City of Santa Monica
Nexus Study

Submitted to:

City of Santa Monica

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R3 Consulting Group, Inc.
Resources, Respect, Responsibility

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Background

In February of 2008, Santa Monica's City Council directed the City Attorney to draft an ordinance *"Prohibiting Retail Establishments from Providing Single Use Plastic Carryout Bags and Regulating the Use of Paper Carryout Bags"* ("Ordinance"). [1]

In January of 2009, City Council held a public hearing on the proposed Ordinance.[2] Following the public hearing, the City issued a Request for Proposal ("RFP") for completion of a nexus study to provide analysis of its proposed Ordinance to *"ensure that the City sets new fees in compliance with the requirements of Propositions 218 and 13 and that the City costs included in any fee be related solely to the City's cost of administering this program"*.[3] In April, 2009, the City retained the services of R3 Consulting Group ("R3") to conduct the nexus study.

The City's proposed Ordinance contains the following key provisions:

- It defines the entities, commercial and retail establishments, that are to be regulated under the proposed Ordinance;
- It defines plastic, paper and reusable bags;
- It prohibits the distribution of single use plastic carryout bags;
- It establishes a "green fee" for each paper carryout bag provided, with the fee to be visible on the customer's receipt;
- The green fee will have two portions: 1) the City's portion, which will be used to offset the costs to the City for implementation and enforcement of the proposed ordinance, and 2) the retailer's portion, which is meant to compensate the affected stores for increased costs related to compliance with the proposed Ordinance; and
- It contains an exemption provision for undue hardship (to be determined by the City).

The City now wishes to determine the amount of the green fee on paper bags through a nexus study.

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[1] City Council Meeting: February 26, 2008. For a copy of the proposed Ordinance see Appendix A.

[2] City Council Meeting: January 13, 2009. For a copy of the City Council Meeting staff report on January 13, 2009, see Appendix B.

[3] City's Request for Proposal.

Number and Types of Stores to be Regulated under Ordinance

The proposed Ordinance indicates that there are approximately 1,700 commercial and retail establishments that will be regulated in the City. These establishments fall into two categories for the purposes of complying with the proposed Ordinance, as follows:

1) All Retail Establishments: The proposed Ordinance requires the following: *"No retail establishment in the City of Santa Monica shall provide a Single Use Plastic Carryout Bag to a customer except as permitted in this Chapter*".

2) Grocery Stores and Pharmacies: The proposed Ordinance requires both of the following:

- *"No grocery store or pharmacy in the City of Santa Monica shall provide to any customer at the point of sale any bag except a Reusable Bag or Paper Carryout Bag";* and
- *"No grocery store or pharmacy may provide a Paper Carryout Bag to a customer without charging a Green Fee to the customer for each Paper Carryout Bag provided".*

The proposed Ordinance defines grocery stores to include retail establishments that sell food, such as supermarkets, convenience stores (all of which are classified for business tax purposes as "grocery, food products" and taxed at a retail rate), liquor stores, gasoline stations and pharmacies (including "drug stores" but not pharmacies located within hospitals).

Table 1 below provides a summary of the number of stores to be regulated under the proposed Ordinance:

TABLE 1

Approximate Number of Stores to be Regulated under the Ordinance

Type of Business and Ordinance Requirements	Number of Businesses
Businesses subject to the green fee include: ▪ 48 grocery stores, convenience stores and mini-marts; ▪ 21 liquor stores; ▪ 24 drug stores (8) and pharmacies (16); and ▪ 8 gas station mini-marts.	101

TABLE 1 Approximate Number of Stores to be Regulated under the Ordinance	
Type of Business and Ordinance Requirements	**Number of Businesses**
Businesses that must ban plastic bags, but are not necessarily subject to the green fee.	979
Food vendors that would likely be exempt from the Ordinance, and must file an exemption application.	638
Total number of vendors subject to the Ordinance requirements.	**1,718**

Methodology

The following tasks were completed for this study:

- Reviewed the City's proposed Ordinance on *"Prohibiting Retail Establishments from Providing Single Use Plastic Carryout Bags and Regulating the Use of Paper Carryout Bags"*;
- Requested and received data from the City regarding the cost of proposed Ordinance implementation;
- Requested the City's estimates of the number of stores to be regulated, the number of bags currently distributed in the City[4], and other related information from the study conducted by City staff (see Appendix C);
- Reviewed proposed legislation, ordinances and studies that had been conducted in other jurisdictions, including the following:
  - Proposed state law, AB 87, which would place a $0.25 fee on plastic carryout bags statewide, and would allow retailers to retain $0.07 of the fee to recover their own costs of implementation (see Appendix D);
  - City of Los Angeles website on the *"It's Our L.A.! Keep It Clean"* program to recycle plastic bags;
  - County of Los Angeles study, *"An Overview of Carryout Bags in Los Angeles County"* (see Appendix E);
  - California cities' experiences with plastic bag bans;

[4] R3 has reviewed the City's estimates of the annual number of single-use bags distributed in Santa Monica and has determined the calculations to be reasonable.

  - Nationwide experiences with plastic bag bans and green fees; and
  - International experiences with plastic bag bans and green fees.
- Surveyed seven retailers both within and outside of the City regarding their bag costs, and any experience the store may have had with encouraging customers to reduce their bag use or placing fees on bags. This was completed in addition to the 21 retailers surveyed by the City. A list of retailers contacted is provided later in this study.

Costs to City for Implementation

The City's Office of Sustainability and Environment ("OSE"), Finance Department and Code Compliance will assign staff and resources to the following activities related to the proposed Ordinance:

- Finance will require the equivalent of 40 percent of a full-time Revenue Operations Assistant who will receive and track monthly fee payments and quarterly payments of the green fees for sale of paper bags made by supermarkets, grocery stores, convenience stores, liquor stores and pharmacies;
- OSE will require a full-time Environmental Analyst for enforcement, outreach, and administration of the bag ban and fee program;
- OSE will require the equivalent of one-quarter of a full-time Administrative Assistant to process exemption applications;
- Outreach and advertising to affected retailers to make them aware of the proposed Ordinance and requirements (includes arranging meetings, preparation and distribution of letters, staff assistance to answer questions, and training and education for staff of affected retailers);
- Outreach and advertising to the public to promote the use of reusable bags:
  - Preparation of press releases;
  - Preparation of advertisements and mailers;
  - Outreach events;
  - Distribution of reusable bags;
  - Preparation of FAQ sheets and website information; and
  - Preparation of City TV news items.

- Code compliance will utilize Code Compliance Officers, a Code Compliance Supervisor and administrative support staff to conduct field inspections and spot checks of stores to ensure compliance, investigate customer complaints, process enforcement paperwork and distribute notices of violation; and
- One-time costs including:
  - Establishing the fee remittance to the City;
  - Other one time costs including pre-ordinance surveys, meetings, retailer dialogues, legal reviews of this nexus study report and code implementation, and other one-time costs; and
  - Supplies such as the one-time initial bag purchase of 25,000 reusable bags, one-time set up fees for forms and protocols, signage, and community outreach.

Table 2 below shows the City's estimated costs to implement and manage the proposed Ordinance:

TABLE 2

Estimated Cost to the City for Implementation and Management of the Proposed Ordinance

Cost Item[5]	Annual Cost	One-Time Cost
Revenue Operations Assist (40% time)	$36,080	
OSE Analyst (1-FTE)	$110,377	
OSE Admin Assist (25% time)	$19,548	
Outreach and Advertising	$55,000	
Code Compliance Officers (supervisor and administrative support staff)	$85,166	
Cost to establish fee remittance to City		$16,500
Other one-time costs (pre-ordinance research, survey, legal review, etc.)		$16,500
Initial Bag Purchase, Supplies and Community Outreach		$110,000
Total Cost	**$306,171**	**$143,000**
TOTAL FIRST YEAR COST	**$449,171**	

[5] Note that a 10 percent contingency has been added to all cost items. This contingency has been added to the budgeted costs to account for any unidentified or unknown costs that may occur during the first year.

The City has estimated the total cost of these implementation activities to be $306,171 per year. One time costs for the first year are $143,000. Accordingly, the total first year cost is estimated to be $449,171.

Baseline Number of Bags, Before Reductions, Due to Outreach and Fees

The California Integrated Waste Management Board has estimated the total usage of plastic bags at 552 per person per year. However, that figure refers to use of only plastic bags, and this proposed Ordinance will only apply a green fee to single use paper bags distributed from grocery stores (as defined to include retail establishments that sell food, such as supermarkets, convenience stores, liquor stores and gasoline stations).

In 2008 and 2009 the City conducted a survey of retail stores that would be required to comply with the proposed Ordinance,[6] and asked those stores to provide data on the number of carryout bags used each month. In addition, an outreach meeting was held.

In combination with the survey conducted by R3, the details of which are discussed later in this study, a total of 36 retailers were contacted and responded to these outreach efforts (some retailer chains were contacted at multiple locations). A list of those businesses that responded to outreach efforts from the City and R3 is provided below:

- 10th Street Medical Pharmacy;
- 7-Eleven (three separate locations);
- 99 Cents Only;
- Albertson's (two separate locations);
- Bob's Market;
- Budget Center Market;
- Chiquita Market;
- Convenient Market;
- Co-Opportunity;
- Exxon #16;
- Fair Market;

[6] See Appendix F for a summary of the information provided by willing retailers through the outreach efforts made by the City.

- Golden Wellness Rx, Inc.;
- Jin's Santa Monica Shell;
- L&K Market;
- Marks & Spencer;
- Mrs. Winston's (two separate locations);
- One Life Natural Food;
- Pavilions;
- Ralph's Grocery;
- Rite Aid (three separate locations);
- Superior Paper/Plastic;
- Tehran Market;
- The Farms;
- Trader Joe's;
- Vons;
- Whole Foods (three separate locations);
- Wilshire 76; and
- Wilshire Chevron.

Based on the data collected by the City in the survey, the estimated current annual number of single use bags in Santa Monica for stores that will be subject to the green fee (i.e., the number of bags that would be subject to the green fee) is provided in Table 3 below (see Appendix C for City's calculations based on accumulated results of the survey):

TABLE 3

City's Estimate of Annual Number of Single Use Bags in Santa Monica (in millions)

High Estimate	Low Estimate	Average of High and Low Estimates
34.3	17.8	26.1

R3 has reviewed the methodology of the survey performed by the City. R3 believes that the basis for the estimates provided by the City in Table 3 above is representative of retailers affected by the proposed Ordinance.

The estimates in Table 3 above are used later in this study to calculate a recommended green fee.

Bag Reduction Experiences

R3 researched and surveyed grocery stores within and outside the City for their experiences in single use carryout bag reduction. The research revealed that several stores have put different kinds of incentives in place to reduce usage of single use bags and encourage consumers to use reusable bags. Each of the stores listed below sell reusable bags, and promote their use. The anecdotal experiences of the stores R3 interviewed for this study include the following:

- The United Kingdom grocery and general merchandise chain, Marks and Spencer, began charging five pence for single use carryout bags in 2008. The store also conducted an extensive public education campaign. A year later, their customers are using 83 percent fewer bags.[7]
- Whole Foods in Santa Monica refunds five cents per bag to customers who bring their own reusable bags. The stores do not use plastic bags, and do use 100 percent recycled paper bags. Whole Foods estimates that 33 percent of customers use reusable bags.[8]
- The 99 Cents Only store in Santa Monica began charging three cents per bag for single use bags, and within approximately two months of the launch of the program, customers reduced bag use by approximately half.
- The Trader Joe's grocery chain promotes the use of reusable bags, sells reusable bags, and enters names of customers into a lottery to thank them for using reusable bags. The grocery chain estimates that at least five percent of customers use reusable bags.[9]
- "On March 15, 2007, to reduce plastic carryout bag consumption, IKEA became the first major retailer in the United States to voluntarily no longer offer a 'free' plastic bag to customers. Instead, customers are given a choice of purchasing a plastic carryout bag for five (5) cents each (all proceeds in the first year would go towards American Forests to plant trees), or purchasing a 'big blue' reusable bag for 59 cents (down from 99 cents). After IKEA introduced a similar program in the United Kingdom in 2006, IKEA's plastic carryout bag consumption dropped by

[7] www.environmentalleader.com, June 5, 2009.

[8] Personal communication, John Jurey, store manager, Whole Foods Santa Monica, May 22, 2009.

[9] Personal communication, Kent Smatherse, manager of Trader Joe's Santa Monica, May 29, 2009.

95 percent."[10] The IKEA store in Burbank reported that bag use at that store was reduced by 50 percent in the first year of implementing a bag fee.

Other Plastic Carryout Bag Bans

Municipal and national efforts to curb or eliminate the use of plastic bags have gained momentum in recent years. The following are some examples in California:

- City of Fairfax residents voted by initiative to implement a ban on plastic carryout bags on November 4, 2008.
- The City of Malibu's ordinance banning the use of point-of-sale plastic bags including both compostable bags and non-compostable went into effect in May of 2008.
- The City of San Francisco banned the distribution of non-biodegradable plastic carryout bags in April of 2007. Like Oakland, all supermarket stores and pharmacy chains (with more than five stores located in San Francisco) were required to provide customers with compostable or biodegradable carryout bags, paper carryout bags, or reusable bags.
- On September 22, 2009 the City of San José City Council directed city staff to draft an ordinance prohibiting single use carryout plastic AND paper bags. An exemption exists for "green" paper bags, which contain at least 50 percent recycled content. The city is deliberating over whether a $0.10 or $0.25 fee is appropriate to cover additional costs on "green" paper bags.

There are many examples of plastic bag bans and fees locally, nationally and worldwide. The following are examples of other jurisdictional plastic bag bans in the United States:

- Alaska – 30 villages have bans as of 1998.
- Edmonds, WA – Adopted a ban in August of 2009.
- Marshall County, IA – Banned plastic bags effective April, 2009.

[10] "An Overview of Carryout Bags in Los Angeles County," A Staff Report to the Los Angeles County Board of Supervisors, August 2007.

- Hawaii – Paia, Maui in 2008 and two counties in 2011.
- North Carolina (Outer Banks) – Ban effective September, 2009.
- Suffolk County, NY – Ban adopted in 1998.
- Westport, CT – Ban went into effect March, 2009.

For a summary of worldwide bans and fees, see Appendix G.

Estimate of Single Use Bag Reduction after Implementation of Ordinance

Of the five bag reduction experiences of retailers listed above, three stores used a fee approach, Marks and Spencer, 99 Cents Only, and IKEA. Those three companies saw bag use decline by 83 percent, 50 percent and 50 percent, respectively.

R3 cannot predict exactly the number of bags that will be reduced as a result of implementing the City's proposed Ordinance and there are no other programs that are exactly comparable. Factors in addition to a fee, that would influence the reduction in bag use, include, but are not limited to, the following:

- Types of stores, such as grocery versus convenience store, and discount versus premium brand. Many trips to the grocery store are planned in advance, and customers may find it easier to remember to bring their reusable bags. In contrast, trips to convenience stores and gas stations may be unplanned, and customers may need to purchase bags more frequently at these stores.
- Business and tourist population. While Santa Monica has 90,000 residents, there are approximately 300,000 people who work in Santa Monica, and the City receives up to 500,000 visitors each weekend. Santa Monica's tourist population may not know about the City's proposed Ordinance, and may not be as prepared to use reusable bags as Santa Monica residents.
- Clientele – certain stores may have customers that are more motivated than others to reduce bag use as a result of the green fee.
- Reduction in bag use that has already occurred – Santa Monica has several stores that have already implemented bag reduction programs, so the additional reductions from

the implementation of this new program may be less than they would have been otherwise.

For the purposes of this study, R3 used three bag reduction assumptions to provide a comprehensive perspective of possible outcomes. The assumptions include 25 percent, 50 percent and 75 percent bag use reductions of the annual number of bags estimated to be used in the City.

Table 4 below shows the results of the estimated reduction in the quantity of single use carryout bags after implementation of the proposed Ordinance:

TABLE 4

Bag Reduction Estimates
(all figures in millions rounded to tenths)

Number of Bags	High Estimate	Low Estimate	Average of High and Low Estimates
Before Implementation of Ordinance[11]	34.3	17.8	26.1
With 25% Reduction	25.7	13.4	19.5
With 50% Reduction	17.2	8.9	13.0
With 75% Reduction	8.6	4.5	6.5

The estimates calculated in Table 4 above are used later in this study as a component for calculating the proposed green fee.

Estimated Cost to the City

The estimate of the City's portion of the green fee is straightforward; it is the total cost of the City's annual regulatory program divided by the number of bags that will be subject to the green fee.

- As described in Table 2, the City's annual costs are anticipated to be $306,171 per year to implement the proposed Ordinance, with a total first year cost of $449,171.
- The number of paper bags that would be subject to the green fee, after reductions in bag use by consumers, could be estimated as low as 4.5 million bags to as much as 25.7 million bags, or higher. (These estimates are based on the

[11] See Table 3 in this study.

"low" initial estimate of bags assuming bag use is reduced 75 percent and the "high" initial estimate of bags assuming bag use is reduced by 25 percent.)

- Therefore, using the low end of the range 4.5 million bag estimate, the City's portion of the green fee would be $0.101 per bag ($449,171 / 4,450,000 bags). This estimate uses the "low" initial estimate of bags, and assumes that bag use is reduced 75 percent.
- Using the high end of the range, the figure of 25.7 million bags, the City's portion of the green fee would be $0.017 per bag ($449,171 / 25,725,000 bags). This estimate uses the "high" initial estimate of bags, and assumes that bag use is reduced 25 percent.
- Using the average estimate of 13.0 million bags as a conservative middle of the road approach, the City's portion of the green fee would be $0.034 per bag ($449,171 / 13,025,000 bags). This estimate uses the "average" initial estimate of bags, and assumes that bag use is reduced 50 percent.

Estimated Cost to Retailers

Identification of Types and Amounts of Costs for Retailers

During the preliminary research, R3 identified the following types of potential costs to the retailers from implementing the proposed Ordinance:

- Cost differential between purchasing paper bags and purchasing plastic bags. Some retailers currently use plastic carryout bags, and the proposed Ordinance would require them to use paper bags instead;
- New costs related to the storage and transportation of paper bags, due to their larger size;
- Administrative costs of complying with the proposed Ordinance (completing paperwork, etc.);
- Decreases in costs of purchasing bags, as consumers reduce their use of single use carryout bags;
- Public education costs, such as providing signage, to inform customers of the proposed Ordinance;
- Labor costs related to training employees to implement the proposed Ordinance, such as maximizing the number of items per bag in order to reduce customers' bag fees; and

- Operational costs of implementing the proposed Ordinance, such as reprogramming cash registers to account for purchases of single use carryout bags, if any.

R3 interviewed the following retailers regarding potential costs listed above (a summary of R3's interview results can be found in Appendix H attached to this study):

- Vons, two grocery stores in Santa Monica;
- Co-Opportunity, one grocery store in Santa Monica;
- Marks and Spencer in the United Kingdom;
- Whole Foods, three grocery stores in Santa Monica;
- 99 Cents Only, a retailer in Santa Monica;
- Trader Joe's, a grocery store in West Los Angeles;
- The Farms, a grocery store in Santa Monica; and
- Albertson's, two grocery stores in Santa Monica.

Estimate of Costs to Retailers in Other Cities

Other cities have estimated the costs to retailers regarding plastic and/or paper carryout bags, as follows:

- The City of Seattle recently proposed a $0.20 green fee on carryout bags.[12] The City posted a "Disposable Bag Green Fee and Foam Food Container Ban Overview and Transition Plan" on its website. In this document, the City indicated that its plan is for merchants to retain $0.05 of the green fee per bag for "taxes and administrative costs." The amount of the green fee was derived from the number of bags and the types calculated by a 30 year cost model. The fee was rejected by voters, however, on August 18, 2009.

- Proposed California State law, AB 87, would place a $0.25 fee on plastic carryout bags statewide, and would allow retailers to retain $0.07 of the fee to recover their own costs of implementation.

- The City of San José is drafting an ordinance to ban both paper AND plastic bags. "Green" paper bags (containing at least 50 percent recycled content) are exempt from the ban. Staff is deliberating over whether a $0.10 or $0.25 fee for retailers is appropriate to cover additional costs of

[12] See Appendix I

"green" paper. The fee is based on a recommendation from staff working with retail industry.

- The County of Los Angeles Department of Public Works also estimated bag costs in 2007.[13] Plastic bags were estimated at $0.03 per bag, paper bags at $0.10 per bag, biodegradable bags at $0.15 per bag and reusable bags at $2.99 per bag.

Estimates of Costs to Retailers for Implementation

During R3's and the City's interviews with retailers, interviewees generally (with the exception of Albertson's) indicated that there would ***not*** be any additional costs associated with implementing the proposed Ordinance due to:

- Changes in bag storage when changing from plastic to paper. None of the stores that were interviewed in the City thought that this would cause a significant change to their operations. Marks and Spencer ("M&S"), in the U.K., however, described their specific operational experience with paper bags. M&S indicated that a pallet of paper bags contains about one-fifth (1/5) the number of bags as a pallet of plastic bags (7,875 paper bags versus 40,000 plastic bags), for the same amount of floor space. M&S indicated that similar storage issues occur at the cash register. If paper bags are used and the cash register storage space holds fewer paper bags than plastic, then the store employees will have to re-stock the paper bags at the cash register more frequently than for plastic bags.
- Changes to cash register programming to accommodate the new "green fee" on bags. Each of the stores that were interviewed indicated that cash register re-programming occurs frequently, and that this would not be a significant cost to the stores.
- Training of store employees regarding the "green fee" and use of paper bags. Each of the stores that were interviewed indicated that employee training occurs frequently, and that this would not be a significant cost to the stores.
    - As the exception, Albertson's indicated that they will incur increased costs for additional time needed during checkout associated with the green fee.

[13] Staff Report to the Los Angeles County Board of Supervisors "An Overview of Carryout Bags in Los Angeles County" August 2007.

- Public education costs regarding changes to bag policy. Stores expressed that costs for public education about the bag policy are folded into other activities to communicate with their customers, and were generally not able to be distinguished from other public education costs.

R3 believes that retailers will experience an increase in administrative costs for such things as internal training, participating in informational meetings with the City, updating and creating signage, increased checkout times, etc. consistent with estimated costs incurred by Albertson's. These costs are distinct and separate from the costs associated with switching from plastic to paper bags, and are only based on green fee implementation.

