

**Reducing Wasted Food in Clark County, WA:
Policy Recommendation for the Board of County Councilors**

Terra Rose

Abstract:

In Clark County, WA, nearly one in four children do not know where their next meal will come from. At the same time, county residents and businesses throw away almost 50,000 tons of food annually, which equates to 227 pounds per person per year. This dynamic of excess and insufficiency is one of the many paradoxes that characterize the food system, and one that comes with tremendous social, economic, and environmental costs. Throwing food away is a missed opportunity to redirect surplus food to those in need, increase resource efficiency, and reduce the impacts of climate change. The Clark County Board of Councilors should ban food waste generated by large-scale commercial entities and public institutions effective in 2018. It should eventually be expanded to include all commercial food waste generators and all residential households in 2020.

The Scale and Consequences of Food Waste

In Clark County, WA, nearly one in four children do not know where their next meal will come from.¹ At the same time, county residents and businesses throw away almost 50,000 tons of food annually,² which equates to 227 pounds per person per year using the appropriate census figures. This dynamic of excess and insufficiency is one of the many paradoxes that characterize the food system, and one that comes with tremendous social, economic, and environmental costs. After all, an uneaten apple that is thrown away isn't just a loss in calories and nutrients that could be redirected to those in need, but also a waste of water, energy, land, labor and the other materials that went into the growing, transportation, and storage of the apple. For example, nationally, a quarter of freshwater used in the United States is essentially "wasted" through unconsumed food.³ What is more, as the apple decomposes, it creates methane, a greenhouse gas that is capable of trapping twenty-one times more heat than carbon dioxide.⁴ Thus, wasted food is also major contributor to climate change.

The Opportunity

However, there is a different way forward. In just three decades, the U.S. more than tripled its overall national recycling rate from 9.6 to 32 percent, showing that similar strides are possible with food given the right incentives and opportunities.⁵ The Clark County Board of Councilors is responsible with oversight of the effectiveness of the waste management system, as well as promoting broader public health and welfare. In acting to reduce food waste, the County Board can play a significant role in creating a healthy community where there are fewer hungry people, and where there is more sustainable resource use, and lower greenhouse gas emissions.⁶

Perhaps most importantly, reducing the amount of food waste decreases the amount of materials that are sent to a landfill. Clark County is in the precarious position of sending its waste to two landfills located out of state in Oregon. Under this arrangement, the County is required to comply with all relevant Oregon laws around waste and recycling management.⁷ Oregon laws could change at anytime—for example, require haulers to provide curbside organics pickup—and Clark County may

have little recourse or lobbying influence. Because food makes up the single largest component of all materials in the landfill by weight,⁸ targeting food waste offers the best way to reduce the overall landfill burden.

Public awareness across the U.S. is growing on this issue, making now an opportune time for the County to seize these benefits. A national poll conducted in 2014 found that nearly two-thirds of individuals responsible with at least some of the household grocery shopping were concerned or very concerned with the amount of food waste being generated, surpassing those worried about other issues like air pollution.⁹ Since the National Resources Defense Council published their landmark report *Wasted: How America Is Losing Up to 40 Percent of Its Food from Farm to Fork to Landfill*, there has been increasing media coverage. As it is a relatively newer issue in the minds of many Americans, most of the coverage focuses on the staggering amount of food waste generated and its consequences, rather than advocating for specific ways to address it. Composting programs are most frequently cited as solutions. Other options to reduce waste such as encouraging businesses to donate surplus food are rarely discussed.

