



# Creating a Sustainable Future through Food Waste Reduction

2022 Year-End Report for the  
Pacific Coast Food Waste Commitment

# Acknowledgments

The Pacific Coast Food Waste Commitment could not accomplish our work without the generous support of our funders:



We are also deeply grateful for the ongoing critical support provided by many of the PCFWC's jurisdiction members.



## About the Pacific Coast Collaborative

The Pacific Coast of North America represents the world's fifth-largest economy, a thriving region of 55 million people with a combined GDP of over \$3 trillion. Through the Pacific Coast Collaborative (PCC), British Columbia, Washington, Oregon, California, and the cities of Seattle, Portland, San Francisco, Oakland, Los Angeles, and Vancouver, British Columbia, are working together to build the sustainable low-carbon economy of the future. Formed in 2008, the PCC has established ambitious goals for reducing greenhouse gas emissions by at least 80 percent by the year 2050 through the transformation of energy systems, buildings, and transportation, and through food waste management – all of which would serve as a model for national and global action.

The PCC leverages the leadership and ambition of its partners along the West Coast, working across geographic borders and vertically among city, state, and provincial governments, to support and strengthen our collective efforts. Together, we are creating great places to live, work, and start and grow businesses – all while reducing harmful greenhouse gas emissions and protecting the natural resources that draw people from all over the world to the Pacific Coast region.



## About the Pacific Coast Food Waste Commitment

The PCC Food Waste Reduction Project began in June 2016 when the PCC entered into the Pacific North American Climate Leadership Agreement – committing to advance organic waste prevention and recovery initiatives to reduce carbon emissions from the region’s food waste stream – which spurred the creation of the PCC Food Waste Working Group, now known as the Pacific Coast Food Waste Commitment (PCFWC). U.S.-based leaders from the food product and retail industries were invited to collaborate with area jurisdictions in a public-private commitment to cut the amount of food waste in half by 2030 – a success metric aligned with United Nations Sustainable Development Goal 12.3 and other global, national, and regional commitments.

The PCFWC is unique in its focus on accelerating action and measurable progress, complementing other climate and food waste commitments such as Champions 12.3, US Champions 2030, and 10x20x30.

To assist in moving the initiative forward, PCC established collaborations with World Wildlife Fund (WWF), ReFED, and WRAP as resource partners to provide expertise, additional philanthropic funding, and capacity for implementation. Cascadia Policy Solutions serves as facilitator and has provided foundational and ongoing support to the Pacific Coast Collaborative since 2011.

### Resource Partners



### Jurisdiction Members

*(as of 12-31-22)*

#### State of California

City of Los Angeles  
 City of Oakland  
 City of San Francisco  
 Alameda County

#### State of Oregon

City of Portland

#### State of Washington

City of Seattle  
 King County

#### British Columbia, Canada

City of Vancouver

## Business Signatories *(as of 12-31-22)*

### Retail

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### Hospitality and Food Service (HaFS)

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### Manufacturing

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*We Feed You*



SEEING POSSIBILITIES IN POTATOES

### Distribution

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### Growers

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# Introduction

Addressing climate change requires repairing our food system, and the “low-hanging fruit” within that system is food waste. In the United States, 38% of food goes unsold or uneaten, and most of this ends up as waste sent to landfills, incineration facilities, or down the drain, or is simply left in the fields to rot. Food waste is responsible for 6% of U.S. greenhouse gas (GHG) emissions and is the #1 input to landfills, with landfills representing the third largest source of methane in the U.S. Given its relatively short lifetime in the atmosphere, targeting methane now will reduce GHG emissions in just a decade or two. Making better use of the food we are already growing means that we will need less cropland and water resources to feed growing populations, preserving forests and grasslands so that they can continue removing GHGs from the atmosphere and yielding other life-sustaining services.

All PCFWC jurisdictions work independently on reducing wasted food within their borders – participation in the PCFWC gives jurisdictions the added opportunity to leverage and achieve impact at scale throughout the region, and has been explicitly written into many strategic plans. Founders of the PCFWC, jurisdictions partners continue to play a key role in providing critical support to the project. Many funders have also recognized the importance of collaborative food waste reduction as a holistic strategy to combat climate change, conserve natural resources, and transform the food system, and have generously provided grant funding to the initiative as well.

This report provides an overview of PCFWC’s progress in 2022 in the key areas of recruitment, signatory engagement (through working groups, sector summits and intervention projects), and

## Impacts of Food Waste



**38%**  
of food in U.S. goes  
unsold or uneaten

Source: ReFED 2023



**6%**  
of U.S. Greenhouse  
Gas Emissions

Source: ReFED 2023



**#1**  
input in U.S. landfills

Source: EPA 2021

data reporting. It also provides a first look at new data from our retail signatories tracking waste in 2020 and 2021; compared to the benchmark data from 2019, it reveals where retailers have successfully addressed waste in their operations, along with the hotspots that need additional focus. Aggregated and anonymized, this information is representative of retailers and other food businesses across the region and around the country, and can be used as a point of comparison for other food waste reduction initiatives.

# Executive Summary

The PCFWC made progress on several key initiatives in 2022. The project added three manufacturers (Lamb Weston, Bob's Red Mill, DelMonte) and three foodservice companies (Sodexo, Aramark, Compass Group) as signatories, in addition to the seven retailers and single trade association that were already part of the PCFWC. In collaboration with its signatories, the PCFWC launched and completed nine intervention projects that yielded promising findings and measurable results.

The PCFWC continued to facilitate dialogue and connection among project signatories across its three working groups: the Produce Working Group, the Food Recovery Working Group, and the Dairy Working Group. The PCFWC also hosted sector-specific summits for the first time in 2022, allowing peer signatories to connect deeper on sector-level food waste concerns. Functioning in tandem, the working groups and sector summits help the PCFWC fulfill its goal of identifying and targeting waste hotspots, and collaborating with partners to develop and share solutions that maximize and scale impact.

