

Case Study: Reducing Food Waste

Kimpton Hotel Monaco Portland, May – October 2017

Pedro Ballesteros has been baking bread at Red Star Tavern in the Kimpton Hotel Monaco Portland, in Oregon, for more than ten years. Until recently, he would go through a sack of flour every day, and a significant portion of the bread he baked was discarded when customers didn't eat it.

Hotel Monaco

This is just one example of the food waste challenge facing the Kimpton Hotel Monaco Portland, one of ten hotels participating in a national campaign by the World Wildlife Fund (WWF) and the American Hotel and Lodging Association (AH&LA), with support from The Rockefeller Foundation, faced.

Located on S.W. Alder St. in downtown Portland OR, the hotel has 221 guestrooms, 8,226 square feet of meeting / banquet space. The hotel is the home of Red Star Tavern.

Red Star Tavern is operated by Kimpton Hotels and Restaurants, as is the hotel, although, per Kimpton operating conventions, each group (hotel and restaurant) reports to a different division of the company. Red Star Tavern is responsible for the restaurant and bar, room service, and all catering / banquet functions; the Director of Catering works with both groups.

Management and workers at Red Star Tavern were enthusiastic and helpful. On a final breakfast visit to the property the server asked one of the consultants if he wanted jam served with his toast – a clear indicator that food waste concerns have been embedded into Red Star Tavern's culture. Our key contacts for the pilot, led by Executive Chef Dolan Lane, included Sous Chef Jacob Mickelson, Director of Catering Carole Lombardi, Restaurant Mangers Ashleigh Gall and Jacob Matson, Baker Pedro Ballesteros, Bartender Brandon Lockman, Manager Will Stevens and Allison Ferre, PR. Red Star Tavern is typically led by a General Manager – however, its GM resigned at the end of July, and Chef Lane seamlessly stepped into a dual role for the remainder of the pilot test.

The Pilot Test

WWF launched the initiative in March of 2017 with a Guidance document, ordering waste bins, "calibration" weigh-ins, email and phone communication, and a visit from a WWF executive.

Hotels were given guidance for creating baseline waste measurements, with a target of beginning in late April. Hotels used two types of bins, each distinguished by its color. Yellow bins capture "Pre-Service"



Executive Chef Dolan Lane

waste, such as kitchen prep waste, and green bins capture “Post-Service” waste, food that had been given to guests (via plate or buffet) and that could not be re-used. Baseline measurements would continue for two weeks. Measurements were made by the hotels’ reporting the volume of the bins’ fill by percentage, with WWF converting the volume measurements to pounds.

Success would be determined by comparing the Pre-Service and Post-Service waste trends to the waste amounts established in the baseline period. Red Star Tavern began its measurements on May 1, using two 44-gallon Brute bins. While the Pilot Test was conducted through June for most hotels, the Monaco test was extended into late October.

Finally, WWF encouraged the donations / rescue of (suitable) food that has been prepared but not consumed. And when food waste does occur, WWF encouraged the diversion of food waste through practices such as composting, that would keep food waste out of landfills.

The Roadmap Process

While the pilot waste measurement methodology was consistent throughout the test, WWF wanted to experiment with some additional types of interventions to study their impact on reducing food waste. At the Kimpton Hotel Monaco Portland, WWF wanted to see what impact a customized strategic plan developed at the property level would have on reducing food waste. Facilitated by an outside consulting team, a Food Waste Strategic Road Map was developed for the property in May of 2017. The consultants and authors of this study are:

- Dr. Steve Schein, a corporate sustainability strategist, author, and leadership development specialist at L4S Consulting.
- Ned Barker, a former F&B VP at IHG Americas, and CEO of a hotel F&B consulting company, Grill Ventures International.

