 1.3 quarts to 0.6 quarts. Since the sample size is so small, this difference is not significant and can't be generalized about all Challengers.

Figure 12



Thirty of the respondents to the week four survey indicated why they didn't measure food waste. The top response was that they didn't have enough time — see Table 19 and Appendix 26 for all reasons.

Table 19

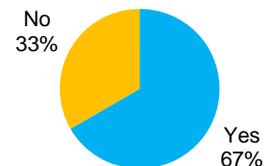
Reason for not measuring food waste			
	Washington County	Beaverton	Overall
Not enough time	3	11	14
Other	1	9	10
Didn't think it was helpful for my family		5	5
Only wanted to try one SMART strategy at a time	1	4	5
Didn't have the right tools		4	4
Didn't know it was an option		4	4
Didn't know how to measure or what tools to use		4	4
Took the ESWLC online and didn't want to go pick up a container from the partner office		2	2

Waste measurement as a motivator

Twenty-one people responded to the question about whether measuring waste motivated them to make changes — not enough to make any conclusions about all Challengers. Sixty-seven percent said that measuring waste was a motivator — see Figure 13.

Figure 13

Did measuring your food waste motivate you to make any changes?



Longer-term change in food waste

It's unclear if there was any change in household food waste in the affected region because there was no community-wide study and there are not enough people responding to the three-month survey.

Other feedback

Challengers offered some feedback as part of the week four and three-month follow up surveys. Overall, the feedback was positive — see Appendix 27 for all responses. Some of the responses included:

“This program is great!”

“I like that Beaverton has made it a priority to share with the community how important it is to eat smart and waste less.”

“I really appreciate Gresham promoting “Eating smarter, and wasting less”. I’m anticipating that my family will do much better in all the above areas.”

“Changing habits is a process, and I plan on looking back at the website and emails for refreshers until we are confident in our new plan.”

“I was not aware of our food waste until I started this program. Loved all of the tips and ideas. I already knew some of the storage tips, but there was still alot that I didn't know. Thank you for the knowledge and helping me to be more aware of reducing waste in our household. I feel this program can help all households.”

Recommendations

Unify regional outreach

It would benefit residents within the region if all jurisdictions across the Metro Wasteshed offered a unified food waste prevention campaign. The Metro area is a fluid region where many people work, live and play in different jurisdictions. Much of the work of solid waste and recycling agencies in the Metro Wasteshed is coordinated, messages are shared and tools are similar. The Master Recycler volunteer program is also a regional program with shared resources and communication, and where volunteers might help several jurisdictions. Over the last year, people from the entire wasteshed participated in the Eat Smart, Waste Less Challenge. All residents in the Metro Wasteshed could be served if Clackamas County and Portland officially join the Eat Smart, Waste Less Challenge. A unified, regional approach could be accomplished by streamlining some of the program administration, increasing volunteer training and volunteer opportunities, and creating an equally cross-branded third-party website. Master Recyclers could perform outreach on behalf of jurisdictions.

Each jurisdiction determines the level of outreach

The level of outreach and type was determined during the pilot by individual partners. Partners could continue to plan their own outreach according to their priorities and available resources. For jurisdictions with limited resources, presentations might be the most efficient outreach tool to focus on. It takes less time to reach people at a presentation than an event, participants are more likely to take a pledge and they are more likely to commit to more than one action. For existing partners, they could increase the number of presentations versus increasing the number of events.

Another potential outreach strategy is hosting food-themed movie viewings followed by an opportunity to take the ESWLC. This strategy is currently being piloted by other Food: Too Good to Waste jurisdictions and shows early promise for recruiting households to take action on preventing food waste at home. Another opportunity includes working more closely with grocers through classes or workshops. Additionally, a region-wide program could benefit from having dedicated social media outreach including Facebook, Twitter and Instagram.

Centralize program website, administration and follow-up emails

Metro could help partner jurisdictions administer the campaign. Metro has authority and resources to help develop the Eat Smart, Waste Less Challenge as a regional campaign, and it is its natural role as the watershed authority to lead regional campaigns. Partner jurisdictions could split up administrative tasks that Metro could not do.

Metro could host a third-party website for the Eat Smart, Waste Less Challenge instead of being replicated on each partners' websites — similar to the look of the new [Master Recycler](#)^{xxv} or [Metro](#) websites.^{xxvi} The website could be independent of any local jurisdiction's website and cross-branded with the partners. The new platform could be mobile-friendly. There would not be any extra or unrelated information to distract visitors. The new website would not need to be replicated by partner websites anymore. One of the pages would describe the nature of the program including partners and links back to partner websites. Partner websites would only need to host brief content summarizing the campaign on their websites and link to the new site. All the new pages on the third-party website would begin with www.EatSmartWasteLess.com/.

It would be more efficient if there were only one set of follow-up surveys and one online ESWLC form. This would make it easier to analyze results, rather than trying to merge multiple data sets. Surveys would be cross-branded and general enough to capture information across the region.

Other data collection could be streamlined by developing and distributing data collection templates at the beginning of the campaign season. One jurisdiction could lead the evaluation.

Follow-up email administration could be centralized as well. Partners would input email address collected from outreach and one partner would schedule and send the follow-up emails. Emails could be cross-branded so that they represent all partners. The "from" email addresses could be neutral — xxx@eatsmartwasteless.com.

Save money with bulk product purchases

Metro could coordinate bulk purchasing of products and resources. This would make it possible for jurisdictions to purchase more resources or save money.

Long term adjustments

Partners could plan to conduct the community outreach campaign through 2022 — see Table 21. This gives partners opportunities to continue to create awareness, promote the suggested behaviors, teach new skills and give out resources to help residents make the change.

The first phase could be directed more by Eat Smart, Waste Less Challenge campaign partners and continue through 2019. Partners could continue to initiate outreach. Then partners could begin to develop community partnerships and recruit more volunteers.

During a second phase of the campaign, beginning in 2020, partners could begin training and supporting "food champion" master volunteers to do most of the outreach — some of whom could be Master Recyclers. Social service organizations could help do outreach too. Partners could provide training and resources. The social service organizations could then work directly with their audiences to prevent food waste at home.

The results of the 2021 DEQ waste composition study will be available by 2022. The 2016 study could be used as a baseline for household food waste and as a comparison to the 2021 study. At this point, if there should be a decrease in the generation of food scraps, the campaign could be transitioned to long-term maintenance outreach — similar to the outreach about curbside recycling. Depending on the reach and depth of previous outreach, local jurisdictions might support continuation of the second phase for several more years.

Table 1

Long term planning	
Task	Timeline
Conduct pilot campaign	2015
Local jurisdictions and Master Recyclers conduct outreach	2016-2019
Develop partnerships with social service organizations to conduct outreach	2018-2020
Develop "food champion" master volunteer program and work more closely with Master Recyclers	2018-2019
Community organizations, food champion master volunteers and Master Recyclers conduct outreach	2020-2022
Transition to general maintenance outreach and education about food waste prevention	2022-

In mid-2016, the Ad Council and the Natural Resources Defense Council will launch a three-year community advertising campaign focused on preventing food waste. This will likely contribute to an increase in community awareness of the issues of food waste. This could help the ESWLC if its messages were adjusted to align to the Ad Council media.

Increase engagement at events

Displays could be adjusted so that they are visually eye-catching with activities that drew people in. Spin wheels seem to be very popular at events especially when there is something to win. A spin wheel could be an opportunity to choose a category for discussion. A magnet board with interactive pieces seems to be engaging too.

Outreach at a table could be to one campaign at a time, especially when the available options include components of joining. People’s time, attention and willingness to try new actions at a booth is limited. Asking someone to take action on food waste and sign up for electronic calendars and reminders — as demonstrated by Gresham — is likely too much. When there are two competing campaigns, it is probably best to increase staff or volunteers and have two separate booths that are adjacent.

SMART Storage is not always the right strategy or the only strategy to help a household. It can be a starting point for a short discussion. However, staff and volunteers could be more prepared to learn about what participants need before going into depth on a topic. It might still be a good idea to get someone to pledge to one thing at a time, rather than explaining them all — at least at events. Depending on the time or interest of participants at events, staff can go deeper into the campaign and other strategies — signing up for each action as they go.

Improve staff and volunteer training

Having a good understanding of the strategies, tools and resources to prevent food waste at home and the confidence to ask someone to pledge to take action are keys to success at events. Staff and volunteers who were not comfortable asking someone to take action were less likely to get Challengers. Master Recyclers were also less likely to volunteer if they weren’t confident. Training for staff and volunteers could include more opportunities to become accustomed to the tools and online resources with more up-front communication. Also, training could include more time to see outreach methods and equipment demonstrated. Staff and volunteers can then practice using them with peers and get feedback and suggestions from staff. Lastly, jurisdictions could give staff and volunteers increased time working alongside practiced staff or volunteers delivering outreach and receiving feedback before they try it themselves.

Increase survey participation

It might be possible to increase survey participation by spending more time up front describing the follow-up to taking the ESWLC. There will always be some people who do not open emails, especially if they do not see

their value. If they don't open the email, they won't read about the surveys. Staff and volunteers could spend more time when signing people up at events and presentations describing the follow-up emails, the value of the surveys and opportunities to win prizes.

It could help to revise the emails so that the surveys are more obvious and prominent such as using different colored text or call out buttons.

Having better prize options for taking surveys might increase participation. One option might be to have a prize for every participant. Another option would be to enter participants into a drawing and have more appealing prize options. Smaller prizes could be bundled and bigger prizes could be given out. There are opportunities to get sponsorship from local organizations and businesses including gift cards, local products and services.

Lastly, adding a sixth email on the fifth week to remind people to participate in the surveys could help increase participation.

Reach more diverse audiences

There is a great opportunity to partner with organizations that work with people of color, who are low-income, and speak and read Spanish as their primary language. There are existing networks that work around food security or nutrition with these populations including Oregon State University Extension Service, public health departments and housing departments, food pantries, and other social service organizations. The ESWLC tools and resources could all be made available in Spanish or other languages as necessary. Additionally, it would be good to consult with these groups and audiences to improve the cultural relevance of messages and tools.

Get more information on household food waste

More information from participating households would be helpful to determine success toward the long-term objectives. Some of the recommendations for increasing survey response might also be helpful to get more responses from Get SMART pledges. It would also be good to spend more time up front describing how to measure food waste over the four week period, what to measure, the benefits of measuring and how to report. Some of this information might be included in the follow-up emails too.

EPA Region 10 is leading a workgroup to study residential food waste. The outcomes of research on behaviors could be useful in seeing impact. Partner jurisdictions could volunteer to participate in the study if they are able to contribute staff time or funding.

Oregon DEQ conducts its statewide waste composition study every five years with the next study in 2016. There is an opportunity for local partners to contribute some funds to the study to get better information about residential food waste generation. Partners could contribute funds to the 2016 study to get a better community baseline as well as funds to the 2021 study to see if there was any change.

Streamline the website

The existing website is very thorough and content-rich. However, there is room to improve them and make them more accessible by paring down content and including more diagrams, figures and images.

Add tools for understanding food product labels

People don't know what to do with food products that have gone beyond their product label date. Partners could develop a handout that describes what food products labels really mean and how consumers can better understand food quality.

Add tools for understanding all strategies

Partners could develop a handout with that describes how to do all strategies, resources offered online and the benefits of trying them. The pledge form only describes how the SMART Storage and Get SMART strategies work. Staff and Master Recyclers currently have to explain the other strategies in person. A Challenger will need to go the website for more information when at home.

Information about all strategies in email follow-ups

If more people are exposed to more of the strategies during outreach, it could more help if the follow-up emails include a little more information about all the strategies, not just the primary message or strategy. It could be more effective to keep the email focused mainly on the primary focus strategy, but offer one or more messages in each email about another strategy.

Promote social media

It might help to promote the Facebook support group in other ways than just the email follow-up news. Changing the privacy setting to public might encourage more people to join the group as they can see that the group could benefit them.

Acknowledgements

Thank you to the West Coast Climate & Materials Management Forum and the U.S. Environmental Protection Agency for developing strategies to reduce household food waste. Thank you to the cities of Beaverton, Gresham, Portland, the counties of Washington and Clackamas, and Metro for helping develop early frameworks for residential food waste prevention outreach in the Metro Wasteshed. Thank you to the cities of Beaverton and Gresham and Washington County for their work to develop, implement and evaluate the Eat Smart, Waste Less Challenge. Thank you to the New South Wales Environmental Protection Agency, "Love Food, Hate Waste" campaign for sharing shopping tools. Thank you to all parties above, for helping write and review this report.

Appendices

Appendix 1 — Campaign goals and objectives

Goal: Food purchased by residents in Washington County (including Beaverton) and Gresham is eaten and not wasted.

Objectives:

Long-term:

Fifteen percent of families **are eating 85 percent of the food purchased** for home consumption by July 2018.

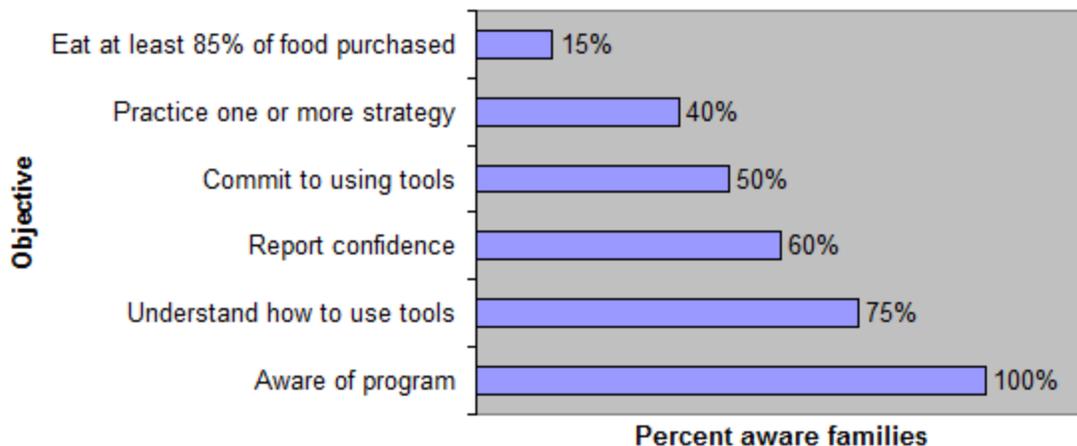
Mid-term:

Forty percent of families **are practicing at least one of the promoted strategies** to prevent waste of food purchased for home consumption by July 2016.

Short-term:

1. Twenty-five hundred families with children under 18 **are aware of the Food Waste Prevention Program and have access to tools and support** for practicing food waste prevention by December 2015.
2. Seventy-five percent of families **understand how to do at least one of promoted strategies** to prevent household food waste by December 2015.
3. Sixty percent of families **report confidence in the ability** to prevent the amount of household food wasted in their home by December 2015.
4. Fifty percent of families **commit to taking at least one of the promoted strategies** to prevent household food waste by December 2015.