In order to capture these costs appropriately, R3 has taken these costs into consideration in the following sections of this study. They appear as the second component of the calculation of the "retailer portion per bag" below.

City of Santa Monica Bag Cost Estimates

The City conducted research in September of 2008, which included a telephone business survey and an outreach meeting hosted by the Santa Monica Chamber of Commerce and Office of Sustainability and the Environment.

Attendees at the outreach meeting included the following stores:

- Albertson's;
- Bob's Market;
- Ralphs;
- Vons; and
- Whole Foods;
- 99 Cents Only.

The purpose of the research was to identify the costs of various types of carryout bags. Based on the information provided by the six stores at the outreach meeting and the information collected from the phone survey of retailers the following costs were developed as summarized in Table 5 below:

TABLE 5
City of Santa Monica Bag Cost Estimates (2008)

Type of Carryout Bag	Low End Estimate	High End Estimate
Plastic Bag	$0.005	$0.09
Paper Bag	**$0.045**	**$0.25**
Biodegradable Bag	$0.08	$0.22
Reusable Bag	$0.70	$10.00

Retailer Portion per Bag

The basis for determining the retailer portion per bag is the research data gathered by the City regarding actual costs to purchase bags, and the additional costs incurred by retailers for implementation.

For the purposes of this study, the cost to businesses for a single paper bag is determined by taking the ***average*** of the range of costs per paper bag identified in the research conducted by the City (Table 5). The research was based on the information provided by those 20 businesses contacted during the City's phone survey in September of 2008 and the six attendees at the following outreach meeting.

R3 acknowledges that the *incremental* cost to the retailers may be lower depending on the individual retailer's past mix of plastic and paper bags. This incremental cost would be the net difference between the individual retailer's cost of plastic vs. paper bags. Therefore, for the calculations, the basis for calculating the net cost of bags to a retailer is the "costs for a paper bag" less the "costs for a plastic bag."

R3 also believes that by taking the average of the range of estimates, the green fee will account for variances in the purchasing habits of different retailers, some of which may receive discounts for ordering bags in bulk. As such, the first component of the retailer portion per bag of the green fee is a cost to the retailer of $0.100, or

$$\frac{(\$0.045 - \$0.005) + (\$0.25 - \$0.09)}{2} = \$0.100$$

The second component of the retailer portion per bag of the green fee is the additional costs associated with implementation as discussed above (e.g., administrative costs, training, checkout time, etc.). This is distinct and separate from the costs exclusively associated with switching from plastic to paper bags, and only based on green fee implementation. Bag fee experiences of other jurisdictions were researched for their calculated green fee remittances back to retailers. In addition, a Santa Monica store worked with R3 to provide cost estimates exclusively associated with the implementation of a green fee.

Table 6 below provides the findings of the Santa Monica store and other jurisdictions that separately ascribed costs of implementation (excluding costs of bags):

TABLE 6

Retailer Costs for Green Fee Implementation

Source	Total Fee Imposed or Considered	Portion Retained by Retailer for Implementation
Santa Monica Store	N/A	$0.095[14]
Seattle	$0.20	$0.05[15]
State of California	$0.25	$0.05[16]
Average	**N/A**	**$0.065**

For the purpose of this study, R3 elected to use an average of the data provided in Table 6 in order to incorporate research that was done on the part of the City and R3 ($0.065). R3 believes the combination of a Santa Monica store's private, locally-based implementation cost data averaged with other jurisdictions' specific experiences is the best way to ensure a fair and accurate assessment of the second component of the retailer portion per bag.

Adding the two components of the retailer portion per bag yields a total of $0.165 per bag to cover the costs of implementation for retailers, or

$0.100 + $0.065 = $0.165

[14] Calculated by information provided by Albertson's regarding bag usage (approximately 165,000 per month) and implementation costs (approximately $189,000 per month). Information provided in phone interviews with Albertson's Director of Environmental Stewardship, Rick Crandall.

[15] "Disposable Bag Green Fee" indicating merchants retain 5 cents per bag for taxes and administrative costs. Source: City of Seattle Disposable Bag Green Fee & Foam Food Container Ban Overview & Transition Plan.

[16] Taken from page 7 of California Assembly Bill 87 introduced January 5, 2009 and amended April 27, 2009.

Overall Green Fee Calculation

There are a wide variety of operations and cost structures for different types of retailers (e.g., small convenience stores, "big box" stores, grocery stores, etc.) R3's estimates of the costs related to implementing the proposed Ordinance are industry-wide estimates, and do not reflect the costs of any individual retailer or of any particular category of retailer.

The calculated green fees are based on the estimates for the annual number of plastic bags at the City's identified retailers. An average is provided for between the "High" and "Low" range estimates (Table 3). The "High", "Low" and "Average" estimates are each decreased by the assumed reduction factors of 25 percent, 50 percent and 75 percent identified earlier in this study (Table 4).

The overall green fee is then based on the calculated costs of the City (Table 2) and retailer portions (Tables 5 and 6). The retailer portion per bag is held constant at $0.165 while the City portion is calculated by dividing the City budget by the total bags after adjusting for the assumed reduction factor. The calculated City portion is then added to the retailer portion to establish the total green fee. Due to the three plausible assumptions in the bag estimates and three assumed bag reduction factors, the analysis yields nine conceivable green fee scenarios.

Table 7 below shows the calculation of the green fee under the assumption of a 25 percent reduction in bag usage (note that all calculated green fees are based on the first year City costs of $449,171, which include $143,000 in one-time costs and the 10 percent contingency to all budgeted cost items):

TABLE 7

Green Fee Calculation
using 25 Percent Reduction Factor

	High Range	Low Range	Average
Estimated # of Bags	34,300,000	17,800,000	26,050,000
25% Bag Reduction Factor	(8,575,000)	(4,450,000)	(6,512,500)
Total Bags less Reduction	**25,725,000**	**13,350,000**	**19,537,500**
City Budget	$449,171	$449,171	$449,171
City Portion per Bag	**$0.017**	**$0.034**	**$0.023**
Retailer Portion per Bag	**$0.165**	**$0.165**	**$0.165**
Total Green Fee	**$0.182**	**$0.199**	**$0.188**

Under the assumption of a 25 percent reduction in bag usage, the following green fee scenarios are conceivable:

- Based on the "High" range estimate of the current number of bags in the City, the green fee could be set to $0.182[17], with $0.017 to be distributed to the City.
- Based on the "Low" range estimate of the current number of bags in the City, the green fee could be set to $0.199, with $0.034 to be distributed to the City.
- Based on the "Average" range estimate of the current number of bags in the City, the green fee could be set to $0.188, with $0.023 to be distributed to the City.

Table 8 below shows the calculation of the green fee under the assumption of a 50 percent reduction in bag usage:

TABLE 8
Green Fee Calculation using 50 Percent Reduction Factor

	High Range	Low Range	Average
Estimated # of Bags	34,300,000	17,800,000	26,050,000
50% Bag Reduction Factor	(17,150,000)	(8,900,000)	(13,025,000)
Total Bags less Reduction	**17,150,000**	**8,900,000**	**13,025,000**
City Budget	$449,171	$449,171	$449,171
City Portion per Bag	**$0.026**	**$0.050**	**$0.034**
Retailer Portion per Bag	**$0.165**	**$0.165**	**$0.165**
Total Green Fee	**$0.191**	**$0.215**	**$0.199**

Under the assumption of a 50 percent reduction in bag usage, the following green fee scenarios are conceivable:

- Based on the "High" range estimate of the current number of bags in the City, the green fee could be set to $0.191, with $0.026 to be distributed to the City.
- Based on the "Low" range estimate of the current number of bags in the City, the green fee could be set to $0.215, with $0.050 to be distributed to the City.

[17] Since a retailer will not be able to collect fractions of a penny from individual customers, an agreement of proper rounding is necessary between the City and the retailers collecting the green fee.

- Based on the "Average" range estimate of the current number of bags in the City, the green fee could be set to $0.199, with $0.034 to be distributed to the City.

Table 9 below shows the calculation of the green fee under the assumption of an 75 percent reduction in bag usage:

TABLE 9
Green Fee Calculation
using 75 Percent Reduction Factor

	High Range	Low Range	Average
Estimated # of Bags	34,300,000	17,800,000	26,050,000
75% Bag Reduction Factor	(25,725,000)	(13,350,000)	(19,537,500)
Total Bags less Reduction	**8,575,000**	**4,450,000**	**6,512,500**
City Budget	$449,171	$449,171	$449,171
City Portion per Bag	**$0.052**	**$0.101**	**$0.069**
Retailer Portion per Bag	**$0.165**	**$0.165**	**$0.165**
Total Green Fee	**$0.217**	**$0.266**	**$0.234**

Under the assumption of a 75 percent reduction in bag usage, the following green fee scenarios are conceivable:

- Based on the "High" range estimate of the current number of bags in the City, the green fee could be set to $0.217, with $0.052 to be distributed to the City.

- Based on the "Low" range estimate of the current number of bags in the City, the green fee could be set to $0.266, with $0.101 to be distributed to the City.

- Based on the "Average" range estimate of the current number of bags in the City, the green fee could be set to $0.234, with $0.069 to be distributed to the City.

Recommendations

This study is intended to be a nexus for covering actual costs of implementing the proposed Ordinance. Based on the analysis in this study, R3 believes that by taking a conservative approach the City will limit the margin of error in the range predictions. For that reason, R3 recommends the following:

- The City use the ***"Average"*** bag estimate with a ***50 percent bag reduction assumption*** for the calculation of the green fee (see Table 7 above). R3 believes that this is the most conservative approach the City can take because both assumptions represent the middle of the road for their respective impacts. Doing so could result in a ***total green fee of $0.199, with $0.034 to be distributed to the City*** for every bag distributed to a customer from a Grocery Store and/or Pharmacy retailer;
- The City base the "City Portion per Bag" green fee calculation on the total first year budget of $449,171 for full cost recovery in the first year; and
- The City eliminate or adjust one-time costs of $143,000 budgeted in the first year in order to properly calculate the "City Portion per Bag" in the future. This will have an impact on the green fee, which will need to be recalculated.

R3 also suggests that the City track the actual number of bags and costs of administering the program in the first year. After the program has been in place for the first year, the City may wish to adjust the green fee based on actual reported bags used or sold from the stores, as well as the anticipated adjustments in the City's cost, including whether the City will purchase additional reusable bags (i.e., one-time costs), or if additional public education efforts are needed to support the program.

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Appendix A

City of Santa Monica Proposed Ordinance

Attachment 4

City Council Meeting: 1/13/2009 Santa Monica, California

ORDINANCE NUMBER (CCS)

(City Council Series)

AN ORDINANCE OF THE CITY COUNCIL OF THE CITY OF SANTA MONICA PROHIBITING RETAIL ESTABLISHMENTS FROM PROVIDING SINGLE USE PLASTIC CARRYOUT BAGS AND REGULATING THE USE OF PAPER CARRY OUT BAGS

WHEREAS, about Nineteen Billion (19,000,000,000) single use bags are used annually in California but less than 5% are recycled; and

WHEREAS, there are approximately 1718 commercial and retail establishments in the City of Santa Monica most of which provide single use, disposable carry out bags to their customers; and

WHEREAS, these establishments distribute about Fifty Million (50,000,000) single use carry out bags are distributed by retail establishments in Santa Monica each year; and

WHEREAS, many of these single use carry out bags are made from plastic or other material that does not readily decompose; and

WHEREAS, numerous studies have documented the prevalence of single use plastic carry out bags littering the environment, blocking storm drains and fouling beaches; and

WHEREAS, Santa Monica's taxpayers must bear the brunt of the clean-up costs; and

WHEREAS, plastic bags are a significant source of marine debris and are hazardous to marine animals and birds which often confuse single use plastic carry out bags for a source of food. The ingestion of these bags can result in reduced nutrient absorption and death to birds and marine animals; and

WHEREAS, even though single use paper bags are made from renewable resources and are much less environmentally problematic than single use plastic bags, they do require

significant environmental resources to manufacture, transport, and recycle and/or dispose of; and

WHEREAS, from an overall environmental and economic perspective, the best alternative to single use plastic carryout bags is a major shift to reusable bags; and

WHEREAS, carryout bag fees have been imposed by other jurisdictions and have proven very effective at generating a major shift in consumer behavior toward the use of reusable bags and significantly reducing bag consumption; and

WHEREAS, there are several alternatives to single use carry out bags readily available in the City of Santa Monica, including reusable bags produced locally from sustainable materials; and

WHEREAS, an important goal of the City's Sustainable City Plan is to procure and use sustainable products and services; and

WHEREAS, it is the City's desire to whenever possible conserve resources, reduce the amount of green house gas emissions, waste, beach litter and marine pollution and to protect the public health and welfare including local wildlife, all of which increase the quality of life for Santa Monica's residents and visitors.

NOW, THEREFORE, THE CITY COUNCIL OF THE CITY OF SANTA MONICA DOES HEREBY ORDAIN AS FOLLOWS:

SECTION 1. Chapter 5.45 is hereby added to the Santa Monica Municipal Code as follows:

CHAPTER 5.45 DISPOSABLE BAG REDUCTION ORDINANCE

Section 5.45.010 Definitions

(a) "Carry Out Bag" means any bag that is provided by a Retail Establishment at the point of sale to a customer for use to transport or carry away purchases, such as merchandise, goods or

food, from the retail establishment. Carry Out Bags do not include Product Bags as defined in this Chapter.

(b) "Food Provider" means any person or establishment in the City of Santa Monica, that provides prepared food for public consumption on or off its premises and includes, without limitation, any store, shop, sales outlet, restaurant, Grocery Store, delicatessen, or catering truck or vehicle.

(c) "Grocery Store" means any Retail Establishment that sells groceries, fresh, packaged, canned, dry, prepared or frozen food or beverage products and similar items, and includes, without limitation, supermarkets, convenience stores, liquor stores and gasoline stations.

(d) "Green Fee" means a fee imposed pursuant to this Chapter upon customers for receipt of a Paper Carry Out Bag.

(e) "Paper Carry Out Bag" means any Carry Out Bag made from any type or thickness of paper with a 100% recycled content and a minimum of 40% post-consumer recycled content.

(f) "Pharmacy" means any retail store, where prescriptions, medications, controlled or over the counter drugs, personal care products or health supplement goods or vitamins are sold, but excluding any licensed pharmacy located within a hospital.

(g) "Product Bag" means any bag, provided to a customer for use within a Retail Establishment to assist in the collection or transport of products to the point-of-sale within the Retail Establishment.

(h) "Retail Establishment" means any person, including any corporation, partnership, business, facility, vendor, organization or individual that sells or provides merchandise, goods or materials, including, without limitation, clothing, food, or personal items of any kind, directly to a customer; Retail Establishment includes, without limitation, any Grocery Store, department store, hardware store, Pharmacy, liquor store, restaurant, catering truck, convenience store, and any other retail store or vendor.

(i) "Reusable Bag" means any bag with handles that is specifically designed and manufactured for multiple reuse, and is either; (1) made of cloth or other washable fabric; or (2) made of other durable material, including plastic, that is at least 2.25 mils. thick.

(j) "Single Use Plastic Carry Out Bag" means any bag that is less than 2.25 mils. thick and is made predominately of plastic derived from petroleum or from bio-based sources, such as corn or other plant sources.

5.45.020 Prohibition on the Use of Single Use Plastic- Carry Out Bags

(a) No Retail Establishment in the City of Santa Monica shall provide a Single-Use Plastic Carry Out Bag to a customer except as otherwise permitted by this Chapter.

(b) No person shall distribute a Single-Use Plastic- Carry Out Bag at any City Facility, City-managed concession, City sponsored event, or City permitted event except as otherwise permitted by this Chapter.

(c) This Section does not prohibit the distribution of Product Bags.

(d) This Section does not prohibit Retail Establishments from making Reusable Bags available to customers whether through sale or otherwise.

5.45.030 Regulation of the use of Paper Carryout Bags

(a) No Grocery Store or Pharmacy in the City of Santa Monica shall provide to any customer at the point of sale any bag except a Reusable Bag or Paper Carry Out Bag.

(b) No Grocery Store or Pharmacy may provide a Paper Carry Out Bag to a customer without charging a Green Fee to the customer for each Paper Carry Out Bag provided.

(c) The City Council is authorized to set the amount of the Green Fee by resolution. The fee shall be set in an amount at least sufficient to allow Grocery Stores and Pharmacies to recover the costs of complying with the requirements of this Chapter and may include an amount sufficient to allow the City to recover solely its regulatory costs.

(d) No Grocery Store or Pharmacy charging a Green Fee pursuant to this section shall rebate or otherwise reimburse a customer for any portion of the fee.

(e) All Grocery Stores and Pharmacies shall indicate on the customer transaction receipts the number of Paper Carry Out Bags provided and the total amount of the Green Fee charged.

(f) On a quarterly basis or as otherwise may be required by the Director of Finance, or his or her designee, each Grocery Store and Pharmacy required to collect Green Fees under this Chapter shall report and remit to the City of Santa Monica the regulatory portion of the Green Fees collected. All payments and receipts of Green Fees shall be reported on a form prescribed by the Director of Finance. The form shall be signed by a responsible officer or agent of the Grocery Store or Pharmacy who shall swear or affirm that the information provided on the form is true and complete.

(g) If payment of any amounts due under this section are not received by the Director of Finance on or before the due date, the Director may impose a penalty of Ten Percent (10%) on any amount due.

(h) Nothing in this Chapter shall be construed to deem any Green Fee required under this chapter to be a tax.

5.45.040 Exemptions

(a) Notwithstanding the prohibitions contained in Section 5.45.020, Single-Use Plastic Carry Out Bags may be distributed to customers by Food Providers for the purpose of safeguarding public health and safety during the transportation of prepared take-out food intended for consumption off of the Food Provider's premises.

(b) The City Manager, or his or her designee, including the Director of the Office of Sustainability and the Environment (OSE), may exempt a Retail Establishment from the requirements

of this Chapter for up to a one year period, upon a showing by the Retail Establishment that the conditions of this Chapter would cause undue hardship. An "undue hardship" shall only be found in:

1. Circumstances or situations unique to the particular Retail Establishment such that there are no reasonable alternatives to Single-Use Plastic Carryout Bags or a Green Fee cannot be charged; or

2. Circumstances or situations unique to the Retail Establishment such that compliance with the requirements of this Chapter would deprive a person of a legally protected right.

(c) If a Retail Establishment requires an exemption beyond the initial exemption period, the Retail Establishment must re-apply prior to the end of the exemption period and must demonstrate continued undue hardship if it wishes to have the exemption extended. Extensions may only be granted for intervals not to exceed one year.

(d) An exemption application shall include all information necessary for the City to make its decision, including but not limited to documentation showing the factual support for the claimed exemption. The City Manager or his or her designee may require the applicant to provide additional information to permit the City to determine facts regarding the exemption application.

(e) The City Manager or his or her designee may approve the exemption application, in whole or in part, with or without conditions.

(f) Exemption decisions are effective immediately, are final and are not appealable.

(g) The City Council may by resolution establish a fee for exemption applications. The fee shall be sufficient to cover the costs or processing the exemption application.

5.45.040 Enforcement and Notice of Violations

(a) The Director of OSE, or his or her designee, shall have primary responsibility for enforcement of this Chapter. The Director of OSE is authorized to establish regulations and to take any and all actions reasonable and necessary to obtain compliance with this Chapter, including, but not limited to, inspecting any retail establishment's premises to verify compliance.

(b) Anyone violating or failing to comply with any of the requirements of this Chapter shall be guilty of an infraction.

(c) The City Attorney may seek legal, injunctive, or other equitable relief to enforce this Chapter.

(d) The remedies and penalties provided in this section are cumulative and not exclusive, and nothing in this Chapter shall preclude any person from pursuing any other remedies provided by law.

5.45.050 Penalties for Violations

Violations of this ordinance shall be punishable as follows:

(a) For the first violation, the Director of OSE or his or her designee, upon determination that a violation of this Chapter

has occurred, shall issue a written warning notice to the Retail Establishment, specifying the violation and the potential penalties in the event of future violations.

(b) For any subsequent violation, an administrative citation shall be issued pursuant to Santa Monica Municipal Code Chapter 1.09, with the fines to be graduated for repeat violations in amounts set forth by City Council resolution.

(c) Each violation of this Chapter shall be considered a separate offense.

5.45.060 Operative Date

This Chapter shall become operative six months after its effective date, which is 30 days after its adoption by City Council.

5.45.070 No Conflict with Federal or State Law

Nothing in this Chapter is intended to or shall be interpreted as conflicting with any applicable federal or state law or requirement.

SECTION 2. Any provision of the Santa Monica Municipal Code or appendices thereto inconsistent with the provisions of this Ordinance, to the extent of such inconsistencies and no further, is hereby repealed or modified to that extent necessary to effect the provisions of this Ordinance.

SECTION 3. If any section, subsection, sentence, clause, or phrase of this Ordinance is for any reason held to be invalid or unconstitutional by a decision of any court of competent jurisdiction, such decision shall not affect the validity of the remaining portions of this

Ordinance. The City Council hereby declares that it would have passed this Ordinance and each and every section, subsection, sentence, clause, or phrase not declared invalid or unconstitutional without regard to whether any portion of the ordinance would be subsequently declared invalid or unconstitutional.

SECTION 4. The Mayor shall sign and the City Clerk shall attest to the passage of this Ordinance. The City Clerk shall cause the same to be published once in the official newspaper within 15 days after its adoption. This Ordinance shall become effective 30 days from its adoption.

APPROVED AS TO FORM:

_____
MARSHA JONES MOUTRIE
City Attorney

Appendix B

"Introduction and First Reading of an Ordinance Prohibiting Single-Use Carry Out Bags."

City of Santa Monica Council Meeting 1/13/09

Attachment 3

City Council Meeting: January 13, 2009

Agenda Item: 7-D

To: Mayor and City Council

From: Dean Kubani, Director of the Office of Sustainability and the Environment

Subject: Introduction and First Reading of and Ordinance Prohibiting Single-Use Carry Out Bags

Recommended Action

Staff recommends that the City Council introduce for first reading an ordinance prohibiting the distribution of single-use plastic carry out bags and regulating the use of paper carry out bags in Santa Monica retail establishments.