The first step in the process was a brief visit to the hotel by one of the consultants. The visit revealed:

- High profile location, at the intersection of SW Alder & SW 5th Avenue
- The concept focuses on modern tavern fare, with full meal service for breakfast, lunch and dinner, and a strong bar program
- No breakfast buffet is offered
- Some dishes are served with condiments that cannot be “rescued” after service
- Multiple banquet rooms are spread across three floors and staging kitchens are small, thus favoring the service of buffet style meals
- The Portland CVB’s web site tell us that Portland’s eco-friendliness is embedded in the local DNA. A short review of local hotels with a clear eco focus led us to conclude that no other hotels were touting food waste strategies. While the Kimpton Hotel Monaco Portland was present on lists of green hotels, the food waste issue might help differentiate it further

Pre-meeting surveys

The Roadmap process began with background research that included a set of six strategic questions emailed to each member of the executive team, along with 20-minute phone interviews, approximately two weeks prior to a two-hour face-to-face team meeting at the hotel.

The pre-meeting survey responses from six members of management were synthesized by the consultants and used to prepare for the meeting. Responses included:

When asked about their current successes in preventing food waste, half of the managers mentioned composting; two others mentioned “not over-preparing” in banquets, though we found there was still opportunity for reduction/scaled back portions.

Half of the managers thought that the cross-utilization of ingredients was the single biggest opportunity for improvement, while two saw opportunities with banquets. One person suggested a focus on selling reception food on a “per person” basis, and discouraging sales by “platter”.

When asked about food waste prevention’s enhancing the hotel’s reputation, managers cited Kimpton’s “eco-friendly” culture, Portland’s “green” culture, and leadership within the community as likely benefits of this initiative. Overall, the team appeared to be philosophically engaged in the initiative’s mission, and proud of their record in composting.

The Roadmap Meeting

The core of the Roadmap process was a two-hour executive team meeting during which the consultants provided a brief presentation of food waste prevention best practices. The consultants facilitated a process where the executives crafted a 3-year vision, mission, and identified their key strategic drivers of food waste and developed specific initiatives / SMART goals that addressed each area.

See the Roadmap in Exhibit A.

Executing the Roadmap

During the subsequent 3 months following the development of the roadmap, progress was made on various initiatives as outlined below categorized by strategic driver:

SALES

The team identified several ways to reduce waste as part of the sales process, but the initiatives took time to develop. A zero-waste menu was developed by the chef, and presented to catering sales, but not until the end of the pilot period. The menu employs multiple waste reduction methodologies, including:

- Creating menu items that could be cross-sold in the restaurant as specials, or via the restaurant’s lunch menu. This would be especially helpful when smaller banquet groups were booked.
- Creating “secondary” recipes that use the trim from the menu’s primary recipes
- A focus on cross utilization of recipe ingredients, and on the use of house-made stocks for ensuring utilization of “whole” vegetables and butchered fish
- Directing sales of reception and break items on a “per person” basis, as opposed to a “platter” basis



Red Star Tavern Roadmap (full-sized version in Exhibit A)

Tied to and integrated with the zero waste menu sales is the effort to cultivate a working partnership with clients by engaging them on the topic. This is achieved first by orienting the sales team to the issues of food waste, then through direct discussion with the clients, supported by a one-page brief (detailed in the “Training” section below).



The new salmon buffet presentation from the zero-waste menu

The Director of Catering believes that another way to engage clients is to list the hotel’s donation partners at an appropriate location on the menu, and to encourage clients to select a recipient of leftover food, should the opportunity occur.

While the menu is expected to contribute toward the reduction of waste with banquets, most catering events are planned weeks or months out, beyond the end of the pilot period.

Further, the hotel’s sales team, based on a suggestion from the consultants, plans to target the Portland Sustainability Cooperative members list for potential business, a *bona fide* lead with 43 new companies.

A third sales initiative called for empowerment of the staff to make waste-reduction decisions. Some creative actions were taken, as the team took the issue to heart. For example, as mentioned in our opening sentence, Baker Pedro Ballesteros spends much of his time baking fresh breads and pastries for Red Star Tavern. One of the items Pedro bakes is the bread that is served to dinner patrons. Servers have simply placed a complimentary plate of bread with butter on each table. The Team estimated that half of the bread found its way to dumpster. The WWF initiative caused Management to review that policy.