Food Waste Prevention Objectives



Challenge form — 8.5 x 11 inches

Take Action to Prevent Food Waste

Take the **EAT SMART, WASTE LESS CHALLENGE** to save money and to keep food tasting fresher and lasting longer.

Tips for SMART STORAGE — Keep fruits and vegetables fresh.

- Store bananas, basil and winter squash on the counter or table — once cut, store in the refrigerator.
- Store garlic, onions, potatoes, mangos, papayas and pineapples in a cool, dark place, like a cupboard.
- Separate ripe fruit from unripe fruit. Many fruits give off gases as they ripen, making other produce spoil faster.
- Store bananas, apples and tomatoes separately, and store fruits and vegetables in different bins.

- Each year, a quarter of all food purchased for U.S. homes is thrown away.
- A family of four can save more than \$1,600 a year by making changes in how they shop, prepare and store food.
- The land used to grow food that is wasted is one and a half times larger than the size of the U.S.

- Berries are often treated to prevent mold. Wash berries just before eating.
- If you like your fruit at room temperature, take what you'll eat for the day out in the morning.
- Consider using storage bags or containers to help extend the life of your produce.

Visit www.EatSmartWasteLess.com for more information and other smart strategies.



Store in the fridge:

- Apples, berries and cherries
- Grapes, kiwi and all citrus fruit
- Most other fruit, vegetables and herbs



Once ripe, store in the fridge:

- Melons, nectarines, apricots, peaches, pears and plums
- Avocados and tomatoes



Check the box to pledge to prevent food waste.

My family will practice:

SMART STORAGE — Keep fruits and vegetables fresh.

Name: _____ Email: _____

Zip code: _____

Fruit and vegetable storage tips



SMART STORAGE: Do you know which fruits and vegetables stay fresh longer inside or outside the refrigerator? Help your food stay fresh and taste better by storing it in the right place so it lasts longer and saves you money.

INSIDE THE FRIDGE:

- Apples, berries and cherries
- Grapes, kiwi and all citrus fruit
- Most fruit, vegetables and herbs — see those listed on the back



ONCE RIPE, STORE IN THE FRIDGE:

- Melons, nectarines, apricots, peaches, pears and plums
- Avocados and tomatoes



ON THE COUNTER OR TABLE:

- Bananas
- Basil
- Winter squash
- Once cut, store produce in the fridge



IN A COOL, DARK PLACE, LIKE A CUPBOARD:

- Mangos, papayas and pineapples
- Potatoes and onions
- Garlic

MORE STORAGE TIPS:

- Store bananas, apples and tomatoes by themselves. Store fruits and vegetables separately. Some fruits give off gases that can quickly ripen other nearby produce.
- Wash, cut and store fruits and vegetables in bags and containers to extend the life of your produce and to make preparation easier at meal times.



Visit www.EatSmartWasteLess.com for more ways to prevent food waste.

Fruit and Vegetable Storage Guide

INSIDE THE FRIDGE:



- Apples, berries and cherries
- Grapes, kiwi and all citrus fruit
- Almost all fruit, vegetables and herbs

ON THE COUNTER OR TABLE:



- Bananas
- Basil
- Winter squash
- Once cut, store produce in the fridge

ONCE RIPE, STORE IN THE FRIDGE:

- Melons, nectarines, apricots, peaches, pears and plums
- Avocados and tomatoes



IN A COOL, DARK PLACE, LIKE A CUPBOARD:

- Mangos, papayas and pineapples
- Potatoes, onions and garlic



More tips to prevent food waste at
www.EatSmartWasteLess.com

SMART SAVING leftover prompt decal — 6 x 4 inches



SMART PREP container sticker — 3 x 2.5 inches



Appendix 3 — Graduated measurement containers

4-QT and 2-QT containers — lids not shown



Appendix 4 — Campaign web pages

www.EatSmartWasteLess.com home page



[HOME](#)
[NEWS](#)
[CALENDAR](#)
[CONTACT US](#)
[SERVICES](#)

SEARCH
 GO

[More Search Options](#)



HEALTH & HUMAN SERVICES

[County Home](#) / [Health and Human Services](#) / [Garbage & Recycling](#) / [Waste Prevention](#) / [Prevent Food Waste at Home](#)



Prevent Food Waste at Home

The average U.S. household throws away a quarter of all food they purchase. That is like going to the store, leaving one of your four bags in the parking lot and driving away. At the same time, one in six Americans lacks a secure supply of food. [Learn more](#) about why preventing food waste matters.

By making small shifts in how we shop, prepare and store food, we waste less, save money and conserve the valuable resources associated with food production.

One step is to store fruits and vegetables properly. Many households store much of their fruit on the counter, however apples and citrus fruits last the longest when they are stored in the refrigerator. If you want them warm, just take what your family will eat that day out of the fridge in the morning.

Take the Eat Smart, Waste Less Challenge

The Eat Smart, Waste Less Challenge is an opportunity for families in the tri-county area to reduce the amount of food waste at home. Information, tools, resources and support for families to take the Challenge are provided by Washington County and the cities of Banks, Beaverton, Cornelius, Durham, Forest Grove, Hillsboro, King City, North Plains, Sherwood, Tigard, Tualatin and Gresham. Challengers start by taking a pledge to practice SMART STORAGE by keeping their fruits and vegetables fresh. More smart strategies, tools and support are also available.

To take the Challenge, click on where you live below.



Including the cities of Banks, Cornelius, Durham, Forest Grove, Hillsboro, King City, North Plains, Sherwood, Tigard and Tualatin, and other [unincorporated communities](#)





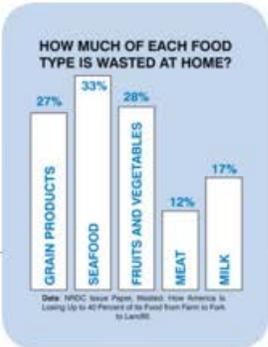
Not sure which jurisdiction you live in?

Type in your address on the [Metromag](#) website to find.

Acknowledgment

Thank you to the West Coast Climate & Materials Management Forum and the U.S. Environmental Protection Agency for developing [strategies to reduce household food waste](#).

HOW MUCH OF EACH FOOD TYPE IS WASTED AT HOME?



Food Type	Percentage Wasted
GRAIN PRODUCTS	27%
SEAFOOD	33%
FRUITS AND VEGETABLES	28%
MEAT	12%
MILK	17%

Data: NRDC Special Report, *Wasted: How America is Losing Up to 40 Percent of Its Food from Farm to Fork to Landfill*.

Fruits and vegetables are the second most wasted food after seafood.

Eat Smart, Waste Less Challenge



Take the Eat Smart, Waste Less Challenge

Click here to take the Challenge

Join other families in Washington County and the tri-county area to reduce food waste at home by taking the **Eat Smart, Waste Less Challenge**. The first step is to pledge to practice the simple step of **SMART STORAGE** by keeping your fruits and vegetables fresh. It's an easy step to take. Click on the box to the left to take the Challenge to start today. County staff will follow up and provide you tools and support to help you with the Challenge. For more information, [contact](#) a waste prevention and recycling specialist or call 503-846-3605.

Take the Challenge at an event

Find staff and Master Recyclers at one of our community events. Learn about how the Challenge works from staff and get free tools including a 4-quart measurement container. Containers are limited to people who sign up for the GET SMART strategy. Go the [County calendar](#) and search for "eat smart" for upcoming events.

Request a presentation

Learn how important the issue is, what you can do about it and get free tools to start now. Staff or Master Recyclers can come speak to your parents group, neighborhood association, church group, business or other adult group. Why not make it a potluck? We will adjust the presentation length to fit your needs (15-45 minutes). [Email](#) us or call 503-846-3605 to schedule a presentation.

Learn more about SMART STORAGE



SMART STORAGE — Keep fruits and vegetables fresh

Get support online

Connect with other Eat Smart, Waste Less Challengers and volunteers who are ready to answer your questions on the [Facebook](#) group. Or use [#EatSmartWasteLessChallenge](#) on Twitter.

Why food waste matters

[Forty percent](#) of the food grown in the United States goes uneaten. Yet [one in six](#) Americans lacks a secure supply of food. [Learn more.](#)

Other smart strategies your family can practice

Are you already practicing SMART STORAGE? Pledge to try another smart strategy when you take the Eat Smart, Waste Less Challenge.



GET SMART — Measure how much food your family throws away over four weeks



SMART SAVING — Eat what you buy



SMART SHOPPING — Buy what you need



SMART PREP — Prepare now and eat later

SMART STORAGE — Keep Fruits and Vegetables Fresh

Keep fruits and vegetables fresh. Help your food stay fresher, taste better and last longer by storing it in the right place.

Tips to practice SMART STORAGE

- Store onions, garlic, potatoes, mangos, papayas and pineapples in a cool, dark place. See [where to store](#) other fruits and vegetables.
- **Freeze food** you won't be able to eat soon.
- Use clear storage bags or containers to help extend the life of your produce and easily identify the contents.
- Separate very ripe fruit, apples and bananas as they will spoil other produce.
- Store fruits in the [low-humidity drawer](#) and leafy greens in the high-humidity drawer.
- Wash berries just before eating to prevent mold.
- Make produce that's past its prime into soups, sauces, pies or smoothies.
- If you like your fruit at room temperature, take what you'll eat for the day out of the fridge in the morning.



Other resources

- A-Z Food [Storage Guide](#)
- [Food storage tips](#)
- [Preserve and store food](#) with Oregon State University (OSU) Extension
- [SniffTest](#) — your ultimate shelf-life guide
- How to [use your refrigerator](#) better
- [Basic freezing steps](#)
- [Learn more](#) about why preventing food waste matters
- Other [smart strategies](#) your family can practice
- [More resources](#)



Click here to take the Challenge

GET SMART — Measure How Much Food Your Family Throws Away Over Four Weeks

Over four weeks, together with your family, measure how much food your household throws away. From the list below, choose the best way for your household to measure edible but uneaten food over the four week challenge. Be sure to include food scraped off plates and from the fridge, counter and cabinets:

- Estimate or take a picture when you throw food away — at the end of the day, is it more, less or same as the days before?
- Measure at the end of each day with a kitchen scale.
- Measure at the end of each day with a large container — is it quarter full, half or more?
- Measure wasted food at the end of each day with a container with graduated measurements. A limited number of 4-quart graduated containers are available to Challengers who choose to measure volume — limited to one per household.



Record the results on the GET SMART [Measurement Guide](#) and post them on your fridge. [Report results online](#) and enter to win prizes.

Other resources

- [Request](#) a free 4-quart graduated measurement container and plastic liners
- GET SMART [Measurement Guide](#)
- [Learn more](#) about why preventing food waste matters
- Other [smart strategies](#) your family can practice
- [More resources](#)



Click here to take the Challenge

Measurement instructions and table

SMART SAVING — Eat What You Buy

Use up leftovers and the ingredients you have before buying more. You'll waste less, save more and may even find a new favorite dish.

Tips to eat what you buy

- Move food that's likely to spoil soon to the front of the shelf or a designated "eat this first" area each week.
- [Learn the difference](#) between "sell-by," "use-by," "best-by" and expiration dates. You can rely on your own sight and smell over food dates in most cases.
- Make casseroles, frittatas, soups and smoothies from leftovers and extra ingredients.
- Create a list each week of foods that may spoil soon and plan upcoming meals around them.



Other resources

- Keep track of what is in your cupboard and freezer with this free [Cool app](#)
- [Request](#) a free "Eat This First" decal
- [Ideas for leftovers](#) from Oregon State University (OSU) Extension Food Heroes
- [A-Z recipes](#) by ingredient by OSU Extension Food Heroes
- [Learn more](#) about why preventing food waste matters
- Other [smart strategies](#) your family can practice
- [More resources](#)



Click here to take the Challenge

SMART PREP — Prepare Now and Eat Later

Preparing ingredients ahead of time can make it easier to create meals later in the week as well as save time, effort and money.

Tips to practice SMART PREP

- When you get home from shopping, wash, dry, chop and prepare items — with the exception of berries which could mold if you wash them too early.
- Place items in clear storage containers — so you can quickly identify the contents.
- Freeze food you don't plan to eat within a few days such as bread, sliced fruit, vegetables or meat.
- Cook several meals at once. Then store them in the refrigerator or freezer for later in the week.
- Prepare and cook perishable items such as meat, then freeze it for use throughout the month.



Other resources

- [Food prep labels](#)
- [Learn more](#) about why preventing food waste matters
- Other [smart strategies](#) your family can practice
- [More resources](#)



Click here to take the Challenge

SMART SHOPPING — Buy What You Need

Make a list with meals in mind and buy no more than what you expect to use. Shopping with meals in mind makes it easier to use the food you buy and keep it fresh.

Tips to practice SMART SHOPPING

- Make a meal plan each week. Include any take-out or dining out meals.
- Keep a running list of meals that your household enjoys.
- Make your [shopping list](#) based on the pre-planned meals.
- Check your fridge, freezer and cupboards for any ingredients you already have before you go shopping.
- Include quantities on your shopping list to make sure you buy just what you need.
- Shop on a full stomach to avoid impulse purchases.
- Avoid packaged produce to control the amount of fruit and vegetables you buy.
- Shop the bulk section for dried goods and buy only what you need.
- Buy fresh ingredients such as spices in smaller quantities.
- Avoid two-for-one deals so you don't buy more than you will use.



Other resources

- Meal planner and [shopping list](#)
- Make and share shopping lists online with the free [Cool app](#)
- [Learn more](#) about why preventing food waste matters
- Other [smart strategies](#) your family can practice
- [More resources](#)

Click here to take the Challenge

Shop with Meals in Mind

Weekly meal plan	Shopping list
<p>Task:</p> <ul style="list-style-type: none"> • Make a shopping list with meals in mind. • Subtract any meals you will eat first. • Include quantities for ingredients. 	<p>Tip:</p> <ul style="list-style-type: none"> • Check your fridge, freezer and cupboards first. • Choose loose fruit and vegetables over pre-packaged food for ingredients.
Monday	
Tuesday	
Wednesday	
Thursday	
Friday	
Saturday	
Sunday	

Visit www.EatSmartWasteLess.com for more steps to prevent food waste at home.

Meal planner and shopping list

Why Food Waste Matters

Impacts on your wallet

- A family of four can save more than [\\$1,600](#) a year by making changes in how they shop, prepare and store food.
- Americans waste more than a [quarter](#) of all food purchased each year or — worth [\\$125 billion](#).

Impacts on the environment

- [Twenty-five percent](#) of U.S. freshwater supplies go to producing food that is wasted.
- The land used to grow food that is wasted globally is [one and a half times larger](#) than the size of the U.S.

Impacts on the community

- Americans waste [1,499 calories](#) in food waste, per person, every day.
- More than [200,000 Oregonians](#) are food insecure.

