

# Creating a Sustainable Future Through **FOOD WASTE** **REDUCTION**

2023 Year-End Report for the Pacific Coast  
Food Waste Commitment

**PACIFIC  
COAST**  
Food Waste  
Commitment

An initiative of the  
Pacific Coast Collaborative



# Acknowledgments

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

**BULLITT**  
FOUNDATION



**WIANCKO CHARITABLE  
FOUNDATION INC**

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

## About the Pacific Coast Food Waste Commitment

The Pacific Coast Food Waste Commitment (PCFWC) is a public-private partnership between city, county, state, and provincial governments, and food businesses operating on the West Coast of North America. Through data collection and analysis, pre-competitive working groups, and intervention projects, the PCFWC accelerates action and measurable progress toward reducing food waste in the region.

The PCFWC began as a project of the [Pacific Coast Collaborative](#) (PCC), a partnership formed in 2008 by West Coast jurisdictions dedicated to building a thriving low-carbon regional economy. As part of its larger goal to reduce greenhouse gas emissions by at least 80 percent by the year 2050, the PCC launched the PCC Food Waste Reduction Project in June 2016 after signing the [Pacific North American Climate Leadership Agreement](#). This sparked the creation of the PCC Food Waste Working Group, now the PCFWC, to advance organic waste prevention and recovery initiatives to reduce greenhouse gas emissions tied to the region's food system.

Since its inception, the PCFWC has invited food businesses operating on the West Coast to collaborate with area jurisdictions in a public-private commitment to eliminate food waste in the region by 50% by 2030 — a success metric aligned with other global, national, and regional commitments.

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

# Business Signatories

(As of December 31, 2023)

## Retailers



## Hospitality and Foodservice



## Distributors



## Manufacturers



## Growers



# Resource Partners



# Jurisdiction Members

(As of December 31, 2023)

## States & Provinces

California Washington  
Oregon British Columbia

## Cities & Counties

Alameda County, CA Portland, OR  
Los Angeles, CA King County, WA  
Oakland, CA Seattle, WA  
San Francisco, CA Vancouver, BC

# Executive Summary

This year, the PCFWC deepened its partnerships, expanded its coalition, and drove impact on the ground across the region through its data capabilities, working groups, and intervention projects.

**The PCFWC's year-over-year retail data analysis indicates that since 2019, unsold food rates decreased by 28% for reporting retailers in the region.** Beyond the data, the PCFWC's impact can be measured through its continued innovation and critical partnerships:

- The PCFWC Whole Chain Project was successfully launched in the spring and completed in the fall, with participation from multiple signatories across the supply chain.
- The intervention project focused on community-based outreach for recycling and composting compliance in Oakland, CA led to the publication of the PCFWC's first-ever bilingual publication.
- The PCFWC was highlighted in two seminal publications — the EPA, FDA, and USDA's [Draft National Strategy to Reduce Food Loss & Waste and Organics Recycling](#) and the global assessment [Reducing Food Loss & Waste: A Roadmap for Philanthropy](#) — as a key model for meaningful food waste reduction.
- The [U.S. Food Waste Pact](#) was launched to build on the successes of the PCFWC and to scale food waste action and collaborations at a national level.

9

**Working Group sessions held across three different focus areas**



6

**Case studies published**



6

**Sector Summits held across three sectors**



5

**Intervention projects completed**



4

**Years of data collected from participating food businesses**



"I deeply appreciate PCFWC's community-led research initiative, which tailors our tools to assist small businesses that often require multi-generational effort to tackle composting, recycling, and waste issues bundled together, while overwhelmed by post-pandemic new norms."