Management decided to list the bread as an option, on the menu. They also gave servers the option of providing it on a complimentary basis when they deemed it appropriate to do so. The result was a savings in the waste of flour, butter (that accompanied the bread), and Pedro’s time. What’s more, a new revenue stream was created.

Should food waste reduction be used as a rationale to increase prices or charge for complimentary items? No. And that’s not what happened here. The WWF initiative supported by the Roadmap process brought a new perspective to the Team, and a smart business decision was made, the type of decision that restaurateurs make every day.



Executive Chef Lane with Pedro Ballesteros

TRAINING

The hotel developed a compelling one-page case for zero waste menus, and the reduction of food waste in general. The plan is to post this for employees and share it with clients. *Key learning*: this piece would have been developed more quickly had we had a template or example in hand.

Red Star Tavern team tasked itself with creating food rescue standards. They later discovered that the donations partners they worked with each had slightly different procedures, and that working with them

appropriately while ensuring the safe handling of food would meet everyone’s needs. For example, one donation recipient brings their own containers, while another “borrows” the hotel’s containers.

DONATION

Donating consumable food to organizations that feed the needy turned out to be the “low hanging fruit” of the project. Management was not familiar with the Bill Emerson Good Samaritan Food Donation Act which protects restaurants and hotels from liability claims when donating food, barring gross negligence. In short, most of the food left over from a banquet was discarded (some was consumed by employees).



**Portland
Rescue Mission**

With a nudge from the consultants, Red Star Tavern developed a relationship with the Portland Rescue Mission, and the first donation was picked up by the Rescue Mission in mid-September. Through October, four donations have been made during a five-week period, and a second donation partner, Blanchette House has recently been added. Red Star Tavern estimates that there may be as many as 50 donations a year, though they are confident that the amount of food per donation will decline with their zero waste menu banquets.



Sous Chef Jake Mickelson and Red Star Tavern's first donation

Part of the donation plan was to identify multiple partners for specific purposes and needs, such as the Pazzo Ristorante at Kimpton Hotel Vintage Portland, and others. Red Star Tavern had plans, thanks to some additional coordination by the consultants, to develop and host a “Portland Downtown Hotel Food Donation Alliance” meeting, with hopes of forming a permanent association. This plan has been delayed, until a new GM is in place.



To ensure that donations are embedded in the banquet and catering processes, the Director of Catering has now added “Donations” to the hotel’s Thursday BEO meetings.

Finally, in support of the initiative to give donation options to clients, as mentioned earlier, the Director of Catering plans to have donation partners listed on the banquet menu. She noted that questions about donating leftover food were not uncommon among her clients.

MEASUREMENT

Three initiatives were developed around the Measurement driver, all related to selling the zero waste menus. As the zero-waste menu was not implemented until the end of the pilot, these measurements will have to await further activity.

Quantifying Results

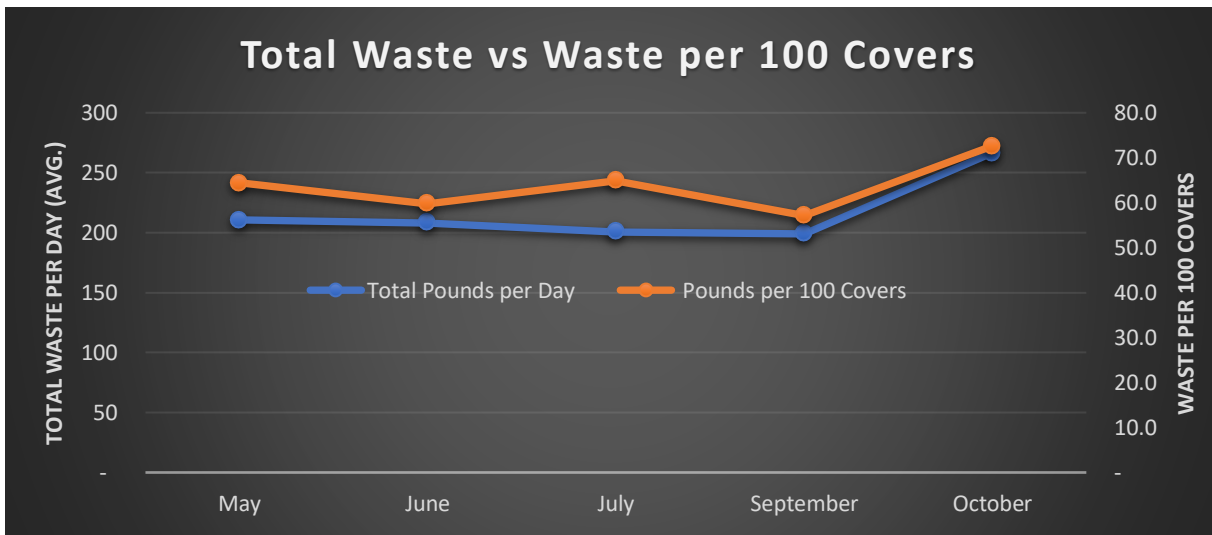
1. We compared the waste measurements in the pilot’s early months – May, June and July (through July 20) against the measurements in September and October. No measurements were recorded between July 20 and September 1.