Building off of its landmark 2019 retail data set from the previous year, in 2022, the PCFWC collected and added 2020 and 2021 data to its compilation, allowing for year-over-year comparison and a more robust analysis than ever before. This dataset now stands as one of the most comprehensive resources in food waste research at the retail level and is being used to inform similar data tracking and analysis among PCFWC signatories within additional sectors.

## Accomplishments in 2022



Added  
**3 manufacturers**



Added  
**3 foodservice companies**



**7 businesses reporting data**



Completed  
**9 intervention projects**



# Data Findings

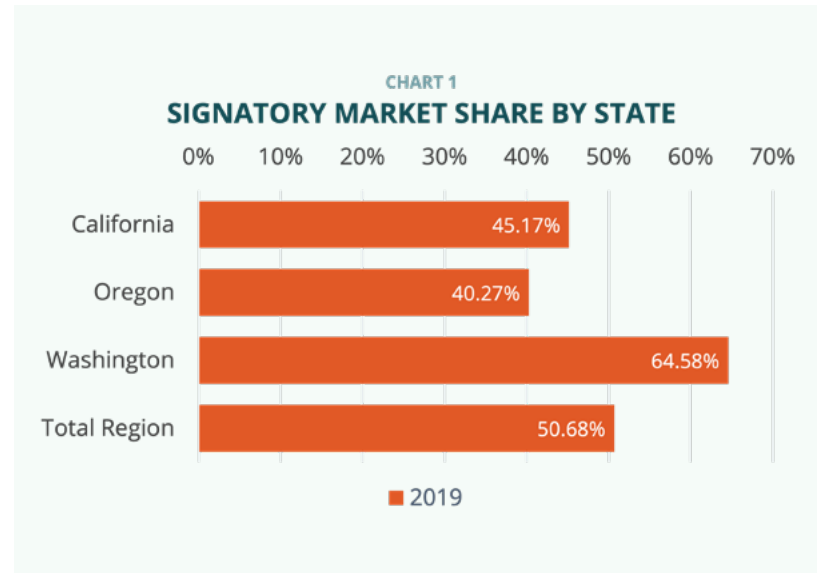
The driving force behind the PCFWC is the belief that data collection is critical for any food waste reduction initiative. The more we understand where, why, and how much waste is occurring, the more effective and efficient we can be in targeting and designing solutions. For the PCFWC, data collection enables us to credibly:

- Establish a baseline for improvement;
- Monitor progress over time;
- Identify hotspots to inform working groups and intervention projects;
- Highlight successes that can be replicated; and
- Provide actionable insights to individual Signatories based on their unique business data.

Throughout 2022, data reporting from retail signatories was a major focus of the PCFWC, and by the end of the year, data on Unsold Food Rates and Unsold Food Destinations for 2019 through 2021 had been received from more than 50% of regional grocery market share. The PCFWC also started piloting this methodology in other sectors, including manufacturing and hospitality & foodservice. Importantly, now that the retail program has been running for multiple years, it is possible to compare data across years and begin to understand how the metrics are changing over time.<sup>1</sup>

The PCFWC's data collection effort constitutes a significant contribution to the existing body of knowledge. The only comparable data sets available come from sources capturing single

points in time – in 2009, FMI, The Food Industry Association, fielded a survey among its members for information on unsold food rates; and in 2016, the Food Waste Reduction Alliance (FWRA) gathered data on food waste destinations among its members. Now that its retail dataset is a consistent annual report, the PCFWC's data contribution has become a new best-in-class dataset aligned with international reporting standards for tracking progress and benchmarking in the retail industry and for food loss and waste reduction initiatives everywhere - this includes being used as the primary retail data source in ReFED's 2023 update to the Insights Engine.



*As of 2019; market share to be updated in the 2023 report.*

<sup>1</sup> It is important to note that as the program progresses, measurement methodology is becoming standardized. Therefore, in these first few years, changes seen in the data from year to year may reflect improvements in measurement and reporting rather than actual increases or decreases in food waste.

## About the Data Collection Process

To facilitate measurement and reporting of data, signatories use ReFED's sector-specific calculators – tools that help calculate and auto-populate reporting templates based on a business's sales, inventory, and food waste destination data. Leading up to reporting deadlines, the ReFED team developed written measurement guidelines and provided one-on-one support to signatories in locating and refining the necessary data sets for reporting. Once a submission is received from a signatory, ReFED's Data & Insights team reviews the data to ensure that it has been entered correctly, includes all required information, accounts for any information gaps, and more. This data is then anonymized and aggregated into an unweighted average across all reporting retailers in the region - meaning that market share is not taken into account to scale the results, so all retailers' data is weighted equally regardless of size. As many of the retailers were completing this process for the second or third time in consecutive years, the data submission process was significantly more streamlined than it was in 2021, showcasing the simple and scalable nature of this approach.

## COVID's Impacts on Food Loss and Waste

Food waste does not happen in a vacuum – in publishing and discussing unsold food data from the retail sector, it is essential to acknowledge the impact COVID-19 has had on the global food supply chain and on retailers specifically. This data represents the first look we have at what happened in stores from 2020-2021, and throughout the Data Findings section of this report, we will attempt to link that data to known behaviors in the retail sector and across the food system. However, we will all continue

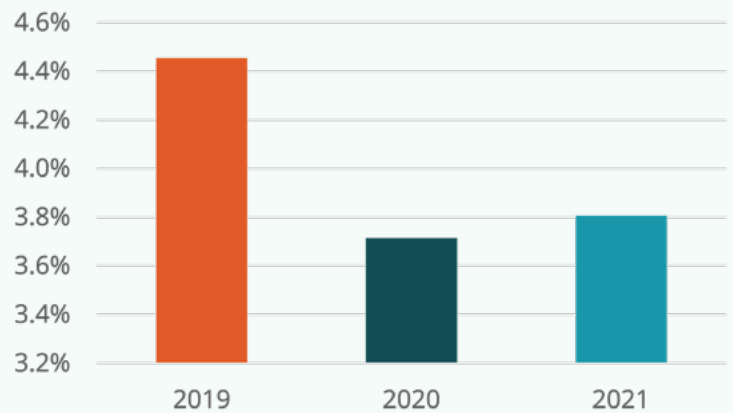
to learn and realize the impact of the COVID-19 pandemic on our food system for years to come.

