



# TOWN OF FAIRFAX

## STAFF REPORT

### September 5, 2018

**TO:** Mayor and Town Council

**FROM:** Garrett Toy, Town Manager *GT*

**SUBJECT:** Discuss concept to reduce the use of disposable food containers, straws, and utensils

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#### CONTINUED FROM AUGUST MEETING

#### RECOMMENDATION

Discuss concept to reduce the use of disposable food containers, straws, and utensils and refer the matter to the Council's Zero Waste Committee.

#### DISCUSSION

Councilmember Goddard requested this item be placed on the agenda. Reducing the use of single-use disposable food ware, utensils, and plastic straws would go a long way toward facilitating the Town's diversion goals. The disposal of single-use food and beverage containers is a major contributor to the landfills and has an overall detrimental impact on the environment. Compostable or biodegradable bags, food-based utensils and containers, and paper cups (99% have plastic liners) are considered landfill material by Marin Sanitary Service.

There is growing interest for reducing the use of single-use disposables. The Town of San Anselmo is considering an ordinance to ban single use plastic serveware. The City of Berkeley is considering a "Single-Use Food Ware and Litter Reduction Ordinance." Malibu prohibits all restaurants from providing plastic straws, plastic stirrers, or plastic cutlery. San Francisco is considering a ban on plastic straws and cutlery. Alameda began enforcing serveware regulations on July 1, 2018. Attached are fact sheets (provided by Councilmember Goddard) on the impacts on businesses and the environment of switching from disposable to reusable food ware items.

*Staff and Councilmember Goddard are not suggesting the Town consider such an ordinance at this time.* Instead, we are recommending that the Council's Zero Waste Committee, consisting of Mayor Lacques and Councilmember Goddard, be tasked with spearheading the efforts to engage the community and encourage the participation of local food businesses in the dialogue. The discussions will cover a broad range of issues including, but not limited to: a) whether any regulations should be mandatory or voluntary, b) whether any restrictions should apply to dine-in and/or take-out only, c) how to address food prepared outside of the town (e.g., packaged meat), d) the potential impacts to people with disabilities (e.g., those who need to use plastic straws), and e) the need for other exemptions.

The goal is to develop recommendations for Council consideration that represent a collaboration between the Town and businesses for reducing the use of disposable food containers, straws, and utensils. The Zero Waste Committee efforts may include the use of on-line surveys and conducting Town Forums/meetings on the issues. The Zero Waste Committee meetings are typically attended by representatives from Marin Sanitary Services and Sustainable Fairfax. While the Zero Waste meetings are open to the public, we would specifically coordinate our efforts with the Chamber of Commerce, so they can inform their membership and encourage business participation.

**ATTACHMENT:** Fact Sheets

AGENDA ITEM # 17

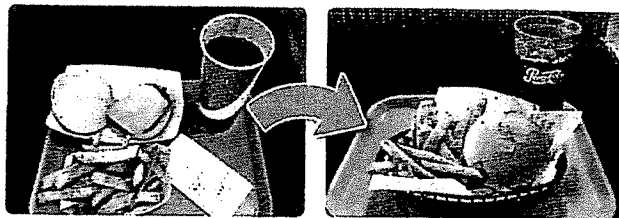
# Net Cost Impact\* of switching from disposable to reusable food ware items for dine-in

Numbers are based on case studies of *ReThink Disposable* certified food businesses.

J&J Hawaiian invested \$557 to replace:

- Disposable Paper Food Clamshells with Reusable Plates & Bowls
- Disposable Paper Food Trays with Reusable Baskets
- Disposable Plastic Utensils with Silverware
- Disposable Wooden Chopsticks with Reusable Plastic Chopsticks
- Disposable Plastic Water & Paper Soda Cups with Reusable Glasses
- Disposable Plastic Sauce Cups & Lids with Reusable Sauce Cups

**ANNUAL NET COST SAVINGS:**  
**\$20,517**



Kirk's Steakburgers invested \$220 to replace:

- Disposable Paper Trays with Reusable Baskets
- Disposable Paper Soda Cups with Reusable Cups
- Disposable Plastic Water Cups with Reusable Cups

**ANNUAL NET COST SAVINGS:**  
**\$3,981**



New York Pizza invested \$170 to replace:

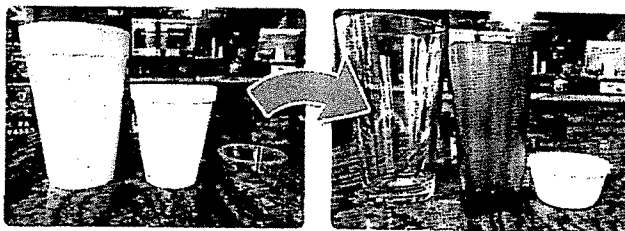
- Disposable Paper Plates with Reusable Metal Pizza Trays
- Disposable Plastic Utensils with Reusable Silverware
- Disposable Plastic Water Cups with Reusable Glasses

**ANNUAL NET COST SAVINGS:**  
**\$3,043**

Rene Rose invested \$636 to replace:

- Disposable Plastic Plates with Reusable Plates
- Disposable Plastic Bowls with Reusable Bowls
- Disposable Plastic Sauce Cups & Lids with Reusable Sauce Cups
- Disposable Plastic Water Cups with Reusable Glasses

**ANNUAL NET COST SAVINGS:**  
**\$22,122**



Shish Grill invested \$80 to replace:

- Disposable Foam Cups for soda and water with Reusable Glasses
- Disposable Plastic Sauce Cups with Reusable Sauce Cups

**ANNUAL NET COST SAVINGS:**  
**\$974**

*\*Net Cost Impact takes into account any upfront and ongoing costs associated with the purchase and care of reusable items and capital improvements needed to carry out ReThink Disposable's recommendations. Net cost savings are based on avoided disposable foodware purchases.*

*NOTE: With the exception of Kirk's Steakburgers, the above restaurants had no mechanized dishwashing.*

# Business Cost Impacts

## from disposable food service items

The cost breakdown\* of disposable food service ware items used for typical to-go meals, based on case studies of *ReThink Disposable* certified food businesses

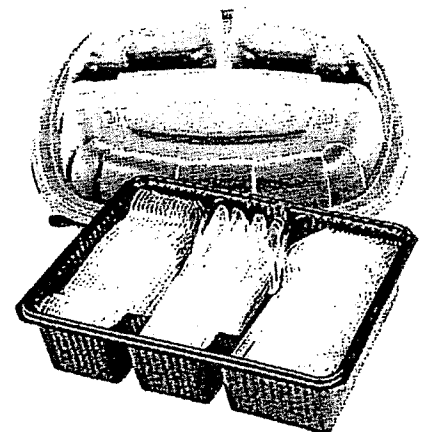
SAFE Coffee To-Go Meal Packaging	
ITEM	COST
16 oz. Hot Cup	\$0.06
Hot Cup Lid	\$0.04
Sleeve	\$0.03
Lid plug/stirrer	\$0.03
3 Sugar Packets	\$0.03
2 Creamers	\$0.08
<b>TOTAL COST:</b>	<b>\$0.27</b>

Breakfast To-Go Meal Packaging	
ITEM	COST
Plastic Bag	\$0.01
Foil	\$0.02
Paper Bag for chips	\$0.02
3 Plastic Sauce Cups for salsa	\$0.06
3 Plastic Sauce Cup Lid	\$0.06
6 Napkins	\$0.01
16 oz. Cold Cup	\$0.05
Cold Cup Lid	\$0.01
Straw	\$0.01
<b>TOTAL COST:</b>	<b>\$0.25</b>

Chicken Bowl To-Go Meal Packaging	
ITEM	COST
Plastic Bag	\$0.01
2 Paper Boxes	\$0.25
2 Large Plastic Clamshells	\$0.38
4 Condiment Packets	\$0.10
6 Napkins	\$0.01
Wooden Chopsticks	\$0.03
Plastic Fork, Knife, Spoon	\$0.03
Sauce Cup	\$0.02
Sauce Cup Lid	\$0.02
<b>TOTAL COST:</b>	<b>\$0.85</b>

