# Reducing Litter and Achieving Zero Waste by Charging for Take-Out Cups

A Survey of Customer and Café Behaviors and Response to a Proposed Ordinance in San Francisco

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Clean Water Fund is a national 501(c)(3) research and education organization that has been promoting the public interest since 1974. Clean Water Fund supports protection of natural resources, with an emphasis on water quality and quantity issues. Clean Water Fund's organizing has empowered citizen leaders, organization, and coalitions to improve conductions of hundreds of communities and to strengthen policies at all levels of government. www.CleanWaterFund.org

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Clean Water Action is a national 501(c)(4) environmental organization with nearly one million members nationwide. Clean Water Action works for clean, safe and affordable drinking water, prevention of health-threatening pollution, creation of environmentally safe jobs and businesses, and empowerment of people to make democracy work. Clean Water Action has organized strong grassroots groups, coalitions, and campaigns to protect our environment, health and economic well-being, and community quality of life. **www.CleanWaterAction.org** 

# **Reducing Litter and Achieving Zero Waste by Charging for Take-Out Cups**

## Background

Clean Water Action (CWA) and Clean Water Fund (CWF) have been working in California to address trash entering the marine environment for many years. Since 2008, CWA has employed legislative advocacy to stop plastic pollution by promoting bans on single-use plastic bags and foam foodware containers. We supported both of San Francisco's ordinances and many other local ones, worked to enact statewide versions of each, and we are now defending SB 270 (Padilla), the statewide bag ban on the 2016 ballot.

In 2011, CWF developed the *ReThink Disposable* program, a partnership program between CWF, local government, and food service businesses and institutions. The City of San Francisco is a partner in the program. To date, *ReThink Disposable* has worked with 100 Bay Area businesses helping them reduce disposable food and beverage packaging. Sixteen (16) of those businesses are based in San Francisco. The San Francisco

Department of the Environment has been a partner in conducting the outreach and engagement for San Francisco food businesses. On average, restaurants in San Francisco each reduced 850 pounds of waste, 117,793 disposable items, and saved 1,810 dollars per year as a result of technical assistance provided by *ReThink Disposable*.

### Targeting Hot and Cold Beverage Cups by Charging Customers for Disposables

CWF's 2011 Bay Area litter survey demonstrated that 67% of the litter on Bay area streets is comprised of food and beverage packaging. Takeout cups and all the items that go with them (lid, sleeve, stir stick, etc.) comprise 13% of the litter on Bay Area streets. Therefore, we conclude that a significant amount of litter can be eliminated by encouraging people to Bring Your Own (BYO) reusable cups.

CWA developed a model ordinance to help reduce disposable cup usage in local jurisdictions. The model ordinance mimics the paper bag charge that is incorporated in San Francisco's plastic bag ban (and also in the state law SB 270). In the bag ban, there is a 10 cent charge for the sale of paper bags. Therefore, when a customer forgets to bring reusable bag to the store, he or she can still get a disposable one but it's no longer free — it has to be purchased. The charge helps people remember to BYO. Our model ordinance applies the same rationale and approach to disposable hot and cold beverage cups — it applies a charge for the disposable products that is intended to help people remember to BYO.

There are two significant benefits to the City associated with reducing single use disposable cups and all the pieces of packaging associated with them. First, charging for disposable cups will help reduce the quantity of trash and litter that the City has to manage either as garbage or as litter. These costs are significant. In addition, paper coffee cups





are not recyclable in San Francisco because they are lined with polyethylene. Therefore, reducing cup waste will also aid the City by helping it reach its goal of 100% zero waste by 2020.

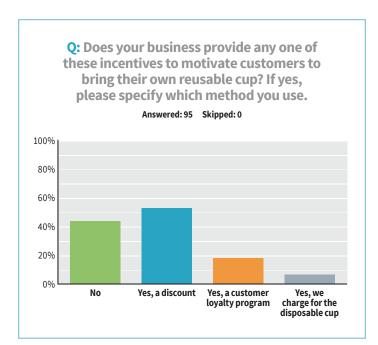
### Café Owner and Café Customer Surveys

CWF conducted surveys with 95 café owners in the eleven districts in San Francisco that sell to-go beverages in disposable cups. The goal of the survey is to determine what current practices businesses utilize to incentivize customers to engage in BYO behavior, what future practices the owners would consider, and if they support a legislative approach to encourage BYO behavior. CWF additionally conducted surveys with 461 customers in the eleven districts of San Francisco to determine what their current BYO cup habits are when ordering hot or cold beverages to-go, what barriers and/or incentivizes are factored into their consideration to BYO, and whether they support a fee for disposable cups. A full list of interview questions are included in the appendices.

