# FINDINGS OF FACT AND STATEMENT OF OVERRIDING CONSIDERATIONS ORDINANCES TO BAN PLASTIC CARRYOUT BAGS IN LOS ANGELES COUNTY

(SCH # 2009111104)

PREPARED FOR:

COUNTY OF LOS ANGELES DEPARTMENT OF PUBLIC WORKS ENVIRONMENTAL PROGRAMS DIVISION 900 SOUTH FREMONT AVENUE, 3RD FLOOR ALHAMBRA, CALIFORNIA 9 I 803

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An Environmental Impact Report (EIR) was prepared by the County of Los Angeles (County) to evaluate potential environmental effects that would result from the proposed Ordinances to Ban Plastic Carryout Bags in Los Angeles County (proposed ordinances) and a reasonable range of alternatives. The EIR was prepared in accordance with the California Environmental Quality Act (CEQA) of 1970, as amended (California Public Resources Code, Section 21000 *et seq.*) and State CEQA Guidelines (California Code of Regulations, Title 14, Section 15000 *et seq.*). Alternative 5, the recommended Ordinance to Ban Plastic Carryout Bags and Impose a Fee on Paper Carryout Bags for All Supermarkets and Other Grocery Stores, Convenience Stores, Pharmacies, and Drug Stores in Los Angeles County (recommended ordinances), as evaluated in Section 4.2.6 of the EIR (see Section 12.2, Clarifications and Revisions, of the EIR), was recommended for adoption by the County of Los Angeles Board of Supervisors.

## I.A CERTIFICATION

#### FINDINGS OF FACT AND STATEMENT OF OVERRIDING CONSIDERATIONS REGARDING THE FINAL ENVIRONMENTAL IMPACT REPORT FOR THE ORDINANCES TO BAN PLASTIC CARRYOUT BAGS IN LOS ANGELES COUNTY (STATE CLEARINGHOUSE NUMBER 2009111104)

The County hereby certifies the EIR for the Ordinances to Ban Plastic Carryout Bags in Los Angeles County, County of Los Angeles, California, State Clearinghouse Number 2009111104. The EIR consists of Volume I: Draft EIR, dated June 2010; Volume II: Technical Appendices to the Draft EIR, dated June 2010; and Volume III: Final EIR, dated October 2010. The EIR has been completed in compliance with the CEQA; the State CEQA Guidelines; the County of Los Angeles General Plan; and all applicable federal, state, and local statutes and regulations that govern the management of environmental resources. The County of Los Angeles Board of Supervisors has received, reviewed, and considered the information contained in the Final EIR, all hearings, and submissions of testimony from officials representing the County of Los Angeles, as well as from other agencies, organizations, and private individuals with a particular vested interest in the proposed ordinances.

In accordance with CEQA Guidelines Section 15090, the County of Los Angeles, as lead agency pursuant to CEQA, certifies the following:

- (a) The Final EIR has been completed in compliance with CEQA
- (b) The Final EIR was presented to the Board of Supervisors, and the Board of Supervisors, as the decision-making body for the County of Los Angeles, reviewed and considered the information contained in the Final EIR prior to approving the project
- (c) The Final EIR reflects the County of Los Angeles's independent judgment and analysis

The County has exercised independent judgment in accordance with Public Resources Code Section 21082.1(c) in retaining its own environmental consultant, directing the consultant in preparation of the EIR, and reviewing, analyzing, and revising material prepared by the consultant.

These Findings of Fact (Findings) and Statement of Overriding Considerations have been prepared in accordance with CEQA and the State CEQA Guidelines. The purpose of these Findings is to satisfy the requirements of Public Resources Code Section 21081 and Title 14 California Code of Regulations Sections 15090, 15091, 15092, 15093, and 15097 of the State CEQA Guidelines, in connection with the

approval of an alternative to the proposed ordinance, which is to adopt an ordinance to ban the issuance of plastic carryout bags and impose a fee or charge on the issuance of paper carryout bags for all supermarkets and other grocery stores, convenience stores, pharmacies, and drug stores in the County.

Having received, reviewed, and considered the foregoing information, and recommendations of the County staff, including the Chief Executive Office and the Department of Public Works, as well as any and all other information in the record, and Section I herein, the County hereby makes Findings pursuant to and in accordance with Section 21081 of the Public Resources Code as presented in Sections II through X of these Findings of Fact and Statement of Overriding Considerations.

## I.B DESCRIPTION OF RECOMMENDED ORDINANCES / ALTERNATIVE 5

The recommended County ordinance, identified and analyzed as Alternative 5 in the EIR, will ban the issuance of plastic carryout bags and place a fee or charge on the issuance of paper carryout bags at certain retail establishments in the unincorporated territories of the County. The County will also encourage the County's 88 incorporated cities to adopt similar ordinances. The County provided a detailed analysis of impacts from adoption of the recommended County ordinance in combination with adoption of similar ordinances by the 88 incorporated cities in the County in Section 4.2.6 of the EIR.

The recommended County ordinance aims to significantly reduce the number of carryout bags that are disposed of or that enter the litter stream by ensuring that certain retail establishments located in the County will not distribute or make available to customers any plastic carryout bags, including compostable and biodegradable plastic carryout bags. The recommended County ordinance will ban the issuance of plastic carryout bags and place a fee or charge on the issuance of paper carryout bags by any retail establishment, as defined, that is located in the unincorporated territory of the County. The recommended County ordinance will impose a \$0.10 charge (which satisfies the minimum of \$0.05 that was studied in Alternative 5 in the EIR) on the issuance of paper carryout bags, which will be called "recyclable paper carryout bags," and will require that the bags be 100 percent recyclable overall and contain a minimum of 40 percent post-consumer recycled material, among other criteria. The recommended ordinance will require a store to provide or make available to a customer only reusable bags or recyclable paper carryout bags. The recommended ordinance also will encourage each store to educate its staff to promote reusable bags and to post signs encouraging customers to use reusable bags.

The retail establishments that will be affected by the recommended ordinance are located within the unincorporated area of the County and meet the following criteria:

- (1) A full-line, self-service retail store with gross annual sales of 2 million dollars (\$2,000,000) or more that sells a line of dry grocery, canned goods, or nonfood items and some perishable items;
- (2) A store of at least 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 that has a pharmacy licensed pursuant to Chapter 9 (commencing with Section 4000) of Division 2 of the Business and Professions Code; or
- (3) A drug store, pharmacy, supermarket, grocery store, convenience food store, foodmart, or other entity engaged in the retail sale of a limited line of goods that includes milk, bread, soda, and snack foods, including those stores with a Type 20 or 21 license issued by the Department of Alcoholic Beverage Control.

The recommended County ordinance will also include a performance standard for reusable bags, which among other things, will require reusable bags to have a minimum lifetime of 125 uses and be machine washable. The recommended County ordinance will also include a phased approach, where the ordinance will apply to large grocery stores and pharmacies before applying to smaller grocery stores, convenience stores, and drug stores. The recommended County ordinance also prescribes procedures so affected retail establishments can report on a quarterly basis the number of recyclable paper carryout bags provided to customers.

## I.C STATEMENT OF PROJECT OBJECTIVES

The County is seeking to substantially reduce the operational cost and environmental degradation associated with the use of plastic carryout bags in the County, particularly the component of the litter stream composed of plastic bags, and reduce the associated government funds used for prevention, clean-up, and enforcement efforts.

The County has identified five goals of the recommended ordinances, listed in order of importance: (1) litter reduction, (2) blight prevention, (3) coastal waterways and animal and wildlife protection, (4) sustainability (as it relates to the County's energy and environmental goals), and (5) landfill disposal reduction. The ordinance program has six objectives:

- Conduct outreach to all 88 incorporated cities of the County to encourage adoption of comparable ordinances
- Reduce the Countywide consumption of plastic carryout bags from the estimated 1,600 plastic carryout bags per household in 2007, to fewer than 800 plastic bags per household in 2013
- Reduce the Countywide contribution of plastic carryout bags to litter that blights public spaces Countywide by 50 percent by 2013
- Reduce the County's, cities', and Flood Control District's costs for prevention, cleanup, and enforcement efforts to reduce litter in the County by \$4 million
- Substantially increase awareness of the negative impacts of plastic carryout bags and the benefits of reusable bags, and reach at least 50,000 residents (5 percent of the population) with an environmental awareness message
- Reduce Countywide disposal of plastic carryout bags in landfills by 50 percent from 2007 annual amounts

The recommended ordinances meet all of these objectives.

