

Senator George J. Mitchell  
Center for Sustainability Solutions



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Senator Brenner, Representative Gramlich and members of the Environment and Natural Resources Committee,

My name is Susanne Lee, and I am a Faculty Fellow at the Senator George J. Mitchell Center for Sustainability Solutions at the University of Maine. Since 2019, we have worked as part a multi-disciplinary faculty and student team focused on ending wasted food and food loss in our state. Our team works with key Maine food waste stakeholders – farms, businesses, schools, and other organizations, municipalities, and consumers throughout the state – to identify, develop, and test sustainable food waste solutions that will equitably benefit all Maine people.

My colleagues include Prof. Travis Blackmer (Economics), Dr. Ivan Fernandez (Soil & Climate Science), Dr. Jean MacRae (Civil/Environmental Engineering & Microbiology), and Dr. Jason Bolton (Food & Nutrition Sciences). Our expertise is also based on research and collaborations with leading national food waste organizations like ReFED and the EPA's Food Too Good To Waste Network, as well as our own Maine food waste advisory group of over forty leading Maine food waste stakeholders. In addition, our team works closely with the Maine Department of Environmental Protection (DEP) using their [Food Waste Hierarchy](#) to guide the development of sustainable food waste solutions for our state.

Today, I am here on behalf of R1 UMaine to provide informational testimony regarding LD1009 that has been informed by our University food waste research and outreach.

According to ReFED 2019 estimates, Maine wastes approximately 213,000 tons of food – roughly about 1/3 of the food we produce. The value of this wasted food is approximately \$1.27 Billion dollars not including the waste of resources – energy, water and labor – used to produce food that is wasted. Sadly, about 97% of Maine's food waste is going to landfills where the trapped rotting food produces methane gas, a GreenHouse Gas (GHG) 28x more potent than CO2.

Therefore, the financial, social, and environmental benefits of a food waste ban can be tremendous, but based on the experience of the six food waste bans already in place, the path to get to a successful and sustainable food waste ban is very complex. It must be thoughtfully planned and implemented to ensure that it delivers the benefits and avoids the risks. (**Bans & Beyond**, Harvard Food Law & Policy 2019)

Our University team has been working with the DEP and our Maine stakeholders to implement food waste pilots to help evaluate the potential benefits, challenges, and risks - and inform public practice and policy, like the bill before you now. I'd like to share some of our important achievements and learnings which may be helpful:

**1) Food Waste Tracking & Measuring Pilots:** Essential for food waste reduction is the ability to track and measure food waste. Our team developed an effective food waste tracking and measuring system that we piloted last year with the Maine Department of Corrections (DOC) in five facilities. We identified opportunities to reduce food waste by 20% and save the DOC over \$200K annually. This year we partnered with Northern Light Health's Blue Hill Hospital to identify similar food waste and

cost savings. In January, we focused on household (HH) food waste reduction with a four week **Maine Home Food Waste Challenge** inviting participants to track and reduce their HH food waste. The average HH food waste reduction was nearly 20% over the four weeks – resulting in an average family cost savings of \$400 annually.

- 2) **Food Rescue Infrastructure Pilots** – With Vermont’s food waste ban tripling food donation volume, we understood the need to increase Maine’s food rescue capacity by virtually connecting community donors, volunteers, and feeding sites and then linking these individual food rescue communities statewide similar to a system that Delaware just implemented to insure that no diverted food goes to waste. We are testing the **Food Rescue US** software system as it is already used successfully in 10 other states connecting over 18,000+ volunteers and successfully diverting 143M lbs. of food from the landfill. We piloted in Biddeford last year and are currently conducting a larger Rockland pilot with positive preliminary results.
- 3) **Food Waste Education/Technical Training Infrastructure & Resources** – With education identified as the single most important food waste solution, we were awarded a 2021 DEP grant to develop a Maine food waste education campaign featuring a **Food Rescue MAINE** website, social media program, school and community education resources, speaking events and workshops, and an annual [Maine Food Waste Solutions Summit](#). Our five school food waste pilots reached over 1600 K-5 graders. The campaign goal was to provide all Mainers with basic food waste education.
- 4) **Food Processing Infrastructure Pilot** – An important but often overlooked food waste recovery solution is building Maine’s food processing infrastructure. According to our 2022 farm/food producer food waste survey, we know that the majority of Maine farmers would like to sell their excess for food processing even if they only break-even or generate a small profit. Processing options include food dehydration and new “upcycled” processed food products that turn the state’s potential produce waste into new food and farm revenues.
- 5) **Community-based Food Recycling Pilots** – Since 2021, we have been working on four Maine community pilots – Waterville, Readfield/Wayne/Fayette, Winslow and Portland – to test free, community food waste drop-off sites as a cost-effective model for diverting food waste from the landfill. Portland now has eight drop-off locations across the city’s diverse neighborhoods collecting 150 tons of food waste and saving over \$10,000 per month in disposal fees. In three pilots, food waste is processed through anaerobic digestion, and in one pilot, they are composting on-site.

Based on this best practice research and pilot experience, we see where major challenges arise:

- **Education/Training** – With better education, our community food waste diversion pilots show greater participation and lower contamination rates. But without an ongoing funding source, this education effort is scheduled to end in early 2023.
- **Infrastructure** – Infrastructure is essential for making sure that diverted food waste is recovered and processed properly, e.g. put into the charitable food system vs. being left on church steps and pantry doorways and being dropped at municipal compost sites vs. being dumped in open lots or forests. Without the proper infrastructure - systems and people - in place to handle the huge volume of newly diverted food waste, experience has shown that food waste can overwhelm insufficient infrastructure and cause a new public health and safety problems.
- **Investment Funding** – Sufficient ongoing funding is crucial to insure successful food waste behavior and system changes; our current food waste funding is a patchwork of grants which limits the effectiveness of our education and infrastructure efforts to short-term, regional pilots.

- **Regulation** – Currently there is a lack of clarity as to food waste processing best practices. The DEP guidelines for “food only” food waste collection are not consistently followed by food waste haulers and processors whose businesses benefit from allowing other food-related materials, including packaged food, into food recycling. This causes consumer confusion, reduces best practice compliance, and allows potential contaminants to enter Maine’s food system.

If these challenges are not addressed in any new food waste legislation, the following risks can occur.

- **Contamination** can enter the food system without education or regulations to help people understand what is “food waste” and to ensure that only food goes into the food waste system – not papers, packaging, micro plastics, etc.
- **Loss of valuable organics resources** is a risk without the sufficient donation and composting infrastructure needed statewide to take in and process wasted food. With Maine leading New England states in food insecurity, a system is needed to insure that the 60% of food waste that is good and edible goes to feed people. For the inedible portion, the USDA’s new Compost/Food Waste grant program highlights the urgent need for infrastructure to divert food scraps to composting in support of farming. Without the infrastructure, we risk losing this valuable organics stream back to the landfill or less valuable processing options.
- **Underserved Communities** like Maine’s farming, rural, and tribal communities would benefit most from proposed food waste solutions but are the most easily overlooked without appropriate funding, infrastructure and regulations to secure their interests.

We appreciate the opportunity to share this overview today, and my colleagues and I would be happy to provide any additional information or participate in the work session. Thank you for your strong support of the University of Maine which makes our research possible. I would welcome any questions.