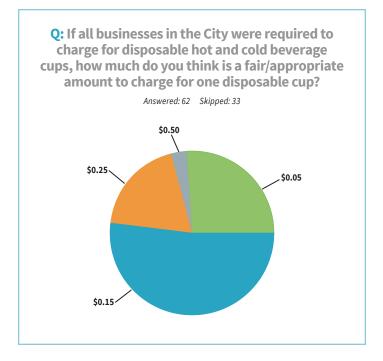
#### Key Findings from the Business Survey

A little over half of businesses surveyed (53%) currently offer a discount to customers that BYO, 18% have some form of a customer loyalty stamp card program, 6% incorporate the disposable packaging cost into their drink prices, and 44% don't pursue any practices to encourage their customers to bring their own cup. Eighty-three percent (83%) of the businesses that offer an incentive for customers to BYO don't advertise the offer anywhere in the store. When business owners that currently do not have any incentives in place were asked if they would consider trying any of the three most common options — discount, customer loyalty program, and/or charge for the disposable — 49% of the 39 respondents said a discount, 8% said a customer loyalty program, and 8% would consider a charge on disposable cups.

CWF discovered a common trend in the survey in early pilot testing of the survey: business owners would not consider charging their customers for to-go packaging because they are concerned with losing business if customers can go to any other store and get the same to-go beverage without paying a fee. They view this as part of their service to customers and perceive the ongoing costs of continually purchasing and restocking thousands



RESPONSE OPTIONS:	Yes	No
the business got to keep 100% of the fee to cover the costs of the disposables	71%	29%
50% of the money went to the business and 50% went to litter abatement in their commercial district	67%	33%
all the money went towards keeping the commercial districts clean	48%	52%



of disposables weekly as part of their normal operating business costs. Based on this finding, the survey was changed to ask businesses, "If there was an even playing field and every business in the city were required to charge for the disposable cup, would they support adding a charge for the disposable cup" and three scenarios for what happened to the monies collected were presented. Seventyone percent (71%) of businesses interviewed support the idea of charging for cups if they keep the monies collected and 67% support the idea if half of the money goes to the business and half to lit-

 Q: How often do you order a hot or (block to-go in a disposable cup)

 Arswerd: 456
 Skipped: 5

 Alot (5 times or more per week)
 Never

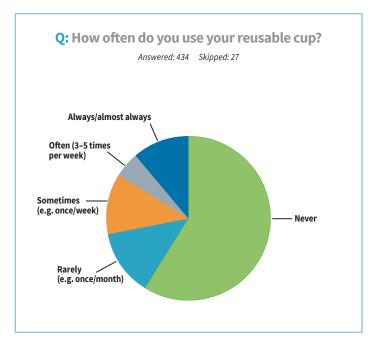
 Often (3-5times per week)
 Rarely (e.g. once/month)

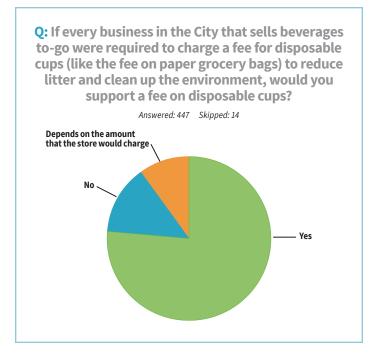
 ter abatement in their commercial district. Fewer respondents (48%) supported the charge if all the funds collected support keeping commercial districts clean.

Businesses were asked what they consider a fair and appropriate amount to charge for a disposable cup. Fifty-two percent (52%) responded \$0.10 and 19% responded \$0.25. The last question of the survey was open-ended and asked what the major concerns are, if any, with implementing a reusable cup incentive program for to-go customers. Only 42 of the 95 (44%) responded to this question and of the respondents, 23 businesses, or 71%, said that they do not have any concerns. This question was specifically asked to see if the issues of cross-contamination or health/safety were raised and only one out of 42 businesses expressed that cross-contamination was a concern.

#### Key Findings from the Customer Survey

Eighteen percent (18%) of the 461 randomly selected respondents throughout the 11 districts in the City of San Francisco order drinks to-go in a disposable cup "a lot" or five times or more per week; 20% order drinks three to five+ times per week; and 30% of those interviewed order at least one to-go drink per week. While 55% of respondents





"never" use a reusable cup for these to-go beverage purchases, 11% "always" do. These results suggest that there is a significant opportunity to reduce litter-prone packaging from the almost two thirds of the population that do not participate in this behavior and there is a solid foundation to build upon with 11% of the population already practicing the behavior change that CWF and the Department of the Environment are seeking — to BYO cup.

When respondents were asked about the barriers that prevent them from bringing a reusable cup, 39% indicated it was because "I forget to bring it with me," and 32% responded that "it's too inconvenient to carry." Fewer than 4% responded that they don't own a container.