## I.D BACKGROUND

## I.D.1 Contribution of Plastic Carryout Bags to Litter Stream

The California Integrated Waste Management Board (CIWMB) estimates that plastic grocery and other merchandise bags make up 0.4 percent of California's overall disposed waste stream by weight, but have been shown to make a more significant contribution to litter, particularly within catch basins.<sup>1</sup> The City of San Francisco Litter Audit in 2008 showed that plastic materials were the second most

<sup>&</sup>lt;sup>1</sup> California Environmental Protection Agency, Integrated Waste Management Board. December 2004. "Table ES-3: Composition of California's Overall Disposed Waste Stream by Material Type, 2003." *Contractor's Report to the Board: Statewide Waste Characterization* Study, p. 6. Produced by: Cascadia Consulting Group, Inc. Berkeley, CA. Available at: http://www.ciwmb.ca.gov/Publications/default.asp?pubid = 1097

prevalent form of litter, with 4.7 percent of all litter collected being unidentified miscellaneous plastic litter, and branded plastic retail bags constituting 0.6 percent of the total number of large litter items collected.<sup>2</sup> As an example of the prevalence of plastic bag litter found in catch basins, during the Great Los Angeles River Clean Up, which collected trash from 30 catch basins in the Los Angeles River, it was observed that 25 percent by weight and 19 percent by volume of the trash collected consisted of plastic bags.<sup>3</sup> Results of a California Department of Transportation (Caltrans) study of catch basins alongside freeways in Los Angeles indicated that plastic film composed 7 percent by mass and 12 percent by volume of the total trash collected.<sup>4</sup> County Flood Control District staff have photographed carryout bags in the catch basins and storm drains.<sup>5</sup> According to research conducted by the Los Angeles County Department of Public Works (LACDPW), approximately 6 billion plastic carryout bags are consumed in the County each year, which is equivalent to approximately 1,600 bags per household per year.<sup>6,7,8</sup> Public agencies in California spend more than \$375 million each year for litter prevention, cleanup, and disposal.<sup>9</sup> The County of Los Angeles Flood Control District alone spends more than \$18 million annually for prevention, cleanup, and enforcement efforts to reduce litter.<sup>10,11,12,13</sup> In 2008–2009, the most recent data available, the County Flood Control District spent over \$24 million on these activities.<sup>14</sup>

<sup>10</sup> Los Angeles County Municipal Storm Water Permit (Order 01-182) Individual Annual Report Form. October 2009. Available at: http://dpw.lacounty.gov/wmd/NPDESRSA/AnnualReport/2009/Appendix%20D%20-%20Principal%20Permittee%20Annual%20Report/Principal%20Permittee%20Annual%20Report.pdf

<sup>&</sup>lt;sup>2</sup> City of San Francisco, San Francisco Environment Department. 2008. *The City of San Francisco Streets Litter Re-audit*. Prepared by: HDR; Brown, Vence & Associates, Inc.; and MGM Management Environmental and Management Service. San Francisco, CA. Available at: http://www.sfenvironment.org/downloads/library/2008\_litter\_audit.pdf

<sup>&</sup>lt;sup>3</sup> City of Los Angeles. 18 June 2004. *Characterization of Urban Litter*. Prepared by: Ad Hoc Committee on Los Angeles River and Watershed Protection Division. Los Angeles, CA.

<sup>&</sup>lt;sup>4</sup> Combs, Suzanne, John Johnston, Gary Lippner, David Marx, and Kimberly Walter. 2001. *Results of the Caltrans Litter Management Pilot Study*. Sacramento, CA: California Department of Transportation. Available at: http://www.owp.csus.edu/research/papers/PP020.pdf

<sup>&</sup>lt;sup>5</sup> County of Los Angeles. 2010. Photographs of Catch Basins in Los Angeles County provided to Sapphos Environmental, Inc. by the County of Los Angeles Flood Control District. Available for viewing at Sapphos Environmental, Inc. Headquarters, Pasadena, CA.

<sup>&</sup>lt;sup>6</sup> California Integrated Waste Management Board. 12 June 2007. Board Meeting Agenda, Resolution: Agenda Item 14. Sacramento, CA.

<sup>&</sup>lt;sup>7</sup> U.S. Census Bureau. 2000. "State & County Quick Facts: Los Angeles County, California." Available at: http://quickfacts.census.gov/qfd/states/06/06037.html

<sup>&</sup>lt;sup>8</sup> At an average of slightly fewer than three persons per household.

<sup>&</sup>lt;sup>9</sup> California Department of Transportation. Accessed on: September 2009. "Facts at a Glance." *Don't Trash California*. Available at: http://www.donttrashcalifornia.info/pdf/Statistics.pdf

<sup>&</sup>lt;sup>11</sup> Los Angeles County Municipal Storm Water Permit (Order 01-182) Individual Annual Report Form. October 2008. Available at: http://dpw.lacounty.gov/wmd/NPDESRSA/AnnualReport/2008/Appendix%20D%20-%20Principal%20Permittee%20Annual%20Report/Principal%20Permittee%20&%20County%20Annual%20Report%20 FY07-08.pdf

<sup>&</sup>lt;sup>12</sup> Los Angeles County Municipal Storm Water Permit (Order 01-182) Individual Annual Report Form. October 2007. Available at: http://dpw.lacounty.gov/wmd/NPDESRSA/AnnualReport/2007/Appendix%20D%20-%20Principal%20Permittee%20Annual%20Report/Annual%20Rpt%2006-07.pdf

<sup>&</sup>lt;sup>13</sup> Los Angeles County Municipal Storm Water Permit (Order 01-182) Individual Annual Report Form. October 2006. Available at: http://dpw.lacounty.gov/wmd/NPDESRSA/AnnualReport/2006/Appendix%20D%20-%20Principal%20Permittee%20Annual%20Report/PrincipalPermittee\_AnnualReportFY05-06.pdf

<sup>&</sup>lt;sup>14</sup> Los Angeles County Municipal Storm Water Permit (Order 01-182) Individual Annual Report Form. October 2009. Available at: http://dpw.lacounty.gov/wmd/NPDESRSA/AnnualReport/2009/Appendix%20D%20-%20Principal%20Permittee%20Annual%20Report/Principal%20Permittee%20Annual%20Report.pdf

In addition, the County has obtained survey data from employees at solid waste facilities within the County that indicate that plastic carryout bags pose serious operational problems for landfills.<sup>15</sup> All survey respondents stated that plastic carryout bags cause serious litter issues due to their lightweight nature and propensity to become airborne.<sup>16</sup> Each survey respondent indicated that it was costly and time consuming to provide cleanup crews to address the plastic bag litter problem in neighborhoods in County unincorporated and incorporated areas that are adjacent to the landfills.<sup>17</sup>

## I.D.2 County Motion

On April 10, 2007, the County Board of Supervisors instructed the County Chief Administrative 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 related to three areas and report their findings and accomplish the following:

- 1. 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;
- 2. Inventory and assess the impact of the current campaigns that urge recycling of paper and plastic sacks; and
- 3. Report back to the Board of Supervisors on findings and recommendations to reduce grocery and retail sack waste, any 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.<sup>18,19</sup>

In response to the directive of the Board of Supervisors, the LACDPW prepared and submitted a staff report, *An Overview of Carryout Bags in Los Angeles County*, (LACDPW Report) in August 2007.<sup>20</sup> The LACDPW Report made four key findings:

- 1. Plastic carryout bags have been found to significantly contribute to litter and have other negative impacts on marine wildlife and the environment.
- 2. Biodegradable carryout bags are not a practical solution to this issue in the County because there are no local commercial composting facilities able to process the biodegradable carryout bags at this time.
- 3. Reusable bags contribute toward environmental sustainability over plastic and paper carryout bags.

<sup>&</sup>lt;sup>15</sup> County of Los Angeles Department of Public Works. 2007. Survey: All Solid Waste Facilities: Plastic Bag Analysis for the County of Los Angeles. Los Angeles, CA.

<sup>&</sup>lt;sup>16</sup> County of Los Angeles Department of Public Works. 2007. Survey: All Solid Waste Facilities: Plastic Bag Analysis for the County of Los Angeles. Los Angeles, CA.

<sup>&</sup>lt;sup>17</sup> County of Los Angeles Department of Public Works. 2007. Survey: All Solid Waste Facilities: Plastic Bag Analysis for the County of Los Angeles. Los Angeles, CA.