The four months (May, June, July, September) showed a consistent decrease in overall waste, however waste rose in October.

Food waste, as compared to the volume of business (number of customers) declined slightly overall, but improved in the Pre-Service area. We attribute this to the fact that the Post-Waste results would largely emanate from catering practices – the zero-waste menu, the one-pager, donations, etc. And these practices, while well in hand, have barely begun and could not be reflected in the data to date.

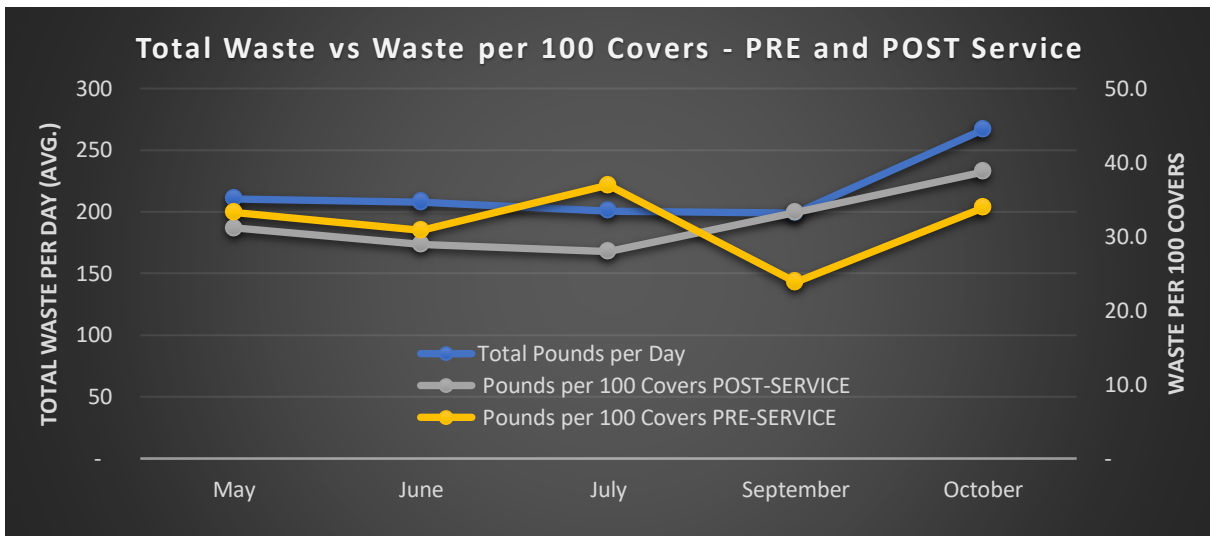
Note that our food waste is expressed in “Pounds of Waste per 100 Covers”. This metric solves for large fluctuations in business levels, not uncommon in our industry, which would reasonably be expected, all things other equal, to result in fluctuations in waste.