To understand how to overcome barriers to bringing their own cup on a regular basis, respondents were asked what would motivate them. Thirty-seven percent (37%) felt that a \$0.25 discount would motivate them to BYO cup, and 21% felt that it would take a \$0.50 discount to encourage them to BYO. Surveyors also asked — if businesses charged for the disposable cup, what would be the lowest charge that would motivate you to BYO? Approximately 25% responded \$0.10, 34% responded \$0.25, and 16% responded that a \$0.50 charge would motivate them to BYO.

Another valuable piece of data gathered in the customer surveys measured how supportive the public would be if the City introduced a mandatory charge on disposable to-go hot and cold beverage cups. Respondents provided an overwhelmingly positive response with 77% in support of a charge for disposable cups. The last question of the survey asked respondents to choose from a list of factors that would motivate them to BYO cup and 44% — almost half — responded to "avoid paying a fee on disposable cups."

#### **Survey Methodology**

CWF developed a questionnaire with the advice and input of San Francisco Department of the Environment and the TAC. In 2014, a test questionnaire was piloted in the City of San Francisco. A variety of interns, volunteers, and staff of CWF and San Francisco Department of the Environment were trained by CWF staff to conduct the survey and assisted in the collection of the data. Data was collected between August, 2015 and March, 2016. Surveyors conducted business and customer surveys in a range of districts throughout San Francisco. See the table below for a breakdown of surveys by district.

	strict/ ard of Supervisor	# of Customer Surveys	# of Business Surveys
1	Eric Mar	16	8
2	Mark Farrell	40	7
3	Aaron Peskin	54	13
4	Katy Tang	40	6
5	London Breed	91	13
6	Jane Kim	66	15
7	Norman Yee	19	4
8	Scott Wiener	39	11
9	David Campos	40	3
10	Malia Cohen	40	8
11	John Avalos	16	7
Tot	tal	461	95

Surveyors collected random samples in each district. To collect business surveys, surveyors selected businesses by walking into cafés and other businesses that serve hot and cold beverages and asked to speak with the owner or manager. The survey was conducted in the shop and if the owner was not present a follow up phone call or email was made if possible. To collect customer surveys, surveyors walked various streets in the districts to avoid collecting responses from only one area and invited passersby to participate in the survey.

### Conclusion

The most common method practiced by café/ businesses to encourage BYO behavior is to offer a discount (53%) but most of them are not advertising the discount (83% of those that offer one fail to advertise it). Offering a discount is the most common method that businesses would be willing to adopt on a voluntary basis. However, when a regulatory approach is considered, there is significant support either for charging for cups if they keep the monies collected (71% of businesses support this) or for a charge whereby half of the money goes to the business and half to litter abatement in their commercial district (67% support this).

A majority of businesses feel a \$0.10 charge would be fair and appropriate to encourage BYO behavior but a majority of customers believe that a charge of \$0.25 would be more likely to influence their behavior. We conclude that the customer is the best judge of what will change their behavior and that an effective charge would be \$0.25. A notable outcome of the business survey is that only one business (out of 42 respondents) expressed any concerns about cross-contamination.

Two thirds of customers surveyed order hot and cold drinks to-go at least once a week and a majority of those surveyed do not bring their own cup. Owning a cup is not a barrier to participating in BYO behavior, since only 4% of the population surveyed does not own a reusable alternative cup for hot and cold beverages. Most customers simply forget to bring a re-usable cup with them, either because they order to-go drinks on the fly and don't plan accordingly, or because current incentives are not strong enough. San Francisco customers who order drinks-to-go feel that being charged for the disposable cup would be a strong incentive to BYO cup more regularly and 77% of individuals who responded would likely support an ordinance that mandated a charge on disposable cups to reduce waste and clean up litter polluting the environment.

In conclusion, the results of these surveys demonstrate support for a policy that creates a level playing field in which businesses are required to charge extra for drinks sold in disposable cups, and allows businesses to keep all or part of the monies collected. A charge of \$0.25 is the most likely to incentivize BYO behavior and reduce the quantity of disposable cups used in San Francisco. Cafés generally did not evidence concerns about cross-contamination with respect to refillable cups brought in by customers, which may be due to the fact that the health code permits the practice.

# Appendix A. Disposable Cup Survey for Hot and Cold Beverages (For Businesses)

#### The first few questions have to do with to-go drink service:

There are many ways that cafes can motivate customers to bring their own reusable hot or cold beverage cups. The three most common practices are: 1) provide a discount, 2) offer a customer loyalty incentive program, such as getting the tenth cup free, and 3) charge for the disposable cup.