<sup>&</sup>lt;sup>18</sup> County of Los Angeles Board of Supervisors. 10 April 2007. Board of Supervisors Motion. Los Angeles, CA.

<sup>&</sup>lt;sup>19</sup> County of Los Angeles, Department of Public Works, Environmental Programs Division. August 2007. An Overview of Carryout Bags in Los Angeles County: A Staff Report to the Los Angeles County Board of Supervisors. Alhambra, CA. Available at: http://dpw.lacounty.gov/epd/PlasticBags/PDF/PlasticBagReport\_08-2007.pdf

<sup>&</sup>lt;sup>20</sup> County of Los Angeles, Department of Public Works, Environmental Programs Division. August 2007. An Overview of Carryout Bags in Los Angeles County: A Staff Report to the Los Angeles County Board of Supervisors. Alhambra, CA. Available at: http://dpw.lacounty.gov/epd/PlasticBags/PDF/PlasticBagReport\_08-2007.pdf

4. Accelerating the widespread use of reusable bags will diminish plastic bag litter and redirect environmental preservation efforts and resources toward "greener" practices.<sup>21</sup>

### I.D.2.1 The County's Solid Waste Management Function in the Unincorporated County Area

The County is responsible for numerous solid waste management functions throughout the County, pursuant to the California Integrated Waste Management Act of 1989 [Assembly Bill (AB) 939].<sup>22</sup>

- Implements source reduction and recycling programs in the unincorporated County areas to comply with the State of California'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.

### I.D.2.2 The County's Solid Waste Management Function Countywide

- Implements a variety of innovative Countywide recycling programs, including: Smart Gardening 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 that 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;

<sup>&</sup>lt;sup>21</sup> County of Los Angeles, Department of Public Works, Environmental Programs Division. August 2007. An Overview of Carryout Bags in Los Angeles County: A Staff Report to the Los Angeles County Board of Supervisors, p. 1. Alhambra, CA. Available at: http://dpw.lacounty.gov/epd/PlasticBags/PDF/PlasticBagReport\_08-2007.pdf

<sup>&</sup>lt;sup>22</sup> California State Assembly. Assembly Bill 939, "Integrated Waste Management Act," Chapter 1095.

- 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.<sup>23</sup>

## I.D.3 Carryout Bag Bans and Fees

The State of California considered placing a ban on the issuance of plastic carryout bags under AB 1998. There are currently four local governments in California that have imposed bans on plastic carryout bags: City and County of San Francisco, City of Malibu, Town of Fairfax, and City of Palo Alto. In addition, there is a plastic carryout bag fee ordinance in effect in the District of Columbia.

## Assembly Bill 1998

AB 1998 was introduced in February 2010 to prohibit convenience food stores, foodmarts, and certain specified stores in California from providing plastic carryout bags to customers. Originally, the bill would have required a store, beginning on July 1, 2011, to provide only reusable bags, as defined, or to make recycled paper bags available for sale at a reasonable cost, but not for less than \$0.25. AB 1998 would have preempted local regulations on the use and sales of reusable bags, plastic carryout bags, and recycled paper bags. AB 1998 underwent revisions throughout the legislative process that changed certain provisions in the bill, including changing the \$0.25 fee to the actual average cost of the recycled paper bag provided to the consumer, rounded to the nearest penny.<sup>24</sup> Supporters of the bill included Californians Against Waste, Heal the Bay, California Grocers Association, California League of Conservation Voters, over 20 California cities, Communities for a Better Environment, the County of Los Angeles and five other California counties, Environment California, certain paper and plastic bag manufacturers, and a number of other environmental, business, and commerce groups.<sup>25</sup> Opposers of AB 1998 included the American Chemistry Council and two plastic bag manufacturers (Crown Poly, Inc. and Command Packaging) who, as part of the Save the Plastic Bag Coalition, sued the County over its voluntary Single Use Bag Reduction and Recycling Program. In August 2010, the American Chemistry Council, Exxon, and Hilex Poly Co., a South Carolina-based bag manufacturer, made a series of campaign donations to certain California lawmakers.<sup>26</sup> AB 1998 failed to achieve the number of votes required to pass the State Senate on August 31, 2010, and is currently not under consideration in California.

## City and County of San Francisco

The City and County of San Francisco adopted an ordinance to ban non-compostable plastic carryout bags, which became effective on November 20, 2007.<sup>27</sup> This ordinance, known as the Plastic Bag

<sup>&</sup>lt;sup>23</sup> County of Los Angeles, Department of Public Works, Environmental Programs Division. August 2007. An Overview of Carryout Bags in Los Angeles County: A Staff Report to the Los Angeles County Board of Supervisors, Preface. Alhambra, CA. Available at: http://dpw.lacounty.gov/epd/PlasticBags/PDF/PlasticBagReport\_08-2007.pdf

<sup>&</sup>lt;sup>24</sup> Assembly Bill No. 1998. Amended in Senate August 27, 2010. Available at: http://www.leginfo.ca.gov/pub/09-10/bill/asm/ab\_1951-2000/ab\_1998\_bill\_20100827\_amended\_sen\_v94.pdf

<sup>&</sup>lt;sup>25</sup> Californians Against Waste. Accessed on: October 2010. AB 1998 (Brownley): Plastic Bag Ban. Available at: http://www.cawrecycles.org/issues/current\_legislation/ab1998\_10

<sup>&</sup>lt;sup>26</sup> Ferriss, Susan. 26 August 2010. "Plastic-bag backers donate to California lawmakers ahead of bill's vote." *The Sacramento Bee*. Available at: http://www.sacbee.com/2010/08/26/2983643/plastic-bag-backers-donate-to.html

<sup>&</sup>lt;sup>27</sup> City and County of San Francisco. "Plastic Bag Reduction Ordinance." Web site. Available at: http://www.sfgov.org/site/sf311csc\_index.asp?id = 71355

Reduction Ordinance, stipulates that all stores shall provide only the following as checkout bags to customers: recyclable paper bags, compostable plastic carryout bags, and/or reusable bags.<sup>28</sup> The ordinance further defines stores as a retail establishment located within the geographical limits of the City and County of San Francisco that meets either of the following requirements:

- (1) A full-line, self-service supermarket with gross annual sales of 2 million dollars (\$2,000,000) or more, which sells a line of dry grocery, canned goods, or nonfood items and some perishable items. For purposes of determining which retail establishments are supermarkets, the City shall use the annual updates of the Progressive Grocer Marketing Guidebook and any computer printouts developed in conjunction with the guidebook.
- (2) A retail pharmacy with at least five locations under the same ownership within the geographical limits of San Francisco.

Since adoption of the ordinance, initial feedback from the public has been positive and the use of reusable bags has increased.<sup>29</sup> There have been no reported negative public health issues (salmonella, e. *coli*, food poisoning, *etc.*) related to the increased use of reusable bags.<sup>30</sup> As a result of the ordinance, San Francisco has not noted an increase in the number of waste discharge permits or air quality permits required for paper bag manufacturing in the district, nor has there been a noticeable increase in traffic congestion in proximity to major supermarkets due to increased paper bag delivery trucks.<sup>31</sup> San Francisco has also not noticed any increase in eutrophication in waterways due to increased use of paper bags.<sup>32</sup> San Francisco has not noted any adverse environmental impacts due to paper carryout bag manufacturing, because there are no facilities located in San Francisco that manufacture paper carryout bags.

Although no studies have been performed to document the potential impacts of the ordinance upon plastic carryout bag litter in storm drains, field personnel from the San Francisco Public Utilities Commission have noted a reduction in the amount of plastic carryout bags in catch-basins and have noted that fewer bags are now being entangled in equipment, which can often slow or stop work in the field.<sup>33</sup>

## City of Malibu

On May 27, 2008, the City of Malibu adopted an ordinance banning plastic carryout bags: Chapter 9.28.020, Ban on Shopping Bags, provides that no affected retail establishment, restaurant, vendor or nonprofit vendor shall provide plastic bags or compostable plastic bags to customers.<sup>34</sup> Further, this

<sup>&</sup>lt;sup>28</sup> San Francisco Environment Code, Chapter 17, Section 1703.

<sup>&</sup>lt;sup>29</sup> Galbreath, Rick, County of San Francisco, California. 10 May 2010. Telephone conversation with Angelica SantaMaría, County of Los Angeles, Department of Public Works, Alhambra, California.