## Data Findings

### Unsold Food Rates

Unsold food includes all food that went unsold in each grocery store food department, including edible food and food scraps (pits, peels, etc.). This metric is the most important measure for tracking food surplus at retail, because it is a direct measure of food waste prevention. **In Calendar Year 2021, a total of 704,741 tons of food went unsold in regional grocery stores (see Chart 3a), which is equivalent to \$3.83 billion in lost sales (see Chart 3b). This translated to an unsold food rate of 3.81% in 2021, which was a slight increase from the unsold food rate of 3.71% in 2020, but a net decrease from 2019's 4.46% (see Chart 2).**

CHART 2  
GROCERY UNSOLD FOOD RATES



Although unsold food rates increased in 2021, absolute tons of unsold food have decreased since 2019 (see Chart 3a). This trend can be explained by considering the impact of the COVID-19 pandemic



on supply chains, and the foodservice and retail sectors in particular. In 2020, due to wide-spread quarantining and social distancing requirements, restaurants were closed and consumers were therefore purchasing more of their food at grocery stores.<sup>2</sup> As we heard from PCFWC retailers, this increased demand, coupled with supply chain challenges, led many retailers to face insufficient supply and/or rapid sell-through of food. Struggling to stock shelves, retailers had little food left to waste. In 2021, as supply chain patterns started to return to “normal” but grocery sales remained higher than pre-pandemic, unsold food rates increased – but still showing a net decrease from 2019.

When comparing trends in unsold food rates and absolute tons of unsold food, it is important to remember that population growth, demand for food, and business performance can all influence the volume of food in the system. If the amount of food handled by a grocery store decreases, then absolute tons of unsold food can decrease even if unsold food \*rates\* go up. This phenomenon can be seen when comparing Charts 2 and 3a – although the unsold food surplus rate increased from 2020 to 2021, total tons of surplus food still decreased. Sales data from Nielsen<sup>3</sup> indicates that total food handled by regional grocery stores declined from 2020 to 2021, evidently enough to counteract the increase in unsold food rate. In 2021, a total of 704 thousand tons of food went unsold in the PCFWC region, amounting to \$3.83 billion in lost sales (see Chart 3b). (Note that the retail value of unsold food is highly dependent on food prices and fluctuates with inflation.)

CHART 3a  
ESTIMATED TOTAL REGIONAL TONS UNSOLD

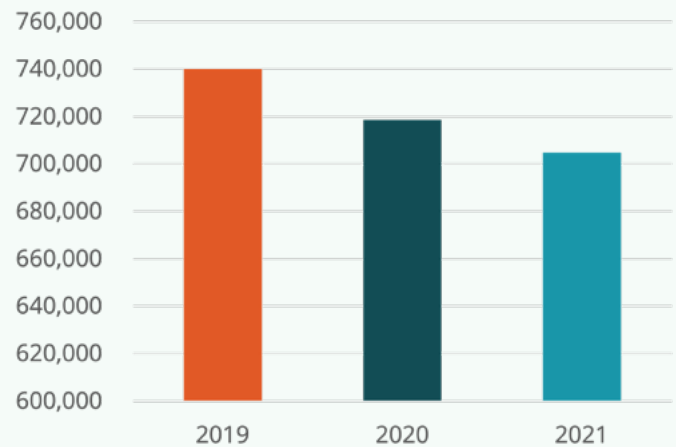
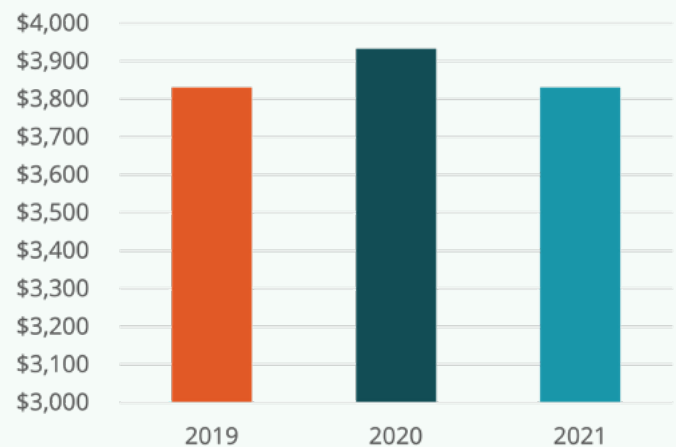


CHART 3b  
RETAIL VALUE OF TOTAL REGIONAL TONS UNSOLD (million \$)



<sup>2</sup> <https://www.ers.usda.gov/covid-19/food-and-consumers/>

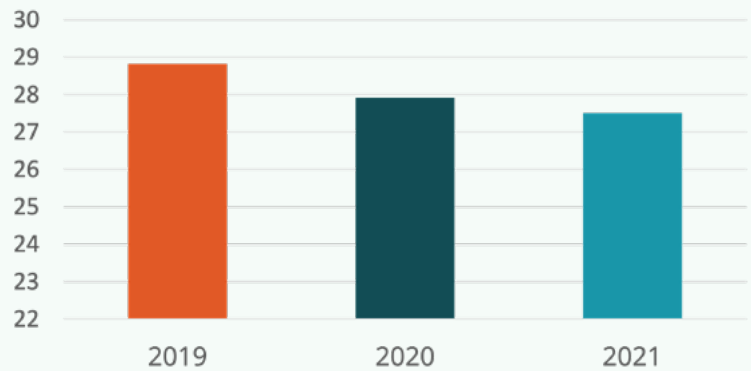
<sup>3</sup> Note that sales data for 2019 was retroactively updated based on a Nielsen methodology improvement, so total tons reported in this document may not exactly align with what was previously published in the 2021 Annual Report. The data team feels confident that the changes made improve the accuracy of the estimates provided.