Learn more

- ["To End Food Waste, Change Needs to Begin at Home."](#) National Public Radio, Nov 17, 2014.
- ["Food Product Dating."](#) United States Department of Agriculture, Aug 2012.
- ["Reducing Food Loss and Waste."](#) World Resources Institute, Jan 2015.
- ["Your Scrape Add Up: Reducing food waste can save money and resources."](#) Natural Resource Defense Council, Mar 2013.
- ["Leftovers: Tasty or Trash?"](#) The Wall Street Journal, Mar 2012.
- ["A look at the \\$175 in your compost."](#) Grist, Jan 2012.
- ["Wasted: How America Is Losing Up to 40 Percent of Its Food from Farm to Fork to Landfill."](#) Natural Resource Defense Council Issue Paper, Aug 2012.
- ["Take the mystery out of date shelf life."](#) The Oregonian, Jan 2011.
- ["From Farm to Fridge to Garbage Can."](#) The New York Times, Nov 2010.
- ["How to Waste Less Food, and Save Money, to Boot."](#) CBS News, Nov 2010.

- ▶ A recipe for cutting food waste, TEDx (14:37 min)
- ▶ The global food waste scandal, TED (14:15 min)

Click here to take the Challenge



More Resources

Here are a few resources to help you prevent food waste at home. Find something new and useful that is not listed below? Please [let us know](#).

SMART STORAGE

- [A-Z Food Storage Guide](#) [A](#)
- [Food storage tips](#) [A](#)
- [Preserve and store food](#) with Oregon State University (OSU) Extension
- [SoTasty](#) — your ultimate shelf-life guide
- How to [use your refrigerator better](#) [A](#)
- Basic [freezing steps](#) [A](#)



GET SMART

- [Request](#) a free "Eat The Best" decal [A](#)
- GET SMART [measurement guide](#) [A](#)

SMART SAVINGS

- [Request](#) a free "Eat The Best" decal [A](#)
- Keep track of what is in your cupboard and freezer with the free [Cool](#) app and website
- Set eat-by dates as you shop for items with the [Green Egg Shopper](#) app
- [Ideas for leftovers](#) from Oregon State University (OSU) Extension Food Heroes
- [A-Z recipes](#) by ingredient by OSU Extension Food Heroes
- Create alerts for using your food with the [SoTasty](#) app and website
- Track what's in your refrigerator with dates with MINI Fridge app on [i-Phone](#)
- Manage the food in your fridge by dates with the Freezer Organizer Pro app on [i-Phone](#) and [Android](#)
- Use the [Allrecipes.com search tool](#) to find recipes for leftover ingredients
- Search for recipe ideas by ingredient on [SoTasty](#)

SMART SHOPPING

- Download a meal planner and [shopping list](#) [A](#)
- Make and share meal plans and shopping lists online with the free [Cool](#) app and website or the [Oxylat](#) app
- Create shopping lists with the [Green Egg Shopper](#) app
- Make meal plans and shopping lists with the [Food on the Table](#) app and website
- Use the [Menu Planner](#) app to create meal plans, track pantry contents and create shopping lists
- Plan meals with the [Love Food Hate Waste](#) app

SMART PREP

- [Food prep labels](#) [A](#)
- [A-Z Food Storage Guide](#) [A](#)
- [Food prep tips](#) by The Lean Green Bean
- [How to prep](#) for the week by MOMables
- [Basic freezer storage](#) by OSU Food Heroes
- How to [freeze food](#) by OSU Extension
- Prep meats, vegetables or fruit [for freezing](#) by the Food Network

Beaverton supporting pages

The screenshot shows the Beaverton website's "Prevent Food Waste at Home" page. The header includes the Beaverton logo and navigation links for "OUR COMMUNITY", "YOUR GOVERNMENT", "CITY DEPARTMENTS", and "CITY SERVICES". A search bar is located in the top right corner. The main content area features a blue sidebar with navigation options like "Smart Storage", "Get Smart", "Smart Saving", "Smart Shopping", "Why Food Waste Matters", and "Other Resources". The main content includes a "Prevent Food Waste at Home" section with a sub-section "Take the Eat Smart, Waste Less Challenge". A large blue button says "Click here to take the Challenge". Below this, there are sections for "Learn more about SMART STORAGE", "Get support online", and "Other smart strategies your family can practice". Each strategy is accompanied by an image and a brief description: "SMART STORAGE - Keep fruits and vegetables fresh", "SMART SAVING - Eat what you buy", "SMART SHOPPING - Buy what you need", and "SMART PREP - Prepare now and eat later". At the bottom, there is an "Acknowledgment" section.

Beaverton
OUR COMMUNITY | YOUR GOVERNMENT | CITY DEPARTMENTS | CITY SERVICES

Home > City Departments > Mayor's Office > Recycling & Garbage > Recycle at Home > Prevent Food Waste

Prevent Food Waste at Home

Food accounts for nearly **30 percent** of all household garbage going into the landfill. About 40 percent of the food grown in the United States goes uneaten, yet **one in six** Americans lacks a secure supply of food. [Learn more](#) about why preventing food waste matters.

By making small shifts in how we shop, prepare and store food, we can waste less, save money and conserve the valuable resources associated with food production.

About the campaign
The Eat Smart, Waste Less Challenge is an opportunity for families in the Metro, Tri-county area to reduce the amount of food waste at home. Beaverton, Gresham and Washington County are providing information, tools, resources and support to families taking the Challenge. Challengers start by taking a pledge to practice SMART STORAGE by keeping their fruits and vegetables fresh. More smart strategies and tools are also available.

Take the Eat Smart, Waste Less Challenge

The City of Beaverton is asking families to take a step to reduce food waste at home. The first step to take the **Eat Smart, Waste Less Challenge** is to pledge to practice **SMART STORAGE** by keeping your fruits and vegetables fresh. Click on the box to the left to take the Challenge and start today. City staff will follow up with you on opportunities to get tools and support to help you with your Challenge.

Learn more about SMART STORAGE

SMART STORAGE - Keep fruits and vegetables fresh

Get support online

Connect with other Eat Smart, Waste Less Challengers and volunteers who are ready to answer your questions on the [Facebook](#) group. Or use [#EatSmartWasteLessChallenge](#) on Twitter.

Other smart strategies your family can practice

GET SMART - Measure how much food your family throws away over four weeks.

SMART SAVING - Eat what you buy.

SMART SHOPPING - Buy what you need.

SMART PREP - Prepare now and eat later.

Acknowledgment
Thank you to the West Coast Climate & Materials Management Forum and the U.S. Environmental Protection Agency for developing [strategies to reduce household food waste](#).

Smart Storage

Keep Fruits and Vegetables Fresh

Help your food stay fresher, taste better and last longer by storing it in the right place.

Tips to practice SMART STORAGE

- Store onions, garlic, potatoes, mangos, papayas and pineapples in a cool, dark place. See where to [store other fruits and vegetables](#).
- [Freeze food](#) you won't be able to eat soon.
- Use clear storage bags or containers to help extend the life of your produce and easily identify the contents.
- Separate very ripe fruit and apples and bananas as they will spoil other produce.
- Store fruits in the [low-humidity drawer](#) and leafy greens in the high-humidity drawer.
- Wash berries just before eating to prevent mold.
- Make produce that's past its prime into soups, sauces, pies or smoothies.
- If you like your fruit at room temperature, take what you'll eat for the day out of the fridge in the morning.



Other Resources

- [A-Z Food Storage Guide](#)
- [Preserve and store food](#) with Oregon State University (OSU) Extension
- [StillTasty](#) - your ultimate shelf-life guide
- How to [use your refrigerator](#) better
- [Basic freezing steps](#)
- [Learn more](#) about why preventing food waste matters
- Other [smart strategies](#) your family can practice
- [More resources](#)



Click here to take the Challenge

Contact us
503-526-2665 or e-mail Recyclingmail@BeavertonOregon.gov

Get Smart

Measure how much food your family throws away

Over four weeks, together with your family, measure how much food your household throws away. From the options below, choose the best way for your household to measure edible but uneaten food over the four week challenge. Be sure to include food scraped **off plates** and **from the fridge, counter and cabinets**.



1. Estimate or take a picture when you throw food away - at the end of the day, is it more, or less or the same as the days before?
2. Measure at the end of each day with a kitchen scale.
3. Measure at the end of the day with a large container - is it a quarter full, half or more?
4. Measure at the end of each day with a graduated container. A limited number of 2-quart graduated containers are available for free - limit of one per household.

Record the results on the [GET SMART measurement guide](#) and post them on your fridge. Report your [results online](#). Complete the four week challenge and get a free produce bag.



Other Resources

- [Request](#) a free 2-quart graduated container
- [Learn more](#) about why preventing [food waste matters](#)
- Other [smart strategies](#) your family can practice
- [More resources](#)

Click here to take the Challenge

Contact us
503-526-2665 or e-mail Recyclingmail@BeavertonOregon.gov

Smart Saving

Eat What you Buy

Use up leftovers and the ingredients you have before buying more. You'll waste less, save more and may even find a new favorite dish.

Tips to eat what you buy

- Move food that's likely to spoil soon to the front of the shelf or a designated "eat this first" area each week.
- Learn the difference between "sell-by", "use-by" and expiration dates. You can rely on your own sight and smell over food dates in most cases.
- Make casseroles, frittatas, soups and smoothies from leftovers and extra ingredients.
- Create a list each week of foods that may spoil soon and plan upcoming meals around them.



Other resources

- Keep track of what is in your cupboard and freezer with this free [Cozi app](#)
- [Request](#) a free "Eat This First" decal
- [Ideas for leftovers](#) from Oregon State University (OSU) Extension Food Heroes
- [A-Z recipes](#) by ingredient by OSU Extension Food Heroes
- [Learn more](#) about why preventing food waste matters
- Other [smart strategies](#) your family can practice
- [More resources](#)

EAT THIS FIRST
Visit www.oregonstate.edu/extension for more ways to prevent food waste.

Click here to take the Challenge

Contact us
503-526-2665 or e-mail Recyclingmail@BeavertonOregon.gov

Smart Shopping

Buy what you need

Make a list with meals in mind and buy no more than what you expect to use. Shopping with meals in mind makes it easier to use the food you buy and keep it fresh.



Tips to practice SMART SHOPPING

- Make a meal plan each week. Include any take-out or dining out meals.
- Keep a running list of meals that your household enjoys.
- Make your [shopping list](#) based on pre-planned meals.
- Check your fridge, freezer and cupboards for any ingredients you already have before you go shopping.
- Include quantities on your shopping list to make sure you buy just what you need.
- Shop on a full stomach to avoid impulse purchases.
- Avoid packaged produce to control the amount of fruit and vegetables you buy.
- Shop the bulk section for dried goods and buy only what you need.
- Buy fresh ingredients, such as spices, in smaller quantities.
- Avoid two-for-one deals so you don't buy more than you will use.

Other resources

- Meal planner and [shopping list](#)
- Make and share shopping lists online with the free [Cozi app](#)
- [Learn more](#) about why preventing food waste matters
- Other [smart strategies](#) your family can practice
- [More resources](#)

Click here to take the Challenge

Contact us
503-526-2665 or e-mail Recyclingmail@BeavertonOregon.gov

Smart Prep

Prepare Now and Eat Later

Preparing ingredients ahead of time can make it easier to create meals later in the week as well as save time, effort and money.

Tips to practice SMART PREP

- When you get home from shopping, wash, dry, chop and prepare items.
- Place items in clear storage containers - so you can quickly identify the contents.
- Freeze food you don't plan to eat within a few days such as bread, sliced fruit, vegetables or meat.
- Cook several meals at once. Then store them in the refrigerator or freezer for later in the week.
- Prepare and cook perishable items such as meat, then freeze it for use throughout the month.



Other Resources

- [Food prep labels](#)
- [Learn more](#) about why preventing food waste matters
- Other [smart strategies](#) your family can practice
- [More resources](#)

EAT THIS FIRST	
Item:	_____
Date created:	_____
Eat by date:	_____
Freeze by date:	_____

Always refrigerate perishable items within two hours of cooking. Your fridge should be between 40 degrees and 32 degrees F. Learn more at www.EatSmartWasteLess.com

Click here to take the Challenge

Contact us

503-526-2665 or e-mail Recyclingmail@BeavertonOregon.gov

More resources

Here are a few resources to help you prevent food waste at home. Please note that the lists below are for educational purposes only. Listing them does not imply endorsement by the City of Beaverton.

SMART STORAGE

- A-Z Food [Storage Guide](#)
- Food [storage tips](#)
- [Preserve and store food](#) with Oregon State University (OSU) Extension
- [StillTasty](#) - your ultimate shelf-life guide
- How to [use your refrigerator](#) better
- Basic [freezing steps](#)



GET SMART

- [Request](#) a free 2-quart graduated container
- GET SMART [measurement guide](#)



SMART SAVINGS

- [Request](#) a free "Eat This First" decal
- Keep track of what is in your cupboard and freezer with the free [Cozi app](#) and website
- Save time and money with [Shopper](#)
- [Ideas for leftovers](#) from Oregon State University (OSU) Extension Food Heroes
- [A-Z recipes](#) by ingredient by OSU Extension Food Heroes
- Create alerts for using your food with the [StillTasty app](#) and website
- Track what food you have at home with [Fridge Pal](#) on iPhone
- Manage the food in your fridge by dates with the [Freezer Organizer Pro](#) app on Android
- Use the [Allrecipes.com search tool](#) to find recipes for leftover ingredients
- Search for recipe ideas by ingredient on [BigOven](#)



SMART SHOPPING

- Download a [meal planner and shopping list](#)
- Make and share meal plans and shopping lists online with the free [Cozi app](#) and website
- Make meal plans and shopping lists with the [Food on the Table](#) app and website
- Use the [Menu Planner](#) app to create meal plans, track pantry contents and create shopping lists
- Plan meals with the [Love Food Hate Waste](#) app



SMART PREP

- [Food prep labels](#)
- A-Z Food [Storage Guide](#)
- [Food prep tips](#) by The Lean Green Bean
- [How to prep](#) for the week by MOMables
- [Basic freezer storage](#) by OSU Food Heroes
- How to [freeze food](#) by OSU Extension
- Prep meats, vegetables or fruit [for freezing](#) by the Food Network



THE CITY OF
GRESHAM
OREGON

[LIVE](#)
[WORK](#)
[PLAY](#)
[CITY](#)

[I WANT TO:](#) I WANT TO...

[Home](#) > [City](#) > [City Departments](#) > [Environmental Services](#) > [Recycling and Solid Waste Division](#) > [Eat Smart Waste Less](#)

[RSS](#)
[Twitter](#)
[Facebook](#)
[YouTube](#)
Text Size A A A

- [Natural Resources](#)
- [Public Works Standards](#)
- [Recycling and Solid Waste](#)
- [Recycle at Home](#)
- [Recycle at Work](#)
- [Recycle at School](#)
- [GREAT Businesses Program](#)
- [Haulers and Rates](#)
- [Household Hazardous Waste](#)
- [Contact](#)
- [Transportation and Streets](#)
- [Water](#)
- [Wastewater Services](#)
- [Watershed Management](#)
- [Contact](#)

Eat Smart Waste Less

Take the Food Waste Prevention Challenge

- Download the [pledge sheet](#).
- Take a picture of the signed pledge form and email it to Shaunna.Sutcliffe@GreshamOregon.gov. Your entry could win you a set of glass food storage containers.
- You will receive five emails (over a four-week period) to support you in the challenge and you will be asked to take a short survey.