Hamburger To-Go Meal Packaging	
ITEM	COST
Plastic/Paper Bag	\$0.01
6 Napkins	\$0.01
5 Condiment Packets	\$0.13
8x8x3 Fiber Clamshell for Hamburger	\$0.23
6x6x3 Fiber Clamshell for Fries	\$0.13
16 oz. Cold Cup	\$0.05
Cold Cup Lid	\$0.01
Straws	\$0.01
<b>TOTAL COST:</b>	<b>\$0.58</b>

Breakfast Burrito To-Go Meal Packaging	
ITEM	COST
Plastic Bag	\$0.01
6x6x3 Fiber Clamshell	\$0.13
Large Plastic Clamshell	\$0.19
Small Plastic Clamshell	\$0.10
3 Sauce Cups	\$0.06
3 Sauce Cup Lids	\$0.06
6 Napkins	\$0.01
Foil	\$0.02
Food Wrap	\$0.01
16 oz. Cold Cup	\$0.05
Cold Cup Lid	\$0.01
Straw	\$0.01
Fork, Knife, Spoon Packet	\$0.03
<b>TOTAL COST:</b>	<b>\$0.69</b>



\*Costs of individual items rounded to the nearest whole cent.

# A Trash-Free Dining Policy Primer

## THE PROBLEM:

- Food and beverage packaging comprises 74% of top 20 littered items in beach cleanups.<sup>1</sup>
- 80% of marine plastic is comprised of packaging and cigarette butts from urban trash.<sup>2</sup>
- Nearly 700 species of marine wildlife are impacted by ingestion and entanglement.<sup>3</sup>
- By 2050, there will be more plastic in the ocean than fish.<sup>4</sup>
- Plastic debris attracts pollutants in seawater and freshwater, particularly persistent organic pollutants, and concentrates them on the surface of plastic particles.<sup>5</sup>
- Micro-plastics are increasingly found in fish and shellfish sold for human consumption, and can transfer pollutants to seafood.<sup>6</sup> They are also found in honey, beer, salt, and in tap water and bottled water.<sup>7</sup>



STAND.EARTH

**Single-use packaging is used in a matter of minutes but causes long-term harm.**

### DISPOSABLE PAPER CUPS:

- 20 billion paper cups used each year in the U.S. (375/ person/year), consuming over 11 million trees and 35 billion gallons of water, generating 2.2 billion lbs. of waste, 4 billion lbs. of carbon dioxide emissions.<sup>8</sup>

### PLASTIC STRAWS:

- 500 million plastic straws used each day in the U.S (182 billion straws per year), generating 342 million lbs. of plastic waste/year, and greenhouse gas emissions equivalent to 8.3 million miles driven per year.<sup>9</sup>

### FREE DISPOSABLES RESULT IN:

- Failing to incorporate their environmental impact into cost of food service
- Not thinking about how much we consume

**Takeout food and beverage packaging poses risks to human health.**

- Hundreds of food packaging chemicals are known carcinogens or endocrine disruptors that can migrate into food and beverages.<sup>10</sup>
- One third to 50% of compostable foodware tested contains fluorinated chemicals that are not eliminated in the

composting process, are extremely persistent, can leach into groundwater, and can end up in plants grown for food in contaminated compost.<sup>11</sup>

- Fluorinated chemicals pose serious human health risks, including kidney and testicular cancer, thyroid disruption, ADHD, delayed puberty and obesity.



GREENVILLE DAILY PHOTO.COM

## Local government spending.

- In 2015, the State required all jurisdictions to eliminate discharges of trash to stormwater by 2030.<sup>12</sup>
- California jurisdictions were spending \$458 million per year on trash control prior to the issuance of the new policy.<sup>13</sup> They will spend much more to comply.

## Increases in disposable plastic worsen climate change.

- Industry projects a 400% increase in plastic production over the next 30 years, fueled by fracking and cheap natural gas.
- Much of the growth is projected by expanding single-use disposable plastic packaging.<sup>14</sup>

## THE SOLUTION:

### Charging for disposables works best.

#### Consumer charges for single-use products work.

- Ireland's 2002 "Plas-Tax" of 0.15 EU, reduced plastic grocery bag consumption by 90% and resulted in 40 times less plastic bag litter.<sup>15</sup>
- Taiwan's 2003 plastic bag charge resulted in a 68% reduction in use.
- Washington D.C.'s \$0.05 charge decreased bags by 75%.
- Great Britain's 2015 five pence charge resulted in an 80% decrease in bags.
- People are more likely to change behavior in response to smaller charges than higher level discounts.<sup>16</sup>