<sup>&</sup>lt;sup>30</sup> Galbreath, Rick, County of San Francisco, California. 10 May 2010. Telephone conversation with Angelica SantaMaría, County of Los Angeles, Department of Public Works, Alhambra, California.

<sup>&</sup>lt;sup>31</sup> Galbreath, Rick, County of San Francisco, California. 10 May 2010. Telephone conversation with Angelica SantaMaría, County of Los Angeles, Department of Public Works, Alhambra, California.

<sup>&</sup>lt;sup>32</sup> Galbreath, Rick, County of San Francisco, California. 10 May 2010. Telephone conversation with Angelica SantaMaría, County of Los Angeles, Department of Public Works, Alhambra, California.

<sup>&</sup>lt;sup>33</sup> Hurst, Karen, San Francisco Public Utilities Commission, California. 18 May 2010. Telephone conversation with Luke Mitchell, County of Los Angeles, Department of Public Works, Alhambra, California.

<sup>&</sup>lt;sup>34</sup> Malibu Municipal Code, Title 9, "Public Peace and Welfare," Chapter 9.28, "Ban on Shopping Bags," Section 9.28.020.

same section of the ordinance prohibits any person from distributing plastic carryout bags or compostable plastic carryout bags at any City facility or any event held on City property.

Since the adoption of this ordinance, the City of Malibu has noted a generally positive reaction from the public and an increase in the use of reusable bags.<sup>35</sup>

## City of Palo Alto

On March 30, 2009, the City of Palo Alto adopted an ordinance banning plastic carryout bags: Chapter 5.35 of Title 5, Health and Sanitation, of the Palo Alto Municipal Code provides that all supermarkets in the City of Palo Alto will only provide reusable bags and/or recyclable paper bags. Retail establishments in the City of Palo Alto are required to provide paper bags either as the only option for customers, or alongside the option of plastic bags.<sup>36</sup> If the retail establishment offers a choice between paper and plastic, the ordinance requires that the customer be asked whether he or she requires or prefers paper bags or plastic bags.<sup>37</sup> All retail establishments and supermarkets were to comply with the requirements of this ordinance by September 18, 2009.

Since the adoption of this ordinance, the City of Palo Alto has received a mostly positive reaction from the public. Due to the lack of available baseline data and the fact that the ordinance is relatively recent, the City of Palo Alto has not been able to quantify the potential increase in use of reusable bags.<sup>38</sup>

## Town of Fairfax

The Town of Fairfax, pursuant to Ordinance No. 722, requires that all stores, shops, eating places, and retail food vendors, as defined, shall provide only recyclable paper bags, reusable bags, or compostable plastic bags as checkout bags to customers at the point of sale.<sup>39</sup> With respect to compostable plastic bags, the ordinance indicates, "because of the ongoing threat that compostable plastic bags pose to marine life, the permitted continued use of compostable plastic bags under Section 4 (a) shall be terminated by operation of law, three years from the date of passage of this ordinance."<sup>40</sup>

## District of Columbia

The District of Columbia adopted an ordinance that became effective on September 23, 2009, to implement the provisions of the Anacostia River Clean Up and Protection Act of 2009. The ordinance stipulates that a retail establishment shall charge each customer making a purchase from the establishment a fee of \$0.05 for each disposable carryout bag provided to the customer with the purchase.<sup>41</sup>

<sup>&</sup>lt;sup>35</sup> Nelson, Rebecca, City of Malibu Department of Public Works, Malibu, California. 22 April 2010. Telephone conversation with Angelica SantaMaría, County of Los Angeles, Department of Public Works, Alhambra, California.

<sup>&</sup>lt;sup>36</sup> Palo Alto Municipal Code, Title 5, "Health and Sanitation," Chapter 5.35, Section 5.35.020.

<sup>&</sup>lt;sup>37</sup> Palo Alto Municipal Code, Title 5, "Health and Sanitation," Chapter 5.35, Section 5.35.020.

<sup>&</sup>lt;sup>38</sup> Bobel, Phil, City of Palo Alto Department of Public Works, Palo Alto, California. 22 April 2010. Telephone conversation with Angelica SantaMaría, County of Los Angeles, Department of Public Works, Alhambra, California.

<sup>&</sup>lt;sup>39</sup> Town of Fairfax. Ordinance No. 722, Section 18.18.080. 1 August 2007. Available at: http://www.stopwaste.org/docs/fairfax\_plastic\_bag\_ordinance.pdf

<sup>&</sup>lt;sup>40</sup> Town of Fairfax. Ordinance No. 722. 1 August 2007. Available at: http://www.stopwaste.org/docs/fairfax\_plastic\_bag\_ordinance.pdf

<sup>&</sup>lt;sup>41</sup> District of Columbia Municipal Regulations, Title 21, Chapter 10, "Retail Establishment Carryout Bags," Section 1001.

The tax, one of the first of its kind in the nation, is designed to change consumer behavior and limit pollution in the Chesapeake Bay watershed.<sup>42</sup> Under regulations created by the District of Columbia Department of the Environment, bakeries, delicatessens, grocery stores, pharmacies, and convenience stores that sell food, as well as restaurants and street vendors, liquor stores and "any business that sells food items," must charge the tax on paper or plastic carryout bags. The ordinance also regulates disposable carryout bags used by retail establishments.

Since the adoption of this ordinance, the District of Columbia has seen a marked decrease in the number of bags consumed. In its first assessment of the new law, the District of Columbia Office of Tax and Revenue estimates that city food and grocery establishments issued about 3.3 million bags in January, which suggests a significant decrease.<sup>43</sup> Prior to the bag tax taking effect on January 1, 2010, the Office of the Chief Financial Officer had estimated that approximately 22.5 million bags were being issued per month in 2009.<sup>44</sup>

## Efforts Outside of the United States

### American Samoa

American Samoa is the first United States territory to ban plastic shopping bags. The law, signed by Governor Togiola Tulafono, takes effect February 23, 2011. The U.S. Environmental Protection Agency's (USEPA's) regional administrator for the Pacific Southwest (Mr. Jared Blumenfeld) recently stated, "we welcome American Samoa's leadership in the Pacific islands to ban plastic shopping bags. This action will decrease the amount of plastic waste in the territory and directly protect marine and bird life in the Pacific."<sup>45</sup> The USEPA notes that other countries that have banned free plastic bags include China, Bangladesh, Australia, Italy, South Africa, Ireland, and Taiwan.

## Denmark

In 1994, Denmark levied a tax on suppliers of both paper and plastic carryout bags. Denmark experienced an initial reduction of 60 percent in total use of disposable bags, with a slight increase in this rate over time.<sup>46</sup>

## Ireland

In 2002, Ireland levied a nationwide tax on plastic shopping bags that is paid directly by consumers. Known as the "PlasTax," the 0.15-euro levy is applied at the point-of-sale to retailers and is required to be passed on directly to the consumer as an itemized line on any invoice. The PlasTax applies to all plastic carryout bags, including biodegradable polymer bags. It does not apply to bags for fresh

<sup>&</sup>lt;sup>42</sup> Craig, Tim. 29 March 2010. "Bag tax raises \$150,000, but far fewer bags used." *The Washington Post*. Available at: http://voices.washingtonpost.com/dc/2010/03/bag\_tax\_raises\_150000\_but\_far.html?wprss=dc

<sup>&</sup>lt;sup>43</sup> Craig, Tim. 29 March 2010. "Bag tax raises \$150,000, but far fewer bags used." *The Washington Post*. Available at: http://voices.washingtonpost.com/dc/2010/03/bag\_tax\_raises\_150000\_but\_far.html?wprss=dc

<sup>&</sup>lt;sup>44</sup> Craig, Tim. 29 March 2010. "Bag tax raises \$150,000, but far fewer bags used." *The Washington Post*. Available at: http://voices.washingtonpost.com/dc/2010/03/bag\_tax\_raises\_150000\_but\_far.html?wprss=dc

<sup>&</sup>lt;sup>45</sup> U.S. Environmental Protection Agency. 30 September 2010. Press Release: "U.S. EPA applauds American Samoa's decision to ban plastic shopping bags." Available at:

http://yosemite.epa.gov/opa/admpress.nsf/0/921A87D72D9AAFC1852577AE007394F1

<sup>&</sup>lt;sup>46</sup> GHK Ltd. May 2007. The Benefits and Effects of the Plastic Shopping Bag Charging Scheme. Prepared for: Environmental Protection Department, Hong Kong, China.