Shu-Yi Lin, Operations Manager of Oakland Chinatown District

**Intervention Project:** Partnering with Community-Based Organizations to Accelerate Compost and Recycling Adoption



# Data Findings Summary

*This is a summary of the data findings for the year 2022. To view all of the data findings, including additional analyses and methodology, please see the supplementary report, "Big Progress in Reducing Retail Food Waste: A Special Report from the Pacific Coast Food Waste Commitment."*

At the heart of the PCFWC's mission is the conviction that robust data collection is indispensable for any successful food waste reduction strategy. Understanding the dynamics of food waste — its origins, causes, and trends — allows for more effective, targeted, and efficient interventions. This data serves as the most recent analysis of retail food waste anywhere and as the longest year-over-year aggregated dataset in the country. **As such, the data outlined in this report is the best-in-class dataset for tracking progress and benchmarking in the retail industry and for food loss and waste reduction initiatives.**

By the end of 2023, the PCFWC had received four years of retail data on unsold food rates and unsold food destinations from more than 50% of the regional grocery market share. **Since 2019, PCFWC retail signatories have made major progress in food waste reduction across four key metrics:**

- Unsold Food Rates decreased by **28%**
- Per Capita Unsold Food decreased by **24%**
- Estimated Carbon Footprint Of Unsold Food In The Region decreased by **30%**
- Donation Rate increased by **20%**

## Why Measurement?

Food waste measurement is critical for food waste reduction initiatives, as it is used to:

- Establish a baseline for improvement
- Monitor progress over time
- Identify hotspots that need action
- Inform working groups and intervention projects
- Determine best practices and highlight successes that can be replicated

## What's Next for Data Collection

This was the first year that data was collected from participating PCFWC manufacturing and foodservice signatories. While the market share thresholds necessary for public reporting have yet to be met, the time and knowledge that the businesses in these sectors have given provide an important foundation for future data collection. Early insights have already informed improvements in the data collection process and will be incorporated into next year's reporting.



# Signatory Action and Progress

## Recruitment and Signatories

Instead of prioritizing new membership in 2023, the PCFWC directed its recruitment energies and resources to deeper engagement with current signatories and sectors. Even so, retail giant ALDI joined, becoming the PCFWC's eighth retail signatory. In addition, several food businesses across retail, manufacturing, and hospitality that are not currently signatories were invited to participate in select Working Group or Sector Summit meetings and to partner on certain intervention projects.

## Working Groups & Signatory Engagement

Working Groups continue to be fundamental to the success of the PCFWC. Organized by key food waste focus areas, the groups function as a way for multiple businesses in various sectors to collaborate and share best practices in a pre-competitive environment. In 2023, Working Groups convened nine times, and attendance and participation continued to grow as the year progressed. Here are some of the highlights to come out of those meetings:

- Consultants and WWF reported on Whole Chain Project progress and received signatory feedback.
- Albertsons shared a series of food recovery pilots the company conducted or is in the process of conducting around solving transportation, culling, and donation storage issues in their Seattle Division.
- New Seasons Market shared insights from their Employee Donation Programs that helped divert a large amount of their waste from downstream destinations.
- WRAP shared key research on selling loose produce and date labeling, which led to signatory conversations on related strategies they could take.
- Sodexo shared their [Food Donation Recovery Guide](#), which can be freely downloaded from the PCFWC website.
- Food recovery organizations presented at and joined the Food Recovery Working Group, becoming an important new voice at the table.

"We appreciated the eagerness on the retailer side to engage in discussion and brainstorm solutions. The biggest benefit of the project was bringing companies together to explore common challenges, discuss opportunities, and engage with retailers in a new and different way. Ideas for upcycling or specification changes are more likely to be productive with the backing of this project and the energy from the retail representatives in the room at VERGE."

Senior Director of ESG at a participating signatory

## Sector Summits

A more recent addition to PCFWC's signatory engagement framework, Sector Summits provide same-sector businesses a concentrated forum for problem-solving and devising targeted and collaborative solutions that address the many shared challenges in their operations. As of 2023, the PCFWC has established and held a total of eight Sector Summits for retail, manufacturing, and foodservice signatories. Here are some of the highlights to come out of the Sector Summits:



The **Manufacturer Sector Summit** led to food manufacturer Land O'Lakes adopting and replicating [an intervention project previously completed by PCFWC signatory Bob's Red Mill](#).