#### Voluntary measures have not worked.

- Starbucks committed to sell twenty-five percent (25%) of its beverages in reusable cups by 2015, but failed to take serious steps to achieve its goal and is currently achieving a 1.4% rate of reusables.<sup>17</sup>
- In 2017, the UK considered, but failed to enact, a "latte levy" after *Pret a Manager* and *Costa* takeout chains' five pence discount failed.<sup>18</sup>

#### Other jurisdictions are moving towards bans and fees for disposable foodware.

- Taiwan is imposing charges for all straws, plastic

shopping bags, disposable utensils, and beverage cups by 2025 and then a complete ban on single-use plastic items, including straws, cups, and shopping bags by 2030.<sup>19</sup>

- Ireland is considering banning single use coffee cups, with 50% of the population surveyed in support.<sup>20</sup>
- The EU announced in 2018 a policy that by 2030 all plastic packaging in the EU will be recyclable or reusable.<sup>21</sup>
- California cities of Malibu, Davis, and Manhattan beach banned plastic straws with "ask first" for alternatives, and Malibu included utensils and stirrers.

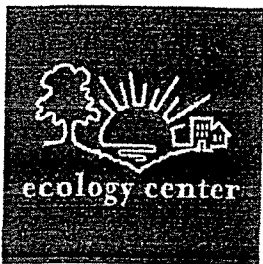


### Food businesses save money.

- Businesses in the Bay Area spend between \$0.25 and \$0.85 per meal on disposable foodware.<sup>22</sup>
- *ReThink Disposable* (Clean Water Fund) showcases businesses that have voluntarily minimized disposables and demonstrate annual net costs savings (accounting for costs of reusables, dishwashing, etc.) from \$1,000–\$22,000 per year.<sup>23</sup>