Prevent Food Waste at Home

Did you know the average U.S. household throws away a quarter of all food they purchase? That is like going to the store, leaving one of your four bags in the parking lot and driving away. At the same time, one in six Americans lacks a secure supply of food. Learn more about why preventing food waste matters.

By making small shifts in how we shop, prepare and store food, we waste less, save money and conserve the valuable resources associated with food production.

One step is to store fruits and vegetables properly. Many households store much of their fruit on the counter, however apples and citrus fruits last the longest when they are stored in the refrigerator. If you want them warm, just take what your family will eat that day out of the fridge in the morning.

Read more about food waste and storage:

- [A-Z Food Storage Guide](#)
- Natural Resources Defense Council paper: [Wasted: How America is Losing Up to 40 Percent of Its Food](#)

Why Food Waste Matters

Impacts on your wallet

- "A look at the \$175 in your compost," *Grist*, Jan 2012.
- A family of four can save more than \$1,600 a year by making changes in how they shop, prepare and store food. Read the [International Journal on Food System Dynamics](#) to learn more.
- Americans waste more than a quarter of all food purchased each year or — worth \$125 billion. To learn more read the [USDA Loss-Adjusted Food Availability Documentation](#).

Impacts on the environment and community

- Twenty-five percent of U.S. freshwater supplies go to producing food that is wasted.
- Americans waste 1,249 calories in food waste, per person, every day.
- More than 500,000 Oregonians are food insecure.

Smart Strategies to Prevent Food Waste

- Smart Storage:** Keep fruits and vegetables fresh. Learn which fruits and vegetables stay fresh longer inside or outside the fridge using the [A to Z Food Storage Guide](#) and the [Refrigerator Infographic](#).
- Get Smart:** Measure how much food waste your household has - you may be surprised.
- Smart Saving:** Eat what you buy. Eat the leftovers in your refrigerator.
- Smart Shopping:**
 - Buy only what you need. Buy fresh ingredients in smaller quantities more often so you waste less and enjoy fresher ingredients.
 - Make a list with meals in mind. While most Americans use a shopping list, not many people shop with meals in mind.
- Smart Prep:** Prep now eat later. Prepare and cook perishable items, then freeze them for use throughout the month. For example, bake and freeze chicken breasts or fry and freeze taco meat. By preparing perishable foods post-shopping, you will make it easier to whip up meals later in the week, saving time, effort and money.

Do more

- Use the [Smart Storage Guide](#) for Fruits and Vegetables
- "To End Food Waste, Change Needs to Begin at Home," National Public Radio, Nov 17, 2014.
- "Food Product Dating," United States Department of Agriculture, Aug 2013.
- "Reducing Food Loss and Waste," World Resources Institute, Jun 2013.
- "Your Scraps Add Up: Reducing food waste can save money and resources," Natural Resource Defense Council, Mar 2013.
- "Leftovers: Tasty or Trash?" *The Wall Street Journal*, Mar 2012.
- "Take the mystery out of dairy shelf life," *The Oregonian*, Jan 2011.

Contact

For more information, contact Shaunna Sutcliffe at 503-618-2694 or Shaunna.Sutcliffe@GreshamOregon.gov.

Appendix 6 — Follow-up emails

Washington County emails

- [Initial follow-up](#)^{xxvii}
- [Week one](#)^{xxviii}
- [Week two](#)^{xxix}
- [Week three](#)^{xxx}
- [Week four](#)^{xxxi}
- [Three-month](#)^{xxxii}
- [Six-month](#)^{xxxiii}

Beaverton emails

- [Initial follow-up](#)^{xxxiv}
- [Week one](#)^{xxxv}
- [Week two](#)^{xxxvi}
- [Week three](#)^{xxxvii}
- [Week four](#)^{xxxviii}
- [Three-month](#)^{xxxix}

Washington County initial follow-up email



Eat Smart, Waste Less Challenge

Thank you for taking the Eat Smart, Waste Less Challenge

You are joining many others across the county who want to reduce wasted food. By making small shifts in how you shop, prepare and store food, you can waste less, save money, and conserve valuable resources used to grow and distribute food.

Thank you for taking action now
You pledged to keep your food fresh, tasting better and lasting longer by [storing it in the right place](#).

More information
Please take a few minutes to [tell us about yourself](#). Results from this short survey will be used to improve outreach efforts to reduce food waste.

Stay connected
You will receive more information, resources and opportunities to win prizes to support your Eat Smart, Waste Less Challenge efforts. You can opt out of receiving notifications at any time.



If you have any specific questions about preventing wasted food at home or are just looking to connect with other families taking the Challenge, join the Eat Smart, Waste Less [Facebook group](#). Or use #EatSmartWasteLessChallenge on Facebook or Twitter get feedback and share your successes. You may also [contact](#) a waste prevention and recycling specialist with the Washington County [Solid Waste & Recycling Program](#) or call 503-846-3605.

Tell us how your family's food waste is changing
You can [report your progress](#) each week for a chance to win prizes. Download a [Measurement Guide](#) to record your progress and post it on your refrigerator. Involve your family and make it fun. Come up with a team name. Then use the online form to report how much wasted food your family creates -- it may surprise you -- www.bit.ly/FoodWasteData.

Live in the cities of Beaverton or Gresham?

- Take the [City of Beaverton](#) Challenge. [Email Beaverton](#) or call 503-526-2665.
- Take the [City of Gresham](#) Challenge. [Email Gresham](#) or call 503-618-2694.

Visit www.EatSmartWasteLess.com for more ways to prevent wasted food at home.

www.WashingtonCountyRecycles.com
503-846-3605
Reduce  Reuse  Recycle

Thank you for taking the Eat Smart, Waste Less Challenge

You are joining many others across the county who want to reduce food waste. By making small shifts in how you shop, prepare and store food, you can waste less, save money, and conserve valuable resources used to grow and distribute food.

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Stay connected

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If you have any specific questions about preventing food waste at home or are just looking to connect with other families taking the Challenge, join the Eat Smart, Waste Less [Facebook group](#). Or use #EatSmart/WasteLessChallenge on Facebook or Twitter get feedback and share your successes. You may also contact a waste prevention and recycling specialist with the City of Gresham [Solid Waste & Recycling Program](#) at Shaunna.Sutcliffe@GreshamOregon.gov or call 503-618.2694.

Track how your family's food waste is changing

Download the Pledge sheet [here](#) to record your progress and post it on your refrigerator. Involve your family and make it fun. Come up with a team name. Email us a picture or electronic copy to report how much food waste your family creates -- it may surprise you. If you email us the filled out form you can enter to win a prize! Shaunna.Sutcliffe@GreshamOregon.gov

Until Next Week,



Do you use your refrigerator efficiently?

Have you ever wondered if it matters where you put things in your fridge? The answer is yes -- some areas are cooler, some warmer and some areas can have variable humidity. These are all factors to consider when deciding where to put food items.

Visit [Eat Smart Waste Less](#) to find the Refrigerator Infographic under Smart Strategies (see image below) for great information about your fridge.



Does your lettuce sometimes wilt quickly? It could be because your produce isn't getting the humidity it needs. Check the front of your produce drawers to look for humidity adjustments. Not all produce drawers have variable humidity.

Here are some tips for storing produce more efficiently:

High-humidity drawer

- Artichokes
- Beets
- Broccoli
- Carrots
- Leafy greens
- Spinach




CITY OF GRESHAM OREGON

You've completed two weeks of the Challenge!

Congratulations on completing your second week of the Eat Smart, Waste Less Challenge. Are you learning new ways to store fruits and vegetables? Has less of your food been thrown out before it can be eaten? Are members of your family helping you prevent food waste? We hope the answer is "YES" to all these questions.

Keep up the good work! Let us know it's going; you can send us an [email](#) or connect on Facebook. What's your favorite food storage tip? What have you learned that is new? What has been the most rewarding?

This week, we are sharing a great online tool for food storage and some fun facts about carrots and celery storage.

Here's a webpage you might like

Online resources are helpful for the busy families that want to prevent food waste. Here is a popular one.

StillTasty

Are you trying to maximize the freshness of your food and reduce food waste? If so, this online tool is for you. Use the www.StillTasty.com website to search for food or beverages. StillTasty will give you information on how long you can store it fresh in your pantry on your counter, in the refrigerator or in the freezer.

The site also has a blog full of food storage related articles and a frequently asked questions section.

Are there other tools you use that are helping you prevent food waste? Let us know so we can share them. Don't forget to check out our list of resources too.

Storing carrots and celery

Who likes to eat wilted carrots or celery? Maybe these are good for soups and stews, but wouldn't you prefer crisp ones when they are fresh? Before they were harvested, water regularly moved through these parts of the plant. Give them some more water.

Carrot storage tips:

- Cut the tops off carrots.
- Store carrots in the fridge either in a container of water or unwashed



Are your Eat Smart, Waste Less Challenge efforts still going strong?

Congratulations -- you've been practicing SMART STORAGE, and any other SMART strategies you pledged, for four weeks! Over this time, we hope you've found some new ways to store your fruits and vegetables and reduce your food waste at home.

Although you will no longer receive weekly emails from us, we hope you continue practicing SMART STORAGE. We encourage you to explore other SMART strategies that are part of the Eat Smart, Waste Less Challenge. We will check back with you in three months to see how your food waste prevention journey is going and to collect any feedback or suggestions for improvement you have.

Please take a moment to tell us how your last four weeks have gone. To enter to win a \$20 grocery gift card, please take our four-week [evaluation survey](#). Responses to this survey will be used to improve the Eat Smart, Waste Less Challenge. Your feedback will help us determine the best strategies and techniques to reduce household food waste.

How to store Mushrooms

Refrigerate fresh mushrooms in a paper bag. Do not wrap them in plastic or store in an airtight container.

Whether you love mushrooms or not, at least you know how to store them.

Learn more

For details about how to freeze mushrooms, visit www.StillTasty.com.

Save your Strawberries

Fresh picked, Oregon strawberries are a special treat. Ripe strawberries will last about two to three days in the refrigerator. Make the most of those delicious berries by storing them correctly and freezing what you can't eat right away.

- Discard any moldy berries before storing.
- Place berries loosely in a shallow container, cover with plastic wrap and refrigerate.





Appendix 7 — Event displays

Washington County table



Beaverton table



Gresham table



Appendix 8 — Prizes

Washington County prizes



ChicoBag Snack Time rePETe reusable bag

- 100% Recycled PET made with recycled plastic bottles
- BPA, Phthalate, PVC and Lead free
- 6.5 x 9.5 inches (open)
- 6.5 x 5.5 inches (folded)
- 3.97 oz
- Machine washable



Preserve round food storage container

- 100% recycled #5 plastic
- 19 oz.
- 100% BPA free
- Screw-tight lid
- Dishwasher safe
- Microwave durable
- Made in the USA

Gresham prize



ProGlass food storage container

- ProGlass Food Storage set with its easy snap lid can go from microwave to freezer to oven to table
- Can withstand extreme temperatures
- Raised lid for extra capacity
- Specially designed lids with locking tabs secure freshness
- Removable silicone seal for easy cleaning
- BPA free
- Glass/silicone
- Dishwasher, freezer, oven and microwave safe
- Imported

Beaverton and Washington County prizes



ChicoBag Produce Stand rePETe 3 reusable produce bag

- 100% Recycled PET made with recycled plastic bottles
- 12.5 x 16 inches
- 1 oz
- Hand washable

Appendix 9 — Presentation

WASHINGTON COUNTY
Division
Solid Waste & Recycling Program

Eat Smart, Waste Less

How to waste less, save money and conserve valuable resources

Sienna Stenroth, Program Educator

1

From the farm to our tables

2

Middle income families
13 percent of budget

Low income families
28 percent of budget

3

Why is our food important?

4

Why is our food waste important?

social
economic
environmental

5

40 percent wasted

6

Food Recovery Hierarchy

Source Reduction
Food Hungry People
Food Animals
Industrial Uses
Composting
Energy to Landfill

7

Economic Impacts

Annual value of food waste:

\$165 billion

8

Economic Impacts

Annual value of food waste:

\$1,600

9

Social Impacts

10

Environmental Impacts

25 percent wasted

11

Environmental Impacts

Methane

Twenty-five times more harmful than CO₂

12

Why do we waste food?

13

What can you do about it?

14

Learn where fruits and vegetables stay fresh the longest

15

SMART storage

www.CoGrant.org/Less.com
- A-Z Storage Guide
- Freezing tips
- And more

16

Get SMART

Measure how much food your family throws away

17

SMART saving

EAT THIS FIRST

Eat what you buy

18

SMART shopping

Buy what you need

19

SMART prep

Prep ingredients now and eat later

20

Take the pledge

21

Benefits

- Teach kids healthy food habits
- Save money
- Protect the environment and our communities
- Save valuable resources
- Develop healthier eating habits
- Feel good watching less

22

Questions?

Sienna Stenroth
Program Educator
sienna_stenroth@co.washington.or.us
503-545-2861
www.eatSmartWasteLess.com

23

24

Appendix 10 — Social media posts

Washington County Health and Human Services
Published by Wendy Gordon (7) · April 30 · 🌐

The Eat Smart, Waste Less Challenge is coming to a farmers market near you! Hear all about it on the latest edition of Community Matters.
<https://www.youtube.com/watch?v=V7VH8fYL8is&feature=youtu.be>



Community Matters - Food Waste Prevention
Brian Stafki from the Washington County Solid Waste & Recycling Program discusses ways to reduce food waste in the home.
YOUTUBE.COM

Washington County Health and Human Services
Published by Wendy Gordon (7) · May 22 · 🌐

Master Recyclers will be at the Sherwood Saturday Market tomorrow from 9 a.m. - 1 p.m. with the Eat Smart, Waste Less Challenge booth. Folks can sign up to take the Challenge and get a free food storage magnet and other tools to prevent food waste at home. www.eatsmartwasteless.com



www.eatsmartwasteless.com
EATSMARTWASTELESS.COM

Washington County Health and Human Services
September 30 · 🌐

Mark your calendar for the Harvest Fest on October 24th. Our very own food waste prevention expert is presenting!

Winona Grange #271
FREE – ALL-COMMUNITY: Education, Food and Entertainment
ANNUAL HARVEST Festival - Saturday, October 24



8340 SW Seneca Street, Tualatin
Saturday, October 24, 3:00 - 8:00pm

Food Waste Prevention with Sanne Stienstra of Washington County Solid Waste & Recycling 3:00-4:00
Organic Community Gardening with "Taster Jar" Series - 4:00-5:00
Buffet - bring a dish to add to the menu. hot dogs, bread, apple cider and homemade jams that the Winona Grange will provide! 5:00 - 6:00
MOVIE - DIRT! The Movie! 6:00 - 8:00 dirtthemovie.org

More info, please email San Keator master@winonagrang271.org
Hosted by www.winonagrang271.org

Washington County Health and Human Services
October 11 · 🌐

Mark your calendar for Thursday, October 15, 7 p.m., Cornelius library. Get simple tips for how to prevent waste like a master, recycle like an expert and prevent food — and money — from being wasted at home. Take home free tools and resources to get started right away.