The **Retail Sector Summit** led to the creation of the Whole Chain Project on fresh strawberries and frozen potatoes. An in-person summit to discuss next steps and solutions for the project was also held in October 2023.



The **Foodservice Sector Summit** led to the creation of a collaborative project between signatories on consumer messaging and post-consumer plate waste. The PCFWC also held an in-person Foodservice Sector Summit at the ReFED Food Waste Solutions Summit in 2023.



# Intervention Projects

Participating in intervention projects is one of the most valuable benefits for businesses that join the PCFWC and represent a core component of the partnership. These projects serve to pilot and scale food waste solutions in businesses and jurisdictions, identifying best practices and creating actionable insights to use for future reduction efforts. In 2023, the PCFWC completed five intervention projects.



## Partnering with Community-Based Organizations to Accelerate Compost and Recycling Adoption

**Oakland Chinatown Improvement Council, Toishan Benevolent Association, and the City of Oakland**

The PCFWC and the City of Oakland partnered with two community-based organizations (CBOs) to explore how collaborating with CBOs could improve compost and recycling outcomes, particularly in a community where English was not the dominant language. A positive correlation was found between CBO outreach and service compliance. The project case study includes recommendations for governments on how to thoughtfully engage with CBOs.



## Impact of Consumer Messaging on Plate Waste

**Aramark and Sodexo**

Two foodservice signatories, Aramark and Sodexo, piloted consumer messaging around food waste at foodservice sites across the West Coast. The impact on consumer plate waste and attitudes was assessed, and consumer surveys suggested that the messaging improved consumer awareness of the issue. However, the pilot also revealed that measurement of post-consumer plate waste remains a challenge for most sites.



## Whole Chain Analysis of Fresh Strawberry and Frozen Potato Food Loss & Waste

**Two Suppliers and Three Retail Partners**

The Whole Chain project — the first of its kind for the PCFWC — analyzed the food waste that occurs along the supply chain from farm to retail for two products that were selected by PCFWC retail signatories: fresh strawberries and frozen potatoes. The investigation included research into solutions for farms and businesses that pilot partners plan to explore implementing in 2024.



## Employee Engagement in Manufacturing

### Land O'Lakes

Land O'Lakes replicated a pilot on employee engagement at their manufacturing plant in Turlock, CA. This pilot had been previously run by [Bob's Red Mill in 2022](#) to great success. Over the six-week campaign period, 78% of Land O'Lakes employees actively participated in identifying and submitting ideas for reducing food waste. One employee idea was implemented immediately after the campaign and led to a 75% improvement in material yield savings on the targeted product line.

"As a foodservice provider, we play a powerful role in working to prevent waste before and after it touches a consumer's plate. Participation in this pilot was an important next step in continuously improving our understanding of what drivers and actions resonate with consumers and our operational teams in our effort to reduce plate waste. We're excited to dig deeper and continue to explore and scale best practices."

Marie Davis, Program Development and Engagement Director,  
Aramark Enterprise Sustainability

**Intervention Project:** Impact of Consumer Messaging on Plate Waste



# PCFWC Projects To-Date

## Foodservice Consumer Messaging

Tested the impact of messaging on post-consumer plate waste.

- **Aramark** | Asilomar, CA
- **Aramark** | Irvine, CA
- **Aramark** | Sacramento, CA
- **Aramark** | Beaverton, OR
- **Sodexo** | Portland, OR
- **Sodexo** | Irvine, CA
- **Sodexo** | San Diego, CA

## Whole Chain

Analyzed waste hotspots for fresh strawberries and frozen potatoes along the supply chain and identified solutions.