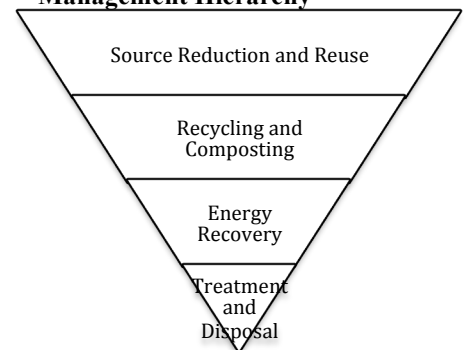
Current Actions to Reduce Food Waste are Insufficient

The Environmental Protection Agency has developed a hierarchy for solid waste management that ranks the various strategies based on their projected environmental impacts. Waste reduction at the source is the most preferred option and landfill disposal is the least.¹⁰

The County has adapted and incorporated this hierarchy into its 2015 *Solid Waste Management Plan* (see Figure 1). And yet, when it comes

to addressing food waste, the county currently has limited programming. A Master Composter program trains volunteers to provide outreach and promote home composting. The Green Business Certification program helps local businesses conduct waste audits and identify areas to decrease waste, including but not specific to food waste. Through the Save Our Scraps program, schools in the county

Figure 1: Clark County Waste Management Hierarchy



can receive technical assistance and support to set up cafeteria composting. Further, a limited pilot program exists in the city of Vancouver that collects food scraps from eighty businesses, but curbside food scraps pickup is otherwise unavailable to residents and businesses outside of Vancouver.¹¹ While these are all important steps to reduce food waste, they aren't on their own sufficient considering amount of food waste is on the rise. In 1995, food made up 11.9% of all materials sent to the landfill and in 2012, the most recent available data, it had risen to 20.4%.¹²

Currently, no composting facilities located within the county are permitted or have interest in accepting food scraps and existing facilities in the broader Portland-metro area are at or are nearing capacity. Because of the limited processing facilities, the food waste from the pilot program is transported more than 160 miles away and thus further expansion of the Vancouver program is constrained. The County Department of Environmental Services has expressed interest in encouraging the development of a composting facility in Clark County, though this can pose certain challenges.¹³ Private sector entities are often hesitant to develop new composting facilities until there is a consistent source of material available—also known as “feedstock”—for processing to ensure economic viability. Conversely, municipalities are often hesitant to move forward with a food separation and collection program until there are adequate processing facilities available creating a “chicken and egg” problem.¹⁴ While it may seem counterintuitive, one effective way to encourage the development of composting facilities is to actually ban food waste from entering the landfills.

Recommendation: Through municipal ordinance, ban the landfill disposal of food waste generated by large-scale commercial entities and public institutions, effective 2018. Expand the ban to include all commercial food waste generators and all residential generators by 2020.

Under this recommendation, commercial entities that generate one ton of food waste per week will be prohibited from sending their waste to landfills effective in 2018. The ban will be expanded to eventually include all businesses and residential households in 2020. This policy option provides a series of benefits. First, it essentially guarantees a consistent feedstock for large scale, commercial composting which should encourage the development of processing sites in the Clark County area and

making curbside food scraps pickup a possibility in the future. Second, it provides a catalyst for commercial entities and households to act to reduce food waste, but allows for flexibility. Instead of mandating a single action, it allows for diversion to occur in a variety of ways such as through donating surplus food to those in need or through strategically reducing food from being wasted in the first place. Each actor is able to select the management options that are most appropriate. Third, legislation imposing a ban is a relatively cost-effective step. Many municipalities are continuing to struggle economically after the recession and so new spending may be politically infeasible. With this action, there are no immediate costs attached to it and so legislation may be easier to pass. Fourth, this act is in direct alignment with the broader waste reduction goals identified in the waste management plan. By 2020, the County seeks to increase the recycling rate to 55% from 53.9% and the diversion rate to 70% from 65.2%.¹⁵

While it may appear extreme, there is a precedent for food waste bans. A handful of states and municipalities have already done this to great success in reducing the overall amount of waste being sent to landfills. Currently, Connecticut, Vermont, Massachusetts, and California all ban commercial food waste for generators of a certain size. Additionally, Seattle, WA; San Francisco, CA; Portland, OR; and New York City, NY also have similar bans at the municipal level. Seattle, San Francisco, and Portland have mandatory composting laws, so the bans include residential households, as well. San Francisco, for example, currently diverts 80% percent of all waste from the landfill.¹⁶ Accordingly, lessons can be learned from their progress. In order to boost the likelihood of success, careful implementation of this law is necessary. A phased approach with ample lead-time is recommended such that food waste generators and recipient sites can adequately plan. Further, the ban must be coupled with technical assistance, outreach, and education to help generators comply with the law.