One way to understand how population change might have influenced demand for food and therefore the amount of food in the system is to look at unsold food per capita. The number of people living in the region (California, Oregon, and Washington) increased very slightly (0.2%) from 2019 to 2020, and then decreased by slightly more (0.5%) from 2020 to 2021 (US Census Bureau). Scaling the absolute volume of unsold food by population controls for potential variation in demand based on that fluctuation, and the trend of a slight decrease in unsold food over time remains (see Chart 4). This indicates that the patterns seen in unsold food amount are independent of population change.

Unsold food rates can vary significantly by food department, and it is valuable to examine this variation to highlight “hotspots” that retailers could prioritize for food waste reduction activities. Chart 5a shows unsold food rates by department for 2021, and Chart 5b shows how these rates have shifted over time.

Unsold food rates were highest in the Prepared Foods (11.76%) and Breads & Bakery (7.44%)

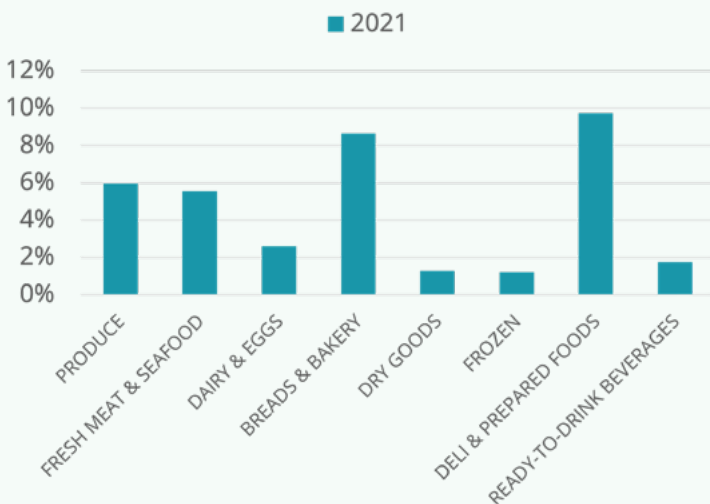
**CHART 4**  
**POUNDS UNSOLD PER CAPITA**



departments in 2019,<sup>4</sup> and remain the leading categories by rate in 2021 (9.71% and 8.64% respectively). These items are often highly perishable, especially when unpackaged and on display in salad or hot bar settings. High unsold food rates in these departments could be due to

<sup>4</sup> 2019 unsold food rates were re-calculated based on a slight change in how PCFWC analyzes retailer shrink data, so the values reported here may not exactly align with what was previously published in the 2021 Annual Report. Again, the data team feels confident that the changes made improve the accuracy of the estimates provided.

**CHART 5a**  
**GROCERY UNSOLD FOOD RATES**



**CHART 5b**  
**GROCERY UNSOLD FOOD RATES**



customer demand for fresh, made-onsite, made-today items, which increased especially during the COVID-19 pandemic when traditional restaurant dining experiences were not available. In the best of times, predicting customer demand for these items on any given day at any given grocery store is very difficult, and that difficulty only increased with changes in consumer behavior and supply chain challenges over the last two years.

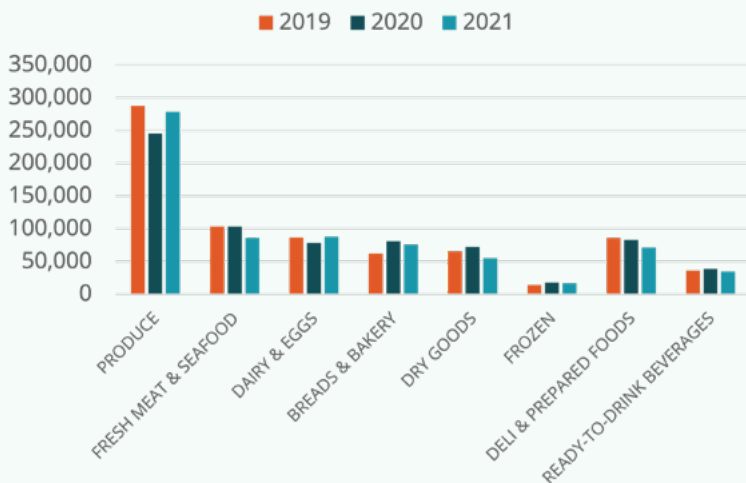
Again, the total tons unsold should be considered alongside the unsold food rates. If a department is low volume, by weight or by sales, then a high unsold food rate alone may not translate to a hotspot worth prioritizing. In 2021, the Produce department remains the largest driver of unsold food from a volume perspective – 39.5% of unsold grocery food by weight and 22% of unsold food by retail value. While Prepared Foods and Breads & Bakery have the highest unsold food rates, they are low sales volume departments, accounting for just 8% combined of food sold by weight. Produce alone accounts for 24% of food sold by weight. Combined with an unsold food rate of 5.96%, the Produce department generates the most unsold food of any department by far. Other departments to consider are Fresh Meat & Seafood, with a lower

## More about Unsold Food Rates

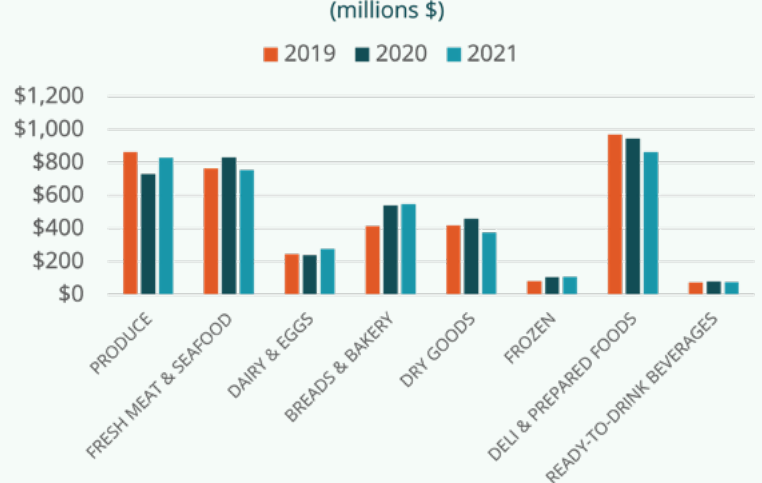
The ultimate goal of a retailer is to sell 100% of its product to customers. Any food that goes unsold is not only a hit to a retailer’s bottom line, but also a negative outcome for people and the environment. Unsold food ultimately drives higher prices that get passed along to customers and can end up in landfills, where it generates harmful methane emissions. Even if the food is kept out of the landfill and sent to other destinations, such as composting or anaerobic digestion, the vast majority (average of 96%) of the food’s embodied emissions have already been accrued by moving through the value chain. The higher upstream cost and impact of food production highlight the need to keep food in the human food supply chain and to prioritize prevention solutions.