The chart below shows the average pounds per day of waste, by month, vs. the average pounds per day per 100 covers. The waste per covers trendline follows the absolute waste trendline almost exactly. The waste-saving measures executed through October achieved positive results (see below), but were insufficient to move the overall pounds per 100 covers number. However, the Pre-Service waste number improved measurably (second chart).



Red Star Tavern separated its waste by Pre-Service and Post-Service. This separation is critical, as it indicates if the waste might be caused by purchasing / storage / handling / processing issues (PRE-SERVICE), or portioning / buffet / recipe / menu issues (POST-SERVICE).

The chart below indicates that Post-Service waste is slightly higher than Pre-Service waste. Further, the September and October results for Pre-Service improved by 14.3% compared to the baseline average.



2. “Pedro’s Bread”

This initiative has been in place since May. Results have been impressive:

- Dough waste is reduced by about 22.5 pounds per week
- Red Star Tavern is saving about 65 pounds of butter each month, and the Chef attributes a significant portion of this to the change in bread service
- A small portion of Pedro’s time has been re-allocated to some new duties
- Red Tavern raised \$2,000 in new revenue, with an estimate of \$5,000 per year

Since the costs of baking the bread were pre-existing when the bread was added to the menu, the sales, with no additional costs assigned, are really bottom-line profit. This means that, a ratio of 4 to 1, Red Star Tavern would normally have to achieve \$20,000 in additional revenue to produce \$5,000 in profit.

Moreover, reducing that much butter each month for a year equates to the following savings:

- 13 kg CO2e or the reduction of 976 miles driven
- 1,400,527 liters of water saved which is equivalent to 1 Olympic sized swimming pool

3. Donations

Red Star Tavern has made donations in four of the past five weeks. These donations averaged 13 pounds. The Chef estimates that, going forward, one donation a week is a conservative estimate, leading to annual expected donations of 780 pounds. We believe that as the donation process becomes “second hand”, and as clients become engaged in the process, that this will increase, perhaps significantly. This increase is likely to be balanced somewhat by a reduction of buffet waste overall, as clients opt for a zero-waste menu.

4. Condiments and Garnishes

- a. The Chef decided that it was time for new ramekins, and he selected a new design with a slightly small capacity. This resulted in a savings of about 20% of overall ketchup costs, about a case a month.
- b. We estimate that a case of citrus was saved every month by the bar manager's decision to place cut garnishes in smaller containers, thus stemming over-production.
- c. A Restaurant manager had servers adopt a procedure long practiced in room service: asking the guest if they wanted the condiments that came with the meal. In fact, this idea was suggested by a room service worker. For example, the restaurant's continental breakfast is served with a portion of marmalade (not pre-packaged). Many guests do not use it, a problem solved when servers ask the guest if they wish to have it. We were unable to quantify this amount.
- d. A Restaurant manager noticed that multiple packages of bakery items were opened simultaneously at breakfast, leading to waste. As a result of these observations, a discussion was held with Red Star Tavern's bread delivery service, and the number of deliveries per week was reduced. We were unable to quantify the amount of savings.

Conclusions & Recommendations

- A. **The Roadmap process was helpful to the Team and contributed positively to the October results, and the momentum that has been built.** Key to this is that the Roadmap was created by and belonged to Red Star Tavern team, not a third party. This allowed each best practice to be customized based on the individual properties unique organizational and community circumstances.
- B. **The use of a small consulting team proved to be important,** especially in light of the unforeseen change in leadership in the middle of the initiative.
- C. **Best Practice awareness among the Team was helpful, but best practices cannot supplant the creativity and ingenuity of motivated and empowered on site staff.** "Pedro's Bread" teaches us that, as does the bar garnish storage change.
- D. **The waste reduction and prevention potential at hotels is high:** hotel breakfast buffets (not present in this instance) and hotel banquet buffets together represent significant opportunities.
- E. **Food waste prevention through sales efforts is not a short-term or quick fix solution.** Potential pre-service savings in catering sales, with techniques such as low or zero waste menus and engaging clients in the food waste dialogue may have both high and long-term potential. However, menu development of this nature is time-consuming, and with catering sales selling several months out, it is challenging to develop a measurable impact during a pilot test timeline.
- F. **Forming food donation partnerships can lead to tangible results in a short period of time that can positively impact the lives of many people in a community.**
- G. **Building a low waste menu is challenging, and research is required.** The purchase and use of prepared foods could reduce waste at a hotel, but may not contribute positively to the food waste

problem. For example, the hotel conducts in-house juicing, which is now part of the zero-waste menu. Red Star Tavern uses citrus which has already been peeled or zested for the bar, whenever possible. And cross-utilizes by-product such as using the carrot pulp for soups.