## NOTES

- 1 BanList 2.0 shows food and beverage packaging items are 74% of top 20 littered items among 6 different beach cleanup datasets- <https://upstreampolicy.org/ban-list-20>
- 2 80% from land based sources: U.S. Department of Commerce, NOAA, Office of Public and Constituent Affairs, (1999) "Turning to the Sea: America's Ocean Future," p.5. Re: most of land-based ocean litter comes from trash in urban runoff: *Trash TMDLs for the Los Angeles River Watershed*, (September 19, 2001):17.
- 3 Gall & Thompson, The Impact of Marine Debris on Marine Life, *Marine Poll Bull*, 2015 Mar 15:93(1-2):170-179
- 4 New Plastics Economy, Ellen MacArthur Foundation (2016). <https://newplasticseconomy.org/publications/report-2016>
- 5 Rochman, C.M., et al, 2013, Long-Term Field Measurement of Sorption of Organic Contaminants to Five Types of Plastic Pellets: Implications for Plastic Marine Debris. *Environmental Science and Technology*. 47, 1646–1654; Rochman, C.M., et al., 2013, Long-Term Field Measurement of Sorption of Organic Contaminants to Five Types of Plastic Pellets: Implications for Plastic Marine Debris. *Environmental Science and Technology*. 47, 1646–1654
- 6 Rochman C.M. et al, 2015a Anthropogenic debris in seafood: plastic debris and fibers from textiles in fish and bivalves sold for human consumption *Sci. Rep.* 5 14340.
- 7 [https://orbmedia.org/stories/Invisibles\\_plastics](https://orbmedia.org/stories/Invisibles_plastics)
- 8 Clean Water Action, Disposable vs. Reusable Cups Fact Sheet - <http://www.rethinkdisposable.org/resources>
- 9 Clean Water Action, Straws Fact Sheet - <http://www.rethinkdisposable.org/resources>
- 10 Clean Water Action, *What's in the Package?* 2016 <https://www.cleanwateraction.org/features/what%E2%80%99s-package>
- 11 Center for Environmental Health, *Avoiding Hidden Hazards: A Purchaser's Guide to Safer Foodware*, 2018. <https://www.ceh.org/wp-content/uploads/CEH-Disposable-Foodware-Report-final-1.31.pdf> — all molded fiber products, blended plant fiber products, and bagasse products contained PFAS- 50% of products tested contained them. L. Schaider et al, *Fluorinated Compounds in U.S. Fast Food Packaging*, *Environmental Science & Technology Letters* 2017 4 (3), 105-111 – 30% of packaging tested was fluorinated.
- 12 [https://www.waterboards.ca.gov/water\\_issues/programs/trash\\_control/](https://www.waterboards.ca.gov/water_issues/programs/trash_control/)
- 13 NRDC: Waste in Our Waterways <https://www.nrdc.org/sites/default/files/ca-pollution-in-waterways-IB.pdf>
- 14 New Plastics Economy, Ellen MacArthur Foundation (2016). <https://newplasticseconomy.org/publications/report-2016>
- 15 Mauro Anastasio and James Nix, Plastic Bag Levy in Ireland, Institute European Environmental Policy, 2016. <https://ieep.eu/uploads/articles/attachments/7f91cb97-8cb7-49c39cf0d34062a9192e/IE%20Plastic%20Bag%20Levy%20conference%20draft.pdf?v=63673818840>
- 16 T. A. Homonoff, *Can Small Incentives Have Large Effects? The Impact of Taxes versus Bonuses on Disposable Bag Use*, National Tax Association Proceedings, Princeton University- <http://ntanet.org/wp-content/uploads/proceedings/2012/008-homonoff-can-small-incentives-2012-nta-proceedings.pdf>
- 17 <https://www.breakfreefromplastic.org/2018/03/13/global-campaign-challenges-starbucks-keep-promise-curb-plastic-pollution-create-100-recyclable-cup/>
- 18 <http://www.wired.co.uk/article/plastic-coffee-cups-environmental-audit-committee-25p-charge-throwaway-culture-recycling-ban>
- 19 "Taiwan to ban disposable plastic items by 2030," February 22, 2108. <https://phys.org/news/2018-02-taiwan-disposable-plastic-items.html>
- 20 <http://www.thejournal.ie/coffee-cups-poll-3642333-Oct2017/>
- 21 European Commission, EU Plastics Strategy-[http://ec.europa.eu/environment/waste/plastic\\_waste.htm](http://ec.europa.eu/environment/waste/plastic_waste.htm)
- 22 Data provided by Clean Water Action's *ReThink Disposable* program, March 2018.
- 23 Id.



# Berkeley Disposable-Free Dining Ordinance Related Articles & Background Resources

## Plastic Pollution in Ocean & SF Bay

- [91% of Plastic Isn't Recycled; Enormous Amount Ends Up in Ocean](#)
- [Shoreline Cleanup Results](#)
- [Plastic Pollution: Billions of Pieces of Plastic Litter Found in San Francisco Bay](#)
- [Video: Removing a Plastic Straw from a Sea Turtle's Nostril](#)

## Plastic Pollution in Food Supply

- [How Plastic In The Ocean Is Contaminating Your Seafood](#)
- [From Sea to Plate: How Plastic Got into Our Fish](#)

## Health Effects of Chemicals in Disposable Foodware

- [Foodware Associated with Increased Exposure to Harmful Chemicals](#)
- [Fluorinated Chemicals \(PFAS\) in Fast Food Packaging](#)
- [Washington State Takes Action to Eliminate PFAS in Food Packaging](#)

## China's National Sword Policy Ends Recycled Plastic Imports

- [Plastics Pile Up as China Refuses to Take the West's Recycling](#)
- [China Doesn't Want Your Trash](#)
- [Mountains of US Recycling Pile Up as China Restricts Imports](#)
- [Some Seattle-area recycling dumped in landfills as China's restrictions kick in](#)

## Cities Struggle to Comply with State Stormwater Regulations

- [Berkeley 2018 Stormwater and Streetlight Funding Initiatives](#)
- [Oakland Targeted in Bid to Cut Trash Flow into SF Bay](#)
- [San Francisco Bay: A Garbage Can for Seven Million People](#)

## Make-up of Street Litter

- [Clean Water Action's Bay Area Litter Survey](#)

## Efficacy of Plastic Bag Ordinances (fees on disposables)

- [New UK Study Proves Plastic Bag Legislation is Working](#)