sales rate but higher unsold food rate, and Dairy & Eggs, with a lower unsold food rate but higher sales rate – and both intensive from an emissions perspective.

**CHART 6a**  
**ESTIMATED TOTAL REGIONAL TONS UNSOLD BY DEPARTMENT**



**CHART 6b**  
**RETAIL VALUE OF TOTAL REGIONAL TONS UNSOLD BY DEPARTMENT**  
(millions \$)





## About the Unknown Destination Rate

Data tracking discrepancies are a major complication when determining how much food goes unsold and where it goes – there can be significant differences between the tons of unsold food a retailer estimates they have based on their unsold food rates and the tons they have actually tracked as being sent to each destination. Most of the time, if you add up the tonnages reported to each destination, the total weight appears much lower than the amount of unsold food estimated based on unsold food rates. This means that there is a significant amount of unsold food that is underreported in one or more destinations. While theft can help explain some of the discrepancy, this is usually relatively small. More common are situations such as retailers donating more food than they estimated or throwing something away while they were in a hurry or otherwise distracted and forgetting to log it.

The **Unknown Destination Rate** is a great metric to measure the sophistication of a retailer’s food waste tracking systems. And if the Unknown Destination Rate is high, it is important to understand that the reported Donations Capture Rate, Waste Rate, or both, could therefore be significantly underreported. Note that when calculating impact, the PCFWC model assumes that what is “unknown” ends up in landfill, and is estimated using the corresponding greenhouse gas emissions factors.

## Unsold Food Destinations

Unsold food at grocery stores is sent to a number of different destinations. Some is donated to food banks, pantries, and other hunger relief organizations, or recycled into animal feed. Some of it is wasted, which the PCFWC defines as anything sent to landfill, incineration, or sewer. Additionally, some is sent to other non-waste destinations, such as composting or anaerobic digestion. It is important to distinguish this from EPA’s definition of food waste, which was updated in 2021 to include composting and anaerobic digestion destinations.

The following numbers represent the average rates reported across the PCFWC retailers for 2021. While landfill and unknown received the most material, anaerobic digestion, donation, and composting were not far behind. It is likely that the destinations of food surplus in this region skew towards rescue and recycling solutions due to the progressive organics management policies of the PCFWC states and jurisdictions, and do not necessarily represent the national average.

CHART 7  
2021 REGIONAL TONS TO EACH DESTINATION

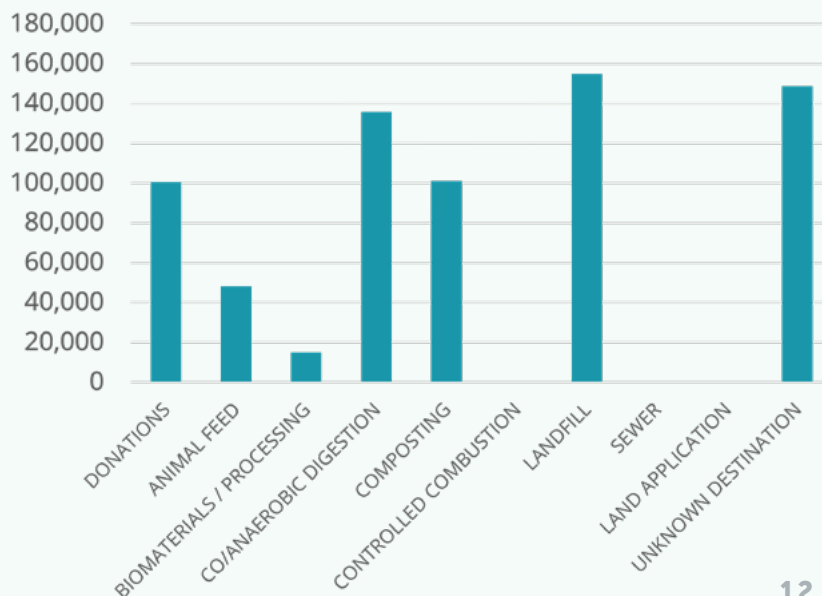
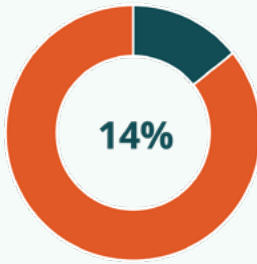
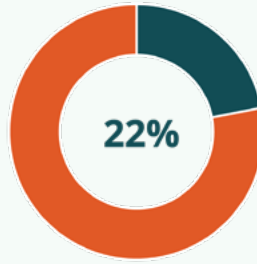