produce, reusable bags sold for 0.70 + euro, or to bags holding goods sold on board a ship or plane or in an area of a port or airport exclusive to intended passengers.<sup>47</sup>

After implementation of the PlasTax, plastic carryout bag usage in Ireland initially declined 90 to 95 percent, and subsequently leveled off closer to 75 percent of the original value.<sup>48,49</sup>

## Australia

The Environmental Protection and Heritage Council in Australia has been very active in attempting to reduce plastic carryout bag use. Retailers support carryout bag reductions via a voluntary "Retailers Code." As a result, from 2002 to 2005, plastic carryout bag use fell from 5.95 billion bags to 3.92 billion bags, and then fell again to 3.36 billion bags in 2006, which represents a 44-percent decrease over four years from voluntary activities. However, consumption of plastic carryout bags rose back up to 3.93 billion bags in 2007, a 17-percent increase from 2006.<sup>50</sup>

## Taiwan

In 2003, the Taiwanese government set a direct charge to consumers as part of a wider waste-reduction initiative. The charge resulted in a 68-percent reduction in plastic carryout bag use; however, there was also a significant rate of conversion to paper bags and alternative bags. The initial ban on thin plastic carryout bags was withdrawn from application to storefront restaurants following an increase in total plastic use and problems with compliance.<sup>51</sup>

## I.E EXISTING CONDITIONS

## I.E.1 Plastic Carryout Bags

In 1977, supermarkets began offering to customers plastic carryout bags designed for single use, and by 1996, four out of every five grocery stores were using plastic carryout bags.<sup>52,53,54,55</sup> Since then, plastic carryout bags have been found to contribute substantially to the litter stream and to have

<sup>&</sup>lt;sup>47</sup> Nolan-ITU Pty Ltd., et al. December 2002. Environment Australia: Department of the Environment and Heritage: Plastic Shopping Bags – Analysis of Levies and Environmental Impacts: Final Report, p.21. Sydney, Australia.

<sup>&</sup>lt;sup>48</sup> Cadman, James, Suzanne Evans, Mike Holland and Richard Boyd. August 2005. *Proposed Plastic Bag Levy – Extended Impact Assessment: Volume 1: Main Report: Final Report*, p.7. Edinburgh, Scotland: Scottish Executive.

<sup>&</sup>lt;sup>49</sup> GHK Ltd. May 2007. *The Benefits and Effects of the Plastic Shopping Bag Charging Scheme*. Prepared for: Environmental Protection Department, Hong Kong, China.

<sup>&</sup>lt;sup>50</sup> Environment Protection and Heritage Council. April 2008. Decision Regulatory Impact Statement: Investigation of options to reduce the impacts of plastic bags. Adelaide, Australia.

<sup>&</sup>lt;sup>51</sup> GHK Ltd. May 2007. The Benefits and Effects of the Plastic Shopping Bag Charging Scheme. Prepared for: Environmental Protection Department, Hong Kong, China.

<sup>&</sup>lt;sup>52</sup> SPI: The Plastics Industry Trade Association. 2007. Web site. Available at: http://www.plasticsindustry.org/

<sup>&</sup>lt;sup>53</sup> County of Los Angeles, Department of Public Works, Environmental Programs Division. August 2007. An Overview of Carryout Bags in Los Angeles County: A Staff Report to the Los Angeles County Board of Supervisors. Alhambra, CA. Available at: http://dpw.lacounty.gov/epd/PlasticBags/PDF/PlasticBagReport\_08-2007.pdf

<sup>&</sup>lt;sup>54</sup> SPI: The Plastics Industry Trade Association. 2007. Web site. Available at: http://www.plasticsindustry.org/

<sup>&</sup>lt;sup>55</sup> County of Los Angeles, Department of Public Works, Environmental Programs Division. August 2007. An Overview of Carryout Bags in Los Angeles County: A Staff Report to the Los Angeles County Board of Supervisors. Alhambra, CA. Available at: http://dpw.lacounty.gov/epd/PlasticBags/PDF/PlasticBagReport\_08-2007.pdf

adverse effects on marine wildlife.<sup>56,57,58,59,60,61</sup> The prevalence of litter from plastic bags in the urban environment also compromises the efficiency of systems designed to channel storm water runoff. Furthermore, plastic bag litter leads to increased cleanup costs for the County, Caltrans, and other public agencies.<sup>62,63,64</sup> Plastic bag litter also contributes to environmental degradation and degradation of the quality of life for County residents and visitors.<sup>65</sup> In particular, the prevalence of plastic bag litter in the storm water system and coastal waterways hampers the ability of, and exacerbates the cost to, local agencies to comply with the National Pollution Discharge Elimination System and total maximum daily loads limits (TMDLs) for trash, pursuant to the federal Clean Water Act (CWA).<sup>66,67</sup>

The CIWMB estimates that approximately 3.9 percent of plastic waste can be attributed to plastic carryout bags used for grocery and other merchandise, which represents approximately 0.4 percent of the total waste stream in California.<sup>68,69</sup> Several organizations have studied the effects of plastic litter: Caltrans conducted a study on freeway storm water litter;<sup>70</sup> the Friends of Los Angeles River conducted

 $http://accstr.ufl.edu/publications/BjorndalEtAl_1994\_IngestionOfMarineDebrisByJuvenileSeaTurtlesInCostalFlorida.pdf$ 

<sup>60</sup> Okeanos Ocean Research Foundation. 1989. *Marine Mammal and Sea Turtle Encounters with Marine Debris in the New York Bight and the Northeast Atlantic*. Available at: http://swfsc.noaa.gov/publications/TM/SWFSC/NOAA-TM-NMFS-SWFSC-154 P562.PDF

<sup>65</sup> Keep America Beautiful. Accessed on: 19 October 2010. *Litter Prevention*. Available at: http://www.kab.org/site/PageServer?pagename = focus\_litter\_prevention

<sup>&</sup>lt;sup>56</sup> United Nations Environment Programme. April 2009. *Marine Litter: A Global Challenge*. Nairobi, Kenya. Available at : http://www.unep.org/regionalseas/marinelitter/publications/docs/Marine\_Litter\_A\_Global\_Challenge.pdf

<sup>&</sup>lt;sup>57</sup> California Integrated Waste Management Board. 12 June 2007. Board Meeting Agenda, Resolution: Agenda Item 14. Sacramento, CA.

<sup>&</sup>lt;sup>58</sup> County of Los Angeles, Department of Public Works, Environmental Programs Division. August 2007. An Overview of Carryout Bags in Los Angeles County: A Staff Report to the Los Angeles County Board of Supervisors. Alhambra, CA. Available at: http://dpw.lacounty.gov/epd/PlasticBags/PDF/PlasticBagReport\_08-2007.pdf

<sup>&</sup>lt;sup>59</sup> Bjorndal, K. et al. 1994. "Ingestion of marine debris by juvenile sea turtles in coastal Florida habitats." In *Marine Pollution Bulletin, 28* (3). Available at:

<sup>&</sup>lt;sup>61</sup> Gomerčić, H. et al. European Journal of Wildlife Research. 2006. "Biological aspects of Cuvier's beaked whale (*Ziphius cavirostris*) recorded in the Croation part of the Adriatic Sea." DOI 10.1007/s10344-006-0032-8

<sup>&</sup>lt;sup>62</sup> California Integrated Waste Management Board. 12 June 2007. Board Meeting Agenda, Resolution: Agenda Item 14. Sacramento, CA.

<sup>&</sup>lt;sup>63</sup> County of Los Angeles, Department of Public Works, Environmental Programs Division. August 2007. An Overview of Carryout Bags in Los Angeles County: A Staff Report to the Los Angeles County Board of Supervisors. Alhambra, CA. Available at: http://dpw.lacounty.gov/epd/PlasticBags/PDF/PlasticBagReport\_08-2007.pdf

<sup>&</sup>lt;sup>64</sup> Combs, Suzanne, John Johnston, Gary Lippner, David Marx, and Kimberly Walter. 1998–2000. *Caltrans Litter Management Pilot Study*. Sacramento, CA: California Department of Transportation.

<sup>&</sup>lt;sup>66</sup> United States Code, Title 33, Section 1313, "Water Quality Standards and Implementation Plans." Clean Water Act, Section 303(d).