Make the Most of Your Solid Waste

Join Washington County Program Educator Sanne Stienstra and Master Recycler Cecilia Warner to learn how to:

- Prevent wasted food with the Eat Smart, Waste Less Challenge
- Use the four Rs — Reduce, Reuse, Repair and Recycle

Get simple tips for how to prevent waste like a master, recycle like an expert and prevent food — and money — from being wasted at home. Take home free tools and resources to get started now. Light refreshments will be provided.

When: Thursday, October 15, 7-8 p.m.
Where: Cornelius Public Library
1355 N Barlow St, Cornelius, 97113
Cost: No charge

www.WashingtonCountyRecycles.com
503-644-3626
Recycle ♻️ Repair ♻️ Reuse ♻️ Reduce ♻️

Washington County Health and Human Services
August 31 · 🌐

Green Drinks is a series of monthly events that focus on sustainability, green initiatives and learning opportunities. On September 10, Sanne Stienstra of the Washington County Solid Waste & Recycling Program will talk about the problem of food waste — the scale of the problem, environmental, social and economic impacts, and ways to prevent food waste at home. Register today: <http://www.pdxgreendrinks.org/.../washington-county-recyclin.../>



Like Comment Share

Beaverton City Government added 3 new photos. Like Page

July 31 · 🌐

Did you know families throw out about 25% of the food they purchase? Learn how to save money and prevent food waste at home by visiting the city's 'Eat Smart, Waste Less' booth at the Beaverton Farmers Market this Saturday.

Like Comment Share

City of Gresham (Official Government) Like Page

July 24 · 🌐

Up for a friendly challenge about a popular topic - food? Take our Food Waste Prevention Challenge by July 30 and you could win a set of glass food storage containers and save money on your food budget. Details: <http://1.usa.gov/1NqOjWB>

FOOD FACTS

PERCENT OF FOOD PRODUCTS WASTED BY THE AVERAGE AMERICAN (IN AND OUT OF HOME)

GRAINS	18%
SEAFOOD	25%
MEAT	33%
DAIRY PRODUCTS	17%
VEGETABLES	20%
FRUIT	15%

Your Scraps Add Up: Reducing food waste can save money and resources

Like Comment Share

3 people like this.

Write a comment...

City of Gresham (Official Government) Like Page

June 30 · 🌐

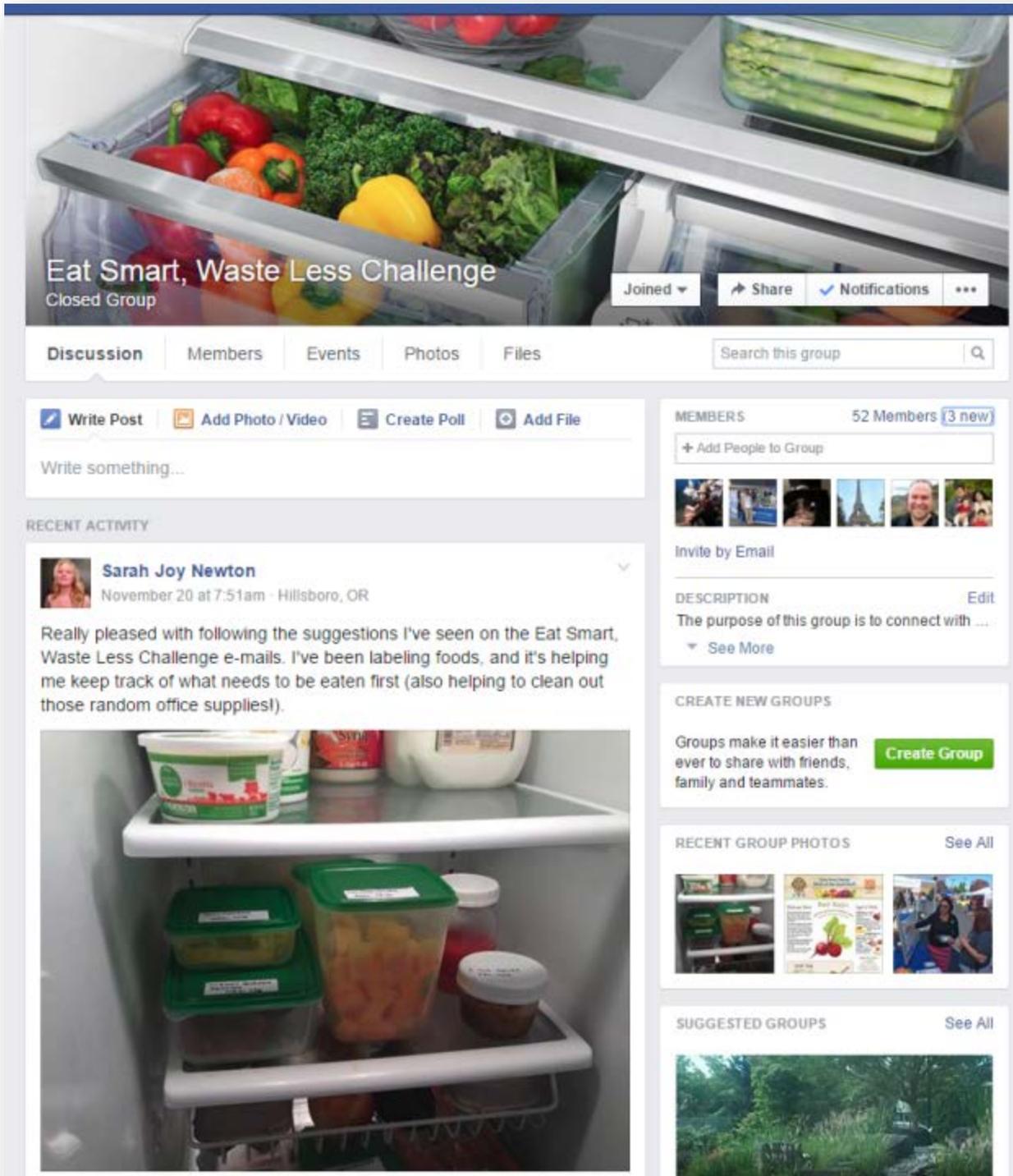
Up for a friendly challenge about a popular topic - food? Take our Food Waste Prevention Challenge by July 30 and you could win a set of glass food storage containers. You'll receive a handful of emails from us with tips guiding you through strategies to prevent food waste, and we'll draw a winner from the challenge finishers. Details: <http://1.usa.gov/1NqOjWB>

Like Comment Share

15 people like this.

Write a comment...

Appendix 11 — Facebook group



The screenshot shows a Facebook group page for the "Eat Smart, Waste Less Challenge". The group is a "Closed Group" with 52 members, including 3 new ones. The page features a header image of a refrigerator drawer filled with fresh vegetables like bell peppers and broccoli. Below the header, there are navigation tabs for Discussion, Members, Events, Photos, and Files, along with a search bar for the group. A post by Sarah Joy Newton, dated November 20 at 7:51am from Hillsboro, OR, is visible. She expresses her satisfaction with following suggestions from the group's e-mails and mentions labeling foods to track consumption. Below her text is a photo of a refrigerator interior with several labeled plastic containers on the shelves. The right sidebar contains sections for "MEMBERS" (with an "Add People to Group" button and a row of member profile pictures), "DESCRIPTION" (stating the group's purpose is to connect with others), "CREATE NEW GROUPS" (with a "Create Group" button), "RECENT GROUP PHOTOS" (with a "See All" link and a row of three photo thumbnails), and "SUGGESTED GROUPS" (with a "See All" link and a single landscape photo thumbnail).

Eat Smart, Waste Less Challenge

Closed Group

Joined ▾ Share Notifications ...

Discussion Members Events Photos Files

Search this group 🔍

Write Post Add Photo / Video Create Poll Add File

Write something...

RECENT ACTIVITY

Sarah Joy Newton
November 20 at 7:51am · Hillsboro, OR

Really pleased with following the suggestions I've seen on the Eat Smart, Waste Less Challenge e-mails. I've been labeling foods, and it's helping me keep track of what needs to be eaten first (also helping to clean out those random office supplies!).



MEMBERS

52 Members [3 new](#)

+ Add People to Group

Invite by Email

DESCRIPTION

Edit

The purpose of this group is to connect with ...

[See More](#)

CREATE NEW GROUPS

Groups make it easier than ever to share with friends, family and teammates.

[Create Group](#)

RECENT GROUP PHOTOS

[See All](#)

SUGGESTED GROUPS

[See All](#)

Appendix 12 — Evaluation plan outline

Question	Method	When	Who provides information
Process evaluations			
Inputs			
Which tools were requested the most?	Count number of products given out	End of season inventory	Partner staff
How much did the program cost? How does that compare to what we budgeted?	Compare budgets to actuals	Before season start and end of season	Partner staff
Activities			
Did we achieve the activities we planned?	Compare project plan to actual activities	End of season	Partner staff
<ul style="list-style-type: none"> How many people were recruited through events and presentations? How many people were recruited through other means (media, newsletters, call centers, other advocates, etc.) 	Record where Challenges came and ask Challengers to self-report on online demographic survey sent in follow-up emails	After each event or presentation and by four weeks	Partner staff and participants of survey
Did project roll out on time?	Compare project plan to actual timeline	End of season	Partner staff
Outputs			
Are we reaching our focus audience? What are the demographics — ethnicity, size of household, where they live, primary language, age range of youth family members and type of housing?	Request self-reported information in online demographic survey shared in follow-up emails	Within four weeks	Participants of survey
How did the program benefit participants?	Request self-reported information in online survey shared in follow up emails	Four weeks, three months, six months and one year after contact	Participants of survey
<ul style="list-style-type: none"> What did Challengers find most helpful? What motivated audience to take the ESWLC? What didn't work? Any unintended consequences? 	Request self-reported information in online survey shared in follow up emails	Four weeks, three months, six months and one year after contact	Participants of survey
Outcome evaluations			
Short-term outcomes			
<ul style="list-style-type: none"> How many people did we contact? How many people committed to taking ESWLC? 	Record number of conversations and number of Challengers	At each event and presentation	Partner staff and Master Recyclers
Did measuring your waste motivate participants?	Request self-reported information in online survey shared in follow up emails	Four weeks after contact	Participants of survey
Mid-term outcomes			
How many families actually performed behavior for length of the ESWLC?	Request self-reported information in online survey shared in follow up emails	Four weeks after contact	Participants of survey
How many are still practicing strategies over time?	Request self-reported information in online survey shared in follow up emails	Four weeks, three months, six months and one year after contact	Participants of survey

Question	Method	When	Who provides information
Long-term outcomes			
Was there a change in participating household food waste?	Request self-reported information in online survey shared in follow up emails	Each week during the ESWLC up to four weeks after contact	Participants of survey
<ul style="list-style-type: none"> • Was there a change in behavior? • Are they still doing behaviors a year later? • Which ones? 	Request self-reported information in online survey shared in follow up emails	Four weeks, three months, six months and one year after contact	Participants of survey
Impact evaluations			
Return on investment			
How much did it cost per Challenger?	Calculate budget to pledge	End of season	Partner staff
Sustained effects			
Did per capita municipal food waste change in over time?	Measure household food waste	Metro regional service standard study and at DEQ and regional waste sorts	DEQ and Metro

Appendix 13 — Follow-up survey content

Demographic survey:

Thank you for taking the time to tell us a little more about your household.

Thank you for taking the Eat Smart, Waste Less Challenge. Results from this short survey will be used to improve our education efforts to reduce food waste. Please answer as many questions as you can.

How did you learn out about the Eat Smart, Waste Less Challenge?

Farmers market or other public event
Recycling Update newsletter
Web search
Social media
From a friend or family
Local media
Community group presentation
Other

What type of housing do you live in?

Detached, single-family home
Attached, duplex to four-plex home
Multifamily community of five or more units including townhomes, apartments, condominiums or similar
Other

How many people live in your household?

One to two
Three to four
Five to six
Seven or more

How many children under 18 years old live in your household?

None
One
Two
Three
Four or more

What is the age range of children in your household -- youngest to oldest?

What is the language spoken most often at home?

English
Spanish
Other

What is the language read most often at home?

English
Spanish
Other

What best describes your race or ethnicity? Check all boxes that apply.

African -- please indicate country of origin
American Indian or Alaskan Native
Black or African American
Caribbean
Central American -- please indicate country of origin

Chinese
European Latino or Hispanic -- please indicate country of origin
Filipino
Guamanian or Chamorro
Japanese
Korean
Mexican
Middle Eastern or North African -- please indicate country of origin
Native Hawaiian
Other Asian -- please indicate country of origin
Other Pacific Islander -- please indicate country of origin
Slavic -- please indicate country of origin
South American
Vietnamese
White
Other
Comment:

Where do you live? If you are not sure, you can use Oregon Metro's MetroMap to find out.

Unincorporated Washington County
City of Beaverton
City of Gresham
Other Washington County city
Other

Which Washington County city do you live in?

City of Banks
City of Cornelius
City of Durham
City of Forest Grove
City of Gaston
City of Hillsboro
City of King City
City of Lake Oswego
City of North Plains
City of Rivergrove
City of Sherwood
City of Tigard
City of Tualatin
City of Wilsonville
Other

What is your contact information? We will only use your information to improve our education efforts and for follow-up questions.

First Name:
Last Name:
Email Address:
Postal Code:

Four-week evaluation:

Please tell us how your four weeks of the Eat Smart, Waste Less Challenge went.

Thank you for taking the Eat Smart, Waste Less Challenge. Results from this short survey will be used to improve our education efforts to reduce food waste. Please answer as many questions as you can.

Which practice(s) is your household currently using? Check all that apply.

SMART STORAGE -- Keep fruits and vegetables fresh
GET SMART -- Measure how much food your family throws away over four weeks
SMART SAVING -- Eat what you buy
SMART SHOPPING -- Buy what you need
SMART PREP -- Prepare now and eat later

Why did you take the Eat Smart, Waste Less Challenge?

Did you measure your food waste?

Yes
No

Why didn't you measure food waste? Check all that apply.

Not enough time
Didn't have the right tools
Didn't think it was helpful for my family
Didn't know it was an option
Only wanted to try one SMART strategy at a time
Took the Challenge online and didn't want to go pick up a container from the County office
Didn't know how to measure or what tools to use
Other

How did the amount of food waste change in your household over the last four weeks?

Less than when I began
Same as when I began
More than when I began
I don't know

Were any of the following helpful for your household to reduce food waste?