Executive Summary

The attached ordinance prohibits all retail establishments in Santa Monica from providing single-use plastic carry out bags to customers, and creates a Green Fee for each paper bag distributed by grocery stores, convenience stores and pharmacies in the city. The ordinance exempts restaurants from the plastic bag ban, allowing them to provide plastic bags for take-out food. The intent of the ordinance is to significantly reduce the environmental impacts related to single-use plastic and paper carry out bags, and to promote a major shift towards reusable bags. The level of the Green Fee will be determined by a fee study, which is currently underway. Staff will return to Council for second reading of the ordinance with a detailed financial impact analysis and a recommended level for the Green Fee, to be adopted by Council resolution, once the fee study is completed. The second reading of the ordinance will occur when the fee study is presented to the City Council for consideration.

Discussion

On February 26, 2008 City Council directed staff to prepare an ordinance prohibiting retail stores from distributing single-use plastic bags and regulating the use of paper bags through the collection of a fee.

The ordinance prohibits all retail establishments in Santa Monica from providing single-use plastic carry out bags to customers at the point of sale. Single-use plastic carry out bags are defined as bags made from petroleum or bio-based plastic that are less than 2.25 mils thick. The ordinance does not prohibit the distribution of plastic “product bags” such as those distributed within a grocery store for bagging produce. The ordinance provides an exception for restaurants and other food service providers, allowing them to provide plastic bags to customers for the transportation of prepared take-out food. This exception is included as a public health safeguard based on input from restaurant owners who expressed concern that some hot and liquid foods could leak from take-out containers and potentially cause paper bags to weaken and fail.

The ordinance also imposes a “Green Fee” on paper carry out bags at all Santa Monica grocery stores, convenience stores, mini-marts, liquor stores and pharmacies. These types of stores are by far the largest current providers of single-use plastic bags in the city, distributing tens of millions of bags annually. If the City were to ban single-use plastic bags but not regulate paper carry out bags it could be expected that these stores would switch to using paper bags in equal numbers as the plastic bags they replaced. While paper bags are made using renewable resources and are not as problematic as plastic bags from a marine debris and litter perspective, their manufacture, transportation and disposal generate significant environmental impacts, and therefore increasing their use is not desirable. The Green Fee will provide a disincentive to customers from requesting paper bags when shopping at the regulated stores and is intended to promote a major shift toward the use of reusable bags by consumers. The fee will not apply to other types of retail stores, because those other stores (including department stores, clothing stores, and stores that sell durable goods) do not typically distribute single-use plastic carry out bags to customers in large volumes, and so any paper bags distributed by those stores would not likely be in response to the plastic bag ban. The Green Fee will also not apply to paper bags distributed by vendors at the City’s Farmers’ Markets.

The Green Fee will be charged for each paper carry out bag provided by the affected stores. Revenues generated from the fee will be used to offset the costs to the City for implementation and enforcement of the ordinance, and to compensate the affected stores for increased costs related to compliance with the ordinance. The level of the Green Fee, the amount of the fee to be retained by the stores, and the amount to be collected by the City will be determined based on the results of a fee study, which is currently underway. Once the study is completed, staff will return to Council with a recommendation and will ask Council to set the fee by resolution. At that time the ordinance will be presented to the City Council for second reading and adoption. It is anticipated that the fee will likely be at least $0.25 (twenty-five cents) per paper bag with at least $0.10 (ten cents) of this amount being retained by the affected stores to offset their costs. Stores will be required to indicate on the customer receipt the number of paper carry out bags provided and the total amount of Green Fee charged. The stores will be required to regularly report and remit to the City the regulatory portion of the Green Fees collected. The ordinance will not become effective until six months after its effective date, the effective date being 30 days after the second reading and adoption of the ordinance.

In addition to the exemption for restaurants and other food service providers, the ordinance allows for a one year renewable hardship exemption if it can be demonstrated that compliance with the ordinance would cause undue economic hardship to the retail business. An undue hardship would include any situation where there are no reasonable alternatives to single-use plastic carryout bags and a Green Fee cannot be charged, or situations where compliance with

the requirements of the ordinance would deprive a person of a legally protected right. The decision to provide an exemption will be made by the City Manager or his/her designee and will be based on review of an exemption application that includes documentation showing the factual support for the claimed exemption.

The Office of Sustainability and the Environment (OSE) will have primary responsibility for enforcement of the ordinance. It is anticipated that enforcement will be primarily conducted on a complaint basis and will be carried out by OSE inspectors as necessary. Inspectors will have the power to issue notices of violations to retail establishments that fail to comply with any of the requirements of the ordinance. For the first violation, a written warning notice will be issued. The penalty for subsequent violations will be a daily fine in increasing amounts from $100 to $500, depending on the number of times the establishment has violated the ordinance.

The ordinance requirements will become operative six months after its effective date, which is 30 days after final Council adoption. During the interim, OSE staff will conduct workshops and other outreach activities to provide information and assistance to retailers affected by the ordinance. OSE staff will also conduct a public outreach and information campaign to inform the public about the ordinance and encourage people to bring their own bags to stores. Staff recommends that this outreach effort continue for a minimum of two years following adoption of the ordinance in order to ensure that the ordinance achieves the intended result of a major shift toward the use of reusable bags in the city.

Alternatives

In addition to the recommended action, the City Council could 1) modify the ordinance to better achieve the Council's intent; or 2) not adopt the ordinance.

The impact of the first alternative would depend on the modifications that Council made and could either expand or reduce the scope of the ordinance provisions, penalties and who the ordinance applies to. Pursuing the second alternative would avoid additional costs to the City for outreach and implementation, and would avoid potential additional costs to Santa Monica retail establishments; however, it would not support the Council's goal of reducing the environmental impacts related to single-use carry out bags in Santa Monica.

Environmental Analysis

The City's action to adopt an ordinance that prohibits retail establishments from providing single-use plastic carry out bags and regulates the use of paper carry out bags is exempt from

the provisions of the California Environmental Quality Act (CEQA) pursuant to CEQA Guidelines, Section 15061(b)(3) [project is exempt when it can be determined with certainty that there is no potential for causing a significant effect on the environment], Section 15307 (Class 7) [action by regulatory agency to assure the maintenance, restoration, or enhancement of a natural resource where regulatory process involves procedures for the protection of the environment] and Section 15308 (Class 8) [action is taken by regulatory agency to assure the maintenance, restoration, enhancement, or protection of the environment where regulatory process involves procedures for the protection of the environment]. The proposed ordinance is specifically designed to significantly reduce or eliminate the use of single-use plastic and paper bags, and to encourage a major shift to the use of reusable bags by consumers. Implementation of this ordinance will likely result in the reduction of tens of millions of single-use bags and the associated environmental impacts related to their manufacture, transportation, use and disposal. The current unregulated and unrestricted use of these products causes significant adverse environmental impacts to the City of Santa Monica, to local beaches, to the marine environment, and to wildlife, and causes the depletion of natural resources and the unnecessary filling of limited landfill capacity.

As drafted the ordinance will replace environmentally harmful products by encouraging the use of reusable products. All of the alternative products are currently available for use.

Financial Impacts & Budget Actions

The financial impacts from adoption of the recommended ordinance will include additional costs to City operations to 1) establish and implement a revenue collection system for the Green Fees; 2) conduct workshops and other outreach activities to provide information and assistance to retailers affected by the ordinance; and 3) conduct an ongoing public outreach and information campaign to inform the public about the ordinance and encourage people to bring their own bags to stores. Since enforcement will be carried out by existing City inspectors on an as-reported basis, it is anticipated that enforcement can be completed without any additional budgetary impacts.

It is anticipated that all costs for implementation of the ordinance will be covered by the revenue generated by the Green Fee. Upon completion of the fee study, staff will return to Council with a detailed financial impact analysis and a recommended level for the Green Fee to be adopted by Council resolution.

Prepared by:
Dean Kubani, Director
Office of Sustainability and the Environment

Approved:

Dean Kubani
Director, Office of Sustainability and the Environment

Forwarded to Council:

P. Lamont Ewell
City Manager

Attachment: Ordinance

Appendix C

City's Estimate of Annual Number of Single Use Bags in Santa Monica

June 17, 2009

City's Estimate of Annual Number of Single Use Bags in Santa Monica
June 17, 2009

Estimates are based on phone surveys of 22 grocery stores, mini marts, liquor stores, gas station mini marts, drug stores and pharmacies conducted during August 2008 and May/June 2009. Total number of stores are based on business license records. Sizes of stores are based on staff estimates.

Grocery Stores – 48 total

- Large Grocery: 1.5 million to 2.2 million bags/yr x 8 stores = **12 million to 17.6 million**
- Medium Grocery: 300,000 to 750,000 bags/yr x 4 stores = **1.2 million to 3 million**
- Small Grocery/Mini-mart: 30,000 – 150,000 bags/yr x 36 stores = **1.08 million to 5.4 million**

Liquor Stores – 21 total

- Same as Small Grocery/Mini-mart: 30,000 – 150,000 bags/yr x 21 stores = **630,000 to 3.15 million**

Gas Station Mini-marts – 8 total

- 10,000 to 75,000 bags/yr x 8 stores = **80,000 to 600,000**

Drug Stores and Pharmacies – 24 total

- Large Drug stores: 350,000 to 550,000 bags/yr x 8 stores = **2.8 million to 4.4 million**
- Small pharmacies: 3000 to 10,000 bags/yr x 16 stores = **48,000 to 160,000**

Estimated total annual number of single use bags currently distributed by Santa Monica stores that would be subject to the green fee = 17.8 million to 34.3 million (This represents the sum of all of the low range numbers and the sum of all of the high range numbers. The actual total is likely somewhere in the middle of these two figures.)

Prepared by the City of Santa Monica, Office of Sustainability and the Environment and reviewed by R3 Consulting Group for reasonableness.

Appendix D

California Assembly Bill # 87

AMENDED IN ASSEMBLY APRIL 27, 2009

AMENDED IN ASSEMBLY MARCH 18, 2009

CALIFORNIA LEGISLATURE—2009–10 REGULAR SESSION

ASSEMBLY BILL No. 87

Introduced by Assembly Member Davis
(Coauthors: Assembly Members Blumenfield, Chesbro, De Leon, and Nava)

January 5, 2009

An act to amend Sections 42250, 42251, 42252, 42253, and 42254 of, to amend the heading of Chapter 5.1 (commencing with Section 42250) of Part 3 of Division 30 of, to add Sections 42252.5 and 42252.7 to, and to repeal and add Sections 42256 and 42257 of, the Public Resources Code, relating to single-use carryout bags.

LEGISLATIVE COUNSEL'S DIGEST

AB 87, as amended, Davis. Single-use carryout bags: environmental effects: mitigation.

Existing law requires, until January 1, 2013, an operator of a store, as defined, to establish an at-store recycling program that provides to customers the opportunity to return clean plastic carryout bags to that store. Existing law imposes various requirements on at-store recycling programs, including requiring a store to maintain records describing the collection, transport, and recycling of plastic carryout bags collected by the store.

Existing law also requires, until January 1, 2013, the manufacturer of plastic carryout bags to develop educational materials to encourage the reducing, reusing, and recycling of plastic bags and make those materials available to stores required to comply with the program.

This bill would instead prohibit, on and after July 1, 2010, a store, as defined, from providing a single-use carryout bag, including a green carryout bag, to a customer unless the store charges a fee of not less than $0.25 per bag at the point of sale. The bill would exempt certain customers from paying the fee. The bill would establish the Bag Pollution Fund in the State Treasury and, by January 31, 2011, would require a store that collects the single-use carryout bag fees to remit the fees, less a specified amount to be used as required, to the State Board of Equalization for deposit in that fund, and do so on a quarterly basis thereafter.

This bill would instead require the manufacturer of a single-use carryout bag to develop educational materials to encourage the reducing, reusing, and recycling of single-use bags and make those materials available to stores required to comply with the program.

The bill would require moneys in the fund, upon appropriation by the Legislature, to be expended by the Integrated Waste Management Board *(board)* as specified, including, but not limited to, *for* administrative costs, developing and implementing programs to encourage and support mitigating the environmental effects of single-use carryout bags, and payments to cities and counties for activities to reduce and prevent single-use carryout bag litter and the environmental impacts of single-use carryout bags.

The bill would require the board to administer and enforce the single-use carryout bag provisions and would require the State Board of Equalization to administer and collect the fees imposed on those bags. The bill would require the board to submit a biennial report to the Legislature, in coordination with other state agencies and stakeholders, on the effectiveness of the program and recommendations to further encourage the use of reusable bags.

Vote: majority. Appropriation: no. Fiscal committee: yes. State-mandated local program: no.

The people of the State of California do enact as follows:

SECTION 1. The Legislature finds and declares all of the following:

(a) Single-use carryout bags that are provided by stores impose hidden costs on consumers, local governments, the state, taxpayers, and the environment.

(b) Litter from plastic carryout bags poses a significant burden to California's economy and a serious threat to the marine ecosystem. It is estimated that Californians consume 19 billion plastic carryout bags per year. However, according to the California Integrated Waste Management Board, the recycling rate for these bags is less than 5 percent. Public agencies in California also spend more than three hundred seventy-five million dollars ($375,000,000) annually in litter cleanup, and plastic carryout bags contribute disproportionately to the litter stream.

(c) Despite past efforts to control marine debris, the quantity of trash in the coastal and ocean environment is increasing dramatically worldwide. It is estimated that 60 to 80 percent of all marine debris, and 90 percent of floating debris is plastic. It may take hundreds of years for this plastic to break down and some plastics never truly biodegrade in the marine environment. Streams and storm drains carry plastic bags to the ocean where they are frequently mistaken as food by marine life. Over 267 species worldwide have been impacted by plastic litter such as plastic bags through entanglement or ingestion.

(d) On February 8, 2007, the California Ocean Protection Council adopted a comprehensive resolution on marine debris calling for statewide action targeting the reduction of single-use plastic packaging, including plastic carryout bags. The council adopted an implementation strategy for this resolution, which in part calls for instituting a statewide fee on single-use plastic grocery bags, with the collected fees utilized to help fund litter abatement and stormwater capture, and reduce the incidence of litter.

(e) Over 15 countries and over 40 U.S. states and cities have either taken action or have proposed to take action on plastic carryout bags in the form of bans or point-of-purchase fees.

(f) While paper bags are recyclable and degrade in the environment, they are not an acceptable alternative to plastic since the production and transport of paper bags leads to significantly greater water pollution and air emissions, including greenhouse gas emissions.

(g) Carryout bags marketed as "biodegradable" or "compostable" are also not a viable alternative because these bags have not proven to biodegrade in the marine environment, are only able to biodegrade under specific conditions found in certain industrial composting facilities that are not widely available

throughout the state, and will not reduce the litter problem since they have the same characteristics as plastic bags.

(h) It is the intent of the Legislature to encourage the use of reusable bags by consumers to reduce the consumption of single-use bags, such as conventional plastic, paper, and biodegradable or compostable plastic bags.

(i) The fees imposed pursuant to Section 42252.5 of the Public Resources Code will mitigate the environmental, public health, and other public-financed impacts caused by the use of single-use bags by offsetting the costs of programs to prevent and reduce the littering and environmental impacts of single-use carryout bags and encouraging the reduction of the use of single-use carryout bags.

(j) Requiring stores to end the subsidy of single-use carryout bags and charge their full economic and environmental costs will provide consumers with an appropriate market signal to make informed decisions regarding carryout bag reduction and reuse options.

(k) Requiring stores to charge and remit a fee for the distribution of single-use carryout bags will help the state and local governments to offset the environmental and social costs of single-use carryout bags.

(*l*) The imposition of the fee pursuant to Section 42252.5 of the Public Resources Code would not result in the imposition of a tax within the meaning of Article XIII A of the California Constitution because the amount and nature of the fee have a fair and reasonable relationship to the environmental, public health, and societal burdens imposed by the use of single-use carryout bags, and there is a sufficient nexus between the fees imposed and the use of those fees to support programs to prevent the litter of single-use carryout bags, reduce the environmental impacts of single-use carryout bags, and encourage the reduction of the use of single-use carryout bags.

(m) (1) There is a clear nexus between the type and amount of the fees imposed pursuant to this act and the environmental, public health, and societal costs resulting from single-use carryout bags.

(2) It is the intent of the Legislature that the fees that are imposed pursuant to Section 42252.5 of the Public Resources Code be consistent with Sinclair Paint Co. v. State Bd. of Equalization (1997) 15 Cal.4th 866.

SEC. 2. The heading of Chapter 5.1 (commencing with Section 42250) of Part 3 of Division 30 of the Public Resources Code is amended to read:

CHAPTER 5.1. SINGLE-USE CARRYOUT BAGS

SEC. 3. Section 42250 of the Public Resources Code is amended to read:

42250. For purposes of this chapter, the following definitions shall apply:

(a) "Biodegradable or compostable bag" means a carryout bag provided by a store to a customer at the point of sale that is certified and labeled as meeting the current American Society for Testing and Materials (ASTM) Standard Specification pursuant to Chapter 5.7 (commencing with Section 42355).

(b) (1) "Green carryout bag" means a single-use carryout bag that is provided by a store to a customer at the point of sale and meets all of the following requirements:

(A) Is composed of at least 40 percent post-consumer recycled content material.

(B) Is accepted in curbside recycling programs serving at least 80 percent of households in the state.

(C) Is capable of composting within 180 days, as determined by the board.

(2) "Green carryout bag" does not include a reusable bag.

(c) "Manufacturer" means the producer of a single-use carryout bag sold to a store.

(d) "Operator" means a person in control of, or having daily responsibility for, the daily operation of a store, which may include, but is not limited to, the owner of the store.

(e) "Paper carryout bag" means a paper carryout bag provided by a store to a customer at the point of sale that is not a reusable bag as defined in subdivision (g).

(f) "Plastic carryout bag" means a plastic carryout bag provided by a store to a customer at the point of sale that is not a reusable bag as defined in subdivision (g).

(g) "Reusable bag" means either of the following:

(1) A bag made of cloth or other machine washable fabric that has handles.

(2) A durable plastic bag with handles that is at least 2.25 mils thick and is specifically designed and manufactured for multiple reuse.

(h) "Single-use carryout bag" means a carryout bag provided by the store to a customer at the point of sale that is not a reusable bag as defined in subdivision (g), and includes biodegradable or compostable bags.

(i) "Store" means a retail establishment that provides single-use carryout bags to its customers as a result of the sale of a product and that meets any of the following requirements:

(1) Meets the definition of a "supermarket" as found in Section 14526.5.

(2) Has over 10,000 square feet of retail space that generates sales or use tax pursuant to the Bradley-Burns Uniform Local Sales and Use Tax Law (Part 1.5 (commencing with Section 7200) of Division 2 of the Revenue and Taxation Code) and has a pharmacy licensed pursuant to Chapter 9 (commencing with Section 4000) of Division 2 of the Business and Professions Code.

(3) Is a chain of convenience food stores primarily engaged in retailing a limited line of goods that includes milk, bread, soda, and snacks, with a total combined square footage of 10,000 square feet or more within the state.

SEC. 4. Section 42251 of the Public Resources Code is amended to read:

42251. (a) The operator of a store that provides plastic carryout bags to customers shall establish an at-store plastic carryout bag recycling program pursuant to this chapter that provides an opportunity for a customer of the store to return to the store clean plastic carryout bags.

(b) A retail establishment that does not meet the definition of a store, as specified in Section 42250, and that provides plastic carryout bags to customers at the point of sale may also adopt an at-store recycling program, as specified in this chapter.

SEC. 5. Section 42252 of the Public Resources Code is amended to read:

42252. An at-store plastic carryout bag recycling program provided by the operator of a store shall include all of the following:

(a) A plastic carryout bag provided by the store shall have printed or displayed on the bag, in a manner visible to a consumer,

the words "PLEASE RETURN TO A PARTICIPATING STORE FOR RECYCLING."

(b) A plastic carryout bag collection bin shall be placed at each store and shall be visible, easily accessible to the consumer, and clearly marked that the collection bin is available for the purpose of collecting and recycling plastic carryout bags.

(c) All plastic bags collected by the store shall be collected, transported, and recycled in a manner that does not conflict with the local jurisdiction's source reduction and recycling element, pursuant to Chapter 2 (commencing with Section 41000) and Chapter 3 (commencing with Section 41300) of Part 2.

(d) The store shall maintain records describing the collection, transport, and recycling of plastic bags collected for a minimum of three years and shall make the records available to the board or the local jurisdiction, upon request, to demonstrate compliance with this chapter.

(e) The operator of a store shall make reusable bags available to customers within the store, which may be purchased and used in lieu of using a single-use carryout bag. This subdivision is not applicable to a retail establishment specified pursuant to subdivision (b) of Section 42251.

SEC. 6. Section 42252.5 is added to the Public Resources Code, to read:

42252.5. (a) Except as provided in subdivision (f), on and after July 1, 2010, a store shall not provide a single-use carryout bag, including a green carryout bag, to a customer at the point of sale, unless the store charges the customer not less than twenty-five cents ($0.25) per bag.

(b) The amount charged pursuant to subdivision (a) shall not be subject to sales tax, shall be separately stated on the receipt provided to the customer at the time of sale, and shall be identified as the Bag Pollution Cleanup Fee.

(c) (1) A store charging a fee pursuant to subdivision (a) may retain a portion of the fee, as specified in subdivision (d). The store shall remit the remainder of the fee to the State Board of Equalization pursuant to Section 42252.7.

(2) A store shall coordinate with its host jurisdiction in expending any revenue retained pursuant to this subdivision.

(3) A store shall not retain more than five cents ($0.05) of the fee for each single-use carryout bag that is not a green carryout

bag. For a single-use carryout bag that is a green carryout bag, a store shall not retain more than seven cents ($0.07) of the fee for each bag.

(d) A store charging a fee pursuant to this section shall use the amount of the fee retained pursuant to subdivision (c) for all of the following:

(1) Reimbursement of the store's costs associated with the collection and remittance of the fee.

(2) The development of in-store educational materials for distribution to customers encouraging the use of reusable bags.

(3) The development and implementation of an educational campaign encouraging the use of reusable bags, including, but not limited to, public service announcements.

(4) Reimbursement of the store's costs associated with providing reusable bags to customers or as donations to community organizations, nonprofit organizations, and other similar entities.

(5) Reimbursement of the store's costs associated with the purchase of single-use carryout bags.

