

# The Food Waste Project: Understanding behaviors and attitudes, assessing knowledge levels, and raising awareness

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## Introduction

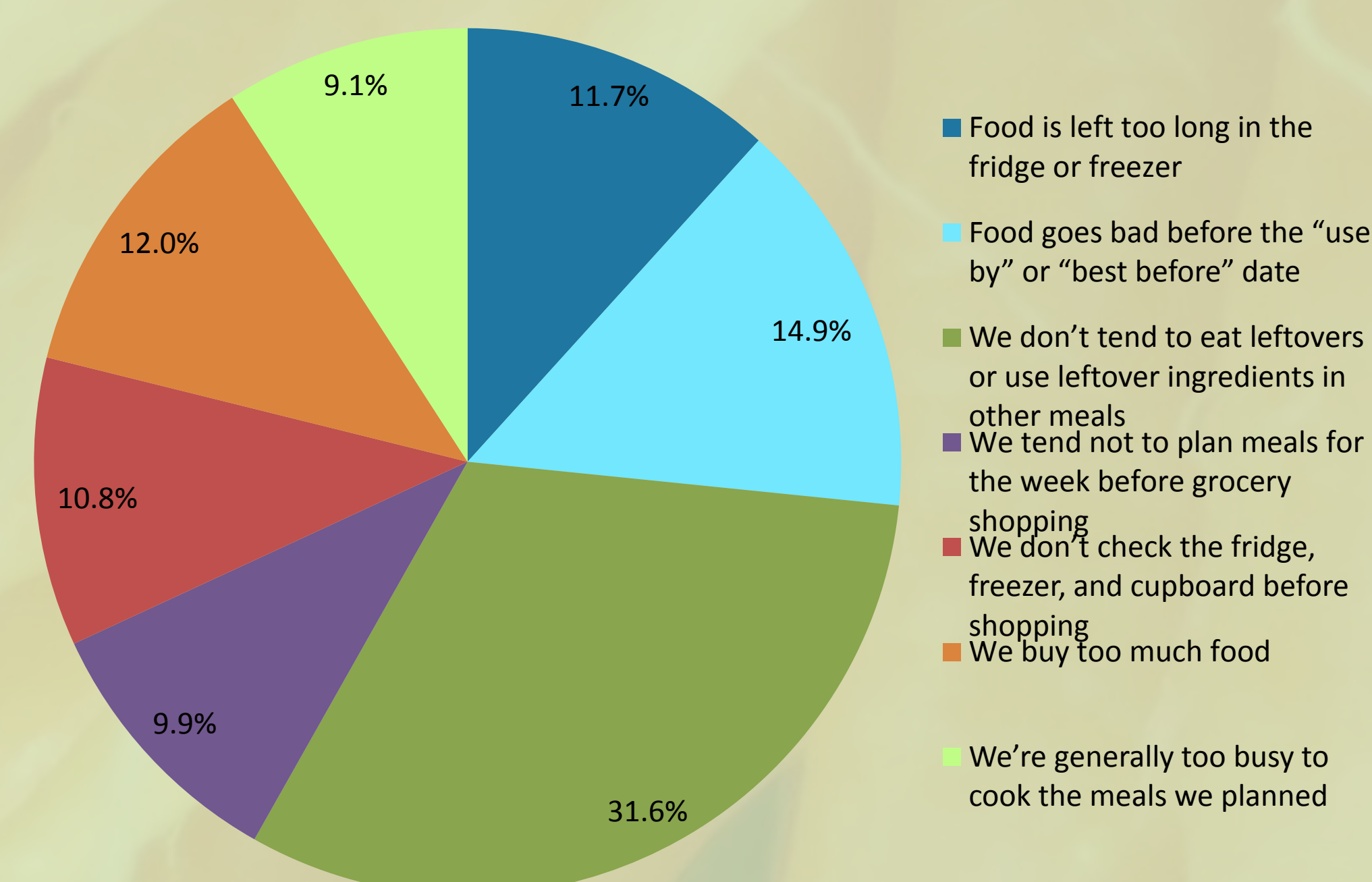
Food is perhaps one of our most valuable resources but, astoundingly, as much as 40% of it is discarded throughout the supply chain. Approximately half of that loss occurs at the consumer level. Until recently, little attention or effort has been dedicated to reducing this widespread inefficiency in the food system of the United States. Our aim is to better understand the underlying behaviors and attitudes related to domestic food waste, in this case specifically within the state of California.