Overall, the media coverage for food waste bans implemented in other areas has been very positive from both the consumer and commercial perspectives. Businesses seem to recognize that reducing food waste makes sound economic sense. Safety net programs tend to see increases in food

donation. Further, bans are recognized as facilitating economic development and innovation as entities see future business opportunities.

Stakeholder Assessment:

There is likely to be some resistance to such an action, as it does represent a fairly aggressive step forward. Waste management entities in the County may express concern if they anticipate economic difficulties as a result of the ban, though they also may see an opportunity to develop a composting facility and expand their business.¹⁷ In Massachusetts, there was no opposition to the ban and this is partially attributed to the multi-year effort to lay the groundwork. The National Waste and Recycling Association, a trade group representing waste management businesses, had anticipated testifying against the legislation, but ultimately decided to support it given the strength of the plan.¹⁸

Food assistance and food recovery organizations, such as the Clark County Food Bank, are likely to be in full support of such a measure since it will likely mean more businesses turning to donation as a way to prevent surplus food from turning into waste. Environmental organizations are also likely to support this step because of the positive environmental impacts.

Business opinion is likely to be divided. Many stand to save money, though others may see it as burdensome, requiring additional staff time to sort food from other waste. Residents are also likely to have split opinions and may find handling food scraps to be “yucky.” With the right outreach, messaging, and education around strategies to reduce barriers, much of this can be overcome.

Annotated Bibliography

Major stakeholders include: waste management organizations contracted within the county; food recovery organizations and other safety net programs; environmental organizations; the broader business community; County residents.

Waste management organizations:

Markowitz, D. “Opinion: Universal Recycling for Vt.” *Burlington Free Press*. 4 April 2015.

This editorial identifies the opportunities that some waste haulers in Vermont have captured as a result of the universal recycling law.

Layzer, J. & A. Schulman. “Municipal Curbside Compostables Collection: What Works and Why?” *Urban Sustainability Assessment (USA) Project, Department of Urban Studies and Planning, Massachusetts Institute of Technology, 2014.*

This report identifies some of the considerations for curbside composting programs highlighting the economic difficulties and need for thoughtful infrastructure planning to ensure economic viability. For example, efficient route selection is necessary to minimize distance traveled, while also managing the quantity of materials collected. Too much requires multiple trips and too little means space in the truck. Many of these considerations equally apply to trash collection.

Environmental organizations:

Gunders, D. *Wasted: How America Is Losing Up to 40 Percent of Its Food from Farm to Fork to Landfill*. National Resources Defense Council, 2012.

Environmental Working Group. “Wasted Food is a Major Source of Emissions.” *Meat Eater’s Guide: Report*. n.p, n.d. <<http://www.ewg.org/meateatersguide/a-meat-eaters-guide-to-climate-change-health-what-you-eat-matters/wasted-food-is-a-major-source-of-emissions/>>.

Several nationwide environmental organizations, including the National Resources Defense Council and the Environmental Working Group, have called attention to the issue of food waste suggesting that local organizations may support action to reduce food waste.

Food recovery organizations and other safety net providers:

Clark County Food Bank. “What We Do.” *Clark County Food Bank*. n.p., n.d.

<<http://www.clarkcountyfoodbank.org/whatwedo/>>.

The Clark County Food Bank is the major food bank in the region, distributing to 34 local agencies. Because they have an active gleaning and food recovery program, they would likely support policies to scale up these efforts so long as they were coupled with the appropriate resources.