Yes No Not applicable
Talking to staff or volunteer in person at an event booth
Talking to staff or volunteer in person at a presentation

Playing the magnet game at an event booth -- sorting food items into storage categories
Taking a pledge to practice SMART strategies to prevent food waste
Finding information and resources on the program website
Reading articles in the Recycling Update newsletter
Receiving weekly follow-up emails
Finding support and resources on the Facebook group
"Fruit and vegetable storage guide" refrigerator magnet
"Fruit and vegetable storage tips" card
Four-quart measuring container
"Eat this first" decal
"Shop with meals in mind" tablet
"Eat this first" storage container label
Comment:

How was your household affected by taking the Eat Smart, Waste Less Challenge?

Are you planning to continue using any of the SMART strategies over the next three months?

Yes
No

Which practice(s) does your household plan to practice over the next three months. Please check all that apply.

SMART STORAGE -- Keep fruits and vegetables fresh
GET SMART -- Measure how much food your family throws away over four weeks
SMART SAVING -- Eat what you buy
SMART SHOPPING -- Buy what you need
SMART PREP -- Prepare now and eat later

What other feedback or observations would you like to share with us?

Your information:

First Name:
Last Name:
Email Address:

Three and six-month evaluations:

Please tell us how three (six) months of the Eat Smart, Waste Less Challenge went.

Thank you for taking the Eat Smart, Waste Less Challenge three (six) months ago. Results from this short survey will be used to improve our education efforts to reduce wasted food. Please answer as many questions as you can.

Which practice(s) is your household currently using? Check all that apply.

SMART STORAGE -- Keep fruits and vegetables fresh
GET SMART -- Measure how much food your family throws away over four weeks
SMART SAVING -- Eat what you buy

SMART SHOPPING -- Buy what you need
SMART PREP -- Prepare now and eat later

How did the amount of wasted food change in your household over the last three (six) months?

Less than when I began

Same as when I began
More than when I began

How was your household affected by taking the Eat Smart, Waste Less Challenge?

Are you planning to practice any of the SMART strategies over the next three (six) months?

Yes
No

Which practice(s) does your household plan to practice over the next three (six) months? Please check all that apply.

SMART STORAGE -- Keep fruits and vegetables fresh

I don't know

GET SMART -- Measure how much food your family throws away over four weeks

SMART SAVING -- Eat what you buy

SMART SHOPPING -- Buy what you need

SMART PREP -- Prepare now and eat later

What other feedback or observations would you like to share with us?

Your information:

First Name: Last Name: Email Address:

Food waste data survey:

GET SMART -- Measure how much food your family throws away over four weeks

Thank you for reporting your household food waste. Be sure to include edible but uneaten food scraped off plates and from the fridge, counter and cabinets.

To make the Challenge fun, include your family. Come up with a team name and do it all together.

Team name or your name:

Which week of the Challenge are you reporting?

Week one
Week two
Week three
Week four
Other

How did you measure your food waste?

Estimated or took a picture
Measured with a kitchen scale
Measured in portions of a large container -- quarter, half or more
Measured with a graduated container
Other

How much food waste did your family create last week?

How did your food waste change compared to last week?

It is more
It is the same
It is less
This is the first week

Do you have any questions or comments you would like to share with us?

Contact info for following up to questions:

First Name:
Last Name:
Home Phone
Email Address:

Appendix 14 — Campaign timeline

Task	Timeline
Draft goals and objectives	Jul-Oct 2014
Define focus audience	Aug-Oct 2014
List barriers, benefits and competition	Sep-Oct 2014
Create position statement	Sep-Nov 2014
Develop product, price, place and promotion	Nov-Dec 2014
Develop evaluation plan	Nov-Dec 2014
Develop budget	Nov-Dec 2014
Design product and promotion	Dec 2014-Feb 2015
Purchase products and promotions	Feb-Mar 2015
Train implementers	Mar-Apr 2015
Implement campaign	May-Sep 2015
Evaluate campaign	Jun-Dec 2015
Revise campaign to include revising mid-term and long-term objectives if necessary	Dec 2015-Feb 2016
Revise budget	Oct 2015-Feb 2016
Revise products and relaunch campaign	Jan-May 2016

Appendix 15 — Volunteer prep communications

Washington County event prep email

Thank you for volunteering to help at xxx event on xxxx.

Campaign: We are sharing the [Eat Smart, Waste Less Challenge](#) at our booth. We are sharing tools and resources to help families eat more of the food they have purchased and waste less. Our main message is that by making small shifts in how we shop, prepare and store food, we waste less, save money and conserve the valuable resources associated with food production. We are using our food storage magnet game from our [food waste prevention kit](#) as on or the ice breakers.

Primary call to action: One shift is to pledge to practice what we call [SMART Storage](#). After taking the pledge, they can receive a SMART storage magnet guide. If they want more information, but aren't ready to commit, they can receive a SMART storage guide card.

Secondary action: We would also like families to take a closer look at how much food they might be wasting. We are giving away 4-quart measurement containers to families who pledge to practice [Get SMART](#). By keeping a "food waste diary" over four weeks, reporting the outcome online each week, they are entered into a drawing to win one of several great prizes. All families need to do is collect "avoidable" food waste after each meal and after cleaning out storage areas — food that could have been eaten but wasn't — not eggshells, peels and similar. They can chart it on the food chart provided. Families are encouraged to chart it each day with the whole family and compost or throw away what was collected at the end of the day.

By trying one or more of the SMART strategies, families can:

- Save up to \$1,600 a year.
- Eat more of their food — families throw out nearly 25 percent of what they purchase.
- Help protect valuable resources — energy, soil, water and time — twenty-five percent of U.S. freshwater supplies go to food that gets wasted.
- Teach their children good food habits.
- Have better access to nutritious food.

After signing up for the Eat Smart, Waste Less Challenge and if they provide their email, they will get weekly email follow-ups for four weeks with helpful information, resources and opportunities to win great prizes. **Providing their email is not mandatory.**

Other actions: On the back side of the tear-off pledge form are other actions they can take.

- [SMART SAVING](#) — Eat what you buy. Challengers receive a "Eat This First" decal to use on a container in their refrigerator.
- [SMART SHOPPING](#) — Buy what you need. Challengers receive a meal planner and shopping list tablet.
- [SMART PREP](#) — Prepare now and eat later. Challengers receive four "Eat This First" prep container labels.

Objectives:

1. Sign people up to take the Eat Smart, Waste Less Challenge — have them fill out the bottom of the tear-off pledge form.
2. Count the number of people you talk to with the mechanical counter — have a more meaningful exchange than just, "hello" or "good morning".

Location: The booth will be at the xxxx at xxxx.

Shifts: Please plan to arrive a few minutes early. There will be a staff to greet you and orient you on how the booth works.

•

Transportation: Please try to take public transportation if possible. The closest bus lines and stop are at xxxx. The closest MAX stop is xxxx at xxxx miles. Google maps is good at planning best transit options. Otherwise, you will have to find street parking nearby.

Preparation: Bring the following. This event is outdoors/indoors.

- Nametag
- Hat
- Sunscreen
- Water bottle
- Snack
- Money for vendors

Report hours: Don't forget to [report your hours](#) when you are done.

Questions: During office hours — 8 a.m.-5 p.m., M-F— you can contact us at 503-846-3605 or email recycle@co.washington.or.us. My direct line is 3651 and email is brian_stafki@co.washington.or.us. I don't have a work cell for after hours.

Washington County presentation prep email

Thank you for volunteering to help with a food waste prevention presentation at xxx on xxxx!

ROLES

Staff and Master Recycler objectives:

3. Educate people about the issues of waste food, benefits of preventing waste and how they can start today.
4. Sign people up to take the Eat Smart, Waste Less Challenge — have them fill out the bottom of the tear-off pledge form.
5. Give the appropriate tools and prompts to people who have taken the Challenge.

- Count the number of people we present to on the material inventory sheet (inside the presentation kit).

You can help in make a successful presentation in several ways. **Please let me know in advance how you are most interested in contributing.** Below are a few examples:

- Observe Washington County staff presenting so you can present on your own or with staff in the future.
- Help set up the presentation materials (such as laptop, projector, Challenge materials and prizes).
- Hand out Challenge materials and choose prize winners at presentation conclusion.
- Answer questions about food waste prevention.
- Help clean up the presentation materials and conduct inventory of materials.
- Co-present alongside Washington County staff — once you have had a chance to observe at least once.

CAMPAIGN BACKGROUND

During our presentation, we will share information about preventing food waste at home and participating in the [Eat Smart, Waste Less Challenge](#). We will provide background information about the problem of food waste and its various impacts — economic, environmental and social. Then we will offer tools and resources to help families eat more of the food they have purchased and waste less. Our main message is that by making small shifts in how we shop, prepare and store food, we can waste less, save money and conserve the valuable resources associated with food production. In order to demonstrate proper food storage, we will do a simple food storage activity using real fruits and vegetables.

Primary call to action: One shift is to pledge to practice what we call [SMART Storage](#). After taking the pledge, attendees can receive a SMART storage magnet guide. If they want more information, but aren't ready to commit, we can give them a SMART Storage guide card.

Secondary action: We would also like families to take a closer look at how much food they might be wasting. We are giving away 4-quart measurement containers to families who pledge to practice [Get SMART](#). By keeping a "food waste diary" over four weeks and reporting the outcome online each week, they will be entered into a drawing to win one of several great prizes, like reusable produce bags. All families need to do is collect "avoidable" food waste after each meal and after cleaning out storage areas — food that could have been eaten but wasn't — not eggshells, peels or rinds. They can chart it on the food chart provided on the back of the pledge form. Families are encouraged to chart it each day with the whole family and compost or throw away what was collected at the end of the day.

By trying one or more of the SMART strategies, families can:

- Save up to \$1,600 a year.
- Eat more of their food — families throw out nearly 25 percent of what they purchase.
- Help protect valuable resources — energy, soil, water and time — 25 percent of U.S. freshwater supplies go to food that gets wasted.
- Teach their children good food habits.
- Have better access to nutritious food.

After signing up for the Eat Smart, Waste Less Challenge and if they provide their email, they will get weekly email follow-ups for four weeks with helpful information, resources and opportunities to win great prizes. **Providing their email address is not mandatory.**

Other actions: On the back side of the tear-off pledge form are other actions they can take.

- [SMART SAVING](#) — Eat what you buy. Challengers receive an "Eat This First" decal to use on a container in their refrigerator.
- [SMART SHOPPING](#) — Buy what you need. Challengers receive a meal planner and shopping list tablet.
- [SMART PREP](#) — Prepare now and eat later. Challengers receive four "Eat This First" prep container labels.

PREPARING FOR THE PRESENTATION

- [Review the presentation online](#) in advance.
- Get to know the campaign and the website.
- Take the Eat Smart, Waste Less Challenge online or at an event.
- Discover your favorite ways to prevent food waste to be able to answer questions.
- Think of a personal story about food waste you're willing to share.

Transportation: Please try to take public transportation if possible. The closest bus lines and stop are at xxxx. The closest MAX stop is xxxx at xxxx miles. Google Maps is good at planning best transit options. Otherwise, there is street parking nearby.

Location and audience: The presentation will be at the xxxx at xxxx. The group we're presenting for is xxx and they are interested in xxx.

Time: xxx to xxx including setup and cleanup. **Please be on time** because it is best if we enter at the same time and your contribution during setup is particularly helpful.

Please bring the following items:

- Master Recycler nametag
- Reusable water bottle

Questions: During office hours (8 a.m.-5 p.m., M-F), you can contact our office at 503-846-3605 or email recycle@co.washington.or.us. My direct line is 503-846-3661 and email is sanne_stienstra@co.washington.or.us. **I don't have a work cell to contact me after hours so please be sure to get in touch well in advance of the scheduled presentation time if you have questions.**

FOLLOW-UP AFTER THE PRESENTATION

Report hours: Don't forget to [report your hours](#) when you are done. These hours can count as payback toward your Master Recycler certification.

Gresham Tabling Talking points for Master Recycler's (and Staff)

Thank you for taking time on your weekend to help the City of Gresham! Here are some talking points to guide you through the day and give you some ideas. If you are new please sign the volunteer waiver found in the event box.



Setup

First, here is a picture of an average City of Gresham Table to get you started:

Notice our wonderful volunteer Bonnie, who is smiling; this is important as we want to represent the City of Gresham well!

Check out and become familiar with all of the materials in the box and on the table.

Goals:

1. Signups for the "Eat Smart Waste Less Challenge",
2. Signups for the "GoCart!" Reminder tool. See below for details,
3. Discuss recycling, waste prevention, and answer questions,
4. Use the hand clicker to count all bodies you interact with and can understand you.

Eat Smart, Waste Less Challenge campaign notes

Primary audience: Families with children living in the City of Gresham and Multnomah County, Washington County (including the City of Beaverton), and the City of Portland or another neighboring City is okay too.

Talking Points:

- "We are giving information on how to waste less food, and not throw all that food and money in the garbage. Here is a magnet with some quick tips"
- "Would you like to enter to win these glass storage containers? Yes? Let's sign you up for the Eat Smart Waste Less Challenge; you will receive 4-5 emails from us with tips and ideas, and the chance to win more prizes!"
- "Do you have a fruit or vegetable which often goes bad in your house? Let's look that up in the A-Z guide to see how it can last longer."
- "Did you know that cilantro can be stored in your fridge and last up to 2 weeks if stored properly?"
- "How much food would you guess that your households wastes each week? Studies suggest that American families are wasting up to \$1200 in food EVERY YEAR."
- "What do you do with your food when it will go bad in a day or so? Did you know you can extend the life of

some foods, or freeze others to keep them for another meal?"

Call to action:

1. Take the Eat Smart, Waste Less Challenge.
2. Pledge to practice SMART STORAGE by storing your fruits and vegetables properly.
3. Fill out the pledge form.
4. Staff and volunteers should verify the email address for readability, tear off (or cut) the slip and keep it (put it in the plastic pitcher), and return the top portion to the Challenger.
5. Let the resident know they will receive 4-5 emails from us with tips and ideas, with more chances to win prizes.

Free tools:

- Storage guide magnets and cards
- "Eat this first" stickers for a box or container in the refrigerator
- Shopping list

More information: GreshamOregon.Gov/Recycling

GoCart Campaign Notes

Make sure you track how many GoCart Signups you do at each event. GoCart is a free tool, it's an App, an email, a text, a phone call, etc. to remind you the day before your garbage and recycling are picked up. You will also receive reminders about recycling events, holiday and weather changes, and coupons to local businesses.

Main GoCart Piece; there is a folded half sheet which features GoCart on the front, with a Recycling Guide on the back, use this one to hand out if someone wants information to take.