(e) Any other transaction fee charged by a store in relation to providing a single-use carryout bag shall be identified separately from the Bag Pollution Cleanup Fee.

(f) The fee imposed pursuant to this section shall not be charged to either of the following:

(1) A customer participating in the California Special Supplemental Food Program for Women, Infants, and Children (Article 2 (commencing with Section 123275) of Chapter 1 of Part 2 of Division 106 of the Health and Safety Code).

(2) A customer participating in the State Department of Social Services Food Stamp Program.

SEC. 7. Section 42252.7 is added to the Public Resources Code, to read:

42252.7. (a) The Bag Pollution Fund is hereby established in the State Treasury. All fees collected by the State Board of Equalization pursuant to this chapter shall be deposited in the fund. By January 31, 2011, and quarterly thereafter, a store that collects the Bag Pollution Cleanup Fee pursuant to subdivision (a) of Section 42252.5 shall calculate the amount of moneys collected and shall remit the moneys to the State Board of Equalization for deposit into the Bag Pollution Fund, less funds retained by the store pursuant to subdivision (c) of Section 42252.5.

(b) The moneys in the Bag Pollution Fund shall be expended by the board, upon appropriation by the Legislature, for the following purposes:

(1) The board shall expend no more than 3 percent of the revenue deposited into the Bag Pollution Fund for reimbursement of the board's costs for administration, collection, enforcement, and auditing requirements associated with this chapter, as well as making refunds associated with the chapter.

(2) The State Board of Equalization shall expend no more than 3 percent of the revenue deposited into the Bag Pollution Fund for reimbursement of the state board's costs for administration and collection of the fee.

~~(2)~~

(3) The board shall, in consultation with the California Environmental Protection Agency, the State Water Resources Control Board, and the Department of Toxic Substances Control, expend no more than 5 percent of the revenue deposited into the Bag Pollution Fund to develop and implement programs related to the use of single-use carryout bags to encourage and support pollution prevention, abatement and cleanup, enforcement, green chemistry, water quality protection and cleanup, and environmental and public education and outreach.

~~(3)~~

(4) The board shall expend the remaining moneys for payments to counties and cities, on a per capita basis, for the following activities to prevent and reduce the litter and environmental impacts of single-use carryout bags:

(A) To establish and maintain local programs, including those in partnership with nonprofit community-based organizations, for purposes of litter cleanup activities, source reduction and recycling efforts, educational and litter prevention programs, and other programs to mitigate the environmental impacts of single-use carryout bags.

(B) Mitigation projects relating to stormwater pollution, including devices to prevent single-use carryout bag litter from entering storm drain systems.

(C) Reusable bag giveaway programs, including those targeting low-income residents.

(c) To receive these funds, a city, county, or city and county shall fill out and return a funding request form to the board. The

form shall specify the activities to prevent and reduce the litter and environmental impacts of single-use carryout bags for which the funds will be used. Jurisdictions may also jointly fill out a funding request for the purposes of pooling their funds.

(d) The board shall annually prepare and distribute a funding request form to each city, county, or city and county. The form shall specify the amount of funds for which the jurisdiction is eligible. The form shall not exceed four double-sided pages in length, and may be submitted electronically. If a city, county, or city and county submits the funding request form and the board deems that the proposed projects meet the funding purposes specified in subdivision (b), the board shall distribute the funds on a per capita basis as defined in subdivision (e). If a city, county, or city and county does not return the funding request form within 120 days of receipt of the form from the board, the city, county, or city and county is not eligible to receive the funds for that funding cycle.

(e) For the purposes of this section, per capita population shall be based on the total population of the incorporated area of a city and the unincorporated area of a county.

(f) The revenues deposited in the Bag Pollution Fund that are generated from the fee imposed pursuant to this chapter shall not be expended for activities unrelated to the prevention or reduction of litter or the environmental impacts of single-use carryout bags.

(g) If a city, county, or city and county prohibits the use of all single-use carryout bags, including green carryout bags, and no fees are collected pursuant to Section 42252.5 within that jurisdiction, that city, county, or city and county shall not be eligible for grant funds pursuant to this section.

SEC. 8. Section 42253 of the Public Resources Code is amended to read:

42253. The manufacturer of a single-use carryout bag shall develop educational materials to encourage the reducing, reusing, and recycling single-use carryout bags and shall make those materials available to stores required to comply with this chapter.

SEC. 9. Section 42254 of the Public Resources Code is amended to read:

42254. (a) The Legislature finds and declares that all of these are matters of statewide interest and concern:

(1) Requiring a store to collect, transport, or recycle plastic carryout bags.

(2) Imposing a plastic carryout bag fee upon a store.

(3) Requiring a store to conduct auditing or reporting with regard to plastic carryout bags.

(b) Unless expressly authorized by this chapter, a city, county, or other public agency shall not adopt, implement, or enforce an ordinance, resolution, regulation, or rule to do any of the following:

(1) Require a store that is in compliance with this chapter to collect, transport, or recycle plastic carryout bags.

(2) Impose a single-use carryout bag fee upon a store that is in compliance with this chapter.

(3) Require auditing or reporting requirements that are in addition to what is required by subdivision (d) of Section 42252, upon a store that is in compliance with this chapter.

(c) This section does not prohibit the adoption, implementation, or enforcement of any local ordinance, resolution, regulation, or rule governing curbside or drop off recycling programs operated by, or pursuant to a contract with, a city, county, or other public agency, including any action relating to fees for these programs.

(d) This section does not affect any contract, franchise, permit, license, or other arrangement regarding the collection or recycling of solid waste or household hazardous waste.

SEC. 10. Section 42256 of the Public Resources Code is repealed.

SEC. 11. Section 42256 is added to the Public Resources Code, to read:

42256. On or before January 1, 2012, and biennially thereafter, the board, in coordination with the State Water Resources Control Board, ~~the State Air Resources Board,~~ the regional water quality control boards, and stakeholders, shall submit a report to the Legislature regarding the effectiveness of this chapter. The report shall also include recommendations to further encourage the use of reusable bags by consumers and retailers and to reduce the consumption of single-use carryout bags, including, at a minimum, the following:

(a) Expanding the definition of stores that are subject to this chapter to all other stores and retail establishments distributing single-use carryout bags, including the retail establishments specified pursuant to subdivision (b) of Section 42251.

(b) Increasing the fee imposed pursuant to Section 42252.5 to increase this chapter's effectiveness.

SEC. 12. Section 42257 of the Public Resources Code is repealed.

SEC. 13. Section 42257 is added to the Public Resources Code, to read:

42257. (a) Except as otherwise provided by this chapter, the board shall administer and enforce this chapter.

(b) The State Board of Equalization shall administer and collect the Bag Pollution Cleanup Fee pursuant to the Fee Collection Procedures Law (Part 30 (commencing with Section 55001) of Division 2 of the Revenue and Taxation Code).

(c) The State Board of Equalization may adopt rules and regulations to carry out this chapter, including, but not limited to, provisions governing collections, reporting, refunds, and appeals.

(d) (1) The Bag Pollution Cleanup Fee shall be due and payable quarterly on or before the 25th day of the month following each calendar quarter.

(2) Payments shall be accompanied by a form, as prescribed by the State Board of Equalization, including, but not limited to, electronic media.

(e) The State Board of Equalization may require the payment of the fee for other than quarterly periods.

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Appendix E

"An Overview of Carryout Bags in Los Angeles County"

August, 2007

http://ladpw.org/epd/pdf/PlasticBagReport.pdf

An Overview of Carryout Bags in Los Angeles County

A Staff Report to the Los Angeles County Board of Supervisors

August 2007

"To Enrich Lives Through Effective and Caring Service"

COUNTY OF LOS ANGELES

LOS ANGELES COUNTY BOARD OF SUPERVISORS

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County's Plastic Bag Working Group

All Supervisorial Districts
Chief Executive Office
Department of Public Works
Internal Services Department
Department of Public Health
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Preface

Report Mandate

On April 10, 2007, the Los Angeles County Board of Supervisors instructed the Chief Executive Officer to work with the Director of Internal Services and the Director of Public Works to solicit input from environmental protection and grocer organizations to:

- Investigate the issue of polyethylene plastic and paper sack consumption in the County, including the pros and cons of adopting a policy similar to that of San Francisco;
- Inventory and assess the impact of the current campaigns that urge recycling of paper and plastic sacks;
- Investigate the impact an ordinance similar to the one proposed in San Francisco would have on recycling efforts in Los Angeles County, and any unintended consequences of the ordinance; and,
- Report back to the Board with findings and recommendations to reduce grocery and retail sack waste within 90 days.

This report is in response to this Motion. Although the report to the Board of Supervisors was due on July 9, 2007, a memorandum was sent to the Board of Supervisors on July 12, 2007 requesting a 45-day extension to incorporate feedback from interested stakeholders, consumers, industry, and environmental representatives.

Solid Waste Management Responsibilities of the County of Los Angeles

Pursuant to the California Integrated Waste Management Act of 1989 (Assembly Bill 939), the County of Los Angeles undertakes the following solid waste management functions:

Unincorporated County Areas

- Implements source reduction and recycling programs in the unincorporated County areas to comply with the State's 50 percent waste reduction mandate. In 2004, the County was successful in documenting a 53 percent waste diversion rate for the unincorporated County areas.
- Operates seven Garbage Disposal Districts, providing solid waste collection, recycling, and disposal services for over 300,000 residents.
- Implements and administers a franchise solid waste collection system which, once fully implemented, will provide waste collection, recycling, and disposal services to over 700,000 residents, and will fund franchise area outreach programs to enhance recycling and waste reduction operations in unincorporated County areas that formerly operated under an open market system.

Countywide

- Implements a variety of innovative Countywide recycling programs, including: SmartGardening to teach residents about backyard composting and water wise gardening; Waste Tire Amnesty for convenient waste tire recycling; the convenient Environmental Hotline and Environmental Resources Internet Outreach Program; interactive Youth Education/Awareness Programs; and the renowned Household Hazardous/Electronic Waste Management and Used Oil Collection Programs.
- Prepares and administers the Countywide Siting Element, which is a planning document which provides for the County's long-term solid waste management disposal needs.
- Administers the Countywide Integrated Waste Management Summary Plan which describes how all 89 of the jurisdictions Countywide, acting independently and collaboratively, are complying with the State's waste reduction mandate.
- Provides staff for the Los Angeles County Solid Waste Management Task Force (Task Force). The Task Force is comprised of appointees from the League of California Cities, the County Board of Supervisors, the City of Los Angeles, solid waste industries, environmental groups, governmental agencies, and the private sector. The County performs the following Task Force functions:
    - Reviews all major solid waste planning documents prepared by all 89 jurisdictions prior to their submittal to the California Integrated Waste Management Board;
    - Assists the Task Force in determining the levels of needs for solid waste disposal, transfer and processing facilities; and,
    - Facilitates the development of multi-jurisdictional marketing strategies for diverted materials.

Report Organization

The Executive Summary provides an overview of the report; Chapter 1 contains an introduction and description of the report's methodology; Chapter 2 provides the history and overview of plastic carryout bags; Chapter 3 discusses the litter impacts from plastic carryout bags; Chapter 4 includes general ecosystem, environmental and public health issues; Chapter 5 compares types and costs of some reusable bags; Chapter 6 summarizes case studies on plastic carryout bags in other countries and jurisdictions, including a discussion on San Francisco's Ordinance and California's new at-store recycling program; Chapter 7 provides a summary of stakeholder comments; Chapter 8 contains the report's findings and options for the Board of Supervisors to consider.

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EXECUTIVE SUMMARY

Key Findings

- **Plastic carryout bags have been found to significantly contribute to litter and have other negative impacts on marine wildlife and the environment.**

- **Biodegradable carryout bags are not a practical solution to this issue in Los Angeles County because there are no local commercial composting facilities able to process the biodegradable carryout bags at this time.**

- **Reusable bags contribute towards environmental sustainability over plastic and paper carryout bags.**

- **Accelerating the widespread use of reusable bags will diminish plastic bag litter and redirect environmental preservation efforts and resources towards "greener" practices.**

Background

Increasing Environmental Awareness and Recycling Efforts

In 2006, despite achieving a 50 percent Countywide recycling rate (one of the highest in the nation), Los Angeles County still disposed over 12 million tons of trash – this is equivalent to filling the Rose Bowl 34 times. Currently, about 20 percent (7,400 tons per day) of the County's trash is exported for disposal to other counties, including Riverside, Orange, and Ventura Counties. By 2020, this figure could rise to 80 percent due to anticipated population/economic growth and landfill closures, assuming no landfill expansions or alternatives to landfills such as conversion technologies are developed. This means more trash being transported over long distances to other counties, leading to higher trash rates and added traffic congestion and air pollution.

To reduce the environmental impact of solid waste disposal, the County of Los Angeles, in partnership with the 88 cities and the private sector, is aggressively expanding and implementing new source reduction and recycling programs. Such programs are geared towards raising environmental awareness; promoting environmental stewardship; and, promoting sustainable uses of resources.

Figure 1 -- Typical Landfill Activity

Need to Reduce Plastic Bag Litter

Each year, approximately 6 billion plastic carryout bags are consumed in Los Angeles County.[1] This is equivalent to 600 bags per person per year. If tied together, these bags would form a string long enough to reach the moon and back, five times.[2]

Most plastic carryout bags are disposed (less than 5 percent are recycled[3]) due to lack of facilities needed to recycle plastic carryout bags. As a result, approximately 45,000 tons of plastic carryout bags are disposed by residents countywide each year, comprising approximately 0.4 percent of the 12 million tons of solid waste disposed each year.[4]

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[1] California Integrated Waste Management Board, Resolution, Agenda Item 14, June 12, 2007 Board Meeting. Countywide figure is prorated.
[2] http://sse.jpl.nasa.gov/planets/profile.cfm?Object=Moon, May 15, 2007. Assumes each bag is 1 foot wide and distance to moon is 238,855 miles.
[3] California Integrated Waste Management Board, Staff Report, Agenda Item 14, June 12, 2007 Board Meeting.
[4] California Integrated Waste Management Board's 2004 Statewide Characterization Study, Table 7. Countywide figure is prorated.

Although paper carryout bags have a higher recycling rate (21 percent nationally[5]), approximately 117,000 tons of paper carryout bags are disposed by residents countywide each year, comprising approximately 1 percent of the total 12 million tons of solid waste disposed each year.[6] This tonnage is higher than the amount of plastic carryout bags disposed because each paper bag weighs more than a comparable plastic carryout bag.

The indiscriminate littering of plastic carryout bags is an increasing blight problem. Although plastic carryout bags are inexpensive and have other useful qualities, they have a propensity to become litter, thus overshadowing these benefits. Due to their expansive and lightweight characteristics, wind easily carries these bags airborne like parachutes. They end up entangled in brush, tossed around along freeways, and caught on fences. Because it is often white or brightly colored and difficult to collect, plastic carryout bag litter is a greater eyesore and nuisance than other littered materials. For this reason, there is an increasing need to diminish the prevalence of plastic carryout bags to maintain a clean and healthy environment, positively enhance the County's recreational and tourism economy, and improve the quality of life for all residents countywide.

Figure 2 -- Seal Chewing on a Plastic Bag
(Courtesy of the Whale Rescue Team)

[5] US EPA 2005 Characterization of Municipal Solid Waste, Table 4.
[6] California Integrated Waste Management Board's 2004 Statewide Characterization Study, Table 7. Countywide figure is prorated.

Public agencies collectively spend tens of millions of dollars annually on litter prevention, cleanup, and enforcement activities. The litter collected is composed of constituents including plastic carryout bags. Additionally, the cost to local governments in Los Angeles County is expected to dramatically rise over the next few years in order to comply with Federal Clean Water Act. For example, the County of Los Angeles Department of Public Works and the Flood Control District annually spend $18 million per year on, but not limited to, street sweeping, catch basin cleanouts, cleanup programs, and litter prevention and education efforts.

Communities within close proximity to landfills and other solid waste processing facilities are especially impacted as plastic carryout bags escape from trash trucks while traveling or emptying their loads. Although trucks and facilities are required to provide cover and fences, carryout bags manage to escape despite Best Management Practices (BMPs) including using roving patrols to pickup littered bags. Inevitably the cost for cleanup is passed on to residents in the form of higher disposal costs. Despite the efforts of various cleanup activities and thousands of residents who annually volunteer countless hours in beach, roadside (e.g., Adopt-A-Highway programs), park, and neighborhood cleanups, plastic carryout bag litter remains a significant problem.

Figure 3 -- Plastic Carryout Bags Ruin The Otherwise Scenic Landscape Along Columbia Way In Palmdale

Reusable Bags

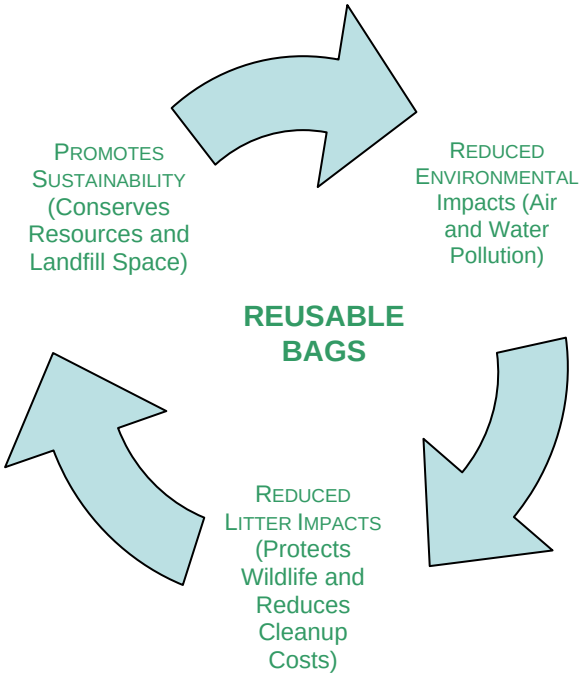
Upon comprehensively evaluating the environmental, ecological, and litter impacts of various types of carryout bags, it is conclusive that the widespread use of reusable bags in lieu of plastic and paper carryout bags would be socially, ecologically and economically beneficial. Facilitating the increased use of reusable bags would conserve energy and natural resources, reduce the total volume of waste disposed in landfills, diminish plastic bag litter, and invite citizens to actively participate in practices that promote a clean and sustainable environment.

Specifically, benefits of widespread use of reusable bags include the following:

- Fewer plastic carryout bags littering neighborhoods.
- Decreased likelihood of plastic bag litter negatively impacting the marine environment (marine wildlife, such as sea turtles and whales, ingest littered plastic carryout bags, which they mistake for food).
- Significant cost savings to taxpayers (e.g., less money spent on litter prevention/cleanup/enforcement resulting from plastic bag litter).
- An environmental cycle motivated by less waste generated, fewer natural resources consumed, reduced energy consumption, and less air and water pollution from manufacturing, transportation, and recycling/disposal processes.
- Grocers' costs for purchasing plastic and paper carryout bags would no longer be passed on to customers.
- Consistent with the intent of Assembly Bill 2449 (Levine, 2006 Statutes) "to encourage the use of reusable bags by consumers and retailers and to reduce the consumption of single-use bags." [7]
- Assists in the development of the emerging "green economy" by spurring the reusable bag industry.

As environmental awareness gains momentum, the timing is optimal for instilling the importance of sustainable practices. One of the most pressing needs now, as landfill capacity become scarce, is to maximize our waste reduction and reuse efforts.

[7] Assembly Bill 2449, Chapter 845, Statutes of 2006.



Biodegradable Carryout Bags

Biodegradable carryout bag usage in Los Angeles County is not practical at this time, due to the lack of commercial composting facilities needed to process the biodegradable carryout bags. The nearest facilities are located in Kern and San Bernardino Counties.[8] Since transporting biodegradable carryout bags to distant commercial composting facilities involves higher services rates, increased traffic congestion and adds to air pollution, it is less ideal in comparison to other alternatives that involve local operations.

Additionally, the use of biodegradable carryout bags would not alleviate the litter problem or potential harm to marine wildlife since they have the same general characteristics of plastic carryout bags (lightweight, persistent in the marine environment, etc.). Furthermore, the presence of biodegradable carryout bags in the recycling stream could potentially jeopardize plastic recycling programs through contamination, and reduce the quality of plastic resins. This contamination could ultimately result in batches of recyclable plastic materials or biodegradable carryout bags being landfilled.

[8] California Integrated Waste Management Board's Solid Waste Information System (SWIS), www.ciwmb.ca.gov/SWIS/Search.asp

State Law and Other Relevant Issues

The majority of plastic carryout bags consumed in the County are distributed at supermarket checkout stands. Because supermarket bags are lighter and thinner than bags used at other retail stores, they have a higher propensity to become litter. To address this and other issues, California adopted Assembly Bill 2449 (Levine, 2006 Statues) in 2006, whose goal was to "encourage the use of reusable bags by consumers and retailers and to reduce the consumption of single-use carryout bags."[9]

AB 2449, which became effective July 1, 2007, requires all large supermarkets and retail stores to make available at-store containers for the collection and recycling of plastic carryout bags, and reusable bags for purchase. Although this requirement may increase the recycling rate of plastic carryout bags (currently at less than 5 percent), no recycling rate benchmarks were established. Moreover, AB 2449 also included a clause which prohibits local governments from imposing a fee on plastic carryout bags or otherwise "interfering" with the at-store plastic bag recycling program.

Since a fee cannot be imposed on plastic carryout bags, another option for local governments to reduce the consumption of plastic carryout bags is to implement a ban. The implementation of such a ban, in conjunction with supplementary measures not pre-empted by AB 2449, are described below.

Alternatives for the Board of Supervisors to Consider

Since plastic carryout bags distributed at supermarkets and other large retail outlets contribute disproportionately to the litter problem, the County plastic bag working group recommends reducing the prevalence of these bags as a first priority. The working group seeks to subsequently investigate measures to reduce the consumption of plastic and paper carryout bags at the remaining retail establishments throughout the County.

Based on the above factors, the following alternatives are presented to the Board for consideration. Supplementary measures are also provided below to further strengthen the main alternatives.