CHART 8  
2021 DESTINATIONS RATES

Donations Capture Rate



Waste Rate



Unknown Destination Rate

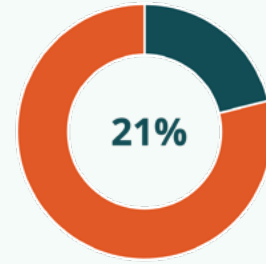
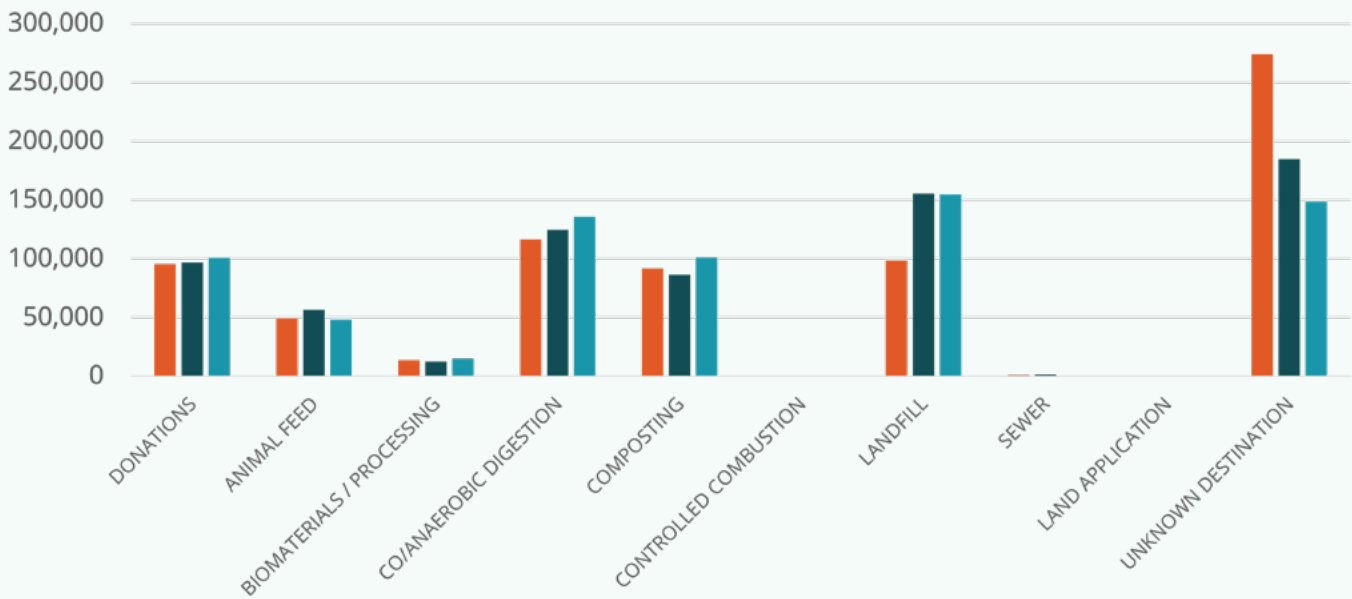


CHART 9  
REGIONAL TONS TO EACH DESTINATION

2019 2020 2021



Looking at the change in surplus destinations over time, the data suggests a significant decline in tons estimated “unknown”, while tons going to other destinations, particularly landfill, has increased since 2019. Considered together, this suggests that reporting retailers have improved their measurement accuracy and gained higher visibility to where unsold food is going. Therefore, reported increases in other destinations may not necessarily

be indicative of more food being sent to that destination but rather more visibility of the food that has always been going there. This is a highly positive development, because what is actively and accurately measured and tracked can now be addressed. For more information on Unknown Destination data, see the call-out box on page 12.

## Impacts of Unsold Food

Assuming that the PCFWC retailers that reported data are representative of the U.S. region as a whole, the [Impact Calculator](#) in ReFED's [Food Waste Insights Engine](#) estimates that the current impacts of unsold food in the region are the following:

### POSITIVE IMPACTS



MEALS DONATED

**167,825,210 MEALS DONATED**

Enough to feed 153,000 people for one year

### CHANGE FROM 2019 TO 2021

MEALS DONATED

**INCREASE**

Up 6% from 2019

### NEGATIVE IMPACTS



MEALS NOT DONATED

**901,283,667 MEALS NOT DONATED**

Equivalent to enough meals to feed an additional 823,000 people for one year

MEALS NOT DONATED

**DECREASE**

Down 7% from 2019



CARBON FOOTPRINT

**2,457,535 MTCO2e**

Equivalent to 546,000 passenger vehicles driven for one year

CARBON FOOTPRINT

**DECREASE**

Down 8% from 2019



WATER FOOTPRINT

**166,791 MILLION GALLONS OF WATER USE**

Equivalent 252,000 Olympic-sized swimming pools

WATER FOOTPRINT

**DECREASE**

Down 13% from 2019



LOST SALES

**\$3.83 BILLION GROCERY SALES LOST**

Equivalent to 4.14% of annual food sales

LOST SALES

**NO CHANGE**

Same as 2019



The carbon footprint of unsold food consists of two major components - “upstream” contributions from all the supply chain activities required to get food from production to retail, and “downstream” contributions from the destinations of unsold food. The upstream component vastly outweighs the downstream component, particularly since some destinations actually end up “offsetting” some of the upstream emissions. For example, recycling unsold food into animal feed is considered to reduce the need for conventionally grown feed crops, so some of the emissions that would have otherwise been incurred to grow that feed is “credited” or subtracted from the overall footprint.

The upstream component varies widely depending on food type, which can explain why the total carbon footprint of unsold food for the region decreased by 8%, even though absolute tons unsold only decreased by 5%. A decrease in unsold tons for departments with higher emissions factors like Fresh Meat & Seafood outweighed the increasing unsold tons for departments with lower emissions factors like Breads & Bakery. And although the downstream component contributes much less to the overall footprint, the changes in destination from 2019 to 2021 likely contribute some variation as well.



# What's Next for PCFWC Data Collection

Continuing to collect and report retail data will be important in informing and accelerating action across the sector. We have also developed a reporting process for the hospitality and manufacturing sectors that the PCFWC began piloting in 2022. Unlike retail and hospitality, where most grocery retailers and foodservice companies have a similar product mix, manufacturers vary drastically in the number and types of products they produce. This will be an important consideration and challenge as the PCFWC develops anonymity thresholds for future public reporting. We are excited to continue these pilots in 2023, including first-time collection of data from these sectors to inform and improve our methodology.