<sup>&</sup>lt;sup>67</sup> County of Los Angeles, Department of Public Works, Environmental Programs Division. August 2007. An Overview of Carryout Bags in Los Angeles County: A Staff Report to the Los Angeles County Board of Supervisors. Alhambra, CA. Available at: http://dpw.lacounty.gov/epd/PlasticBags/PDF/PlasticBagReport\_08-2007.pdf

<sup>&</sup>lt;sup>68</sup> California Environmental Protection Agency, Integrated Waste Management Board. December 2004. "Table ES-3: Composition of California's Overall Disposed Waste Stream by Material Type, 2003." *Contractor's Report to the Board: Statewide Waste Characterization* Study, p. 6. Produced by: Cascadia Consulting Group, Inc. Berkeley, CA. Available at: http://www.ciwmb.ca.gov/Publications/default.asp?pubid = 1097

<sup>&</sup>lt;sup>69</sup> Note: Plastics make up approximately 9.5 percent of California's waste stream by weight, including 0.4 percent for plastic carryout bags related to grocery and other merchandise, 0.7 percent for non-bag commercial and industrial packaging film, and 1 percent for plastic trash bags.

<sup>&</sup>lt;sup>70</sup> Combs, Suzanne, John Johnston, Gary Lippner, David Marx, and Kimberly Walter. 1998–2000. *Caltrans Litter Management Pilot Study*. Sacramento, CA: California Department of Transportation.

a waste characterization study of the Los Angeles River;<sup>71</sup> the City of Los Angeles conducted a waste characterization study on 30 storm drain basins;<sup>72</sup> and LACDPW conducted a trash reduction and a waste characterization study of street sweeping and trash capture systems near and within the Hamilton Bowl, located in Long Beach, California.<sup>73</sup> These studies concluded that plastic film (including plastic bag litter) composed between 7 to 30 percent by mass and between 12 to 34 percent by volume of the total litter collected. Despite the implementation of best management practices, installation of litter control devices such as cover fences for trucks, catch basins, and facilities to prevent airborne bags from escaping, and despite the use of roving patrols to pick up littered bags, plastic bag litter remains prevalent throughout the County.<sup>74</sup> AB 2449 requires all supermarkets (grocery stores with more than \$2 million in annual sales) and retail businesses of at least 10,000 square feet with a licensed pharmacy to establish a plastic carryout bag recycling program at each store. Starting on July 1, 2007, each store must provide a clearly marked bin that is easily available for customers to deposit plastic carryout bags for recycling. The stores' plastic bags must display the words "please return to a participating store for recycling."<sup>75</sup> In addition, the affected stores must make reusable bags available to their patrons. These bags can be made of cloth, fabric, or plastic with a thickness of 2.25 mils or greater.<sup>76</sup> The stores are allowed to charge their patrons for reusable bags.<sup>77</sup> Store operators must maintain program records for a minimum of three years and make the records available to the local jurisdiction.<sup>78</sup>

### I.E.2 Paper Bags

The production, distribution, and disposal of paper carryout bags also have known adverse effects on the environment.<sup>79,80</sup> There is a considerable amount of energy that is used, trees that are felled, and pollution that is generated in the production of paper carryout bags.<sup>81,82</sup> The CIWMB determined in the 2004 Statewide Waste Characterization Study that approximately 117,000 tons of paper carryout bags are disposed of each year by consumers throughout the County. This amount accounts for

<sup>&</sup>lt;sup>71</sup> Friends of the Los Angeles River and American Rivers. 2004. *Great Los Angeles River*. Los Angeles and Nevada City, CA.

<sup>&</sup>lt;sup>72</sup> City of Los Angeles, Sanitation Department of Public Works. June 2006. *Technical Report: Assessment of Catch Basin Opening Screen Covers*. Los Angeles, CA.

<sup>&</sup>lt;sup>73</sup> County of Los Angeles, Department of Public Works, Environmental Programs Division. August 2007. An Overview of Carryout Bags in Los Angeles County: A Staff Report to the Los Angeles County Board of Supervisors. Alhambra, CA. Available at: http://dpw.lacounty.gov/epd/PlasticBags/PDF/PlasticBagReport\_08-2007.pdf

<sup>&</sup>lt;sup>74</sup> County of Los Angeles, Department of Public Works, Environmental Programs Division. August 2007. An Overview of Carryout Bags in Los Angeles County: A Staff Report to the Los Angeles County Board of Supervisors. Alhambra, CA. Available at: http://dpw.lacounty.gov/epd/PlasticBags/PDF/PlasticBagReport\_08-2007.pdf

<sup>&</sup>lt;sup>75</sup> Public Resources Code, Section 42250–42257. 2006. Assembly Bill 2449.

<sup>&</sup>lt;sup>76</sup> Public Resources Code, Section 42250–42257. 2006. Assembly Bill 2449.

<sup>&</sup>lt;sup>77</sup> Public Resources Code, Section 42250-42257. 2006. Assembly Bill 2449.

<sup>&</sup>lt;sup>78</sup> California Integrated Waste Management Board. 12 June 2007. Board Meeting Agenda, Resolution: Agenda Item 14. Sacramento, CA.

<sup>&</sup>lt;sup>79</sup> County of Los Angeles, Department of Public Works, Environmental Programs Division. October 2008. County of Los Angeles Single Use Bag Reduction and Recycling Program – Program Resource Packet. Alhambra, CA.

<sup>&</sup>lt;sup>80</sup> Green Cities California. March 2010. *Master Environmental Assessment on Single-Use and Reusable Bags*. Prepared by ICF International. San Francisco, CA.

<sup>&</sup>lt;sup>81</sup> County of Los Angeles Board of Supervisors. 22 January 2008. *Single Use Bag Reduction and Recycling Program* (*Resolution and Alternative 5*). Los Angeles, CA. Available at: http://dpw.lacounty.gov/epd/PlasticBags/Resources.cfm

<sup>&</sup>lt;sup>82</sup> County of Los Angeles, Department of Public Works, Environmental Programs Division. October 2008. County of Los Angeles Single Use Bag Reduction and Recycling Program – Program Resource Packet. Alhambra, CA.

approximately 1 percent of the total 12 million tons of solid waste generated each year.<sup>83</sup> However, paper bags have the potential to biodegrade if they are sufficiently exposed to oxygen, sunlight, moisture, soil, and microorganisms (such as bacteria); they are denser and less susceptible to becoming airborne; and they generally have a higher recycling rate than do plastic bags. The U.S. Environmental Protection Agency reported that the recycling rate for high-density polyethylene plastic bags and sacks was 11.9 percent in 2007, compared to a recycling rate of 36.8 percent of paper bags and sacks.<sup>84</sup> The County currently has an education outreach program for curbside recycling, which includes paper carryout bags.<sup>85</sup> There is nearly universal access to curbside recycling throughout the County, where paper bags can be recycled by homeowners conveniently. The paper used to make standard paper carryout bags is originally derived from wood pulp, which is a naturally biodegradable and compostable material. The brown paper bags currently used by stores in the County are made of at least 40 percent post-consumer recycled content.<sup>87</sup> Based upon the available evidence, paper carryout bags are less likely to become litter than are plastic carryout bags.

## I.E.3 Reusable Bags

Reusable bags offer an alternative to plastic carryout bags, compostable plastic carryout bags, and paper carryout bags. The utility of a reusable bag has been noted in various reports, such as the 2008 report by Green Seal, which estimates the life of a reusable bag as being between two and five years.<sup>88</sup> In 1994, the Green Seal report encouraged an industry standard of a minimum of 300 reusable bag uses; today, Green Seal recommends a more ambitious standard of a minimum of 500 uses under wet conditions (bag testing under wet conditions is more stringent testing).<sup>89</sup> Furthermore, life cycle studies for plastic products have documented the adverse impacts related to various types of plastic and paper bags; however, life cycle studies have also indicated that reusable bags are the preferable option to both paper bags and plastic bags.<sup>90,91,92,93</sup>

<sup>&</sup>lt;sup>83</sup> California Environmental Protection Agency, Integrated Waste Management Board. December 2004. Contractor's Report to the Board: 2004 Statewide Waste Characterization Study. Produced by: Cascadia Consulting Group, Inc. Berkeley, CA. Available at: http://www.ciwmb.ca.gov/publications/localasst/34004005.pdf

<sup>&</sup>lt;sup>84</sup> U.S. Environmental Protection Agency. November 2008. "Table 21: Recovery of Products in Municipal Solid Waste, 1960 to 2007." *Municipal Solid Waste in the United States: 2007 Facts and Figures*. Washington, DC. Available at: http://www.epa.gov/waste/nonhaz/municipal/pubs/msw07-rpt.pdf. The referenced table included the recovery of post-consumer wastes for the purposes of recycling or composting, it did not include conversion/fabrication scrap. The report includes the recovery of plastic bags, sacks, and wraps (excluding packaging) for a total of 9.1 percent of plastic recovered in this category. The County of Los Angeles conservatively estimates that the percentage of plastic bags in this category for the County of Los Angeles is less than 5 percent.