- H. **Training resources and delivery systems must consider the time demands of staff, especially in a 24 / 7 business.** Video training was developed for the initiative, but its potential was underutilized as the Team were very busy and were operating without a full management staff.
- I. **Red Star Tavern's Team was engaged in the process,** and enthusiastic about their efforts and the results. The process worked to improve morale, as a specific sense of purpose was created and embraced. Most importantly, hotel management intends to continue its efforts to reduce and prevent food waste, and considers food waste reduction to be a habit embedded within Red Star Tavern.

Carole Lombardi, Director of Catering, told us: *"Our commitment to the zero-waste menu and partnering with local charities for food donations will only enhance Red Star Tavern's competitive edge when selling to our clients."*

- J. **Team members were inspired by the initiative** and felt empowered to initiate actions in keeping with the direction of the Roadmap. For example, a creative approach to dinner bread service was developed, and this had significant positive consequences. A restaurant manager heard a comment about condiments, and turned it in to a new food-waste-reducing procedure, first in Room Service and then in the Restaurant. The same manager observed multiple bags of identical product opened and going stale at the same time, and fixed that with a new procedure. A bartender realized that garnishes were going bad due to using storage containers that were too large.

Restaurant Manager Ashleigh Gall said that the initiative was *"great for morale because the employees really care...and they appreciated that we were open to their ideas and feedback."*

- K. **Changes in management, which can affect the degree of success of food waste prevention, should be anticipated.** For example, a significant challenge came half-way through the pilot when Red Star Tavern GM, left for a position with another company. For the remainder of the pilot Red Star Tavern's Executive Chef pulled "double-duty", and a few items understandably gravitated toward the back burner. While the Chef, with help from experienced managers, did an outstanding job of running the day-to-day operations, some of the initiative's elements might have moved a bit more quickly, given a full complement of leaders.
- L. **Establishing a single metric for hotel F&B food waste could be a key part of embedding food waste reduction awareness and practices into the hotel industry.** We like the idea of measuring waste per cover, or per 100 covers as we have done here. But other ideas of metrics should be discussed as well.

EXHIBIT A – THE ROADMAP

	<h2 style="margin: 0;">VISION</h2> <p style="margin: 0;">By 2019, Red Star Tavern will be recognized as a pioneer of food waste management. We will accomplish this by educating staff and engaging guests on how to prevent waste, as well as developing a mature food rescue program. By doing so, Red Star Tavern’s food waste management program will be the model for the Kimpton Hotels & Restaurants.</p>
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STRATEGIC DRIVERS

Sales	Training	Donation	Measurement
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KEY STRATEGIC INITIATIVES

<p>Cultivate working food waste prevention partnerships with clients</p> <p>Create seasonal (low-waste) sustainable menus</p> <p>Empower staff to make waste-reduction decisions</p>	<p>Develop one-pager for onboarding new employees and for clients</p> <p>Create food rescue standards</p> <p>Implement item level over-production log with established thresholds</p>	<p>Identify multiple partners for specific purposes and needs</p> <p>Partner with Pazzo and others</p> <p>Give donation options to guests, recognize groups who are engaged in the process</p>	<p># of events sold with zero-waste menus</p> <p># of calls from clients requesting zero-waste menus</p> <p># of restaurant clients that choose zero-waste menu items sold, percentage of total sales</p>
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<h2 style="margin: 0;">MISSION</h2> <p style="margin: 0;">We prevent food waste by using food to it’s highest potential for the benefit of our community and the earth.</p>	
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