- **ALTERNATIVE 1 – Ban Plastic Carryout Bags at Large Supermarkets and Retail Stores One Year After Adoption of Ordinance**

  To reduce plastic bag litter, request the County's plastic bag working group (consisting of the Chief Executive Office, County Counsel, Internal Services Department, Public Works, and other County departments/agencies as

[9] Assembly Bill 2449, Chapter 845, Statutes of 2006.

appropriate) to draft an ordinance banning plastic carryout bags at large supermarkets and retail stores. All large supermarkets and retail stores voluntarily applying a point of sale fee (e.g., 10¢) on each plastic carryout bag consumed would be exempt from the Ordinance. This exemption would provide more flexibility to affected stores, while providing a mechanism (the consumption fee) with proven effectiveness in reducing overall consumption. The consumption fee is to be retained by the affected store. The Ordinance would also define "large supermarkets and retail stores."

Delay implementation of the ban for one year to allow the working group to work with affected stakeholders, conduct additional outreach efforts and promote awareness of the upcoming ban.

- **ALTERNATIVE 2 – Ban Plastic Carryout Bags At Large Supermarkets And Retail Stores Effective:**
  - **July 1, 2010, If The Bag Disposal Rate Does Not Decrease By A Minimum Of 35%.**
  - **July 1, 2013, If The Bag Disposal Rate Does Not Decrease By A Minimum Of 70%.**

To reduce plastic bag litter, request the County's plastic bag working group to draft an ordinance banning plastic carryout bags at large supermarkets and retail stores. The ban would go into effect automatically, effective:

- July 1, 2010 if the disposal rate of plastic carryout bags does not decrease by a minimum of 35%, using FY 2007-08 as the baseline, by January 1, 2010.
- July 1, 2013 if the disposal rate of plastic carryout bags does not decrease by a minimum of 70%, using FY 2007-08 as the baseline, by January 1, 2013.

All large supermarkets and retail stores voluntarily applying a point of sale fee (e.g., 10¢) on each plastic carryout bag consumed would be exempt from the Ordinance. This exemption would provide more flexibility to affected stores, while providing a mechanism (the consumption fee) with proven effectiveness in reducing overall consumption. The consumption fee is to be retained by the affected store. The Ordinance would also define "large supermarkets and retail stores."

To achieve these goals, the working group shall coordinate with grocers/industry to establish the aforementioned baseline (the difference between total consumption and recycling), reduce the consumption of plastic carryout bags, and increase the recycling rate of plastic carryout bags (within the constraints of Assembly Bill 2449).

The County may accelerate the ban on plastic carryout bags if cities containing a majority of the County's population adopt an ordinance or enter into a Memorandum of Understanding with the County banning plastic carryout bags.

- **ALTERNATIVE 3 – Status Quo**

  Request the County's plastic bag working group to monitor the effects of Assembly Bill 2449 and other related actions.

Supplementary Measures

To complement the alternatives identified above, the working group also recommends implementing all of the following supplementary measures. Each of these measures may be implemented in addition to whichever alternative is selected by the Board:

A. Direct the Department of Public Works, in consultation with the County plastic bag working group, to implement a comprehensive public education campaign, and create partnerships with large supermarkets, retail stores, and elementary schools to promote reusable bags over plastic and paper carryout bags.

B. Direct the plastic bag working group to draft a resolution for Board consideration prohibiting the purchase and use of plastic carryout bags at all County-owned facilities and County offices.

C. Direct the County's plastic bag working group to actively work with the 88 cities in Los Angeles County to implement measures which reduce the consumption of plastic and paper carryout bags.

D. Direct the Department of Public Works, to aggressively pursue grants and other funding opportunities to fund the comprehensive public education campaign as described in Supplementary Measure A above.

E. Direct the Chief Executive Office, Department of Public Works, and the County's Legislative Advocates to work with the State legislature to:

   - Repeal the provision of Assembly Bill 2449 which prohibits local governments from imposing a fee on plastic carryout bags or implementing other at-store recycling measures;
   - Implement either a statewide fee on each plastic bag used with funds directed to local governments on a per-capita basis for litter prevention and cleanup efforts; or implement statewide

benchmarks to reduce the consumption of plastic carryout bags; or implement a statewide ban on plastic carryout bags.

F. Direct the County's plastic bag working group to investigate measures to reduce the consumption of plastic carryout bags at other retail establishments, as well as evaluate paper bag usage throughout the County.

G. Direct Public Works to work with the State, solid waste industry and other stakeholders to develop markets and other programs to reduce plastic bag litter.

H. Direct the County's plastic bag working group to establish a Subcommittee to assist in carrying out the functions of the working group, including tracking the reduction of plastic bag litter to comply with the Federal Clean Water Act.

I. Direct the County's plastic bag working group to provide a semi-annual progress report to the Board describing progress and efforts to reduce the consumption of plastic and paper carryout bags in Los Angeles County.

CHAPTER 1

INTRODUCTION AND METHODOLOGY

Introduction

Description of Motion

On April 10, 2007, the Los Angeles County Board of Supervisors instructed the Chief Executive Officer to work with the Director of Internal Services and the Director of Public Works to solicit input from outside environmental protection and grocer organizations to:

- Investigate the issue of polyethylene plastic and paper sack consumption in the County, including the pros and cons of adopting a policy similar to that of San Francisco;
- Inventory and assess the impact of the current campaigns that urge recycling of paper and plastic sacks;
- Investigate the impact an ordinance similar to the one proposed in San Francisco would have on recycling efforts in Los Angeles County, and any unintended consequences of the ordinance; and,
- Report back to the Board with findings and recommendations to reduce grocery and retail sack waste within 90 days.

This report is in response to this Motion. Although the report to the Board of Supervisors was due on July 9, 2007, a memorandum was sent to the Board of Supervisors on July 12, 2007 requesting a 45-day extension to incorporate feedback from interested stakeholders, consumers, industry, and environmental representatives.

Background on Current Disposal Conditions

Los Angeles County has the most extensive and complex solid waste system in the nation. It covers an area of 4,752 square miles and encompasses 88 cities and 140 unincorporated communities. Home to more than 10.2 million people, Los Angeles County is the most populous county in the nation, having a larger population than 42 states and 162 countries.[10] One in three Californian's live in Los Angeles County. The County's population is expected to increase to

[10] Los Angeles County Economic Development Corporation, Los Angeles County Profile, May 2006.

approximately 11 million people by 2020.[11] If it were a country, Los Angeles County would rank 17th in the world in terms of Gross Domestic Product.[12] This vigorous population growth, coupled with comparable increases in economic activity, will have a major impact on the solid waste management infrastructure in Los Angeles County.

In 1989, the California Legislature passed the California Integrated Waste Management Act (Assembly Bill 939). Assembly Bill 939 requires every city and county to divert 50 percent of solid waste generated from landfill disposal, otherwise face a fine of $10,000 per day. Counties have the added responsibility of managing the residual trash that remains after recycling.

Since 1990, numerous programs have been implemented at the city and County levels, including curbside recycling, construction and demolition waste recycling, and business recycling enhancement programs. In addition, the County has implemented Countywide recycling programs to assist jurisdictions to comply with Assembly Bill 939, such as the Countywide Household Hazardous Waste/Electronic Waste Management Program, the Waste Tire Collection Program, and the SmartGardening Program.

In 2006, despite achieving a 50 percent Countywide recycling rate (one of the highest in the nation), Los Angeles County disposed over 12 million tons of trash – this is equivalent to filling the Rose Bowl 34 times. Currently, about 20 percent (7,400 tons per day) of the County's trash is exported for disposal to other counties, including Riverside, Orange, and Ventura Counties. By 2020, this figure could rise to 80 percent due to anticipated population/economic growth and landfill closures, assuming no landfill expansions or alternatives to landfills such as conversion technologies are developed. This means more trash being transported over long distances to neighboring counties, leading to higher trash rates and added traffic congestion and air pollution.

To reduce the environmental impact of solid waste disposal, the County of Los Angeles, in partnership with the 88 cities and the private sector, is aggressively expanding and implementing new source reduction and recycling programs. Such programs are geared towards raising environmental awareness; promoting environmental stewardship; and, promoting sustainable uses of resources.

Methodology Used

To comprehensively assess the ecological, environmental, and financial impacts of carryout bags on Los Angeles County, published studies from around the

[11] Los Angeles County Economic Development Corporation, L.A. Stats, June 2006.
[12] http://lacounty.info/miscellany.pdf, May 15, 2007.

world were reviewed and analyzed. In addition, surveys of major grocery and retail stores, solid waste facilities, Caltrans, cities, and County departments were conducted to gather information on prevailing recycling, litter, and cleanup methods and costs. Several public and environmental interest groups, industry and manufacturing trade organizations were also consulted regarding plastic carryout bag consumption and management, litter impacts, and cleanup efforts.

CHAPTER 2

OVERVIEW OF PLASTIC CARRYOUT BAGS

Overview

Plastic carryout bags were first introduced into the marketplace in 1975.[13] Since then, plastic carryout bags have become an integral part of our everyday custom because they are convenient, inexpensive, and functional. They are sometimes reused to line trash cans, collect pet waste, and for general storage purposes. Below is a history of plastic carryout bags as well as relevant facts and figures.

Plastic Bag History

1975: Montgomery Ward, Sears, J.C. Penny, Jordan Marsh, and other large retail stores were the first to switch to plastic merchandise bags.[14]

1977: Supermarkets began offering plastic carryout bags.[15]

1996: Four of every five grocery stores use plastic carryout bags.[16]

2002: Ireland introduced the first consumer plastic carryout bag fee (20¢ [U.S.] per bag).[17]

2006: California passed legislation mandating at-store recycling of plastic carryout bags, by all large supermarkets and retail businesses beginning July 1, 2007.[18]

2007: San Francisco becomes the first U.S. city to ban the use of non-biodegradable plastic carryout bags at all large supermarkets and pharmacy chains.

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[13] www.plasticsindustry.org/about/fbf/environment.htm#plasticbaghistory, May 3, 2007.
[14] Ibid.
[15] Ibid.
[16] Ibid.
[17] http://www.environ.ie/en/Environment/Waste/PlasticBags/News/MainBody,3199,en.htm, May 1, 2007.
[18] Assembly Bill 2449, Chapter 845, Statutes of 2006.

Table 1 -- Plastic and Paper Bag Statistics

Item	Statistic
Annual Plastic Bag Consumption Rate	
Worldwide	Between 500 billion and 1 trillion[19]
National	380 billion plastic carryout bags, sacks, wraps per year[20]
California	<20 billion[21]
Countywide	6 billion[22]
Unincorporated County area	600 million[23]
Percentage of Overall Disposal Waste Stream[24]	
Plastic Carryout Bags	0.4 percent by weight
Paper Carryout Bags	1 percent by weight
Annual Rate of Disposal at Landfills[25]	
Plastic Carryout Bags	
California	147,038 tons
Countywide	45,000 tons
Paper Carryout Bags	
California	386,097 tons
Countywide	117,000 tons
Annual Rate of Recycling	
Plastic Carryout Bags	
National	<5 percent[26]
California	<5 percent[27]
Countywide	<5 percent[28]
Paper Carryout Bags	

[19] http://www.epa.gov/oamsrpod/hcsc/0613326/att10.pdf May 2007
[20] http://www.epa.gov/region1/communities/shopbags.html, May 14, 2007.
[21] California Integrated Waste Management Board, Resolution, Agenda Item 14, June 12, 2007 Board Meeting.
[22] Prorated from the State figure.
[23] Ibid.
[24] California Integrated Waste Management Board's 2004 Statewide Characterization Study, Table 7.
[25] California Integrated Waste Management Board's 2004 Statewide Characterization Study, Table 7. Countywide figures are prorated from State figures.
[26] US EPA 2005 Characterization of Municipal Solid Waste, Table 7.
[27] California Integrated Waste Management Board, Staff Report, Agenda Item 14, June 12, 2007 Board Meeting.
[28] Assumed State rate applies to Los Angeles County.

Item	Statistic
National	21 percent[29]
California	21 percent[30]
Countywide	21 percent[31]
Cost to Purchase	
Plastic Carryout Bags	2 – 5 cents each[32]
Paper Carryout Bags	5 – 23 cents each[33]
Biodegradable Carryout Bags	8 – 17 cents each[34]

How Are Plastic Carryout Bags Manufactured?

Plastic resin is created by taking chemical chains called polymers commonly found in petroleum and natural gas processing, and connecting them together using heat and pressure to create plastic resins. The plastic resin is heated in a chamber and pushed through an opening (called a die) by air, which cools the heated plastic, and creates the air pocket of the plastic bag. After the plastic sheet is cooled, it is guided through several rollers to flatten and stretch the film to size the width of the bag. Once properly sized, the final step is to cut the plastic sheet into appropriate size bags.[35]

It is estimated that there are at least nine companies in Southern California, and three companies in Northern California that manufacture plastic carryout bags.[36]

[29] US EPA 2005 Characterization of Municipal Solid Waste, Table 4.
[30] Assumed National rate applies to California.
[31] Assumed National rate applies to Los Angeles County.
[32] www.usplastic.com (May 22, 2007), www.restockit.com (May 22, 2007).
[33] www.mrtakeoutbags.com (May 22, 2007), www.restockit.com (May 22, 2007).
[34] www.ecoproducts.com (May 22, 2007).
[35] www.Plasticresources.org (May 22, 2007).
[36] www.Thomasnet.com (May 22, 2007).

Figure 4 -- Plastic Pellets Used to Make Plastic carryout bags

What Types of Plastic Carryout Bag Are Commonly Used by Supermarkets, Food Establishments and Retail Stores?

Published studies and reports show that there are two main types of plastic carryout bags on the market. The first type of bag is HDPE 2 which is thin, lightweight and found in most grocery stores. The second type of bag is LDPE 4 which is thicker and glossier and found in retail stores. A random survey of major supermarkets, food establishments, and retail stores countywide, and site visits to plastic bag manufacturers confirmed this information.

Figure 5 -- HDPE 2 Plastic Carryout Bag

Figure 6 -- LDPE 4 Plastic Carryout Bag

Table 2 -- Types of Plastic Carryout Bags Used

Store	Type of Plastic Bag Used?
Grocery	
Albertsons	HDPE 2
Food4Less	HDPE 2
Ralphs	HDPE 2
Safeway	HDPE 2
Stater Bros.	HDPE 2
Vons	HDPE 2
Wild Oats	HDPE 2
Retail	
99 Cent Store	HDPE 2
CVS	HDPE 2
Kmart	HDPE 2
RiteAid	HDPE 2
Target	LDPE 4
Walmart	HDPE 2

Do Local Jurisdictions Collect Plastic Carryout Bags at Curbside?

A survey of the 89 jurisdictions in Los Angeles County revealed that 25 cities currently allow their residents to recycle their plastic carryout bags at curbside.

Table 3 -- Curbside Collection of Plastic Carryout Bags

Jurisdiction	Existing Plastic Carryout Bag Recycling at Curbside
Agoura Hills	Yes
Alhambra	No
Arcadia	No
Artesia	Yes
Avalon	No
Azusa	No
Baldwin Park	No
Bell	Yes
Bell Gardens	No
Bellflower	No
Beverly Hills	Yes
Bradbury	No
Burbank	No
Calabasas	Yes
Carson	No
Cerritos	No
Commerce	No
Claremont	No
Compton	No
Covina	Yes
Cudahy	No
Culver City	No
Diamond Bar	No
Downey	No
Duarte	No
El Monte	No
El Segundo	No
Gardena	Yes
Glendale	No
Glendora	Yes

Jurisdiction	Existing Plastic Carryout Bag Recycling at Curbside
Hawaiian Gardens	No
Hawthorne	No
Hermosa Beach	Yes
Hidden Hills	No
Huntington Park	No
Industry	No
Inglewood	No
Irwindale	Yes
La Canada Flintrige	Yes
La Habra Heights	No
La Mirada	No
La Puente	No
La Verne	No
Lakewood	Yes
Lancaster	No
Lawndale	Yes
Lomita	No
Long Beach	No
Los Angeles	Yes
Lynwood	Yes
Malibu	No
Manhattan Beach	No
Maywood	No
Monrovia	Yes
Montebello	No
Monterey Park	Yes
Norwalk	Yes
Palmdale	No
Palos Verdes Estates	No
Paramount	Unknown
Pasadena	No
Pico Rivera	No
Pomona	No
Rancho Palos Verdes	No
Redondo Beach	No
Rolling Hills	No
Rolling Hills	Yes

Jurisdiction	Existing Plastic Carryout Bag Recycling at Curbside
Estates	
Rosemead	No
San Dimas	No
San Fernando	No
San Gabriel	No
San Marino	Yes
Santa Clarita	No
Santa Fe Springs	No
Santa Monica	No
Sierra Madre	Yes
Signal Hill	Yes
South El Monte	Yes
South Gate	No
South Pasadena	Yes
Temple City	No
Torrance	No
Vernon	No
Walnut	No
West Covina	No
West Hollywood	Yes
Westlake Village	No
Whittier	No
Uninc. County	No
TOTAL	**25 responded Yes**

The collected plastic carryout bags are taken to a recycling or materials recovery facility (depending on the jurisdiction's collection system) where they are either sent for disposal, or in some cases sorted, baled, and sold on the open market. The facility's main objective is to maximize diversion of recyclables from the waste stream, while reducing cost and maximizing revenue from those materials targeted for recovery. The most commonly recovered materials include plastic containers, paper, aluminum cans, and cardboard because they are easy to collect, have an available market, and provide the most revenue without specialized sorting machinery. Like most plastics, the majority of plastic carryout bags that are recovered are sold to foreign markets, where anecdotal accounts reveal that the material is converted to plastic resin for remanufacturing or incinerated for energy. Policy makers have begun to take notice of this issue for all commodities, not just plastics, because commodities managed overseas do not meet the same level of standards for environmental protection as in the U.S.

Based on a survey of recycling and materials recovery facilities (and field visits of selected facilities), it was revealed that over 90 percent of the plastic carryout bags taken to these facilities are *not* recycled, but instead taken to landfills for the following reasons:

- Plastic carryout bags usually have a high contamination rate due to reuse as a household trash bin liner or by coming into contact with other contaminants (e.g., pet waste) when placed in the collection bin. As the contamination rate increases, the quality of the plastic resin is reduced.

- Plastic carryout bags interfere with machinery and have a tendency to jam the screens used to separate materials.

- It is not cost efficient to recycle plastic carryout bags due to lack of suitable markets. The domestic market for plastic carryout bags are extremely limited, especially in California, requiring recycling facilities and materials recovery facilities to truck plastic carryout bags over long distances, making the recycling of plastic carryout bags economically unfeasible. Foreign markets have shifted to using local markets due to quality concerns and transportation costs.

Figure 7 -- Typical Waste Stream Traveling Along a Conveyor Belt

Do County Departments Use Plastic Carryout Bags?

Based on a survey of County departments, it was revealed that plastic carryout bags are rarely used (see below).[37]

Table 4 -- Use of Plastic Carryout Bags by County Department

County Department	Use Plastic Carryout Bags?	If Yes, How Much?
Child Support Services	No	N/A
Coroner	No	N/A
Community Development Commission	No	N/A
LACERA	No	N/A
Community Senior Services	Yes	Don't know
Superior Court	No	N/A
Grand Jury	No	N/A
Chief Information Office	No	N/A
Public Defender	No	N/A
Fire Department	No	N/A
Sheriff	Yes	20-30 lbs
Registrar Recorder/County Clerk	No	N/A
Treasurer and Tax Collector	No	N/A
Internal Services	No	N/A
Assessor, Office of	No	N/A
LACMA	No	N/A
Affirmative Action Compliance, Office of	No	N/A
Mental Health	No	N/A
Animal Care and Control	No	N/A
District Attorney's Office	No	N/A
Parks and Recreation	Yes	36700/month
Regional Planning Dept.	No	N/A
Public Health	No	N/A
Health Services	No	N/A
Alternate Public Defender	No	N/A

[37] Of the 56 County Departments, only 25 responded to the survey. The Department of Community Senior Services indicated that they utilize plastic carryout bags to carry food in their food pantry program once a week.

CHAPTER 3

LITTER IMPACT OF PLASTIC CARRYOUT BAGS

Litter Impact

The indiscriminate littering of plastic carryout bags is an increasing blight problem. Although plastic carryout bags are inexpensive and have other useful qualities, they have a propensity to become litter, thus overshadowing these benefits. Due to their expansive and lightweight characteristics, wind easily carries these bags airborne like parachutes. They end up entangled in brush, tossed around along freeways, and caught on fences. Because it is often white or brightly colored and difficult to collect, plastic carryout bag litter is a greater eyesore and nuisance than other littered materials. For this reason, there is an increasing need to diminish the prevalence of plastic carryout bags to maintain a clean and healthy environment, positively enhance the County's recreational and tourism economy, and improve the quality of life for all residents countywide.

Public agencies collectively spend tens of millions of dollars annually on litter prevention, cleanup, and enforcement activities. The litter collected is composed of constituents including plastic carryout bags. Additionally, the cost to local governments in Los Angeles County is expected to dramatically rise over the next few years in order to comply with Federal Clean Water Act. For example, the County of Los Angeles Department of Public Works and the Flood Control District annually spend $18 million per year on, but not limited to, street sweeping, catch basin cleanouts, cleanup programs, and litter prevention and education efforts.

Communities within close proximity to landfills and other solid waste processing facilities are especially impacted as plastic carryout bags escape from trash trucks while traveling or emptying their loads. Although trucks and facilities are required to provide cover and fences, carryout bags manage to escape despite Best Management Practices (BMPs) such as using roving patrols to pickup littered bags. Despite litter control devices (e.g., litter fences), local landfills and solid waste transfer station operators estimate they spend approximately $25,000 and $1,500 per month at each facility, respectively, to send roving patrols to pickup littered plastic carryout bags. Even with these measures, it is very difficult to pick up the errant plastic carryout bags. Inevitably the cost for cleanup is passed on to residents in the form of higher disposal costs. Despite the efforts of various cleanup activities and thousands of residents who annually volunteer countless hours in beach, roadside (e.g., Adopt-A-Highway programs), park, and neighborhood cleanups, plastic carryout bag litter remains a significant problem.

Plastic carryout bags that make their way into the storm drain system impact the system's ability to efficiently channel storm water runoff. The County Department of Parks and Recreation, confers that plastic carryout bags contribute to litter within local lakes, and negatively impacts the environment and wildlife. Furthermore, plastic carryout bag litter inhibits proper landscape maintenance operations as it becomes entangled in the turf mowing machinery.

While the exact percentage of plastic carryout bags in the total litter stream is not definitively quantified, below is a summary of several studies conducted on plastic litter.