Measurement is critical in the fight against food waste, and this information will support those efforts by highlighting where attention and resources need to be directed – by PCFWC signatories, and by businesses across the industry that have not yet joined. Reporting data of this magnitude is a tremendous effort and will facilitate informed, high-impact, on-the-ground solutions to continue progress towards our shared 2030 reduction commitment.



*Via Bob's Red Mill Intervention Project*



# Recruitment and Signatories

2022 PCFWC signatory recruitment pushed the collaboration into new sectors. The project added three manufacturers (Lamb Weston, Bob's Red Mill, DelMonte) and three food service companies (Sodexo, Aramark, Compass Group). These companies are exciting additions to our existing signatory cohort, and adding their perspectives and leadership is invaluable to the project.

In line with food waste voluntary agreements being delivered with WRAP throughout the world, the project continues to focus on engaging sectors across the food system and partnering with organizations that can deliver the most impact. Beyond expanding into the Hospitality and Food Service (HaFS) industry in 2023, the PCFWC will continue to seek out partners and opportunities to influence the holistic, systemwide change the food system urgently needs.



# Signatory Engagement

## Working Groups

Sharing best practices and building upon the food waste reduction successes of partners can inspire and increase the potential for broader regional impact. To facilitate an exchange of insights into system-wide shared challenges and innovative solutions to overcome them, working groups are composed of signatories and featured engagement partners (e.g., trade bodies and technical experts).

These working groups were established and continue to serve as the backbone of the PCFWC effort and the starting point for its intervention projects.

Working groups on Dairy, Produce, and Food Recovery continued in 2022. The working groups saw an uplift in participants and provided the platform for the first-ever PCFWC case studies to be developed and shared. PCFWC working groups are designed to provide a safe and conducive environment for constructive discussions centered on collaborative problem-solving and collective brainstorming on food waste reduction challenges and solutions. Some notable highlights

from the working groups in 2022 included keynote presentations of food waste reduction best practices from PCFWC signatories Raley's, Sprouts, and New Seasons. PCFWC looks forward to continuing to cultivate and see signatory leadership flourish in the working groups in 2023.

## 2022 Updates

- **Dairy Working Group** - Activity focused on shaping a pilot to measure and identify dairy waste hotspots in retail – a persistent gap in knowledge that signatories flagged as a barrier to progress. New Seasons ran the pilot and shared their learnings with the group. The PCFWC plans to take the pilot findings and implement solutions to target the greatest causes for dairy waste in a second, follow up intervention project.
- **Produce Working Group** - Activity supported the development of collectively undertaking a whole chain food waste reduction project on waste-intensive products. Other highlights over the year included Albertsons unveiling their new company-wide food donation program and associated measures for tracking impact, and PCC Markets sharing how they have used a whole chain approach to reducing food waste by working closely with their suppliers and farmers.
- **Food Recovery Working Group** - Activity focused on the collective challenges of maximizing food recovery and sharing solutions. Raley's presented a case study on collaborating with Feeding America to improve tracking using the MealConnect application. Sodexo also presented their Food Recovery Donation Toolkit, which is being revised for public release.

## Establishing Sector Task Forces

In 2022, the PCFWC launched sector-specific summits to develop pre-competitive solutions to key shared challenges that will help move the wider sector forward on food waste reduction. The project hosted virtual meetings for the Retail, Manufacturing/Distribution, and Foodservice industries and one in-person meeting for the Retail Task Force at the VERGE 22 San Jose conference. At the latter summit, leading companies, including PCFWC signatories, discussed collaborating on a multi-part, joint pilot in 2023 focusing on a whole chain approach to food waste reduction.

## Engaging with the Hospitality and Foodservice Sectors

In 2022, the PCFWC held its first Foodservice Sector Summit with partners across the industry. A key discussion topic during the Summit was influencing consumer behavior through the development of customer-facing campaigns and strategies for effective food waste messaging. This interest led to partners sharing efforts and motivation to simultaneously engage and empower staff on food waste reduction, which would effectively create a lasting and impactful feedback loop for education and engagement for both staff and customers alike. Hospitality and Foodservice is a promising sector for the PCFWC in 2023, with great opportunities and support for sustainable food initiatives.



# Intervention Projects and Case Studies

One of the primary benefits of joining the PCFWC lies in the opportunity to participate in a series of intervention projects, where signatories work with the PCFWC resource partners, consultants, and other industry experts to test innovative solutions that address real-world operational challenges. These projects focus on better understanding where and why food waste is occurring, as well as running interventions to measurably reduce food waste. In each case, a key component of this work is to surface insights and progress that might not otherwise be shared, in an effort to de-risk and accelerate the uptake of food waste reduction best practices.

## Case Studies

All nine initial intervention projects have been completed, and several are now available in case study format. The case studies successfully showcase the wide array of strategies available to reduce food waste – including the relevant challenges and opportunities for doing more. Projects examined technological solutions, such as using artificial intelligence software to reduce food waste by ~15% across retail stores, as well as creative employee engagement strategies that ultimately led to a 70% reduction in waste on a production line. The remaining case studies are in development and will be available in the first half of Q1 of 2023.

### Case studies with links:

- [Using Artificial Intelligence to Reduce Food Waste in Grocery Retail](#)
- [Institutionalizing a Waste Reduction Culture in Food Manufacturing](#)
- [A Closer Look at Sprouts' Food Waste Reduction Commitment and Best Practices](#)
- [How Raley's is Optimizing its Operations to Reduce Food Waste](#)
- [New Seasons Market: Food Waste Reduction Commitment & Upcycling Initiatives](#)

### And coming soon:

- [How E-Commerce Solutions Can Reduce Produce Department Waste](#)
- [Low-Waste Event Planning in Hospitality](#)
- [PCC Markets Upcycling Case Study: From Bread to Breadcrumbs](#)
- [Dairy Waste Hotspot Identification at New Seasons Market](#)



## Completed 9 intervention projects

Case studies showcase the wide array of **strategies available to reduce food waste**



A project examined technological solutions to **reduce food waste by ~15% across retail stores**



A project explored employee engagement strategies that led to a **70% reduction in waste on a production line**



# Looking Ahead to 2023

As food waste continues to gain recognition as a top sustainability priority and climate mitigation strategy, we are optimistic that solutions will continue to gain momentum, allowing more food businesses to adopt them with less perceived risk and realize the benefits of food waste reduction. We are committed to promoting the key findings from the case studies to spread awareness of solutions and to engage more businesses in food waste reduction efforts.