Talking Points:

- "Do you live in Gresham"
- "Do you live in a house or an apartment?"
- "A house? Great, I can sign you up. It takes about 45 seconds on my tablet"
- An apartment or outside Gresham: "Great I have recycling info for you and information on preventing food waste in your home." (*Go Cart doesn't work for apartments or people living outside the City of Gresham, although their may be similar tools in their area... Portland, Vancouver have similar apps*)

Some reasons to sign up for GoCart:

1. It's a free service to remind you of your garbage and recycling day, and what goes in each bin. (*Is today a trash week or not? Go Cart will remind you!*)
2. You will also receive reminders about recycling events.
3. You will notified of changes due to holidays and inclement weather.
4. You will also get exclusive access to coupons to local businesses.
5. Available in App form for Apple devices or android in the iTunes store or Google Play Store.
6. You can also opt to not get the app, but receive weekly email reminders or text message reminders.

More info: GreshamOregon.Gov/GoCart

Other main handouts/Information

- Gresham Residential Recycling brochure (English and Spanish)
- Metro Spanish Multi Family guide
- Metro English general recycling guide
- Metro Hazardous Waste home guide

- Habitat Restore handout
- Metro Master Gardner handout

Questions and suggestions

Please record any unanswered questions you receive in the notebook *(or on the online excel doc?)*. Make sure to get contact information so a City of Gresham Waste & Recycling Program staff member can follow up. Record any notes about the event, booth or any other feedback in the notebook too.

More details on Eat Smart, Waste Less

Program website: Each strategy is listed in more detail at www.EatSmartWasteLess.com including resources.

About the SMART STRATEGIES:

SMART STORAGE

Keep fruits and vegetables fresh. Help their food stay fresher, taste better and last longer by storing it in the right place.

Tips to practice SMART STORAGE:

- Store onions, garlic, potatoes, mangos, papayas and pineapples in a cool, dark place. – List those details here??
- Freeze food they won't be able to eat soon.
- Use clear storage bags or containers to help extend the life of their produce and easily identify the contents.
- Separate very ripe fruit, apples and bananas as they will spoil other produce.
- Store fruits in the low-humidity drawer and leafy greens in the high-humidity drawer.
- Wash berries just before eating to prevent mold.
- Make produce that's past its prime into soups, sauces, pies or smoothies.
- If they like their fruit at room temperature, take what they'll eat for the day out of the fridge in the morning.

Tools:

- Fruit and vegetable storage tips card
- Fruit and vegetable storage guide magnet

GET SMART

Over four weeks, together with their family, measure how much food their household throws away. From the list on the back of the pledge flyer, they can choose the best way for their household to measure edible but uneaten food over the four week challenge. They should include food scraped off plates and from the fridge, counter and cabinets. We are not measuring bones, peels, rinds or other inedible food:

1. Estimate or take a picture when they throw food away — at the end of the day, is it more, less or same as the days before?
2. Measure at the end of each day with a kitchen scale.
3. Measure at the end of each day with a large container — is it quarter full, half or more?
4. Measure wasted food at the end of each day with a container with graduated measurements. A limited number of 4-quart graduated containers are available to Challengers who choose to measure volume — limited to one per household. You can give them four plastic liner bags to go along with it.

They can record the results on the graph on the back of the flyer and post them on their fridge. We want households measuring to report results online. Reporting each week enters them to win prizes.

SMART SAVINGS

Use up leftovers and the ingredients they have before buying more. They'll waste less, save more and may even find a new favorite dish.

Tips to eat what they buy:

- Move food that's likely to spoil soon to the front of the shelf or a designated "eat this first" area each week.
- Learn the difference between "sell-by," "use-by," "best-by" and expiration dates. They can rely on their own sight and smell over food dates in most cases.
- Make casseroles, frittatas, soups and smoothies from leftovers and extra ingredients.
- Create a list each week of foods that may spoil soon and plan upcoming meals around them.

Tool — Eat this first decal. Put this on a box in your fridge for leftovers or items that need be eaten soon.

SMART SHOPPING

Make a list with meals in mind and buy no more than what they expect to use. Shopping with meals in mind makes it easier to use the food they buy and keep it fresh.

Tips to practice SMART SHOPPING:

- Make a meal plan each week. Include any take-out or dining out meals.
- Keep a running list of meals that their household enjoys.
- Make their shopping list based on the pre-planned meals.
- Check their fridge, freezer and cupboards for any ingredients they already have before they go shopping.
- Include quantities on their shopping list to make sure they buy just what they need.
- Shop on a full stomach to avoid impulse purchases.
- Avoid packaged produce to control the amount of fruit and vegetables they buy.
- Shop the bulk section for dried goods and buy only what they need.
- Buy fresh ingredients such as spices in smaller quantities.
- Avoid two-for-one deals so they don't buy more than they will use. Tool — Shop with

meals in mind tablet

SMART PREP

Preparing ingredients ahead of time can make it easier to create meals later in the week as well as save time, effort and money.

Tips to practice SMART PREP:

- When they get home from shopping, wash, dry, chop and prepare items – with the exception of berries which could mold if they wash them too early.
- Place items in clear storage containers — so they can quickly identify the contents.
- Freeze food they don't plan to eat within a few days such as bread, sliced fruit, vegetables or meat.
- Cook several meals at once. Then store them in the refrigerator or freezer for later in the week.
- Prepare and cook perishable items such as meat, then freeze it for use throughout the month.

Appendix 16 — Events and presentations

Washington County events (28)

- Bethany Farmers Market
- Cedar Mill Farmers Market — *twice*
- Forest Grove Farmers Market — *five times*
- Hillsboro Downtown Market — *four times*
- Hillsboro Tuesday Marketplace
- Hillsboro Wednesday Market - Kaiser Westside
- North Plains Farmers Market
- Orenco Farmers Market
- Sherwood Farmers Market
- Sustainability Health Week
- Tigard Area Farmers Market — *four times*
- Tualatin Farmers Market
- Washington County Fair — *four days*
- Washington County Public Services Building

Beaverton events

- Beaverton Farmers Market
- Community Action Energy Fair
- Employee Wellness Fair
- National Night Out
- Picnics in the Park

Gresham events

- Birch Community Service Table days
- Gresham Farmers Markets
- Gresham Saturday Market
- National Night Out
- Rock the block
- Rockwood farmers markets
- SnoCap Table days
- Women Infant Children event

Washington County group presentations

- Adelante Mujeres staff retreat
- Farmington View Elementary PTA, Bobcat Boosters
- Boys & Girls Club parent education class
- City of Hillsboro Green Bag
- Cornelius Public Library
- Green Drinks Westside
- Habitat for Humanity staff meeting
- Hillsboro Kiwanis
- Lego Robotics Clubs — *four times*
- Master Recycler Fall Training
- Master Recycler spring food waste prevention training
- PCC Sustainability class
- Sherwood Old Town Rotary
- The Knoll at Tigard multifamily community
- Tualatin Rotary Club
- Washington County Public Health staff meeting
- Winona Grange, Fall Harvest Fest

Appendix 17 — Demographic information

Number of children under 18 years in household						
	Washington County	Beaverton	Overall	Washington County	Beaverton	Overall
None	12	13	25	57%	45%	50%
Two	5	6	11	24%	21%	22%
Three	3	3	6	14%	10%	12%
Four or more	0	4	4	0%	14%	8%
One	1	3	4	5%	10%	8%

Number of people living in household						
	Washington County	Beaverton	Overall	Washington County	Beaverton	Overall
Three to four	8	13	21	38%	45%	42%
One to two	9	10	19	43%	34%	38%
Five to six	3	5	8	14%	17%	16%
Seven or more	1	1	2	5%	3%	4%

Type of housing						
	Washington County	Beaverton	Overall	Washington County	Beaverton	Overall
Detached, single-family home	16	16	32	73%	57%	64%
Multifamily community of five or more units including townhomes, apartments, condominiums or similar	6	11	17	27%	39%	34%
Attached, duplex to four-plex home		1	1	0%	4%	2%

Appendix 18 — How was your family affected by taking the ESWLC?

All of us were aware which was great
Being aware of food purchased so that we make sure we use it before it goes bad.
Decreased food waste
Food storage habits became better, but food waste over the four weeks ended up being the same (since we had a smattering of pre-challenge food go bad during the challenge.
had to think about food more
I am more aware now of watching what I buy and what I have in the frig and to make sure I use what I buy.
I can better see what food I'm putting in the compost each week by looking at it in the clear container. I learn a few new storage tips which are helping most my fruits and vegetables stay fresh until I eat them too. And I started planning out what types of foods to eat for each meal, so I don't over buy/produce a certain type. I'm using this diet guide: http://www.healthyfitfocused.com .
I didn't get the things I marked no to
I live in a rural area so getting fresh fruits and veggies is a bit of a challenge. When do get to the market, I tend to over-buy. I'm being much more mindful of that type of waste and so purchase less. I also try to schedule shopping trips at times I know I will be able to prepare fresh produce and freeze it. We are saving money. But, more importantly, we are less wasteful which feels good(-;
I made sure I only purchased small amonts.
I really think about waste. I don't order french fries when I go out to eat because I realized I was always throwing over 1/2 of them away. I don't really need them, anyway!
It just made them mindful of what they asked for and what they would eat
It made us be more aware of the storage of our food, buying more than we needed, and to be aware of which foods to eat first.
Just made us more aware.
less food waste
less waste, focused on eating what was available, rather than mindlessly buying more.
Made better decisions about what to buy and when/when to eat
Making better use of leftovers by packing lunches the night before, which is also healthier and saves \$. Win win!
More aware of expiration dates not paying as much perishable items
more awareness
More conscious
not
Not a big change, but we were already extremely conscious of minimizing food waste.
only one complain so far: family feel as there isn't enough food for them :).
Our produce is staying fresher, longer.
Paying more attention to habits.
Positive
Positively! Keeping awareness about food waste is important (always)
Saving money
Since we just moved and purchased a new refrigerator, I was able to fill it for the first time with smart storage tips in mind so things are in the right place, visible and in the correct containers. It was good to get our family started off on the right foot.
there wasn't much waste
We are doing more thinking about what is needed at the point of purchase
We are more self conscious of the food waste we put into the trash.
We became more aware.
We had some good conversations at the store, weather we need to buy something or not.
We have saved money by keeping our fruits fresh
We love using our magnet that tells us how to keep our foods better and we paid much more attention to our garbage amount after signing up for the challenge.
We really already practice it so it just was a reminder to keep doing it.
We saved \$\$\$
We say exactly how much we through away
We waste less food
We were more conscious and aware, although we ended up being proud of how our habits already align with the eat smart, waste less challenge.
We're doing better at using up our leftovers and being more mindful of what's in the frig. Our goal is to do even better and to start using the "Eat this First" label.

Appendix 19 — Products and tools distributed

Products and tools distributed				
Tools distributed	Washington County	Beaverton	City of Gresham	Overall
Fruit and Vegetable Storage Guide magnet	3,075	269	1,600	4,944
Fruit and Vegetable Storage Tips card	2,556	52	520	3,128
Eat This First decal	1,718	5	1,200	2,923
Shop With Meals in Mind shopping pad	337	15	700	1,052
Take Action to Prevent Food Waste pledge form	549	250	115	914
Eat This First food label	492	20		512
Measurement bucket	174	7		181
Plastic bag	88			88

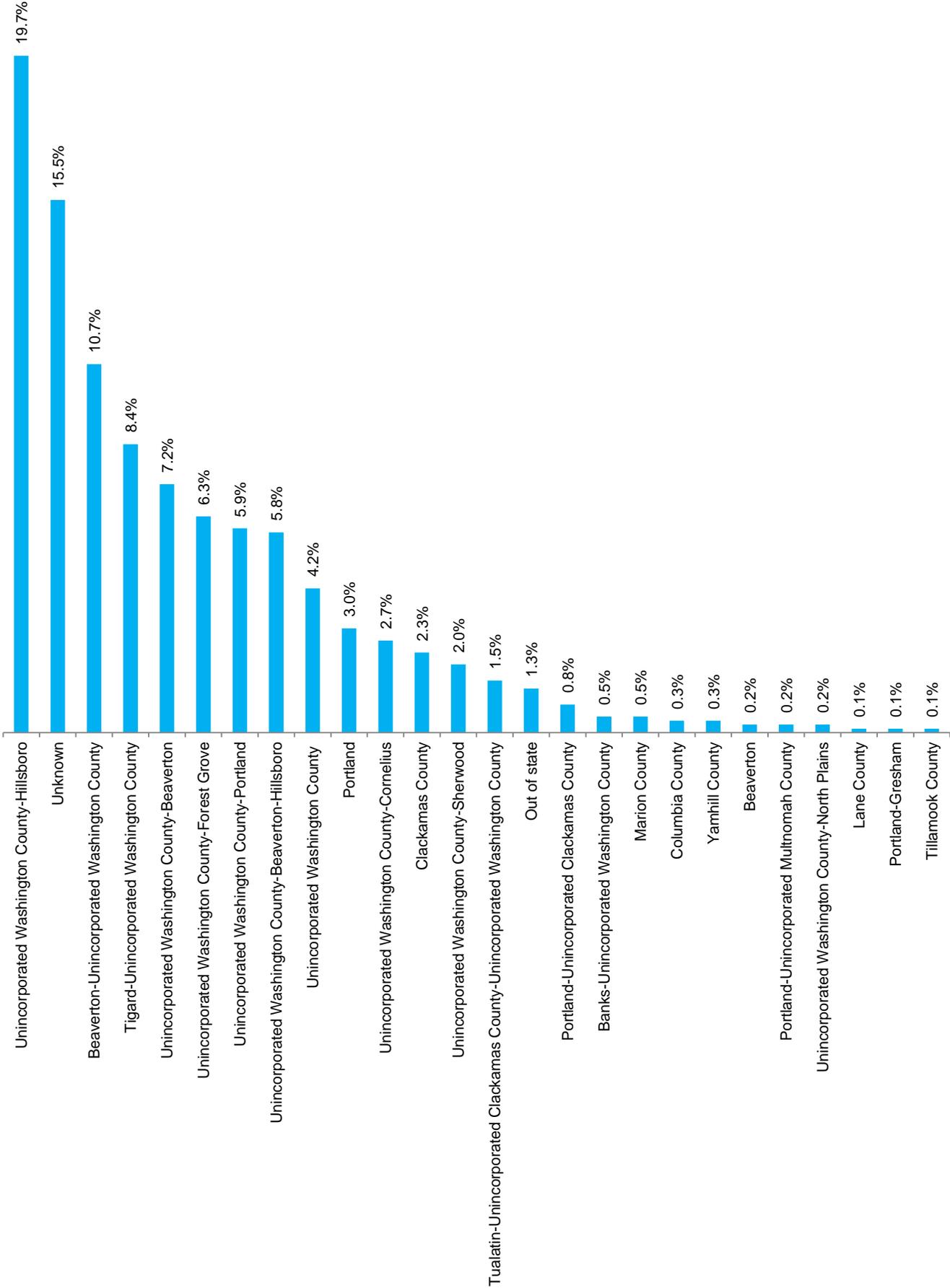
Appendix 20 — Challengers by jurisdiction and zip code

Number of Challengers by jurisdiction and zip code. Jurisdictions listed in order of size of geography when more than one jurisdiction is named.