Original graphic outlining the typical flow of food throughout the supply chain

## Experimental Approach

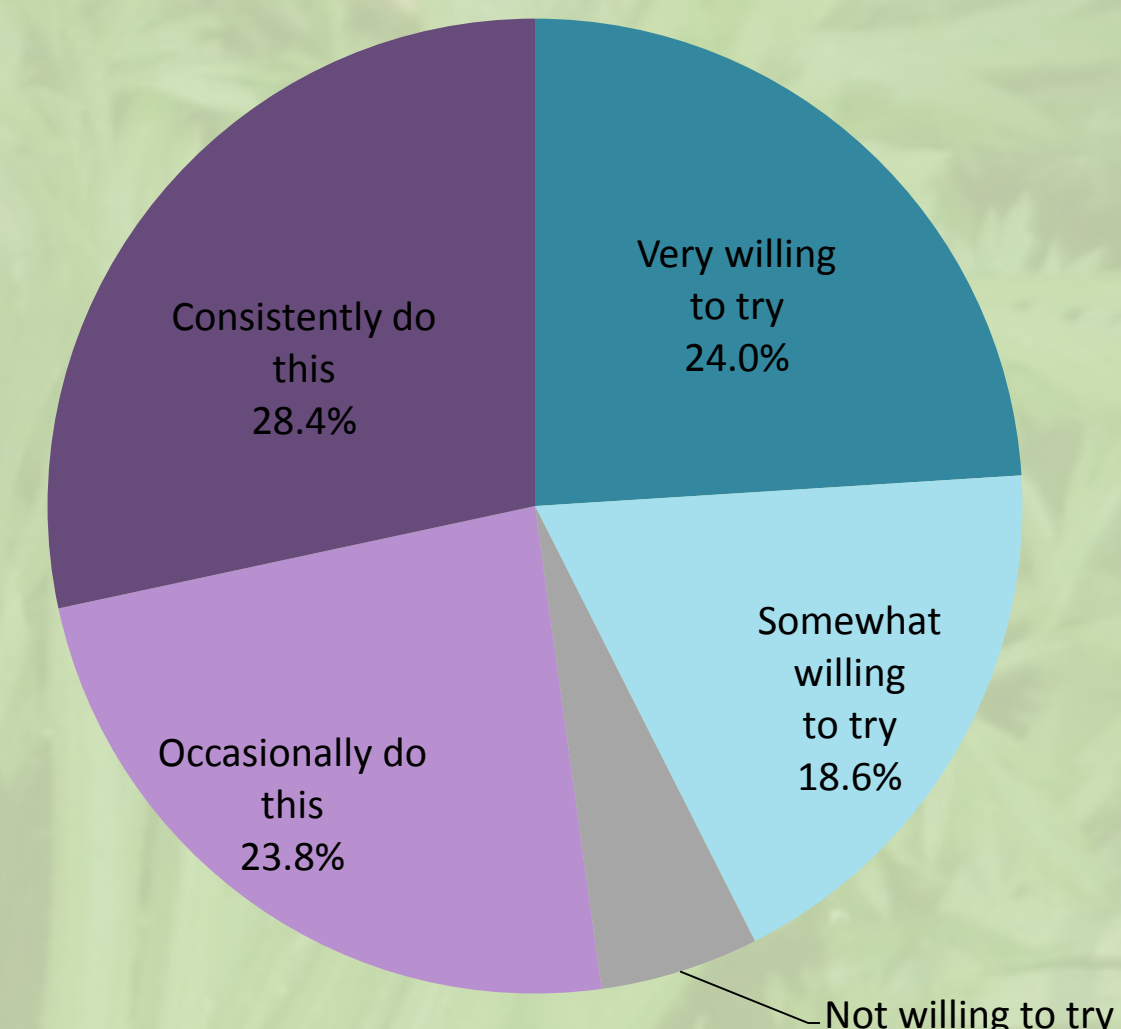
Though food losses occur at all stages of the supply chain and some is unavoidable, the largest proportion of loss occurs at the consumer level [3]. We believe it is likely that the general public does not understand the full implications of wasteful behavior when it comes to food. We surveyed over 1000 California residents over the age of 18 through the internet survey service, Survey Monkey. We then used the results to craft a public awareness campaign to influence and inform the general public