1. Does your business provide any one of these incentives to motivate customers to bring their own reusable cup? If yes, please specify which method you use. *Please circle all that apply.* 

a) No

- b) Yes, a discount (proceed to question 2)
- c) Yes, a customer loyalty program (skip to question 3)
- d) Yes, we charge for the disposable cup (skip to question 4)
- 2. How much is the discount?
- 3. How does the customer loyalty program work?
- 4. How much do you charge?
- 5. Does your business have signage advertising the incentive program for BYO inside the store? \_\_\_Yes \_\_\_No
- 6. If all businesses in the City were required to charge for disposable hot and cold beverage cups, would you be supportive of this policy if:
  - a. You got to keep the charge to cover costs of disposable cups? \_\_\_\_Yes \_\_\_\_No
  - b. You got to keep half of the charge, and the other half went to keeping the streets clean in this commercial district? \_\_\_\_Yes \_\_\_\_No

c) All the money went towards keeping the streets clean in this commercial district? \_\_\_\_Yes \_\_\_\_No

- 7. How much do you think is a fair/appropriate amount to charge for disposable cups?
  a) \$0.05 b) \$0.25 c) \$0.50 d) \$0.75 e) \$1.00
- 8. Would you consider trying any of these new methods to incentivize customers to bring their own reusable hot and cold beverage cups (for the methods they are not already practicing)? *Please circle all that apply.*

a) No (skip to question 9)

- b) Yes, a discount (skip to question 10)
- c) Yes, a customer loyalty program
- d) Yes, a charge for the disposable cup (skip to question 11)
- 9. If no, please explain why you are not interested in encouraging customers to bring their own reusable cups.
- 10. For a discount, how much would you be willing to provide?
  - a) \$0.05 b) \$0.25 c) \$0.50 d) \$0.75 e) \$1.00
- 11. For a charge, how much would you be willing to charge?
  - a) \$0.05 b) \$0.10 c) \$0.25 d) \$0.50 e) \$0.75 f) \$1.00

12. What is/are the major concern(s) with implementing a reusable hot and cold beverage cup incentive program for to-go customers? (*Open ended*).

12a. If the response is "cross contamination," how does your business deal with it?

#### The last three questions have to do with on-site drink service.

- 1. What percent of your drinks served on-site are served in reusable cups? Estimate if needed.
- 2. Do you offer every customer dining on-site a reusable cup or do they have to ask for it?
  - a) Offer

b) Customer requests it

3. What is/are the major concern(s) with implementing a reusable cup program for on-site consumption? *Please circle all that apply.* 

a) Inadequate dishwashing capacity

- b) Cost of additional labor
- c) Theft

d) Product loss or damage

e) Cross-contamination concerns

f) Other\_\_\_\_\_

# Appendix B. Disposable Cup Survey for Hot and Cold Beverages (For Customers)

#### 1. How often do you order a hot or cold drink to-go?

a) Never

- b) Rarely (i.e., once/month)
- c) Sometimes (i.e., once/week)
- d) Often (3-5 times/week)
- e) A lot (5 times or more / week)

#### 2. How often do you use a reusable cup when ordering those to-go beverages?

- a) Never
- b) Rarely (i.e., once/month)
- c) Sometimes (i.e., once/week)
- d) Often (3-5 times/week)
- e) Always/almost always

#### 3. What is the biggest barrier that prevents you from bringing your own cup? Please circle all that apply.

- a) It's not important to me
- b) It's too inconvenient to carry
- c) Washing it myself is inconvenient
- d) I forget to bring it with me
- e) I don't like the taste in my own cup
- f) There is no discount incentive where I purchase to-go beverages
- g) There is a discount, but it's not high enough
- h) I don't have any barriers
- i) Other\_\_\_\_\_

#### 4. Which of these factors would motivate you to bring your own cup? Please circle all that apply.

- a) Reducing waste
- b) Protecting the environment
- c) Saving money through a discount
- d) Avoiding paying fees if there was a charge for disposable cups
- e) Supporting local charities
- f) Providing funds for litter cleanup
- g) Other\_\_\_\_\_
- h) None
- 5. If a business provides a discount, what is the *lowest* discount that would encourage you to bring your own cup?
  - a) \$0.10 b) \$0.25 c) \$0.50 d) \$0.75 e) \$1.00 f) I will not bring my own cup no matter what
- 6. If a business charged for their disposable cup, what is the *lowest* charge that would motivate you to bring your own cup?
  a) \$0.05 b) \$0.10 c) \$0.25 d) \$0.50 e) \$0.75 f) \$1.00
- 8. Hypothetically, if every business in the City that sells beverages to-go were required to charge a fee for disposable cups (like the fee on paper grocery bags) to reduce litter, would you support a fee on disposable cups?
  - a) Yes b) No c) Depends on the amount that the store would charge