- **Distribution Center** | Shafter, CA
- **Retail Store** | Bakersfield, CA
- **Distribution Center** | Tracy, CA
- **Retail Store** | Livermore, CA
- **Distribution Center** | Rialto, CA
- **Farm** | Watsonville, CA
- **Farm** | Pasco and Richland, WA

## Oakland Chinatown

Engaged community-based organizations to support outreach on SB 1383 and local compost ordinances.

- **Aramark** | Asilomar, CA

## Manufacturer Employee Engagement and Culture Change

Conducted an employee engagement campaign to collect and implement ideas on how to reduce food waste in the manufacturing facility.

- **Bob's Red Mill** | Milwaukie, OR
- **Land O' Lakes** | Turlock, CA

## Hospitality Low-Waste Events

Trained hospitality teams and planners to reduce food waste at events.

- **Hotel** | Seattle, WA
- **Hotel** | Seattle, WA
- **Event Center** | Portland, OR
- **Event Center** | Vancouver, BC
- **Hotel** | San Francisco, CA
- **Hotel** | Seattle, WA
- **Hotel** | Berkeley, CA
- **Hotel** | Los Angeles, CA

## Artificial Intelligence in Retail

Used inventory management systems Shelf Engine and Afresh to reduce shrink and grow sales.

- **Two large chains** | CA, OR, WA

## Upcycling Initiatives at New Seasons

Investigated upcycling high-value items within store foodservice.

- **New Seasons Market** | OR, WA

## Upcycling Breadcrumbs

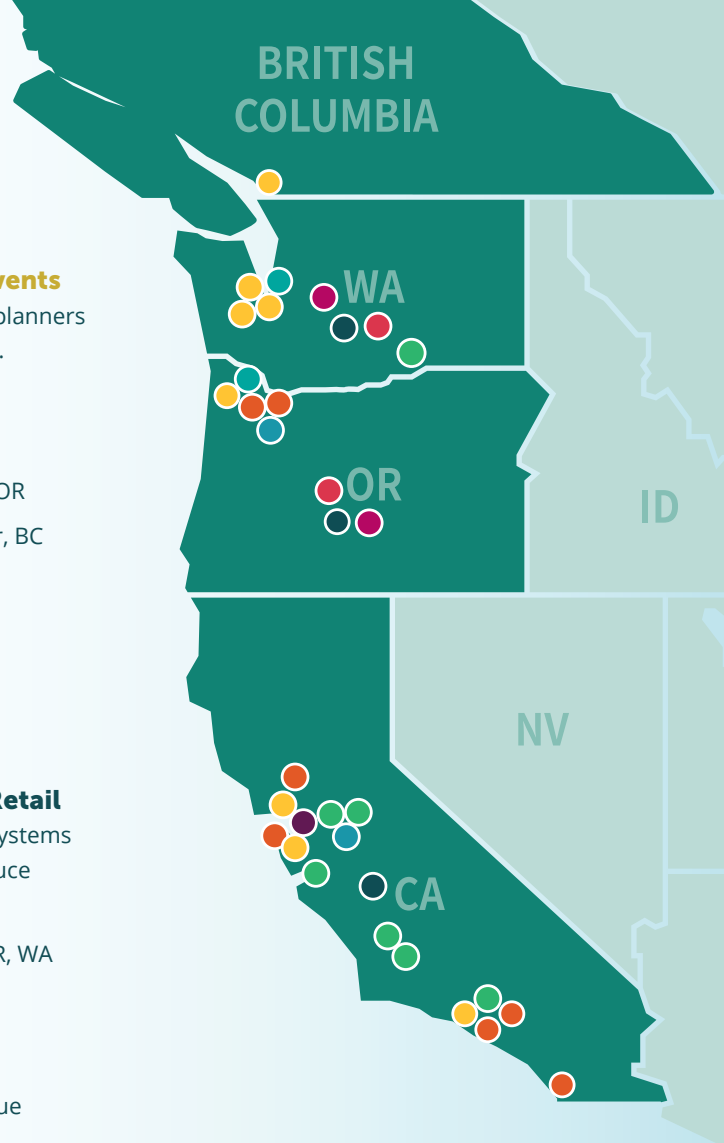
Engaged with food recovery organization Farestart to upcycle bread into breadcrumbs for resale at PCC Community Markets.