Oesch, E. “Oregon Food Bank needs basic food donations.” *Koin6*. 25 Nov 2014.

<<http://koin.com/2014/11/25/oregon-food-bank-needs-basic-food-donations/>>.

This article suggests some shortages occurring at food banks in Oregon. Since Clark County resides on the border, it is likely that food banks in the county are also experiencing shortages. The need for more food provides further evidence to suggest that food banks and safety net programs would support policies to increase donations.

Businesses:

Food Waste Alliance. “About the Food Waste Reduction Alliance.” *Food Waste Reduction Alliance. Grocery Manufacturers Association, 2013.* <<http://www.foodwastealliance.org/about-us-page-2/>>

This website describes an alliance between the Grocery Manufacturers Association, the Food Marketing Institute, and the National Restaurant Association that seeks to reduce food waste amongst their members. This suggests some support for the goal, though there may be some resistance to specific policies.

Gunders, D. “Massachusetts businesses stay ahead of food waste ban.” *GreenBiz.* 1 Aug 2013.

This article describes the many businesses who supported the Massachusetts food waste ban from an anaerobic digestion business to the Red Sox baseball team.

I wasn't able to identify any articles that show where businesses opposed food waste bans, but they most certainly exist.

Citizens:

Libby, H. “Statewide waste ban shows improvement in sustainability efforts.” *The Daily Free Press.* 4 May 2015.

Orton, T. “Metro food waste ban opens doors to entrepreneurs.” *Business Vancouver.* 27 Jan 2015.

The majority of media coverage of bans in other states has been positive with quotes from citizens supporting the measures. Though, like in the case of businesses, this certainly won't be a universal opinion.

Freeman, J. & A. L. Skumatz. *Best Management Practices in Food Scraps Programs.* Boulder, CO: Econservation Institute.

This report identifies the perceived barriers to separating food scraps from the rest of waste, the “yuck factor” and fear of vermin and pathogens being two of the main concerns cited. It indicates that the right messaging and outreach can help overcome these issues (as they are largely perceived rather than real). After all, food has always been in the trash so there is no increased risk of vermin and pathogens.

References

- ¹ Gundersen, C., A. Satoh, A. Dewey, M. Kato & E. Englehard. *Map the Meal Gap 2015: Food Insecurity and Child Food Insecurity Estimates at the County Level*. Feeding America, 2015.
- ² Clark County Department of Environmental Services. *2012 Waste Stream Analysis*. Vancouver, WA: Clark County Department of Environmental Services, 2012.
- ³ Hall, K., J. Guo, M. Dore & C. Chow. “The Progressive Increase of Food Waste in America and Its Environmental Impact.” *PLoS ONE*. 4.11 (2009): e7940.
- ⁴ Environmental Protection Agency. *Methane and Nitrous Oxide Emissions from Natural Sources*. Washington, D.C.: U.S. Environmental Protection Agency, 2010.
- ⁵ Environmental Protection Agency. *Municipal Solid Waste Generation, Recycling, and Disposal in the United States: Facts and Figures for 2012*. Washington, D.C.: U.S. Environmental Protection Agency, 2012.
- ⁶ Lipinski, B. et al. “Reducing Food Loss and Waste.” Working Paper, Installment 2 of *Creating a Sustainable Food Future*. Washington, D.C.: World Resources Institute.
- ⁷ Clark County Department of Environmental Services. *Clark County Solid Waste Management Plan 2015*. Vancouver, WA: Clark County Department of Environmental Services, 2015.
- ⁸ Clark County Department of Environmental Services. *2012 Waste Stream Analysis*.
- ⁹ Harris Interactive. *More than Four in Five Americans Say It Should Be a National Priority to Feed Struggling Families in the U.S.* 22 May 2014. *The Harris Poll*.
- ¹⁰ Environmental Protection Agency. “Non-Hazardous Waste Management Hierarchy.” *Environmental Protection Agency*. N.p., 22 Nov 2013.
< <http://www.epa.gov/solidwaste/nonhaz/municipal/hierarchy.htm>>.
- ¹¹ Clark County Department of Environmental Services. *Clark County Solid Waste Management Plan 2015*.
- ¹² Clark County Department of Environmental Services. *2012 Waste Stream Analysis*.
- ¹³ Clark County Department of Environmental Services. *Clark County Solid Waste Management Plan 2015*.
- ¹⁴ Layzer, J. & A. Schulman. “Municipal Curbside Compostables Collection: What Works and Why?” Urban Sustainability Assessment (USA) Project, Department of Urban Studies and Planning, Massachusetts Institute of Technology, 2014.
- ¹⁵ Clark County Department of Environmental Services. *Clark County Solid Waste Management Plan 2015*.