Table 5 -- Summary of Litter Studies

	All Plastic Film		Plastic Bags	
	Weight %	Volume %	Weigh %	Volume %
Caltrans Litter Management Pilot Study (1998-2000)	7	12		
Great Los Angeles River Clean Up (4/30/04)		34		
City of Los Angeles Catch Basin Cleaning (6/10/04) (Note, plastic carryout bags listed separately; not included under All Plastic Film)	30	24	25	19
Hamilton Bowl Project-Street Sweeping (2006)	20			
Hamilton Bowl Project-Trash Capture Devices (Feb. 2007)	30			

- Caltrans Litter Management Pilot Study -- The purpose of the study was to investigate the characteristics of litter in freeway stormwater and the effectiveness of BMPs. The study was conducted from 1998 through 2000 on a freeway in the Los Angeles area. Results showed that plastic film, which includes plastic carryout bags, was 7 percent by mass of the litter collected and 12 percent by volume. These percentages do not include moldable plastics, which was a separate category.

- On April 30, 2004, during the Great Los Angeles River Clean Up, organized by the Friends of Los Angeles River, a waste characterization study was conducted. Approximately 60 cubic feet of litter was collected and sorted. Results showed plastic film to be 34 percent of the total litter by volume. This percentage does not include moldable plastics, which was a separate category.

- On June 10, 2004, the City of Los Angeles conducted a waste characterization study. Litter was cleaned from 30 storm drain catch basins and characterized for plastic film and plastic carryout bags separately, among other litter types. The plastic film was found to be 30 percent by weight and 24 percent by volume of the litter. Plastic bags were 25 percent by weight and 19 percent by volume.

- The Hamilton Bowl Trash Reduction Project -- The purpose of the study was to investigate the costs and efficiency of three end-of-pipe and one catch basin structural trash capture systems. The Hamilton Bowl is a 15 acre storm detention basin containing 15 water outfalls in the City of Long Beach.

  The Hamilton Bowl Project characterized trash collected from street sweeping and trash capture systems. In summer 2006, trash from street sweeping from various land uses was collected and sorted. The composition was classified into glass, paper, yard waste, and plastic. Plastic consisted of bags, bottles, jugs and Styrofoam. It ranged from 5 percent of the total trash from open space and commercial land uses to 20 percent from institutional land use.

  Then in December 2006 and February 2007, trash from the Hamilton Bowl's trash capture system was characterized. This trash was sorted and found to consist of up to 30 percent plastics.

Financial Impact

County of Los Angeles' Litter Cleanup/Prevention Costs

The Los Angeles County Department of Public Works, as the lead County agency responsible for implementing litter reduction and education programs, implements a variety of programs to reduce the impact of litter on our communities. This includes litter collection along roadways, channel inverts, street sweeping, emptying public trash containers, catch basin cleanouts, flood control channel cleanups, stormwater pollution prevention activities, capital improvement projects, implementing best management practices, and implementing public education and outreach activities. The County of Los Angeles Department of Public Works and the Flood Control District spends approximately $18 million per year to carryout these responsibilities.

For example, the County sweeps over 81,000 miles of streets on a weekly basis. Street sweeping is an effective means to collect litter before it enters catch basins and the storm drain system, thus reducing possible impacts to the environment.

In addition, in order to maintain the integrity of the County storm drain system and meet the National Pollutant Discharge Elimination System (NPDES) permit

requirements, the Department of Public Works cleans out litter from its 78,000 catch basins and additional city owned catch basins at least once a year. In addition, catch basins which receive considerable litter are cleaned up to three additional times a year. Over 644 tons of litter was removed from County and city catch basins in the 2005-2006 rain year.

Furthermore, Public Works installs and maintains numerous devices to allow for the removal of litter from the storm drain system. They include 1,026 catch basin inserts and 1,826 curb inlet catch basin retractable screens, 61 "full capture" hydrodynamic separators, 4 end-of-pipe screens, and 21 in-stream floating booms or nets.

End-of-Pipe Net at Hamilton Bowl

In-Stream Floating Net

Figures 8 and 9 -- Sample Litter Capture Devices

Caltrans Costs

The California Department of Transportation (Caltrans) is responsible for planning, designing, constructing, and maintaining the State's highway system. Caltrans District 7, which consists of Los Angeles and Ventura Counties is the second largest of the 12 workforce districts. It is responsible for maintaining 915 freeway and highway miles in Los Angeles County alone. In fiscal year 2005-2006, District 7 collected 50,000 cubic yards of litter and debris at a cost of $12 million, not including the tens of thousands of man hours spent by community service workers collecting litter along the highways.

Zero Trash TMDL

The quality of storm water and urban runoff is fundamentally important to the health of the environment and quality of life in Southern California. Polluted storm

water runoff is a leading cause of water quality impairment in the Los Angeles Region. Storm water and urban runoff (during dry and wet weather) are often contaminated with pesticides, fertilizers, animal droppings, trash, food wastes, automotive byproducts, and many other toxic substances generated by our urban environment. Water that flows over streets, parking lots, construction sites, and industrial, commercial, residential, and municipal areas carries these untreated pollutants through the storm drain networks directly into the receiving waters of the Region.

A watershed is the land area where water collects and drains onto a lower level property or drains into a river, ocean or other body of water. There are 8 watersheds in Los Angeles County: The Los Angeles River, Sun Valley, San Gabriel River, Ballona Creek, North Santa Monica Bay, Dominguez, Santa Clara River, and Antelope Valley.

The Los Angeles County Flood Control District, the County of Los Angeles, and cities within the County are required to by their National Pollutant Discharge Elimination System (NPDES) permit to prevent discharges into its rivers, lakes, and ocean, *including the above watersheds*. In addition, the Regional Water Quality Control Board recently imposed a total maximum daily load (TMDL) for what can enter these water bodies. Therefore, the County must implement BMPs to meet these TMDL requirements. The County has for years implemented and maintained numerous BMPs to prevent littering and to remove the litter from its right-of-ways and its storm drain system.

Recently, the Regional Water Quality Control Board established a Zero Trash TMDL for the Los Angeles River and Ballona Creek watersheds. These TMDLs require a 10 percent annual reduction of trash entering the water body until zero trash is reached by 2014. These TMDLs not only affect the County of Los Angeles, but also many other agencies. For example, the Ballona Creek Trash TMDL also applies to Caltrans and the cities of Los Angeles, Culver City, Beverly Hills, Santa Monica, West Hollywood, and Inglewood. The Los Angeles River Trash TMDL also affects Caltrans, the City of Los Angeles, and 41 other municipalities within the Los Angeles River watershed. The estimated annual operation and maintenance costs to comply with these requirements for the County of Los Angles and other agencies is expected to exponentially increase in coming years.

Anti-littering Law

State law requires any person convicted for littering to pay the following fine:

- Between $250 and $1,000 (first conviction)
- Between $500 and $1,500 (second conviction)
- Between $750 and $3,000 (third conviction)

The court may require a person to perform 8 hours of community service by picking up litter.[38]

However, this law is difficult to enforce because a law enforcement officer must observe the person in the act of littering. In addition, inadvertent plastic carryout bag litter (which is a significant source) is extremely difficult to enforce because it is not possible to identify and fine the person causing the inadvertent litter.

[38] Section 374.4 of the Penal Code.

CHAPTER 4

ECOSYSTEM, ENVIRONMENTAL AND PUBLIC HEALTH ISSUES

Ecosystem Impacts From Littered Carryout Bags

Plastic Carryout Bags

Although plastic bag litter creates blight, it also has many adverse effects on marine- and land-based wildlife. Due to the County's extensive and diverse watersheds, many of the littered plastic carryout bags find their way into local beaches, and eventually the ocean.

Several studies have reported that up to 90 percent of marine debris is plastic, with plastic carryout bags making up a portion of the litter.[39] It is estimated that over 267 species of wildlife have been affected by plastic bag litter, including birds, whales, turtles and many others.[40]

Although the impacts of plastic carryout bags on the ecosystem are not precisely quantified, several anecdotal reports have documented numerous health impacts on wildlife attributed to plastic carryout bag litter. For example, ingested plastic carryout bags have impacted marine life in the following unintended ways:

- Clogging the throat, thus choking the animal
- Artificially filling the stomach so that the animal cannot consume food, depriving them of nutrients
- Infecting them with harmful toxins that can poison the animal
- Entangling the animal, leading to choking, cuts, and even restricting growth[41]

Whales and large birds often swallow plastic carryout bags inadvertently during feeding, which become permanently lodged in the stomach. Turtles swallow plastic carryout bags, since they resemble their main food source, jellyfish.[42] Similarly, plastic bags can smother plants, restricting growth and destroying the

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[39] www.cawrecycles.org (May 15, 2007), www.plasticdebris.org (May 15, 2007).
[40] http://www.mcsuk.org/mcsaction/pollution/litter (May 15, 2007), http://www.plasticdebris.com/PRDS_Brochure_DOWNLOAD.pdf (May 15, 2007).
[41] www.marinedebris.noaa.gov (May 15, 2007), http://www.plasticdebris.com/PRDS_Brochure_DOWNLOAD.pdf (May 15, 2007).
[42] http://www.seaworld.org/animal-info/Animal-Bytes/animalia/eumetazoa/coelomates/deuterostomes/chordata/craniata/reptilia/testudines/sea-turtles.htm (August 1, 2007)

natural habitats of many different species of marine wildlife.[43] Recent studies indicate that plastic carryout bags also contain many different additives such as PCBs, DDT and nonylphenols and in turn can seep into marine animals that inadvertently ingest them, which endangers their health.[44]

Figure 10 -- Seal Entangled in Plastic Bag
(Courtesy of the Whale Rescue Team)

Plastic carryout bags also affect domestic land animals such as cows, goats, and horses, which occasionally eat plastic carryout bags found on the ground or entangled in brush.[45] Plastic bag litter is found to have similar undesirable health impacts on these animals.[46]

The North Pacific Gyre is an area located roughly 1,000 miles from the California coast line, where several ocean circular currents meet, creating an accumulation of marine debris, especially plastics. Since plastics do not biodegrade, they are often accumulated in the Gyre from multiple northern Pacific Rim countries. The table below summarizes the results from an August 1999 research expedition.

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[43] www.nos.noaa.gov/education/kits/corals/coral09_humanthreats.html (July 1, 2007)
[44] A Brief Analysis of Organic Pollutants Absorbed to Pre and Post Production Plastic Particles from the Los Angeles and San Gabriel River Watersheds, C.J. Moore, G.L Lattin, A.F Zellers, Algalita Marine Research Foundation, Long Beach, CA.
[45] www.Reusablebags.com (May 15, 2007), www.epa.com/jtr/jtrnet/plastic.htm (May 15, 2007).
[46] www.plasticbageconomics.com (May 15, 2007).

Plastic film, which includes plastic carryout bags, makes up approximately 29% of the plastic pieces collected.

Table 6 -- Abundance (pieces/km^2) by type and size of plastic pieces and tar found in the North Pacific gyre

Mesh-size (mm)	Fragments	Styro-foam Pieces	Pellets	PP/Mono-filament	Thin Plastic Films	Tar	Misc./ Unid.	Total
>4.760	1,931	84	36	16,811	5,322	217	350	24,764
4.759-2.800	4,502	121	471	4,839	9,631	97	36	19,696
2.799-1.000	61,187	1,593	12	9,969	40,622	833	72	114,288
0.999-0.710	55,780	591	0	2,933	26,273	278	48	85,903
0.709-0.500	45,196	567	12	1,460	10,572	121	0	57,928
0.499-0.355	26,888	338	0	845	3,222	169	229	31,692
Total	195,484	3,295	531	36,857	95,642	1,714	736	334,270

Paper Carryout Bags

Littered paper carryout bags do not have the same impact on the ecosystem as plastic carryout bags for the following reasons:

- Paper carryout bags are less likely to be littered because they are heavier and less likely to become airborne, as well as have a higher recycling rate (e.g., they are universally collected at curbside and have a recycling rate of 21 percent[47]); and,
- Paper carryout bags will biodegrade in the marine environment, minimizing the negative environmental impacts.

Biodegradable Carryout Bags

Although biodegradable carryout bags will only decompose in a commercial composting facility, no such facilities exist in Los Angeles County. In addition, reports have shown that biodegradable carryout bags can take over five months to partially decompose in marine environments; thus, it is assumed that these biodegradable carryout bags would have similar impacts as regular plastic carryout bags.[48]

[47] US EPA 2005 Characterization of Municipal Solid Waste, Table 4.
[48] The Biodegradation of Mater-Bi Starch-Based Polymer in Freshwater and Sea Water Project Report, December 1996, Dr. Nick McClure, Finders University of South Australia.

Environmental Impacts From Carryout Bags

To comprehensively evaluate the environmental impacts of various carryout bags, published studies were reviewed and analyzed that investigated air quality impacts and energy consumption from different phases of the lifecycle.[49] Although we were unable to locate any current U.S. research publication detailing these impacts, we were able to locate several published studies conducted overseas.[50] Based on our review of these studies, the study prepared in 2002 for the Australian Department of the Environment and Heritage[51] was the most comprehensive and comparable report. The report included a computer model that simulated the life-cycle impacts of various carryout bags. Below is a summary table detailing the environmental findings from this life cycle analysis.[52]

Table 7 -- Australia's Assessment of Alternatives

Type of Carryout Bag	Bags Used per Year	Material Consumed (kg)	Greenhouse Gas Equivalent (CO2) For One Year	Primary Energy Use For One Year (MJ)
Reusable (PP fiber bag)	4.15	0.48	1.96	46.3
Biodegradable (starch based)	520	6.5	6.61	61.3
Single HDPE	520	3.12	6.08	210
Kraft Paper Bag (with handles)	520	22.15	11.8	721
Boutique LDPE	650	11.77	29.8	957

Based on the information above, reusable bags made of polypropylene have the least environmental impact due to the reduced number of bags consumed per year. However, it must be noted that the study may not represent actual conditions in Los Angeles County. For example, the study assumed the following information regarding manufacturing/transportation and disposal:

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[49] Australian Department of the Environment and Heritage Plastic Shopping Bags – Anaylsis of Levies and Environmental Impacts Final Report, prepared by Nolan-ITU, December 2002, page 28.

[50] Australian Department of the Environment and Heritage Plastic Shopping Bags – Anaylsis of Levies and Environmental Impacts Final Report, prepared by Nolan-ITU, December 2002; SOCIO Economic Impact of the Proposed Plastic Bag Regulations by Bentley West Management; and, Environmental Group Research Report: Proposed Plastic Bag Levy – Extended Impact Assessment Volume 1: Main Report 2005.

[51] Plastic Shopping Bags – Analysis of Levies and Environmental Impacts, prepare by Nolan-ITU.

[52] Australian Department of the Environment and Heritage Plastic Shopping Bags – Anaylsis of Levies and Environmental Impacts Final Report, prepared by Nolan-ITU, December 2002, page 36.

Manufacturing/Transportation

- 67% of HDPE plastic carryout bags were imported from South-east Asia
- 66% of LDPE plastic carryout bags were imported from South-east Asia
- 0% of paper carryout bags were imported
- 100% of biodegradable carryout bags were imported from Italy (but made in Australia)
- 0% of reusable bags imported

End-of-Life (Disposal) Assumptions

- 78.5%, 2%, 0.5%, and 19% of HDPE plastic carryout bags were landfilled, recycled, littered, and reused per year
- 80.5%, 0%, 0.5%, and 19% of LDPE plastic carryout bags were landfilled, recycled, littered, and reused per year
- 39.5%, 60%, 0.5%, and 0% of paper carryout bags were landfilled, recycled, littered, and reused per year
- 80.5%, 0%, 0.5%, and 19% of biodegradable carryout bags were landfilled, recycled, littered, and reused per year
- 99.5%, 0%, 0.5%, and 0% of reusable bags were landfilled, recycled, littered, and reused per year

Public Health Impact of Carryout Bags

Most plastic carryout bags carry a voluntary warning label which typically states, "Warning: To Avoid Danger of Suffocation, Keep This Plastic Bag Away From Babies and Children. Please Do Not Use This Bag in Cribs, Beds, Carriages and Playpens."

Despite the above safety warning, according to the United States Consumer Product Commission, the Commission receives "an average of about 25 reports a year [nationwide] describing deaths to children who suffocated due to plastic carryout bags. Almost 90 percent of them were under one year of age. Recent reports often describe bags originally used for dry cleaning or storage. Some may have been used to protect bedding and furniture, and others just were not carefully discarded."[53]

[53] http://www.cpsc.gov/CPSCPUB/PUBS/5064.html, April 30, 2007.

CHAPTER 5

TYPE AND COST OF REUSABLE BAGS

Reusable Bag Types

Reusable bags are a viable option for consumers because they are typically recyclable, lightweight, durable, washable, and can carry three to four times that of a plastic carryout bag. Reusable bags can be purchased from a number of locations, including grocery and retail stores, and internet websites such as www.reusablebags.com and www.earthwise.com. Below is list of common reusable bags.

Table 8 -- Types of Reusable Bags

Type	Store	Avg. Cost	Contents
	**Whole Foods** (Gives 5¢ back for each reusable bag used)	$2.99	Non-woven polypropylene (Plastic #5) 100% recyclable
	**Ralphs** (Gives 5¢ back for each reusable bag used)	$1.50 (50¢ will be donated to environmental groups)	Non-woven polypropylene (Plastic #5) 100% recyclable
	**Vons**	99¢	Non-woven polypropylene (Plastic #5) 100% recyclable
	**Albertsons**	99¢	Non-woven polypropylene (Plastic #5) 100% recyclable

Type	Store	Avg. Cost	Contents
	**Target**	$1.49	Non-woven polypropylene (Plastic #5) 100% recyclable
	**Recycled Products.com**	$5.00	Cotton canvas
	**Etcetera, Etcetera, Etcetera**	$6.00	100% recycled water/soda bottles
	**Papernorplastic.com**	$9.99 (4th free)	600 Denier Polyester backed with Vinyl (similar to school backpacks)
	**Ecobags.com**	$10	100% cotton

Economics of Reusable Bags

Although reusable bags cost between 99¢ and $10 each, the savings to consumers can be significant since grocers/retailers cost for purchasing single use carryout bags is no longer passed along to customers (see table below).

Table 9 -- Cost Comparison of Carryout Bags

Type of Carryout Bag	Annual Consumption Rate	Average Cost Per Bag	Annual Cost To Consumers
Plastic Bag	600	3¢ (ranges between 2 - 5¢)[54]	$18 (in hidden costs)
Paper Bag	300 (consumption rate is unknown, assumed ½ of plastic carryout bags due to size)	10¢ (ranges between 5 - 23¢)[55]	$30 (in hidden costs)
Biodegradable Bag	600	15¢ (ranges between 8 - 17¢)[56]	$90 (in hidden costs)
Whole Food Reusable Bag	1 (assumes avg. consumer will use 3 bags/year and will last 2 years before replacement)	$2.99	$4.50 (direct cost)

[54] www.usplastic.com (May 22, 2007), www.restockit.com (May 22, 2007).
[55] www.mrtakeoutbags.com (May 22, 2007), www.restockit.com (May 22, 2007).
[56] www.ecoproducts.com (May 22, 2007).

CHAPTER 6

CASE STUDIES

City/County of San Francisco

In 2005, the City of San Francisco considered imposing a 17¢ fee on non-biodegradable plastic carryout bags before reaching an agreement with the California Grocers Association. The agreement called for large supermarket stores to voluntarily reduce the number of plastic bags consumed by 10 million in 2006. Although the California Grocers Association claimed that supermarket stores reduced plastic bag consumption by 7.6 million, the City disputed this figure since it was not verifiable. This disagreement led to a renewed interest in banning non-biodegradable plastic carryout bags.[57]

On March 22, 2007, San Francisco adopted an ordinance banning the distribution of ***non-biodegradable*** plastic carryout bags. Effective September 22, 2007, all supermarket stores (generating $2 million or more) must provide their customers one (or a combination) of the following 3 choices:

- Biodegradable carryout bags – the bags must display the words "green cart compostable" and "reusable," and display a solid green line that circles the bag.
- Paper carryout bags -- the bags must display the words "reusable" and "recyclable," cannot contain old-growth fiber, and be made of 40 percent post-consumer recycled content.
- Reusable bags – the bags must be cloth or plastic (greater than 2.25 mils thick) bags.[58]

In addition, effective March 22, 2008, all pharmacy chains (with more than 5 stores located in San Francisco) must also comply with the above requirement. Supermarkets or pharmacies failing to comply with the Ordinance may face civil liabilities of $100, $200, or $500 for the first, second, or third violation, respectively.[59]

According to the Biodegradable Products Institute, San Francisco is promoting the use of biodegradable carryout bags because it has an advanced residential and commercial food scrap diversion program.[60] However, Biodegradable

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[57] San Francisco Chronicle, March 28, 2007, San Francisco First City to Ban Shopping Bags.
[58] Plastic Bag Reduction Ordinance, San Francisco County Board of Supervisors, March 22, 2007.
[59] Ibid.
[60] http://www.bpiworld.org/Files/PressRelease/PRsxdBPP.pdf, May 20, 2007

carryout bags usage in Los Angeles County is not practicable at this time, due to the lack of commercial composting facilities necessary to process the biodegradable carryout bags. The nearest facilities are located in Kern and San Bernardino Counties.[61] Since transporting biodegradable carryout bags to distant commercial composting facilities involves higher service costs, and adds to traffic congestion and air pollution, it is less ideal in comparison to other alternatives that involve local operations.

Additionally, the use of biodegradable carryout bags would not alleviate the litter problem or potential harm to marine wildlife since they have the same general characteristics of plastic carryout bags (lightweight, persistent in the marine environment, etc.). Furthermore, the presence of biodegradable carryout bags in the recycling stream could potentially jeopardize plastic recycling programs through contamination and reduce the quality of plastic resins. This contamination could ultimately result in batches of recyclable plastic materials or biodegradable carryout bags being landfilled.