- **PCC Community Markets** | Greater Seattle area, WA

## Dairy Hotspots

Identified the top items and causes of dairy waste in grocery retail.

- **New Seasons Market** | OR, WA



## Best Practice Studies

### Strengthening Food Rescue Programs

Captures best practices in staff training protocols and food rescue partnerships.

**Raley's** | Northern California

### Store-Level Tracking and Support

Highlights innovative partnership between Sprouts and WM to produce store-level waste data and donation "scorecards."

**Sprouts Farmers Market** | California, Washington

### E-Commerce to Reduce Waste

Analyzes state of grocery e-commerce markets and opportunities for reducing food waste.

**Multiple Stores** | CA, OR, WA

## Intervention Project Highlight

# Whole Chain Analysis of Food Loss & Waste on the West Coast

This intervention project was the first project of its kind for the PCFWC.

Other PCFWC pilot projects have traditionally engaged one business or segment of the supply chain, but the PCFWC Whole Chain project brought together two suppliers and three major U.S. retailers to identify food waste solutions that require cross-supply chain collaboration. The project specifically analyzed the waste hotspots and potential solutions for two products that were identified by PCFWC retail signatories as important to investigate: fresh strawberries and frozen potatoes. The PCFWC Whole Chain project will continue in 2024, with a focus on implementing the high-impact, cross-sector solutions identified in part one.

## Key Findings



### Fresh Strawberries

The main hotspot for strawberries was at the farm stage, where 36% of total loss occurs due to the berries not meeting size or quality standards, or from labor constraints.

The top solution proposed was to test a harvesting technique called "bulk harvesting" and create new product lines with retailers that use the smaller or imperfect strawberries.



### Frozen Potatoes

The largest source of waste for frozen potatoes (21-38% of total loss) was found at the processing plant. Recommendations for next steps were to gather more data at each stage to scope out which edible byproducts or out-of-spec items would best be targeted for upcycling.



### Source and Timeframe

Store and warehouse data and on-farm measurement from 2021-2023.



### Waste Destination

Waste was left in fields or sent to animal feed, compost, anaerobic digestion, or landfill.



### Geography

Farms, Distribution Centers, and Retailers in the Pacific Coast region.

## Case Studies

A total of six case studies were published in 2023 to document the findings from intervention projects conducted and finalized across 2022 and 2023.



### Upcycling Initiatives in Retail

#### New Seasons Market

New Seasons Market started an upcycling initiative to study which items would be most profitable and require the least labor to move from shelf to hot/salad bar or through other sellable forms.

[VIEW CASE STUDY](#)

### How E-Commerce Strategies Can Reduce Wasted Produce

#### Grocery Retailers

The PCFWC conducted an analysis of how grocery retailers can use e-commerce strategies to capture more value and reduce food waste, specifically around wasted produce. The data show that produce continues to contribute the highest volume of unsold food in grocery retail.

[VIEW CASE STUDY](#)

### Bread to Breadcrumbs Upcycling Initiative

#### PCC Community Markets

PCC Community Markets developed the foundational processes and partnerships needed to upcycle their bread into breadcrumbs for resale. The project relies on partnerships with their bread provider, Macrina Bakery, and the job training organization FareStart.

[VIEW CASE STUDY](#)



## Preventing Problematic Event Waste

[VIEW CASE STUDY](#)

### GreenBiz Group and the Hyatt Regency Seattle

GreenBiz Group and the Hyatt Regency in Seattle worked together to reduce food waste at GreenBiz's Circularity 23 event. The unique approach being tested was the engagement of both the event planner/client and the hospitality site in collaborative planning around food waste reduction strategies.