¹⁶ SF Environment. “Zero Waste FAQ.” *City and County of San Francisco*. N.p., n.d.
< <http://www.sfenvironment.org/zero-waste/overview/zero-waste-faq>>.

¹⁷ Markowitz, D. “Opinion: Universal Recycling for Vt.” *Burlington Free Press*. 4 April 2015.

¹⁸ Kaplan, S. “Massachusetts Food Waste Ban Gains Broad Acceptance.” *NPR All Things Considered*. 4 Nov 2014.

Reduce Food Waste for Healthy Communities: Ban Food From Landfills

Nearly 50,000 tons of food is thrown away each year in Clark County while one in four children live in food insecure households. Act now to reduce food waste by imposing a landfill ban modeled after the one implemented in New York City.

Opportunity

Food waste is a resource out of place. Currently, Clark County sends more discarded food to Oregon landfills than plastic, paper, metal, glass, or any other material and this figure is growing. In 1995, food made up only 11.9 percent of all waste material and today, it represents over a fifth. This high level of waste costs the local economy, results in wasted economic and natural resources, and misses an opportunity to redirect some of this food to those in need. With rising landfill costs and more than 27,000 children who don't know where their next meal will come from, this is an opportunity that can no longer be ignored.



The Way Forward. Few people plan to waste food, but most need a little help in taking action. Accordingly, states and municipalities across the nation have begun banning food waste from landfills, starting with the large-scale generators like grocery stores, restaurants, and jails. Under this proposal, commercial entities that generate more than one ton of food waste per week will be prohibited from sending it to landfills effective in 2018. This action provides a catalyst for commercial entities to reduce the amount of food that they wasted, but also offers flexibility. Instead of mandating a single action, it allows for diversion to occur in a variety of ways. Businesses can decide to donate surplus food, for example, or can strategically reduce food from being wasted in the first place through smarter ordering

Recommended Action

Introduce legislation to ban the landfill disposal of food waste generated by large commercial organizations and public institutions starting in 2018.

practices. San Francisco has managed to divert more than 80% of their municipal waste away from the landfill, in part due to a food waste ban.

Though it may appear extreme, when rolled out with sufficient planning time and technical support, bans have been met in other areas with little resistance. In Massachusetts, for example, waste haulers had anticipated opposing the ban but ultimately decided to support the state's plan given the opportunities it provided. Clark County can further be a leader by eventually expanding this ban to all commercial operations and residential households in the future.

Why Banning Food Waste Works

- **It Allows for Flexibility:** Instead of mandating a single reduction action as Seattle has done with mandatory composting, it allows each business to choose the most appropriate reduction strategies.
- **It is Cost-Effective:** Bans on their own cost very little compared with developing a curbside food scraps pickup program.
- **It Promotes Economic Development:** Private sector entities are often hesitant to develop new food recycling programs (e.g. anaerobic digestion or composting) until there is a consistent source of material available for processing. Bans guarantee future material will be separated and thus encourage economic development.
- **It Aligns with Existing Waste Reduction Goals:** Banning food waste helps Clark County to achieve their goal to divert 70% of waste away from landfills by 2020.