City of Oakland

On July 17, 2007, the City of Oakland adopted an ordinance banning the distribution of *non-biodegradable* plastic carryout bags. Effective January 17, 2008, all stores (generating $1 million or more), except restaurant and fast food establishments, must provide their customers one (or a combination) of the following 3 choices:

- Compostable or biodegradable carryout bags.
- Paper carryout bags -- the bags cannot contain old-growth fiber, and be made of 40 percent post-consumer recycled content.
- Reusable bags – the bags must be (1) cloth or other machine washable fabric, or (2) made of other durable material suitable for reuse.[62]

Stores failing to comply with the Ordinance will be given a written warning. If a store continues to violate the Ordinance, the owner may face civil liabilities of $100, $200, or $500 for the first, second, or third violation, respectively, following the initial warning[63]

According to City of Oakland's Resolution accompanying the Ordinance, Oakland is banning non-biodegradable plastic carryout bags because:

- Of its negative impacts on the environment and wildlife;

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[61] California Integrated Waste Management Board's Solid Waste Information System (SWIS), www.ciwmb.ca.gov/SWIS/Search.asp
[62] Ordinance Banning Plastic Carry-out Bags, City of Oakland, July 3, 2007.
[63] Ibid.

- o It's consistent with the City's adopted policy to reduce its reliance on oil; and,
- o It's consistent with Assembly Bill 2449 (Levine, 2006 Statutes), which "encourage[s] the use of reusable bags by consumers and retailers and reduce the consumption of single-use bags."[64]

All City sponsored events are also prohibited from distributing non-biodegradable plastic carryout bags effective October 17, 2007.[65]

On August 3, 2007, the "Coalition to Support Plastic Bag Recycling" filed a petition for writ of mandate under the California Environmental Quality Act (CEQA) in Alameda Superior Court. The coalition alleges that Oakland failed to analyze the ordinance's potential environmental impact as required by CEQA.

Other States and Cities Considering Restrictions

Since San Francisco's move to ban ***non-biodegradable*** plastic carryout bags in March 2007, and the Los Angeles County Board of Supervisors request to investigate the feasibility of banning plastic carryout bags in April 2007, a number of U.S. cities and states have also begun investigating similar measures.

State
Alaska
New York

Cities
Annapolis, MD
Austin, TX
Bakersfield, CA [Issue placed on hold]
Baltimore, MD
Berkeley, CA
Boston, MA
Fairfax, CA
Maui, HI
New Haven, CT
Oakland, CA [Banned non-biodegradable plastic carryout bags on July 17, 2007]
Portland, OR
Phoenix, AZ
Santa Cruz, CA
Seattle, WA

[64] Ibid.
[65] Ibid.

Elsewhere

Several countries have restricted the consumption of plastic carryout bags, through bans, taxes, and/or increased public awareness and recycling. Litter, conservation of natural resources, and negative impacts on the marine environment were the primary reasons of this action. Below is a brief description of several actions.

Ireland

Effective 2002, Ireland imposed a fee of 20 cents (U.S.) on each plastic carryout bag consumed.[66] The primary purpose of the tax, commonly known as PlasTax, was to shift public behavior towards greater use of reusable bags, and reduce plastic carryout bag litter which was impacting the Country's coastline and tourism industry. The collected monies are used to fund litter, waste management, and other environmental initiatives.[67]

The Minister for the Environment determined that a consumer fee would be the most effective way to change shopping habits and break consumer reliance on plastic carryout bags. Therefore, a decision was made to impose a fee on consumers.

Prior to the PlasTax, an estimated 1.2 billion plastic carryout bags were consumed annually. Within months of its inception, the consumption rate dropped precipitously – studies found a dramatic reduction from 328 bags used per person per year to 21 (a 95 percent drop).[68]

The use of reusable bags has become widely accepted and consumers now carry reusable bags when they go grocery shopping. Moreover, even people who use reusable bags support the PlasTax model because it allows a 'safety net' in case they do not have their reusable bags at the time of purchase.

To further reduce plastic carryout bag consumption, effective July 1, 2007, Ireland increased the PlasTax to 25 (U.S.) cents per bag.[69]

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[66] www.environ.ie/en/Environment/Waste/PlasticBags/News/MainBody,3199,en.htm, May 1, 2007.
[67] www.environ.ie/en/Environment/Waste/PlasticBags/PublicationsDocuments/FileDownLoad,1386,en.pdf, May 1, 2007.
[68] www.environ.ie/en/Environment/Waste/PlasticBags/News/MainBody,3199,en.htm, May 1, 2007.
[69] http://www.ireland.com/newspaper/breaking/2007/0701/breaking27.htm, July 17, 2007.

Australia

In 2002, it was estimated that Australians were using approximately 6.9 billion plastic carryout bags each year, of which 50 to 80 million bags ended up as litter. In October 2002 the Australian government convened a stakeholder working group consisting of state and local governments, industry, retailers, recyclers, and environmental groups. This stakeholder group established a national voluntary goal to reduce plastic carryout bag litter by 75% and reduce the consumption of HDPE type plastic carryout bags by 50% (by December 31, 2005).[70]

Retailers were categorized in two groups

- Group One retailers (major supermarkets)
- Group Two retailers (all others providing plastic carryout bags)

Since then, a number of initiatives have been implemented, including voluntary at-store recycling of plastic HDPE type carryout bags.

According to a report from the Australia Retailers Association, as of December 31, 2005, **Group One** retailers spent $50 million on public education efforts over two years which resulted in a 45% reduction in the issuance of plastic carryout HDPE bags and a 14 percent in-store recycling rate. The report concluded that "despite these major achievements, the majority of consumers have yet to alter their behavior," and plastic carryout bag "litter remains static over the five year life . . . at around 2% of the total litter stream."[71] This finding is supported by a subsequent report which found "in Australia, voluntary efforts have seen significant reductions in plastic bag consumption; however ***these do not appear to have had a noticeable impact on litter with levels remaining approximately the same***."[72] (emphasis added)

Regarding **Group Two** retailers, "identifying target retailers and activities to gain their attention, and subsequent commitment to act, proved challenging. . ." Thus, it's estimated that Group Two retailers reduced their consumption by only 23%.[73]

Currently, the Australian Retailers Association continues to advocate for more education, and the Australian government continues to examine other options to

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[70] Consultation Regulatory Impact Statement: Investigation of Options to Reduce The Environmental Impact of Plastic Bags, Environment Protection and Heritage Council, January 2007, page 37.
[71] http://www.ephc.gov.au/pdf/Plastic_Bags/ANRA_Report_to_EPHC_Chair_22_May_2006.pdf.
[72] Consultation Regulatory Impact Statement: Investigation of Options to Reduce The Environmental Impact of Plastic Bags, Environment Protection and Heritage Council, January 2007, page 23.
[73] Ibid, page 38.

phase out plastic carryout bags by 2009, including banning them or levying a fee on each plastic carryout bag consumed (similar to Ireland's PlasTax). [74, 75, 76]

South Africa

In 2003, the South African government adopted regulations impacting the manufacture, trade, and commercial distribution of plastic carryout bags in order to combat the plastic carryout bag litter problem. The problem was so pervasive that plastic bag litter was commonly referred to as 'the new national flower.'

Under the new regulations, all plastic carryout bags must now have a minimum thickness of 24 micrometers (microns). In addition, all monies collected from a 3 cent levy are used to fund cleanup efforts, and promote reuse and recycling.[77]

California's New At-Store Recycling Program

To increase the plastic carryout bag recycling rate (currently less than 5 percent), in 2006, California passed Assembly Bill 2449 to "encourage the use of reusable bags by consumers and retailers and to reduce the consumption of single-use carryout bags."[78] Effective July 1, 2007, all large supermarkets and retail businesses (of at least 10,000 square feet with a licensed pharmacy) are required to:

- Establish a plastic carryout bag recycling program at each store;
- Make the recycling bin easily accessible and identifiable to customers;
- Ensure that each plastic carryout bag provided to customers be labeled, "Please Return To A Participating Store For Recycling;" [79]
- Make available reusable bags which are made of cloth, fabric or plastic with a thickness of 2.25 mils or greater. The stores may charge for reusable bags; and,
- Maintain program records for a minimum of three years and make the records available to the California Integrated Waste Management Board or the host jurisdiction.

It is estimated that 7,000 stores statewide are affected.[80] If large supermarkets or manufactures fail to comply, they may face a fine of $500, $1,000, or $2,000 for the first, second, or third violation, respectively.

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[74] http://www.ephc.gov.au/pdf/Plastic_Bags/ANRA_Report_to_EPHC_Chair_22_May_2006.pdf.
[75] Consultation Regulatory Impact Statement: Investigation of Options to Reduce the Environmental Impact of Plastic Bags, Environment Protection and Heritage Council, January 2007, page 70.
[76] The Daily Telegraph - Australia, July 21, 2007, Plastic Bags Ban Rubbished.
[77] http://www.lib.uct.ac.za/govpubs/plasticbags.htm
[78] Assembly Bill 2449, Chapter 845, Statutes of 2006.
[79] Ibid.

Although Assembly Bill 2449 does not establish an at-store recycling rate goal or a consumption reduction goal, on June 12, 2007, the California Integrated Waste Management Board adopted emergency regulations establishing reporting requirements to evaluate the effectiveness of the program.[81]

However, of most interest to local governments is Assembly Bill 2449's preemption clause which prohibits local governments from interfering in the above at-store recycling program, imposing a plastic carryout bag fee on the affected stores, or increasing the above reporting requirements.

While it is unclear where the collected plastic carryout bags are taken for recycling, a few businesses indicated that the bags are taken to their distribution centers and shipped to various recyclers throughout the country.

Assembly Bill 2449 sunsets on January 1, 2013.[82]

Ikea's Self-Imposed Fee On Plastic Carryout Bags

On March 15, 2007, to reduce plastic carryout bag consumption, IKEA became the first major retailer in the United States to voluntarily no longer offer a 'free' plastic bag to customers. Instead, customers are given a choice of purchasing a plastic carryout bag for 5 cents each (all proceeds in the first year would go towards American Forests to plant trees), or purchasing a 'big blue' reusable bag for 59 cents (down from 99 cents).[83] After IKEA introduced a similar program in the United Kingdom last year, IKEA's plastic carryout bag consumption dropped 95 percent.[84]

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[80] California Integrated Waste Management Board, Staff Report, Agenda Item 14, June 12, 2007 Board Meeting.
[81] Ibid.
[82] Assembly Bill 2449, Chapter 845, Statutes of 2006.
[83] http://www.ikea.com/ms/en_US/about_ikea/social_environmental/environment.html, July 17, 2007.
[84] http://www.sltrib.com/ci_6384558, July 17, 2007.

CHAPTER 7

STAKEHOLDER COMMENTS

Industry/Grocer Concerns

While many plastic products play a vital and important role in enhancing our quality of life, recent proposals by local and state governments to ban plastic carryout bags to reduce litter and increase recycling have concerned the plastic and grocer industries. Although these industries acknowledge that plastic carryout bags are a contributor to the litter problem, they believe that plastic carryout bags are unfairly targeted because the problem is not with the plastic carryout bags themselves, but with the lack public education regarding recycling programs. Industries believe that increasing plastic carryout bag recycling programs at stores and at curbside is the key to reducing litter. Industry also believes that a lack of litter prevention programs is the main cause of litter around parks and beaches (e.g., trash cans often don't have lids or are overfilled, causing trash to spill on the ground and plastic carryout bags to be blown away).

In addition, grocers fear a plastic carryout bag ban will result in increased paper bag use, which are heavier, cost more, and ultimately increase the cost to consumers. A rise in cost may also drive consumers to shop at stores not affected by the ban. In addition, grocers fear reusable bags would increase check-out times, thus negatively impacting their business operations. Grocers are quick to point out that many stores already stock reusable bags for consumers to purchase, and that large grocery stores are now required to offer plastic carryout bag recycling stations effective July 1, 2007 as a result of Assembly Bill 2449 (see Chapter 6) – thus, providing consumers more opportunities to recycle and curbing plastic carryout bag litter. Industry believes that with proper public education and promotion, AB 2449 will be successful in reducing the number of plastic carryout bags littered.

Examples of Alternative Products Advocated by Industry

Crown Poly

Crown Poly, a local manufacturer, has created a plastic carryout bag with a reinforced strip on the bottom and reinforced hold handles called the Hippo Sak™.

Because the Hippo Sak™ is slightly larger then the conventional plastic carryout bag, coupled with the aforementioned qualities, it allows consumers to carry more items in each bag and is capable of being reused as a trash can liner.

Although the number of conventional plastic carryout bags consumed may be reduced if the Hippo Sak™ was widely distributed, the litter and environmental impacts associated with conventional plastic carryout bags continue to be applicable to the Hippo Sak™.

DePoly Degradable Solutions

DePoly Degradable Solutions, a company based in England, specializes in making plastic products biodegradable by introducing an additive into the manufacture process. The technology, OXO-degradation, is capable of making plastic carryout bags biodegradable, thus allowing it to breakdown in the natural environment. Because it takes many months for the biodegradable plastic carryout bags to partially degrade in the natural environment, it would not reduce plastic bag litter.

Stripes2Stripes™

Stripes2stripes™ is an emerging company which advocates a system for recycling plastic carryout bags. Under the company's system, plastic carryout bags would have three identifiable diagonal stripes in the lower right-hand corner imprinted with a 1-800 number; consumers would be given a larger plastic bag to store their used Stripes2stripes™ bags; and, when the larger plastic bag is full, consumers would be encouraged to call the 1-800 number or visit the company's website for instructions on where to take their bag for recycling.

Upon evaluating the Stripes2stripes™ program, plastic carryout bag litter would not be reduced since the amount of plastic carryout bags consumed would remain the same; and, the program may contribute to litter since it introduces a larger recycling bag into the marketplace instead of encouraging consumers to store Stripes2stripes™ bags within the same bags.

Consumer and Environmental Groups Perspective

Plastic carryout bags, although convenient, have numerous adverse environmental impacts, including litter and harming marine wildlife. Consumer and environmental groups cited many of the same studies used throughout this report to support their claims.

In addition, these groups also emphasize that local governments should further promote a "reduce, reuse, and recycle" philosophy that educates consumers and businesses on the need to reduce overall plastic carryout bag usage through the use of reusable bags. To discourage the use of plastic carryout bags and curb litter, consumer and environmental groups support a ban or fee on each plastic carryout bag consumed.

List of Contacted Stakeholders

A number of stakeholders were contacted to participate in preparation of this report. Below is a list of those stakeholders.

Table 10 -- Stakeholder List

Organization
1 Bag at a Time
Algalita Marine Research Foundation
Ballona Creek Renaissance
Californians Against Waste
California Coastal Commission
California Grocers Association
California Integrated Waste Management Board
California Restaurant Association
City of Los Angeles (Public Works/Sanitation Department)
Command Packaging
Crown Poly
DePoly Degradable Solutions
Earth Resource Foundation
Ek & Ek, A Lobbyist and Public Advocacy Firm
Environmental Charter High School/Green Ambassadors
Friends of Ballona Wetlands
Keep California Beautiful
Heal the Bay
Los Angeles Audubon Society
Los Angeles Chamber of Commerce
Los Cerritos Wetlands Stewards
Natural Resources Defense Council
Parent Teachers Association Representative
Plastic Recycling Corporation of California
Progressive Bag Alliance
Rose & Kindel/Plastics Association
Santa Monica Baykeepers
Sierra Club, Los Angeles Chapter
Stephen Joseph “Stripes to Stripes”

CHAPTER 8

FINDINGS AND OPTIONS

Key Findings

- **Plastic carryout bags have been found to significantly contribute to litter and have other negative impacts on marine wildlife and the environment.**

- **Biodegradable carryout bags are not a practical solution to this issue in Los Angeles County because there are no local commercial composting facilities able to process the biodegradable carryout bags at this time.**

- **Reusable bags contribute towards environmental sustainability over plastic and paper carryout bags.**

- **Accelerating the widespread use of reusable bags will diminish plastic bag litter and redirect environmental preservation efforts and resources towards "greener" practices.**

Alternatives for the Board of Supervisors to Consider

Since plastic carryout bags distributed at supermarkets and other large retail outlets contribute disproportionately to the litter problem, the County plastic bag working group recommends reducing the prevalence of these bags as a first priority. The working group seeks to subsequently investigate measures to reduce the consumption of plastic and paper carryout bags at the remaining retail establishments throughout the County.

Based on the above factors, the following alternatives are presented to the Board for consideration. Supplementary measures are also provided below to further strengthen the main alternatives.

- **ALTERNATIVE 1 – Ban Plastic Carryout Bags at Large Supermarkets and Retail Stores One Year After Adoption of Ordinance**

  To reduce plastic bag litter, request the County's plastic bag working group (consisting of the Chief Executive Office, County Counsel, Internal Services Department, Public Works, and other County departments/agencies as appropriate) to draft an ordinance banning plastic carryout bags at large supermarkets and retail stores. All large supermarkets and retail stores

voluntarily applying a point of sale fee (e.g., 10¢) on each plastic carryout bag consumed would be exempt from the Ordinance. This exemption would provide more flexibility to affected stores, while providing a mechanism (the consumption fee) with proven effectiveness in reducing overall consumption. The consumption fee is to be retained by the affected store. The Ordinance would also define "large supermarkets and retail stores."

Delay implementation of the ban for one year to allow the working group to work with affected stakeholders, conduct additional outreach efforts and promote awareness of the upcoming ban.

- **ALTERNATIVE 2 – Ban Plastic Carryout Bags At Large Supermarkets And Retail Stores Effective:**
  - **July 1, 2010, If The Bag Disposal Rate Does Not Decrease By A Minimum Of 35%.**
  - **July 1, 2013, If The Bag Disposal Rate Does Not Decrease By A Minimum Of 70%.**

To reduce plastic bag litter, request the County's plastic bag working group to draft an ordinance banning plastic carryout bags at large supermarkets and retail stores. The ban would go into effect automatically, effective:

- July 1, 2010 if the disposal rate of plastic carryout bags does not decrease by a minimum of 35%, using FY 2007-08 as the baseline, by January 1, 2010.
- July 1, 2013 if the disposal rate of plastic carryout bags does not decrease by a minimum of 70%, using FY 2007-08 as the baseline, by January 1, 2013.

All large supermarkets and retail stores voluntarily applying a point of sale fee (e.g., 10¢) on each plastic carryout bag consumed would be exempt from the Ordinance. This exemption would provide more flexibility to affected stores, while providing a mechanism (the consumption fee) with proven effectiveness in reducing overall consumption. The consumption fee is to be retained by the affected store. The Ordinance would also define "large supermarkets and retail stores."

To achieve these goals, the working group shall coordinate with grocers/industry to establish the aforementioned baseline (the difference between total consumption and recycling), reduce the consumption of plastic carryout bags, and increase the recycling rate of plastic carryout bags (within the constraints of Assembly Bill 2449).

The County may accelerate the ban on plastic carryout bags if cities containing a majority of the County's population adopt an ordinance or enter

into a Memorandum of Understanding with the County banning plastic carryout bags.

- **ALTERNATIVE 3 – Status Quo**

  Request the County's plastic bag working group to monitor the effects of Assembly Bill 2449 and other related actions.

Supplementary Measures

To complement the alternatives identified above, the working group also recommends implementing all of the following supplementary measures. Each of these measures may be implemented in addition to whichever alternative is selected by the Board:

A. Direct the Department of Public Works, in consultation with the County plastic bag working group, to implement a comprehensive public education campaign, and create partnerships with large supermarkets, retail stores, and elementary schools to promote reusable bags over plastic and paper carryout bags.

B. Direct the plastic bag working group to draft a resolution for Board consideration prohibiting the purchase and use of plastic carryout bags at all County-owned facilities and County offices.

C. Direct the County's plastic bag working group to actively work with the 88 cities in Los Angeles County to implement measures which reduce the consumption of plastic and paper carryout bags.

D. Direct the Department of Public Works, to aggressively pursue grants and other funding opportunities to fund the comprehensive public education campaign as described in Supplementary Measure A above.

E. Direct the Chief Executive Office, Department of Public Works, and the County's Legislative Advocates to work with the State legislature to:

   - Repeal the provision of Assembly Bill 2449 which prohibits local governments from imposing a fee on plastic carryout bags or implementing other at-store recycling measures;
   - Implement either a statewide fee on each plastic bag used with funds directed to local governments on a per-capita basis for litter prevention and cleanup efforts; or implement statewide benchmarks to reduce the consumption of plastic carryout bags; or implement a statewide ban on plastic carryout bags.

F. Direct the County's plastic bag working group to investigate measures to reduce the consumption of plastic carryout bags at other retail establishments, as well as evaluate paper bag usage throughout the County.

G. Direct Public Works to work with the State, solid waste industry and other stakeholders to develop markets and other programs to reduce plastic bag litter.

H. Direct the County's plastic bag working group to establish a Subcommittee to assist in carrying out the functions of the working group, including tracking the reduction of plastic bag litter to comply with the Federal Clean Water Act.

I. Direct the County's plastic bag working group to provide a semi-annual progress report to the Board describing progress and efforts to reduce the consumption of plastic and paper carryout bags in Los Angeles County.