## Tracking Dairy Waste Hotspots in Grocery Retail

[VIEW CASE STUDY](#)

### New Seasons Market

New Seasons Market did an in-depth analysis of dairy waste hotspots in several of their stores, looking at the causes of waste and potential solutions.



## Best Practices for Hospitality Teams to Reduce Food Waste at Events

[VIEW CASE STUDY](#)

### Five Hotels and Two Convention Centers Along the West Coast

Hospitality sites across the West Coast implemented best practices for low-waste events. The project uncovered the most successful strategies and created a [Waste Tracker Tool](#) that can be used by hospitality teams.

"As a result of this pilot, we revised our banquet summary reports the supervisors send post-event, so they are more tailored and streamline reporting for efficiency and effectiveness with capturing the information of the event. These details are especially beneficial for repeat events, as well as identifying food that perhaps isn't popular so we can adjust menu offerings and avoid food waste."

Stephanie Couture, Director of Catering, Vancouver Convention Centre

**Case Study:** Best Practices for Hospitality Teams to Reduce Food Waste at Events

# The PCFWC Around the World

In addition to learning from peers and sharing insights at events, the PCFWC is proud to be partnering with EPA and UNEP on conducting innovative intervention projects that target upstream loss and foster collaboration across sectors. The PCFWC hopes to leverage these partnerships and the increased awareness of the PCFWC on the national and global level to augment and scale its food waste reduction efforts for greater impact and progress across the system.



*Representatives from food waste voluntary agreements across the UK, Mexico, Australia and New Zealand with the PCFWC team at the 2023 ReFED Food Waste Solutions Summit.*

2023 was a landmark year for PCFWC participation and mentions at conferences and in publications.

## Events

- GreenBiz VERGE 23
- WasteExpo/Food Recovery Forum
- COP28 in Dubai
- Sustainable Agriculture Summit
- International Fresh Produce Association Town Hall
- Progressive Dairy Producers of Wisconsin Summit
- 2023 ReFED Food Waste Solutions Summit
- Sonoco Fresh Food, Packaging, and Sustainability Summit

## Publications



**Draft National Strategy  
for Reducing Food Loss  
and Waste and Recycling  
Organics**

[DOWNLOAD PDF](#)



**Reducing Food Loss  
& Waste: A Roadmap  
for Philanthropy**

[DOWNLOAD PDF](#)

# Looking Ahead to 2024

In 2024, the PCFWC will continue to leverage the expertise and passion of its partners to target upstream waste and to transform the West Coast food landscape to be more sustainable and circular. Recognizing the strength inherent in working together, the PCFWC considers investing time and effort in its cross-sector and cross-jurisdictional relationships as the key to boosting the initiative's ability and capacity to mitigate climate change through food waste reduction.

Collaboration will remain the primary focus of the PCFWC as it continues to create more touch points for jurisdictions and signatories to interact. The PCFWC will continue to convene Working Groups and Sector Summits for signatories to have open discussion, share challenges, and strategize solutions. From these pivotal conversations and through signatory partnerships, the PCFWC will develop and conduct another chapter of impactful intervention projects. Through its case studies, inclusion in partner publications, and strategic attendance at key peer events, the PCFWC plans to continue disseminating data, lessons learned, and shareable insights to spark action and collaboration into and beyond 2024.

Finally, at the end of 2023, the [U.S. Food Waste Pact](#) was launched, a program inspired by the success of the PCFWC that looks to build partnerships with food businesses across the country. In 2024, the PCFWC looks forward to seeing how the new national program will support and scale the work that began on and continues along the West Coast.



"The PCFWC has been a strong driver in helping us evolve our data collection and reporting on food waste and better understand areas for action. Today, we are proud to be a part of the expanded U.S. Food Waste Pact as we continue our journey to reduce food waste across the value chain. Our commitment remains to galvanize action across the retail and consumer goods sector on demonstrably reducing food waste through advocacy, supplier engagement, philanthropy and innovation."

Chris Franke, Senior Manager, Global Sustainability, Walmart, Inc.



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## Get in Touch

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