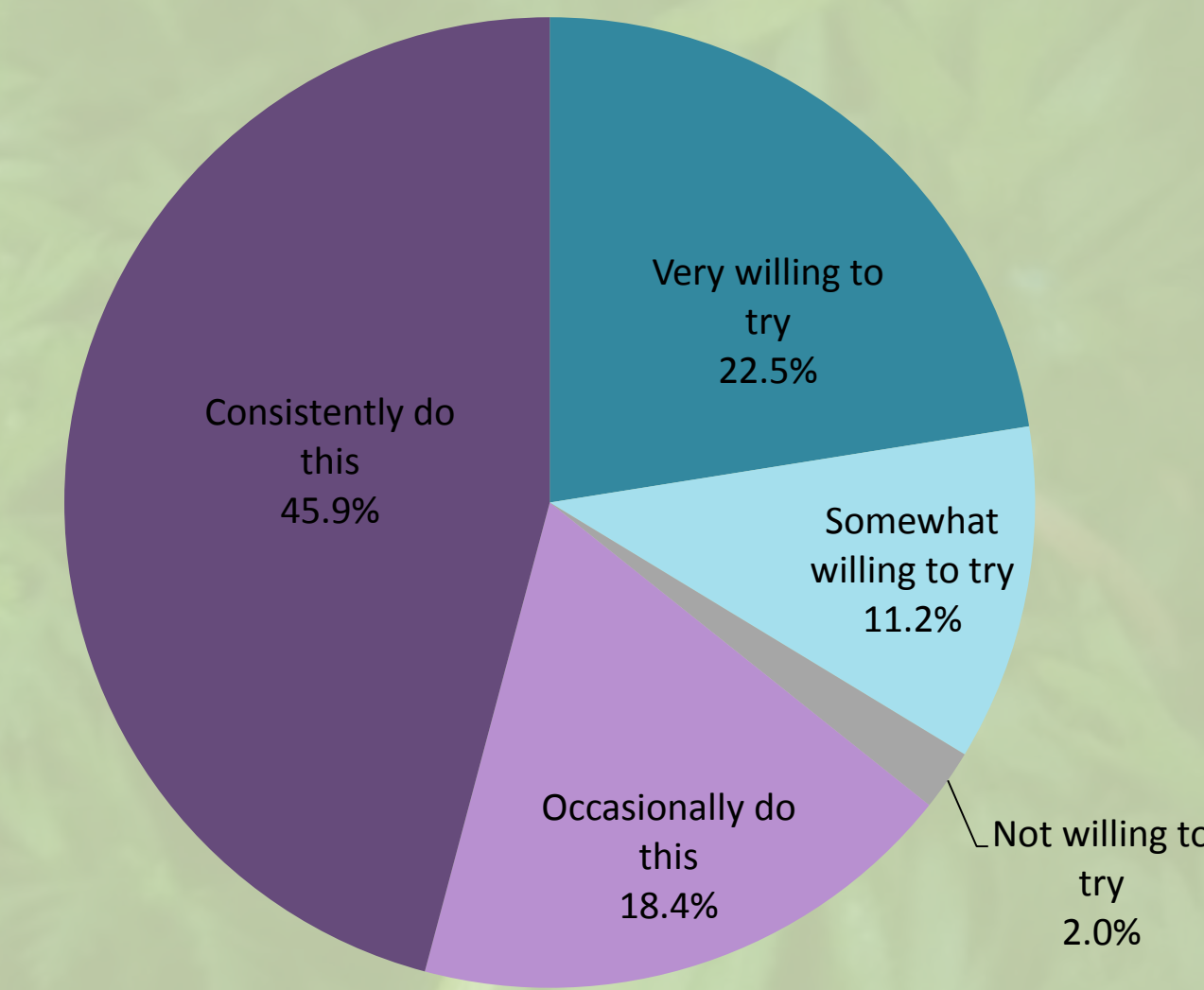
We wanted to identify the main reasons respondents might waste food. As the figure shows, the responses were fairly evenly distributed. This breakdown indicated that it would be beneficial to address all of the reasons for consumer food waste in our awareness campaign, instead of only highlighting a few.