Appendix F

City of Santa Monica’s Retailer Survey Summary

City of Santa Monica's Retailer Survey Summary

Store Name	Location	Bag Usage	More Plastic Bag Information
10th Street Medical Pharmacy	1450 10th St	2-3 plastic and 20-30 paper bags per day	
99 Cents Only	4000 Union Pacific Ave	350 million plastic bags per year in whole state	1.5-2 cents cost per plastic bag
7-Eleven	630 Wilshire Blvd	120 bags a day	20% of customers request bags. Mostly plastic bags are used.
7-Eleven	1600 Santa Monica Blvd	120 bags a day	20% of customers request bags. Mostly plastic bags are used.
7-Eleven	1865 Lincoln Blvd	120 bags a day	20% of customers request bags. Mostly plastic bags are used.
Albertson's	3105 Wilshire Blvd	approximately 165,000 per month	
Albertson's	2627 Lincoln Blvd	approximately 165,000 per month	
Bob's Market	1650 Ocean Park Blvd	60,000 plastic and 3,600 paper bags per month	25% now bring reusable
Budget Center Market	2327-31 4th St	175 plastic bags per day	less than 1% of customers bring reusable bags
Chiquita Market	1739 Ocean Park Blvd	1800 bags a month	
Convenient Market	2838 Santa Monica Blvd	500 plastic bags in about 2-3 weeks	3 customers bring in their own bag each week
Co-Opportunity	1525 Broadway	15,000 plastic and 9,000 paper bags per month	35% now bring reusable. 10 cents per plastic and 11 cents per paper bag
Exxon #16	1801 Lincoln Blvd	200 plastic bags per day - no reusable bags	
Fair Market	2225 4th St	24,000 bags per month	10% of customers bring reusable bags
Golden Wellness Rx	1202 Montana Ave	5 paper and 5 plastic bags per day	20% bring reusables
Jin's Santa Monica Shell	1866 Lincoln Blvd	25-30 plastic bags per day	
L&K Market	2127 Main St	75-80 plastic bags per day	2 people weekly bring reusable bags
Mrs. Winston's	2450 Colorado Ave	12,000 bags a month	
Mrs. Winston's	2901 Ocean Park Blvd	12,000 bags a month	
One Life Natural Food	3001 Main Street	1,000 plastic bags per wk (3000 per wk in 2007)	2 cents cost for plastic and 10 cents cost for paper
Pavilions	820 Montana Ave	336,000 bags a month	Data taken Aug 2008 * May 2009 suggests 145,000 plastic bags per month and 36,000 paper bags per month.
Ralph's	1644 Cloverfield Blvd	33,750 paper bags per month	Dead lead. 3 referrals. Can't give that info out.
Rite Aid	Wilshire and 13th	45,000 plastic bags per month	
Rite Aid	Wilshire and 18th	39,000 plastic bags per month	
Rite Aid	Pico	30,000 plastic bags per month	
Superior Paper/Plastic Distributor	1930 E. 65th St. LA	Distributor for Santa Monica	1-2.5 cents cost per plastic bag and 8-10 cents for paper
Tehran Market	1417 Wilshire Blvd	1500 bags a month	
The Farms	2030 Montana Ave	22,530 plastic and 2,250 paper bags per month	$31,000 for bags a year
Trader Joe's	3212 Pico Blvd	280,000 bags per month	Data taken Aug 2008 * May 2009 suggests 49,500 plastic bags per month and 99,000 paper bags per month.
Whole Foods	1425 Montana Ave	12,000 paper bags per month	25% now bring reusable
Whole Foods	2201 Wilshire Blvd	25,000 paper bags per month	25% now bring reusable
Whole Foods	500 Wilshire Blvd	12,000 paper bags per month	25% now bring reusable
Wilshire 76	2601 Wilshire Blvd	6 plastic bags per day	
Wilshire Chevron	2420 Wilshire Blvd	100 plastic bags per day	No reusable bags

Appendix G

Worldwide Plastic Bag Bans and Fees

http://www.dep.state.fl.us/waste/retailbags/pages/mapsandlists.htm

Worldwide Plastic Bag Bans and Fees

Source: State of Florida Department of Environmental Protection
http://www.dep.state.fl.us/waste/retailbags/pages/mapsandlists.htm

Plastic Bag Levies & Fees

- **Belgium** – Effective July 1, 2007
- **Denmark –** Adopted in 1994
- **Germany**
- **Hong Kong –** Adopted April 2009; Effective July 2009
- **Ireland** – Effective March 2002
- **Israel** – Adopted June 2008
- **Italy** – Adopted in 1988; Ban to be introduced in 2010
- **Netherlands –** Effective January 2008
    - **Seattle, Washington –** Adopted by city council on July 28, 2008 – *Defeated by ballot initiative on August 18th***.**
    - **Toronto, Ontario —**Effective June 1, 2009
    - **Washington, D.C. –** Adopted June 16, 2009

Plastic Bag Bans

- **United States:**
    - **Alaska –** As of 1998, 30 villages have bans
    - **California:**
        - **Fairfax –** Passed by voter initiative on November 4, 2008
        - **Malibu** – Adopted May 2008
        - **Manhattan Beach** – Adopted July 1, 2008 – *In lawsuit*
        - **Oakland** – Adopted June 29, 2007 – *Voluntary ban*
        - **Palo Alto -** Adopted March 2009; Effective Sept 2009
        - **San Francisco –** Adopted April 2007
    - **Edmonds, WA –** Adopted August 2009; Effective August 2010**.**
    - **Marshall County, Iowa –** Effective April 9, 2009
    - **Hawaii:**
        - **Maui County-** Effective 2011
        - **Paia, Maui** – Effective 2008
        - **Kauai County-** Effective 2011
    - **North Carolina (Outer Banks) –** Adopted June 24, 2009; Effective September 1, 2009
    - **Suffolk County, New York –** Adopted in 1988
    - **Westport, Connecticut** – Adopted September 2, 2008; Effective March 19, 2009.
- **Bangladesh**--Effective March 1, 2002:
    - **Dahka, Bangladesh --** Banned plastic bags in January of 2002
- **Bhutan** -- Adopted June 2007
- **Botswana** -- Effective February 1, 2007
- **Brazil –** Effective October 2007
    - **Buenos Aires, Argentina** – Effective September 2008
- **China** --Effective June 1, 2008
    - **Coles Bay, Tasmania -** Effective April 2003
    - **Red Sea Province (Egypt) –** Effective January 1, 2009
- **Eritrea –**Adopted in 2005
- **France –** Phase out completely by 2010
    - **Corsica** –Full ban effective 1999
    - **Paris, France –** Full ban adopted January 2007
- **India:**
    - **Delhi, India –** Full ban effective January 2009
    - **Chandigarh, India** – Full ban effective October 2, 2008

    - **Himachal Pradesh, India**—Full ban effective 2003
    - **Maharashtra, India**—Full ban effective August 2005
- **Italy –** Effective 2010. Previously, the country had a plastic bag tax.
    - **Karachi, Pakistan** -- Effective December 2008
- **Kenya** –Adopted in June 2007
    - **Loddon Shire, Victoria (Australia)** -- Effective December 2005
- **Macedonia –** Effective January 1, 2009
    - **Manitoba, Canada:**
        - **Coldwell** – Adopted August 12, 2008; Effective October 2008
        - **Eriksdale** – December 9, 2008
        - **Leaf Rapids** --Effective April 2007
    - **Mexico City, Mexico –** Adopted March 2009; Effective August 2009.
    - **New South Wales (Australia):**
        - **Huskisson –** Adopted November 2003
        - **Kangaroo Valley –** Adopted November 2003
        - **Mogo –** Adopted September 2003
    - **Nova Scotia, Canada** – Effective fall 2008 – applies to liquor stores only
- **Papua New Guinea** -- Effective December 2004
    - **Quebec, Canada** – Effective 2009 – provincial ban applies to liquor stores only:
        - **Huntingdon** – Full ban effective January 2008
        - **Amqui, Quebec –** Full ban effective Spring 2008
- **Rwanda—**Adopted in 2005
- **Somalia**—Adopted in 2005
- **Somaliland** – Effective March 2005
- **South Africa–** Adopted May 9, 2003
    - **South Australia –** Adopted November 2008; Effective May 2009
- **Spain** – Mandatory phase out of 50% by end of 2009
- **Taiwan** – Adopted in 2007
- **Tanzania** – Effective October 2006
    - **Zanzibar, Tanzania** – Ban in 2006
- **Uganda**--Effective July 1, 2007
    - **Ulanbaatar, Mongolia** – Adopted June 2008
- **United Kingdom**
    - **Aylsham, England** – Effective May 3, 2008
    - **Banchory, Scotland –** Effective January 2008
    - **Girton, England –** Effective January 2008
    - **Hay-On-Wye, Wales –** Effective December 2007
    - **Hebden Bridge, England –** Effective December 2007
    - **Henfield, England –** Effective May 2008
    - **Kew, England –** Effective July 2008
    - **Llandysilio, Wales –** Effective 2007
    - **Modbury, England –** Effective May 1, 2007
    - **Overton, England –** Effective October 2007
    - **Selkirk, Scotland –** Effective April 4, 2008
    - **Tisbury, England –** Effective January 2008

Appendix H

R3 Store Interviews Summary

R3 Store Interviews Summary

Store Name	Types of Bags Used at Store	Cost of Bags	What is the extra cost for storage of paper bags?	Has store initiated a campaign to reduce bag use?	What reduction in bags has the store experienced?	How long did it take to achieve this decrease?	Does store give refund for using reusable bags?	Any additional costs for counting bags and entering in cash register?	What are public education costs for signage, etc.?
Vons	Plastic, paper and reusables.	Plastic costs $.005 and paper between $.05 and $.09.	Requires 7 trucks for same # of paper bags as one truck of plastic.	Yes, they have resuable bags for sale at check stand. No verbal offer. Bags cost between $1-3.	Very small.	Program has been in place several years.	No.	Yes, incremental cost of time. All about efficiency. Reusable bags slow down line.	None.
Co-Opportunity	Heavy Plastic bags. Paper bags (standard grocery bag size, 100% recycled content, 40% post-consumer).	$0.14 $0.10	Not an issue for this store.	Yes, store clerks prompt customers to use reusable bags, also store signage, and display of bags.	Store has no data.	No data.	Yes, $0.05 refund per bag.	None.	No separate costs; costs are folded in to other activities to communicate with their customers.
Marks & Spencer, UK	They use different types of bags across the different product lines of their stores (clothing vs. food, for example.) The new plastic bags are thicker, so they can be reused, and they have 100% recycled content.	On average, paper bags are 10-30% more expensive than plastic for equivalent size and quantity.	For the same size pallet, they can either store 40,000 plastic bags or 7,875 paper bags. Shipping cost are also higher for paper, due to weight and size.	Yes, the store began with public education, and then added a 5 cent fee per bag (UK pound.)	They achieved an 84% reduction in bag use after a year, with the majority of the reduction (over 70%) occurring in the first month.	Major reductions occurred in the first month, with additional reductions over the first year.	No.	None. They have on-going training of store clerks, and this is part of on-going training.	M&S did a lot of public education, including signage, magazine, direct face-to-face communication with customers, web site information, messages on the bags, signs on tables in their cafes, and give-aways of organic cotton shopping bags with program information printed on them.
Whole Foods	Now: paper bags only; no plastic bags. Whole foods used to use plastic bags - they were premium, thicker bags.	Case price is $27.50. Case price was $20.50.	The store doesn't see the storage issue or shipping as an additional cost.	Yes, store banned plastic bag and reminds/encourages customers to use their own reusable bags. They believe the cessation of plastic bag use brought more attention to the issue, and had an educational affect.	Chain has seen a tripling in use of reusable bags. The store estimates that 33% of customers use reusable bags.	One year.	Refund of either 5 cents or 10 cents per reusable bag, depending on store location. Santa Monica store gives a refund of $0.05 per bag for use of reusable bags.	No cost. Reprogramming occurs routinely.	Public education activities include the refund, reminders by clerks, advertising, sales of bags, displays, promotions, celebrity bags, etc. No cost data.
99 Cents Only	Stores use standard plastic grocery bags, and sell reusable bags.	Reusables offered at 99.99 cents each.	Not an issue for this store.	Yes, stores have added a $0.03 fee on their disposable plastic bags. They also sell reusable bags for 99 cents.	These stores have experienced a 50% reduction in the use of disposable bags.	The decrease occurred within approximately 2 months of the launch of the program.	No.	None.	No significant public education costs.
Trader Joe's	Store uses both standard plastic grocery bags and standard paper grocery bags.	Trader Joe's elected not to provide any data.	Trader Joe's elected not to provide any data.	Customers who use reusable bags are given a slip to enter their name into a lottery each time they use reusable bags. Stores have reminder signs in parking lots and inside stores. They sell reusable bags in stores, and directly communicate with customers.	They have seen at least a 5% reduction in bags due to reuseables.	This program has been in place for several years.	No refund, just lottery chances.	No additional costs foreseen. Cash register programming changes are made by corporate and downloaded from the main server.	They incorporate the reusable bag message into current public education at stores, and do not know the costs of bag education.
The Farms	They use both paper and plastic bags, and sell reusable bags.	Their plastic bags cost half a cent each, and their paper bags cost $0.13 each.	There are no extra storage costs, because the store purchases a weekly supply of bags.	Yes, store offers reusable bags for sale, and reminds customers to use them through direct communication with customers.	No estimate. Many people forget their bags.	No data.	No refund.	No additional costs foreseen. Reprogramming is a 5-10 minute task.	Store has no additional costs for public education, and relies on the City to educate the public.
Albertson's	They use both paper and plastic bags, and sell reusable bags.	Plastic costs between $0.015 and $0.019, paper between $0.046 and $0.08)	Requires 10 more truck loads per year.	Yes. Signs, contest between associates to sell more reusable bags, Earth Day (spend over $25, get a free bag)	500% increase in reusable bag usage.	No data.	No.	No, however costs will be realized by the extra time it takes to assess green fee on paper bags.	Incorporated into current public education. Costs are all due to inefficient time use at register to assess green fee.

Appendix I

"Alternatives to Disposable Shopping Bags and Food Service Items Volume I."

Prepared by Herrerra Environmental Consultants for the City of Seattle January, 2008.

http://www.seattlebagtax.org/herrera1.pdf

Alternatives to Disposable Shopping Bags and Food Service Items
Volume I

Prepared for

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January 29, 2008

Appendix J

"Single Use Disposable Carry-out Bag Ordinance."

Santa Clara County Staff Report December, 2008.

http://www.sccgov.org/SCC/docs%2FIntegrated%20Waste%20Management%20(DIV)%2FStaff%20Report%20from%20SRR%20Subcommittee3.pdf

County of Santa Clara
Recycling and Waste Reduction Commission
Integrated Waste Management Division

1553 Berger Drive, Building #1
San Jose, California 95112
(408) 282-3180 FAX (408) 282-3188
www.ReduceWaste.org

STAFF REPORT

DATE: December 10, 2008

TO: Recycling and Waste Reduction Commission

FROM: Skip Lacaze, Chair
Source Reduction and Recycling Subcommittee to the Technical Advisory Committee

SUBJECT: Single Use Disposable Carry-out Bag Ordinance

RECOMMENDED ACTION

Approve model ordinance language regarding fee for single use carryout bags in unincorporated Santa Clara County in retail establishments and forward a favorable recommendation to the Board of Supervisors, Santa Clara County Cities Association and Mayors and City Managers within Santa Clara County.

FISCAL IMPLICATIONS

Costs associated with implementation and enforcement of this ordinance will be mitigated by the fees collected on the per bag fee.

HISTORY

In April 2008, the Recycling and Waste Reduction Commission (RWRC) was given a presentation on Single Use Carry out Bags. At their August 27 meeting, the RWRC directed the Technical Advisory Committee (TAC) to the RWRC to prepare a recommendation and draft policy on Single-Use Bag/Container Reduction options and report back to RWRC. The Source Reduction Recycling Subcommittee of the TAC met several times between August and December while the City of San Jose held concurrent stakeholder meetings. These meetings resulted in a menu of options for the RWRC to consider. At the October 22 meeting, the RWRC came to consensus on the points in the attached model ordinance.

REASONS FOR RECOMMENDATION

Single-use carryout bags are a source of litter impacting the County of Santa Clara and the wider environment. According to the Santa Clara Valley Urban Runoff Pollution Prevention Program, 60 percent of the litter found in Bay Area creeks is plastic. While paper has been noted in land-based litter studies such as San Francisco's recent report of 2007, "biodegradable" material, which would include paper, only comprises 12% of the litter found in Bay Area creeks. Litter collection for beaches, state highways, cities and counties costs the state $303.2 million each

year; plastic bags represent approximately 1% of the total litter at an approximate cost of $3 million for plastic bags alone.

The collective problem of plastics in the marine environment affects the world beyond Santa Clara County. Santa Clara County land-based debris, including litter (mostly bags, packaging and single-use disposable products) is conveyed through storm drains to local creeks, into San Francisco Bay and into the Pacific Ocean, endangering marine and wildlife.

The environmental impacts and issues include the use of fossil fuels (petroleum and natural gas) *equivalent* to more than 12 million barrels of oil to produce plastic bags, the related pollution and energy consumption due to resource extraction, manufacture and transportation, the billions of bags that end up as litter each year and the fact that plastic breaks into toxic bits that foul soil, waterways and the food web.

The Commission came to unanimous agreement that staff should proceed with a draft ordinance that has the following elements:

A. All types of carry out bags at check outs should be included in the ordinance (paper, plastic and compostable plastic)
B. The ordinance would reduce the use of disposable bags primarily through fees rather than bans
C. The RWRC was willing to go either of two ways depending on feedback from the County and City attorneys. The two acceptable options were "bag ban/with opt out fee" charged to the retailers; or levy fee on consumers. It is recommended that fees be levied on consumers rather than stores to conform with AB 2449.
D. All retailers would be included with a few exceptions (very small retailers and possibly restaurant carry out bags).
E. All jurisdictions will have some form of the ordinance to their City Councils by the week of April 20, 2009 (Earth Week) with a specific effective date to be determined by each jurisdiction (possibly Oct. 1, 2009).
F. Enforcement in unincorporated Santa Clara County will be carried out by the County's Weights and Measures Division when they make their regularly scheduled visits to retailers to do scanner checks; jurisdictions may be choose alternative methods of enforcement.
G. All bags, regardless of size will be included (due to health and safety standards, sub-bags used for produce and meat would be exempt, as would "header" bags used for greeting cards).
H. Performance Standards are built in to the ordinance to measure success that may include litter surveys, store surveys and/or the amount or weight of disposable bags purchased.
I. There will not be a Sunset provision, but there will be a re-evaluation after three years.

Fees collected by the jurisdiction from the retailer may be used for stepped up litter programs, public education/outreach and enforcement of the ordinance.

BACKGROUND

The Technical Advisory Committee (TAC) has discussed at length, several options for the specifics of a model ordinance. These include what types of bags would be covered, which

retailers, fee versus ban or a combination of both, enforcement, provisions for sunset/re-evaluation and performance standards.

The RWRC felt strongly that the model ordinance should be as robust and inclusive as possible, as does the California Grocer's Association. To that end, the following considerations were either included or excluded based on ease of implementation and replication.

A. All types of single-use, disposable carryout bags would be included in the ordinance—plastic, paper, and compostable plastic

1. Alternative: only plastic bags would be included (there is almost unanimous consensus that this alternative is environmentally inferior due to resource consumption and disposal considerations)

B. The ordinance would reduce the use of disposable bags primarily through fees, rather than bans

1. Alternative: the ordinance would be based on bans of all types of disposable carryout bags, rather than fees (less flexible than a fee based system; does not provide revenue to offset costs of litter control or enforcement of bans)
2. Alternative: the ordinance would be based on bans of disposable, carryout plastic bags, and fees on paper bags

C. Single-use, disposable plastic carryout bags would be banned, but individual stores could opt out of the ban if they voluntarily charged a fee on such bags

1. Alternative: the fees would be levied on consumers (the generators of waste bags) rather than stores, which may avoid the local fee preemption in AB 2449
2. Alternative: the ordinance would be based on bans of disposable, carryout plastic bags at the stores where local fees have been preempted by AB 2449, and fees on all other bags, including plastic bags at other stores and paper bags at all stores

D. All retail establishments would be included, except that restaurants and take-out food establishments would be excluded initially, and retailers that were very small or subject to extreme circumstances would be able to apply for exemption

1. Alternative: the ordinances would apply only to the large grocers and pharmacies currently covered by AB 2449
2. Alternative: the ordinance would apply to a larger fraction of retail establishments than AB 2449, but would exclude the majority of small establishments, at least initially (this alternative might be seen as necessary by some jurisdictions if a fee-based system is chosen, due to difficulties of administering a near-universal program)
3. Alternative: the ordinance would apply to all retail except a few specified establishments, perhaps, restaurants (this alternative is seen by the California Grocers Association and some others as superior from a public information and enforcement perspective, especially for a ban-based system)

E. The ordinance would become effective six months after enactment

1. Alternative: the local ordinances would become effective on some specified date or after a different duration
2. Alternative: the local ordinance might only become effective if a Statewide fee or ban is not in effect by January 1, 2010 or some other date
3. Alternative: the local fee would not be effective on all or some stores until the existing preemption of local fees is eliminated or expires

F. Enforcement

1. No consensus on a uniform enforcement system; alternatives mentioned were
   1.1. Countywide enforcement, perhaps by Environmental Health
   1.2. enforcement remains a local option
2. Ban compared to fee systems
   2.1. a ban can be enforced on a complaint basis, but
   2.2. a fee system requires proactive enforcement
3. An ordinance could require store signage (windows, checkout areas) to notify the public that the store is covered by the ordinance or exempt, then enforcement could be on a complaint basis

G. Bag Size – what size bags should be addressed?

1. There should be no exception for carryout bags on the basis of size
   1.1. bags used for protection of unpackaged food, greeting cards, and other items, which are then placed in carryout bags, would be exempt
   1.2. small carryout bags issued at internal points of sale (e.g., pharmacy counters inside larger stores) would not be exempt
2. Used cardboard boxes and other types of carryout packaging would not be covered

H. Performance Standards

One or more of the following alternatives should be selected:

1. Alternative: litter surveys (number or percentage of disposable bags in street surveys; creek trash assessments, collected litter, etc.)
2. Alternative: store surveys of bag use (percentage of disposable and reusable bags)
3. Alternative: amount of disposable bags purchased or used by stores, by number or weight (AB 2449 reporting, expanded to other covered stores to the extent practicable)

I. Sunset/Re-evaluation Provision – when should our effectiveness be evaluated and changes considered?

1. There should be no sunset on local bag ordinances
2. The effectiveness of local ordinances should be evaluated after three years and modifications should be considered as appropriate

CONSEQUENCES OF NEGATIVE ACTION

If the model ordinance is not approved, unincorporated Santa Clara and cities within Santa Clara County will not have model language to assist them in formulating their own ordinances regarding single use carry out bags. Additionally, consumers will continue to receive single use carry out bags at the check stand which will continue to contribute to litter in the road and water ways, impacting wildlife, have a negative environmental impact and drain natural and financial resources in response to the demand and use of these bags.

STEPS FOLLOWING APPROVAL

Forward a favorable recommendation to the Board of Supervisors, the Santa Clara County Cities Association and Mayors and City Managers within Santa Clara County.

Appendix K

Other Research Materials

"Plastic Shopping Bags – Analysis of Levies and Environmental Impacts."

Environment Australia December, 2002

http://www.environment.gov.au/settlements/publications/waste/plastic-bags/pubs/analysis.pdf

Environment Australia

Department of the Environment and Heritage

Plastic Shopping Bags – Analysis of Levies and Environmental Impacts

Final Report

DECEMBER 2002

Prepared in association with
RMIT Centre for Design and
Eunomia Research and Consulting Ltd

Ref: 3111-02

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