Zip code	Count	Location
97106	4	Banks-Unincorporated Washington County
97075	1	Beaverton
97076	1	Beaverton
97005	52	Beaverton-Unincorporated Washington County
97008	40	Beaverton-Unincorporated Washington County
97009	1	Clackamas County
97013	2	Clackamas County
97027	1	Clackamas County
97034	1	Clackamas County
97035	5	Clackamas County
97045	2	Clackamas County
97070	3	Clackamas County
97132	3	Clackamas County
97222	2	Clackamas County
97018	1	Columbia County
97053	1	Columbia County
97056	1	Columbia County
97463	1	Lane County
97002	1	Marion County
97301	1	Marion County
97303	1	Marion County
97362	1	Marion County
46148	1	Out of state
59718	1	Out of state
60019	1	Out of state
63353	1	Out of state
84116	1	Out of state
98660	2	Out of state
98682	2	Out of state
98683	1	Out of state
99737	1	Out of state
97201	2	Portland
97203	1	Portland
97204	1	Portland
97207	1	Portland
97209	1	Portland
97211	1	Portland
97212	2	Portland
97214	3	Portland
97215	1	Portland
97217	5	Portland

Zip code	Count	Location
97218	1	Portland
97221	3	Portland
97232	1	Portland
97236	1	Portland
97239	2	Portland
97266	2	Portland
97233	1	Portland-Gresham
97219	7	Portland-Unincorporated Clackamas County
97205	2	Portland-Unincorporated Multnomah County
97223	49	Tigard-Unincorporated Washington County
97224	23	Tigard-Unincorporated Washington County
97107	1	Tillamook County
97062	13	Tualatin-Unincorporated Clackamas County-Unincorporated Washington County
97078	18	Unincorporated Washington County
97125	1	Unincorporated Washington County
97117	1	Unincorporated Washington County
97003	16	Unincorporated Washington County
97007	52	Unincorporated Washington County-Beaverton
97225	10	Unincorporated Washington County-Beaverton
97006	50	Unincorporated Washington County-Beaverton-Hillsboro
97113	23	Unincorporated Washington County-Cornelius
97116	54	Unincorporated Washington County-Forest Grove
97123	90	Unincorporated Washington County-Hillsboro
97124	79	Unincorporated Washington County-Hillsboro
97133	2	Unincorporated Washington County-North Plains
97229	51	Unincorporated Washington County-Portland
97140	17	Unincorporated Washington County-Sherwood
97101	1	Yamhill County
97128	1	Yamhill County
97148	1	Yamhill County
Blank	133	Unknown

Percent Challengers by jurisdiction



Appendix 22 — Unique page views

Unique page views				
Page	Washington County	Beaverton	Overall	Percent of subpages
Campaign Home Page			745	
Take the Eat Smart Waste Less Challenge	345	154	499	67%
SMART STORAGE	217	75	292	58.5%
Why food waste matters	95	9	104	20.8%
SMART SHOPPING	35	12	47	9.4%
SMART SAVING	32	12	44	8.8%
Get SMART	36	7	43	8.6%
SMART PREP	29	14	43	8.6%
More Resources	19	8	27	5.4%
Total subpages				100%

Appendix 23 — Budget

Campaign budget				
	Washington County	Beaverton	City of Gresham	Overall
Take Action to Prevent Food Waste pledge form	\$67	\$31	\$14	\$112
Fruit and Vegetable Storage Guide magnet	\$313	\$91	\$2,055	\$2,459
Fruit and Vegetable Storage Tips card	\$67	\$11	\$62	\$140
Fruit and Vegetable Storage Tips card -- Spanish		\$5		\$5
Eat This First decal	\$178	\$3	\$360	\$541
4 Qt Cambro measurement bucket	\$623			\$623
2 Qt Cambro measurement bucket		\$17		\$17
Shop With Meals in Mind shopping pad	\$219	\$2	\$447	\$668
Eat This First food labels	\$172			\$172
Plastic bags	\$3			\$3
Product total	\$1,641	\$161	\$2,938	\$4,740
rePETE snack bag	\$165			\$165
rePETE produce bag	\$163	\$119		\$282
19 oz. screw-top food storage container	\$45			\$45
Glass food storage container			\$46	\$46
Prize total	\$374	\$119	\$46	\$539
Banner	\$327			\$327
Banner stand	\$590			\$590
Magnet board	\$1,150			\$1,150
Activity magnets	\$105			\$105
Carrying case for magnet activity	\$75			\$75
Mechanical counter	\$42			\$42
Table banner (3 paper banners)		\$24		\$24
Fridge display		\$15		\$15
Display total	\$2,289	\$39		\$2,328
Hillsboro Farmers Market	\$50			\$50
Sherwood Farmers Market	\$40			\$40
North Plains Farmers Market	\$10			\$10
Event fee total	\$100			\$100
Food	\$231			\$231
Training total	\$231			\$231
Total	\$4,635	\$320	\$2,984	\$7,939

Appendix 24 — Investment in person-hours for Challengers

Person-hours spent for each household committing to use strategies to prevent food waste				
	Washington County	Beaverton	City of Gresham	Overall
Person hours events	241	71.25	209	521
Person hours presentations	22.42*			22.42
Total person hours	263.42	71.25	209.00	543.67
Challengers events	302	225	86	613
Challengers presentations	200*			200
Total number of Challengers	502	225	86	813
Investment events	0.80	0.32	2.43	0.85
Investment presentations	0.11			0.11
Total investment	0.52	0.32	2.43	0.67

**Figure does not including presentations to youth groups*

Appendix 25 — Investment person-hours spent for each contact

Person-hours spent for each contact				
	Washington County	Beaverton	City of Gresham	Overall
Person hours events	195*	71.25	209.00	475.25
Person hours presentations	22.42*			22.42
Total person hours	217.42	71.25	209.00	497.67
Contacts events	1202*	412	581	2195
Contacts presentations	387*			387
Total number of contacts	1589	412	581	2582
Investment events	0.16	0.17	0.36	0.22
Investment presentations	0.06			0.06
Total investment	0.14	0.17	0.36	0.19

**Figure does not include events where contacts weren't counted or where the booth was next to loud music and presentations to youth groups*

Appendix 26 — Other reasons for not measuring waste

Other reasons for not measuring waste
Didn't hear anything after I signed up.
Don't waste any, I eat it all.
forgot
Had already implemented home composting of food scraps and striving to re-purpose leftovers, didn't feel it was necessary to measure.
I am a Portland city resident and we put our food waste in our yard debris containers. I really like doing this and feel like it might actually be doing some good in composting (I hope!).
I kept forgetting to measure.
I live in in Indiana. I took the challenge while visiting my family in Tigard.
I seemed to have not understood the concept of measuring waste and did not get a container.
Just didn't. Try not to waste food so make it a practice of eating what we have.
We have very little food waste. We have two small children so we do a lot of purees and freezing of fruits or veggies before they go bad. We have very limited food waste.

Appendix 27 — Other feedback

Other feedback from Challengers
Changing habits is a process, and I plan on looking back at the website and emails for refreshers until we are confident in our new plan.
I like that Beaverton has made it a priority to share with the community how important it is to eat smart and waste less.
I really appreciate Gresham promoting "Eating smarter, and wasting less". I'm anticipating that my family will do much better in all the above areas.
I really appreciate your program. One thing I would like to add is that I'm much less finicky about the expiration dates on packaged foods which not only cuts down on waste, but often results in sales on food that is close to the sell by date.
I think this is a neat challenge, and I hope it leads to others adapting more positive behaviors as well.
I visited the display with a friend and one of the volunteers encouraged us to have a challenge. I was glad to take it on, because I was sure I would win. I lost.
I was not aware of our food waste until I started this program. Loved all of the tips and ideas. I already knew some of the storage tips, but there was still alot that I didn't know. Thank you for the knowledge and helping me to be more aware of reducing waste in our household. I feel this program can help all households.
More appreciation of the value of food. Shouldn't waste food even if you can afford to throw it away. Be more realistic about how much fruit and vegetables we will actually eat. Very aware now before buying if I will actually want to spend the time, calories or fat grams to cook broccoli, asparagus and brussel sprouts so that they taste good to eat.
Provide more tools for people and if there are to be free products include them in the mailer
Thank you for doing this and raising awareness in our community.
Thank you!
Thanks for doing this! The resources and follow up emails were helpful in keeping the goal in mind
Thanks for sharing good resources and bringing awareness to this topic.
This exercise helped me realize how much unnecessary shopping I was doing and helped me eating mor fresh foods.
This is a great idea to have this program in our city. It helps me and others be more aware of our food consumption and waste.
This is great info. I love the magnet because it is a constant reminder on my fridge about where to store what. I'd love it even more if you'd include which produce should be in a humid vs drier drawer in the fridge. I would love to put a sticker on each drawer in my fridge to keep it all straight!
This program is great!
What happened to the bag?

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- ⁱ Eat Smart, Waste Less Challenge, www.EatSmartWasteLess.com
- ⁱⁱ EPA Food: Too Good To Waste Toolkit, <http://westcoastclimateforum.com/food>
- ⁱⁱⁱ Oregon 2009 Waste Composition Study, <http://www.deq.state.or.us/lq/sw/disposal/wastecompstudy2009.htm>
- ^{iv} Economic impacts of food waste in the U.S., <http://www.cleanmetrics.com/pages/ClimateChangeImpactofUSFoodWaste.pdf>
- ^v USDA food loss study, [http://www.ers.usda.gov/data-products/food-availability-\(per-capita\)-data-system/loss-adjusted-food-availability-documentation.aspx#.U3uAA RDtGg](http://www.ers.usda.gov/data-products/food-availability-(per-capita)-data-system/loss-adjusted-food-availability-documentation.aspx#.U3uAA RDtGg)
- ^{vi} NRDC food waste issue paper, <http://www.nrdc.org/food/files/wasted-food-ip.pdf>
- ^{vii} UN report on the impacts of food, <http://www.fao.org/docrep/018/i3347e/i3347e.pdf>
- ^{viii} USDA study of lost calories, <http://www.ers.usda.gov/publications/eib-economic-information-bulletin/eib121.aspx>
- ^{ix} Economic impacts of food waste in the U.S., <http://www.cleanmetrics.com/pages/ClimateChangeImpactofUSFoodWaste.pdf>
- ^x DEQ 2050 Vision, <http://www.deq.state.or.us/lq/pubs/docs/sw/2050vision/MaterialsManagementinOregon.pdf>
- ^{xi} Community-based social marketing, <http://www.toolsofchange.com/en/programs/community-based-social-marketing/>
- ^{xii} Food: Too Good to Waste Pilot background report, http://westcoastclimateforum.com/sites/westcoastclimateforum/files/related_documents/Food_Too_Good_To_Waste_Background_Research_Report.pdf
- ^{xiii} Washington County families, http://factfinder.census.gov/faces/nav/jsf/pages/community_facts.xhtml
- ^{xiv} Gresham families, http://factfinder.census.gov/faces/nav/jsf/pages/community_facts.xhtml
- ^{xv} Beaverton families, http://factfinder.census.gov/faces/nav/jsf/pages/community_facts.xhtml
- ^{xvi} Portland Climate Action Now program, <https://www.portlandoregon.gov/bps/article/499700>
- ^{xvii} Clackamas County garbage and recycling, <http://www.clackamas.us/recycling/>
- ^{xviii} Washington County *Recycling Update*, <http://www.co.washington.or.us/News/Newsletters/recyclewisnewsletter.cfm>
- ^{xix} TVCTV video, <http://www.co.washington.or.us/News/Newsletters/recyclewisnewsletter.cfm>
- ^{xx} Washington County Community Matters, <http://www.co.washington.or.us/hhs/community-matters.cfm>
- ^{xxi} Beaverton *Every Day is Recycling Day*, <http://www.beavertonoregon.gov/DocumentCenter/View/8277>
- ^{xxii} Beaverton *Your City*, <http://www.beavertonoregon.gov/ArchiveCenter/ViewFile/Item/4459>
- ^{xxiii} *Gresham* newsletter, <https://greshamoregon.gov/WorkArea/linkit.aspx?LinkIdentifier=id&ItemID=289724&libID=289743>
- ^{xxiv} Eat Smart, Waste Less Challenge Facebook group, <https://www.facebook.com/groups/EatSmartWasteLessChallenge/>
- ^{xxv} Master Recycler Program, <http://www.masterrecycler.org/>
- ^{xxvi} Metro, <http://www.oregonmetro.gov/>
- ^{xxvii} WC initial follow-up email, <http://myemail.constantcontact.com/Thank-you-for-your-pledge-to-prevent-food-waste.html?soid=1117347218158&aid=9Nlni5zIGg>
- ^{xxviii} WC week one follow-up email, <http://myemail.constantcontact.com/Eat-Smart--Waste-Less-Challenge-Follow-up.html?soid=1117347218158&aid=AXa5M7xRi3Y>
- ^{xxix} WC week two follow-up email, <http://myemail.constantcontact.com/Eat-Smart--Waste-Less-Challenge-Follow-up.html?soid=1117347218158&aid=frytVNivR3s>
- ^{xxx} WC week three follow-up email, <http://myemail.constantcontact.com/Eat-Smart--Waste-Less-Challenge-Follow-up.html?soid=1117347218158&aid=XI6hHBBbABE>
- ^{xxxi} WC week four follow-up email, <http://myemail.constantcontact.com/Eat-Smart--Waste-Less-Challenge-Follow-up.html?soid=1117347218158&aid=FKWUFb7CR5g>
- ^{xxxii} WC three-month follow-up email, <http://myemail.constantcontact.com/Eat-Smart--Waste-Less-Challenge-Follow-up.html?soid=1117347218158&aid=p9fGYxVh1mw>
- ^{xxxiii} WC six-month follow-up email, <http://myemail.constantcontact.com/Win-a-ReStore-gift-card--learn-about-national-food-waste-prevention-goals-and-more.html?soid=1117347218158&aid=TVQzaYEg1vE>
- ^{xxxiv} Beaverton initial follow-up email, <http://us3.campaign-archive1.com/?u=113535216e449a1a27977a0a4&id=0a76efb6c6>
- ^{xxxv} Beaverton week one follow-up email, <http://us3.campaign-archive2.com/?u=113535216e449a1a27977a0a4&id=3c401b8fd6>
- ^{xxxvi} Beaverton week two follow-up email, <http://us3.campaign-archive2.com/?u=113535216e449a1a27977a0a4&id=f3d9f90bc3>
- ^{xxxvii} Beaverton week three follow-up email, <http://us3.campaign-archive1.com/?u=113535216e449a1a27977a0a4&id=ad5d2a5273>
- ^{xxxviii} Beaverton week four follow-up email, <http://us3.campaign-archive2.com/?u=113535216e449a1a27977a0a4&id=b1a1d2724c>
- ^{xxxix} Beaverton three-month follow-up email, <http://us3.campaign-archive1.com/?u=113535216e449a1a27977a0a4&id=acf6e5e621>