## Survey Results

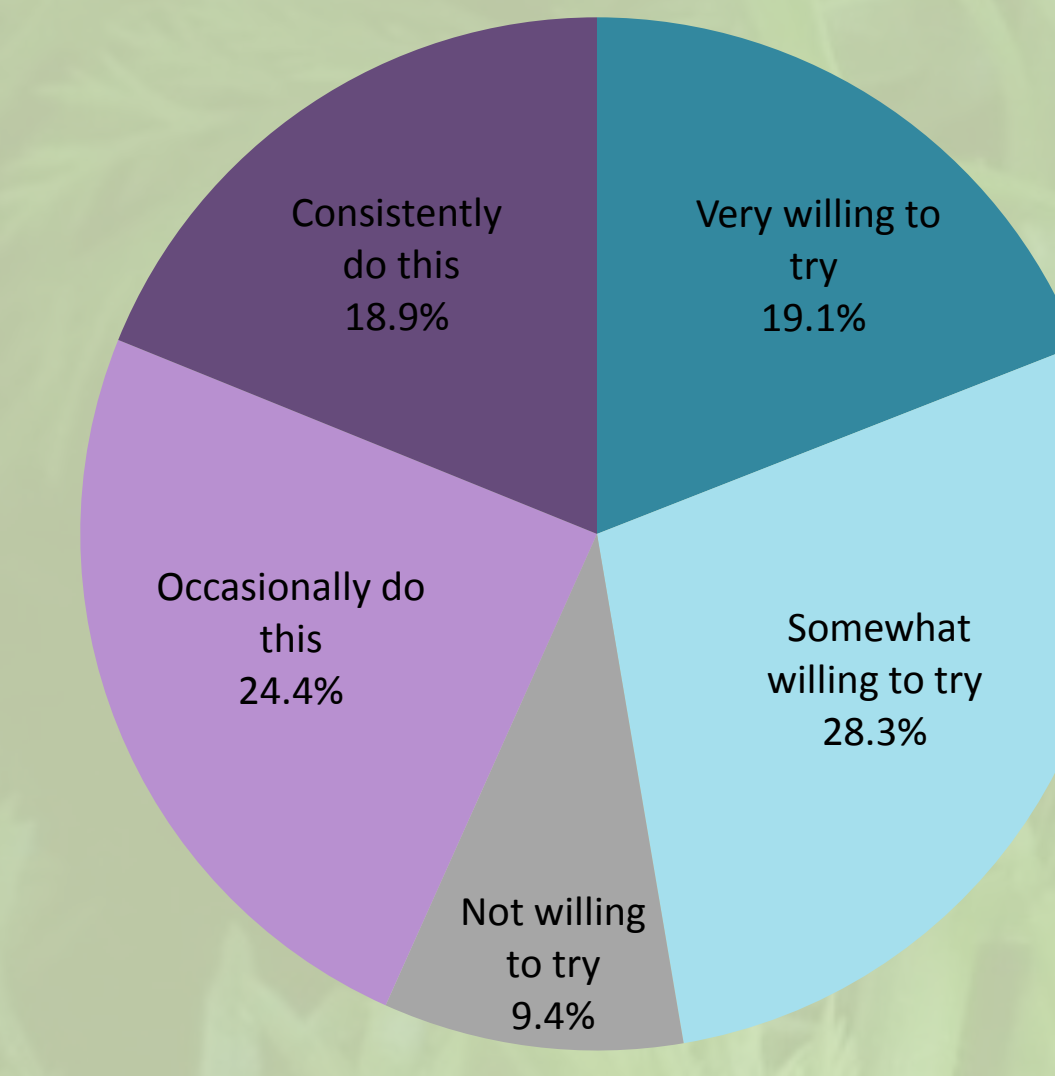
Write a shopping list based on a menu plan