Retailer signatory engagement will continue in 2023. We will also launch a new round of intervention projects, including an extensive whole chain project involving retailers and manufacturers to examine and address their upstream and

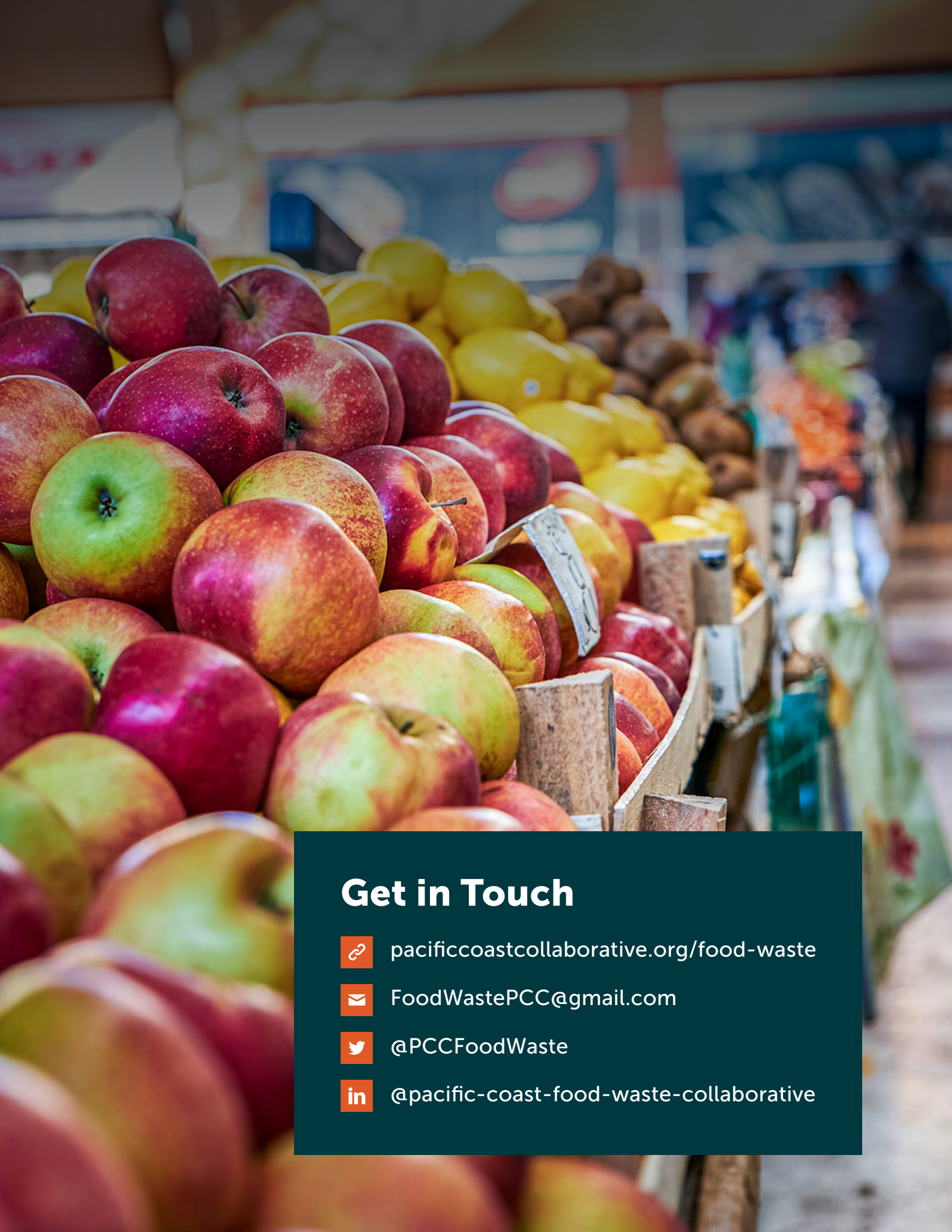
downstream impact on food waste. This model will follow the best practices established by WRAP for a whole chain approach to food waste reduction, which ensures that prevented waste isn't just passed onto the next stop in the supply chain. We will also continue our work with the hospitality industry and build upon the low-waste events planning pilot that ran in 2022 with several large hotel brands and convention centers.

We are excited to continue iterations of the different ReFED Food Loss and Waste Calculators and reporting methodologies to streamline the data collection process and unearth insights that improve waste tracking and solutions development.


We are also looking forward to continuing our recruitment and engagement focus on the hospitality and foodservice sectors in 2023. These sectors present a unique and impactful opportunity to reduce food waste at scale on account of their consumer-facing nature and eagerness to create positive environmental impact – an eagerness that customers spur through increasing demand for services that factor in sustainability.

The movement to address the food waste crisis is greater than ever. Awareness is at an all-time high, and as the number of pledges and commitments continues to grow, the need for concrete action to fulfill those promises and resolve the crisis is also greater than ever. As we continue to leverage data, innovate solutions, and remove barriers to change across the food system in 2023, the PCFWC and its ever-growing group of committed partners look forward to doing our part in answering that need through collaborative action.





## Get in Touch

 [pacificcoastcollaborative.org/food-waste](https://pacificcoastcollaborative.org/food-waste)

 [FoodWastePCC@gmail.com](mailto:FoodWastePCC@gmail.com)

 [@PCCFoodWaste](https://twitter.com/PCCFoodWaste)

 [@pacific-coast-food-waste-collaborative](https://www.linkedin.com/company/pacific-coast-food-waste-collaborative)