Use leftover food for other meals

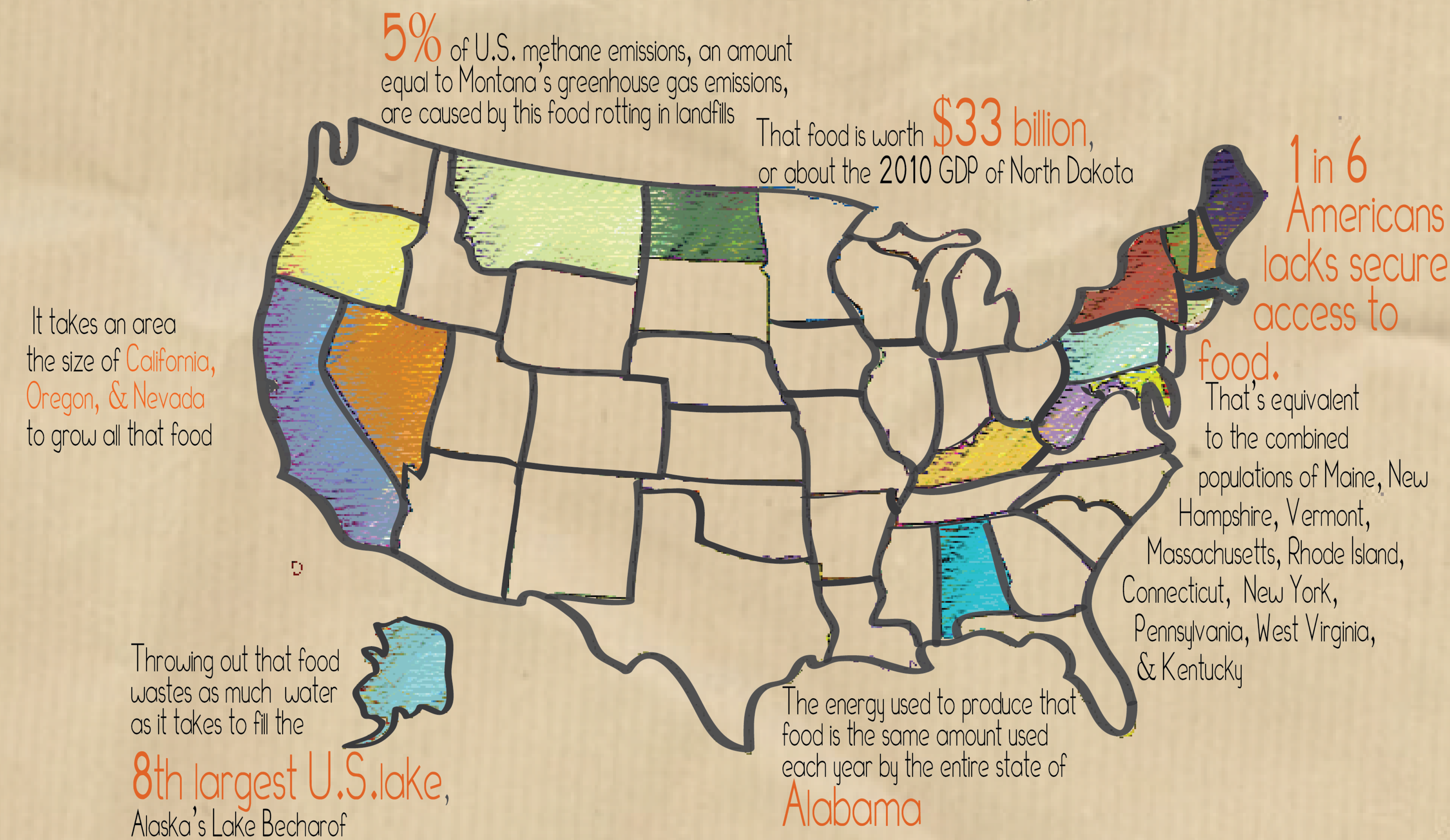


Plan a weekly menu



We wanted to assess the how willing people were to adopt certain practices to help reduce their waste in order to identify any low-hanging fruit targets for our messaging. We asked respondents to indicate their willingness to adopt new behaviors or to indicate that they already practice these activities (and how consistently they do so). Our results indicate that very few respondents were unwilling to try these measures in order to reduce their food waste footprints. We believe this is indicative of the need to use campaigns like ours to direct consumers towards behaviors that are conducive to limiting food waste and provide them with the tools to do so.

**FOOD WASTE, U.S.A.** Consumers throw out nearly **20%** of food produced in the US...



## Selected Sources

"Agricultural Resources and Environmental Indicators," *United States Department of Agriculture* (2006).  
 J. C. Buzby, J. Hyman, Total and per capita value of food loss in the United States. *Food Policy*. 561-570 (2012).  
 D. Gunders, Wasted: How America is Losing up to 40 Percent of its Food from Farm to Fork to Landfill. *National Resource Defense Council*. (2012).  
 K. Venkat, The climate change and economic impacts of food waste in the United States. *International Journal on Food System Dynamic.*, 2, 431-446 (2012).

## Campaign

### Film

Through the Carsey-Wolf Center's Environmental Media Initiative, we were selected to participate in the Green Screen Program: a collaboration between environmental and film students to create media that connects the public with environmental issues. Our narrative film, entitled *I Am The 40%*, follows our main character, a two-legged carrot on a journey through the food supply chain.



### Website

Our website ([TheFoodWasteProject.com](http://TheFoodWasteProject.com)) will relay a variety of information as well as showcase our narrative film. This information includes recent news relating to food waste, our mission, a resources section that highlights smartphone apps and additional literature pertaining to food waste, our Twitter feed, team biographies, and contact information.



## Conclusions

We believe that addressing the problem of food waste will undoubtedly be in the best interest of the state of California as well as the entire country. Food waste has both indirect and direct influences on climate change, unsustainable use of water and other natural resources, food insecurity of individuals, and the amount of disposable income we retain. In light of growing environmental awareness and a tough economic climate, refining our food system to reduce food waste should be a feasible option to increase efficiency and reduce impacts.

## Further Information



Website: [TheFoodWasteProject.com](http://TheFoodWasteProject.com)  
 Twitter: @TheFoodWastePro  
 Email: [foodwaste@lists.bren.ucsb.edu](mailto:foodwaste@lists.bren.ucsb.edu)  
 Printout a copy of this poster from our website!

## Acknowledgements

We would like to extend a special thanks to Professor Gary Libecap for his invaluable guidance. Sarah Anderson also provided incredibly valuable insight to this project. Our short film, *I Am The 40%*, could not have been completed without Chris Jenkins and Michelle Musser.