<sup>&</sup>lt;sup>85</sup> County of Los Angeles Department of Public Works. Accessed October 12, 2010. Outreach Programs. Web sites available at: http://dpw.lacounty.gov/epd/recycling/outreach.cfm and http://dpw.lacounty.gov/epd/recycling/crm.cfm

<sup>&</sup>lt;sup>86</sup> American Forest and Paper Association. Accessed on: 25 October 2010. "Facts about Paper." Web site. Available at: http://www.afandpa.org/FunFacts.aspx

<sup>&</sup>lt;sup>87</sup> Perez, David, County of Los Angeles, Department of Public Works. 30 October 2008. E-mail correspondence; Paper Bag Distribution – Field Survey Summary - on file at Sapphos Environmental, Inc. Pasadena, CA.

<sup>&</sup>lt;sup>88</sup> Green Seal, Inc. is an independent non-profit organization that uses science-based standards and the power of the marketplace to provide recommendations regarding sustainable products, standards, and practices.

<sup>&</sup>lt;sup>89</sup> Green Seal, Inc. 13 October 2008. Green Seal Proposed Revised Environmental Standard For Reusable Bags (GS-16). Washington, DC. Available at: http://www.greenseal.org/certification/gs-

<sup>16</sup>\_reusable\_bag\_proposed\_revised\_standard\_background%20document.pdf

<sup>&</sup>lt;sup>90</sup> Reusable bag manufacturers in the United States are expected to enforce industry standards and recommendations, such as using recycled materials, to reduce adverse environmental impacts.

Reusable bags are intended to provide a viable alternative to the use of paper or plastic carryout bags.<sup>94</sup> Currently, some stores within the County, such as certain Whole Foods divisions, do not offer plastic carryout bags at checkout, but instead offer reusable bags for sale and provide rebates if its patrons bring their own reusable bags. Other stores, such as certain Ralphs divisions, offer reusable bags for purchase at registers and offer various incentives such as store rewards or store credit to customers who use reusable bags.<sup>95</sup>

## I.E.4 Voluntary Single Use Bag Reduction and Recycling Program

On January 22, 2008, the County Board of Supervisors approved a motion to implement the voluntary Single Use Bag Reduction and Recycling Program in partnership with large supermarkets and retail stores, the plastic bag industry, environmental organizations, recyclers and other key stakeholders. The program aims to promote the use of reusable bags, increase at-store recycling of plastic bags, reduce consumption of single-use bags, increase the post-consumer recycled material content of paper bags, and promote public awareness of the effects of litter and consumer responsibility in the County. The voluntary program establishes benchmarks for measuring the effectiveness of the program, seeking a 30-percent decrease in the disposal rate of carryout plastic bags from the fiscal year 2007–2008 usage levels by July 1, 2010, and a 65-percent decrease by July 1, 2013.<sup>96</sup>

The County identified three tasks to be undertaken by the County, stores, and manufacturers as part of the voluntary program's key components:

- 1. Large supermarket and retail stores: develop and implement store-specific programs such as employee training, reusable-bag incentives, and efforts related to consumer education
- 2. Manufacturer and trade associations: encourage members to participate in the program, provide technical assistance and marketing recommendations, and coordinate with large supermarkets and stores
- 3. County of Los Angeles Working Group: facilitate program meetings, determine specific definitions for target stores, establish a framework describing participant levels and participation expectations, and develop and coordinate program specifics such as educational material, reduction strategies, establishment of disposal rates and measurement methodology, progress reports, and milestones

<sup>94</sup> Green Seal, Inc. 13 October 2008. Green Seal Proposed Revised Environmental Standard For Reusable Bags (GS-16). Washington, DC. Available at: http://www.greenseal.org/certification/gs-

<sup>&</sup>lt;sup>91</sup> Green Seal, Inc. 13 October 2008. Green Seal Proposed Revised Environmental Standard For Reusable Bags (GS-16). Washington, DC. Available at: http://www.greenseal.org/certification/gs-

 $<sup>16\</sup>_reusable\_bag\_proposed\_revised\_standard\_background\%20 document.pdf$ 

<sup>&</sup>lt;sup>92</sup> Boustead Consulting & Associates, Ltd. 2007. *Life Cycle Assessment for Three Types of Grocery Bags – Recyclable Plastic; Compostable, Biodegradable Plastic; and Recycled, Recyclable Paper.* Available at: http://www.americanchemistry.com/s plastics/doc.asp?CID=1106&DID=7212

<sup>&</sup>lt;sup>93</sup> Green Cities California. March 2010. *Master Environmental Assessment on Single-Use and Reusable Bags*. Prepared by: ICF International. San Francisco, CA.

<sup>16</sup>\_reusable\_bag\_proposed\_revised\_standard\_background%20document.pdf

<sup>&</sup>lt;sup>95</sup> Ralphs Grocery Company. 2009. "Doing Your Part: Try Reusable Shopping Bags." Web site. Available at: http://www.ralphs.com/healthy\_living/green\_living/Pages/reusable\_bags.aspx

<sup>&</sup>lt;sup>96</sup> County of Los Angeles Board of Supervisors. 22 January 2008. *Single Use Bag Reduction and Recycling Program* (*Resolution and Alternative 5*). Los Angeles, CA. Available at: http://dpw.lacounty.gov/epd/PlasticBags/Resources.cfm

In March 2008, the County provided each of the 88 incorporated cities in the County with a sample "Resolution to Join" letter that extended to the cities an opportunity to join the County in the abovementioned activities related to the Single Use Plastic Bag Reduction and Recycling Program. There are currently 11 cities within the County that have signed resolutions to join the County in its efforts and in adopting similar ordinances for their respective cities: Agoura Hills, Azusa, Bell, Glendale, Hermosa Beach, Lomita, Pico Rivera, Pomona, Redondo Beach, Santa Fe Springs, and Signal Hill. These cities have implemented a variety of public education and outreach efforts to encourage participation within their cities, including developing public education brochures, running public service announcements on their city's cable television channel, establishing committees focused on community outreach, and distributing recycled-content reusable bags at community events.

These endeavors were undertaken in an effort to increase the participation of grocery stores, to shift consumer behavior to the use of recycled plastic bags, and to encourage a considerable transition to the use of reusable bags.

Since that time, the County Working Group found that the program was not successful in achieving its goals. Over a two-year period and despite State law, stores in the unincorporated area did not provide data that would enable County staff to determine if the voluntary Program benchmark of 30 percent disposal reduction of plastic bags had been met. Furthermore, although the public education and outreach aspects of the program, including the successful Brag About Your Bag Campaign, were effective in raising awareness of the environmental impacts of carryout bags and the benefits of reusable bags, it did not translate into changes in consumer behavior significant enough to address the County's major objectives.<sup>97</sup>

## I.F EIR PROCESS

The County prepared an EIR for the proposed ordinances in accordance with CEQA. The County has taken steps to encourage the public to participate in preparation of the environmental analysis for the proposed ordinances. On December 1, 2009, the County circulated an NOP for a Draft EIR for the proposed ordinances to the State Clearinghouse and to various federal, state, regional, and local government agencies. A public Notice of Availability (NOA) of the NOP was published in the *Los Angeles Times*. The NOP and Initial Study were mailed (or e-mailed) directly to approximately 480 agencies and interested parties. The NOP advertised six public scoping meetings for interested parties to receive information on the proposed ordinances and the CEQA process, as well as providing an opportunity for the submittal of comments. The scoping meetings facilitated early consultation with interested parties in compliance with Section 15082 of the State CEQA Guidelines. The meetings were held on December 7, 8, 9, 10, 11, and 14, 2009, at the following seven locations:

- East Los Angeles College, 1700 Avenida Cesar Chavez, Monterey Park, California 91754
- Yvonne B. Burke Community and Senior Center, 4750 West 62nd Street (Baldwin Hills / Ladera Heights Area), Los Angeles, California 90056
- County of Los Angeles Department of Public Works (LACDPW) headquarters, Conference Room C, 900 South Fremont Avenue, Alhambra, California 91803
- Calabasas Library, Founder's Hall, 101 Civic Center Way, Calabasas, California 91302
- Steinmetz Senior Center, 1545 South Stimson Avenue, Hacienda Heights, California 91745

<sup>&</sup>lt;sup>97</sup> County of Los Angeles Chief Executive Office. 5 August 2010. *Single Use Bag Reduction and Recycling Program and Expanded Polystyrene Food Containers – Final Quarterly Progress Report*. Available at: http://dpw.lacounty.gov/epd/PlasticBags/PDF/BoardLetters/bdls\_080510\_bagrpt10.pdf

- Castaic Regional Sports Complex, 31230 North Castaic Road, Castaic, California 91384
- Jackie Robinson Park, 8773 East Avenue R, Littlerock, California 93543

A total of 18 individuals attended the scoping meetings. The public review period closed on January 4, 2010. The County requested information from the public related to the range of actions under consideration and alternatives, mitigation measures, and significant effects to be analyzed in depth in the EIR. All verbal and written comments related to environmental issues that were provided during public review of the NOP and at scoping meetings were considered in the preparation of this EIR. This EIR considers alternatives that are capable of avoiding or reducing significant effects of the proposed ordinances. The comment period for the NOP and Initial Study closed on January 4, 2010. A total of seven comment letters were received in response to the NOP and Initial Study. The Final EIR considered the environmental issues identified in the NOP, responses to letters of comments received on the Draft EIR, and clarifications and revisions resulting from public review of the Draft EIR.

The EIR was prepared to inform public agency decision makers and the general public about the proposed ordinances and their potentially significant environmental effects, to suggest possible ways of minimizing those significant effects, and to describe a reasonable range of alternatives that could feasibly attain most of the basic objectives of the proposed ordinances, but would avoid or substantially lessen any of the potentially significant effects of the proposed ordinances. The Draft EIR was completed and forwarded to the Governor's Office of Planning and Research (OPR) State Clearinghouse on June 2, 2010, for a 45-day review period that ended on July 16, 2010.

An electronic copy of the Draft EIR was made available at all public libraries in the County, and a hard copy of the Draft EIR was made available at each of 10 public libraries. An NOA of the Draft was advertised EIR for public review in the *Los Angeles Times*, delivered to all public libraries in the County, and sent via postal mail and/or e-mail to 27 public agency representatives and approximately 460 stakeholders, including private organizations and individuals. Copies of the Draft EIR were available for purchase, at reproduction cost, from the County. A total of 11 letters of comment and a petition with more than 1,800 signatures were received in response to the Draft EIR. In addition, the County hosted six public meetings throughout the County to provide the public with key findings of the Draft EIR and to solicit comments.

The Final EIR was prepared based on the Draft EIR, comments received in response the Draft EIR during circulation of the document for public review, and clarifications and revisions resulting from public review of the Draft EIR. A total of 11 letters of comment and a petition with over 1,800 signatures urging the County to ban plastic carryout bags, were received on the Draft EIR from resource agencies, organized groups, and individuals: County of Los Angeles Fire Department, City of Palmdale, City of Pasadena, American Chemistry Council, Heal the Bay, Renewable Bag Council, Symphony Environmental Technologies, Save the Plastic Bag Coalition, Mr. Lars Clutterham, Ms. Hillary Gordon, and OPR State Clearinghouse. Upon completion of the review period for the Draft EIR, a Final EIR was prepared and provided to the County Board of Supervisors for certification of compliance with CEQA, and for review and consideration as part of the decision-making process for the proposed ordinances.

## I.G GENERAL FINDINGS

During the environmental evaluation of the proposed ordinances, the County evaluated all environmental issues recommended by CEQA and the State CEQA Guidelines.

The Initial Study determined that the proposed ordinances would not be expected to result in significant impacts to 12 environmental issue areas: aesthetics, agricultural and forestry resources,

cultural resources, geology and soils, hazards and hazardous materials, land use and planning, mineral resources, noise, population and housing, public services, recreation, and transportation and traffic. The Initial Study, which addressed several arguments raised by certain members of the plastic bag industry, concluded that the proposed ordinances may have the potential to result in significant negative or beneficial impacts related to 5 environmental issue areas: air quality, biological resources, greenhouse gas (GHG) emissions, hydrology and water quality, and utilities and service systems.

The EIR determined that the recommended County ordinance (analyzed as Alternative 5), based on the County's assumption of a conservative number of plastic bags used in its analysis and a conservative scenario of 50 percent conversion to paper carryout bags, when applying the threshold "generate greenhouse gas emissions, either directly or indirectly that may have a significant effect on the environment," that GHG emissions due to the end of life of paper carryout bags in landfills would be cumulatively considerable.

The County has evaluated six alternatives to the proposed ordinances (including the No Project Alternative): ban plastic and paper carryout bags in Los Angeles County; ban plastic carryout bags for all supermarkets and other grocery stores, convenience stores, pharmacies, and drug stores in Los Angeles County; or ban plastic and paper carryout bags for all supermarkets and other grocery stores, and drug stores in the County; or ban plastic carryout bags for all supermarkets and other grocery stores, and drug stores in the County; or ban plastic carryout bags for all supermarkets and other grocery stores, pharmacies, and drug stores in the County; or ban plastic carryout bags for all supermarkets and other grocery stores, convenience stores, pharmacies, and drug stores in the County. In addition, the EIR also analyzed the No Project Alternative pursuant to CEQA. Alternative 4 was determined to be the environmentally superior alternative because it would result in the greatest reduction in the use of both plastic and paper carryout bags. Alternative 5 will also result in a significant reduction in plastic carryout bags, while retaining an option for consumers to purchase paper carryout bags should they choose to pay a charge for paper carryout bags, forget their reusable bags, or are visiting in the area and do not have reusable bags with them. Alternative 5 was recommended for adoption by the County Board of Supervisors.

Before project approval, an EIR must be certified pursuant to Section 15090 of the State CEQA Guidelines. Prior to approving a project for which an EIR has been certified, and for which the EIR identifies one or more significant environmental impacts, the approving agency must make one or more of the following findings, with a brief explanation of the rationale, pursuant to Public Resources Code Section 21081 and Section 15091 of the State CEQA Guidelines, for each identified significant impact:

- (1) Changes or alterations have been required in, or incorporated into, the project that avoid or substantially lessen the significant environmental effect as identified in the final EIR.
- (2) Such changes or alterations are within the responsibility and jurisdiction of another public agency and not the agency making the finding. Such changes have been adopted by such other agency or can and should be adopted by such other agency.
- (3) Specific economic, legal, social, technological, or other considerations, including provision of employment opportunities for highly trained workers, make infeasible the mitigation measures or project alternatives identified in the EIR.

The County has made one or more of the specific written Findings above regarding each significant impact associated with the project. Those Findings are presented in Chapter X of this document, along with a presentation of facts in support of the Findings.

Section 15092 of the State CEQA Guidelines states that after consideration of an EIR, and in conjunction with the Section 15091 findings identified above, the lead agency may decide whether or how to approve or carry out the project. The lead agency may approve a project with unavoidable adverse environmental effects only when it finds that specific economic legal, social, technological, or other benefits of the project outweigh those effects. Section 15093 requires the lead agency to document and substantiate any such determination in a "statement of overriding considerations" as a part of the record. The Authority's Statement of Overriding Considerations is presented in Chapter IX of this document.

# SECTION II POTENTIAL ENVIRONMENTAL EFFECTS THAT ARE NOT SIGNIFICANT

The analysis undertaken in support of the Initial Study for the ordinances that was completed on December 1, 2009, determined that there are 12 environmental issue areas pursuant to the State CEQA Guidelines that will not have significant impacts resulting from implementation of the ordinances: aesthetics, agriculture and forestry resources, cultural resources, geology and soils, hazards and hazardous materials, land use and planning, mineral resources, noise, population and housing, public services, recreation, and transportation and traffic. Therefore, these issue areas were not carried forward for detailed analysis in the EIR for the ordinances.

The EIR analysis also determined that the recommended ordinances (analyzed as Alternative 5 in the EIR) will not result in significant impacts related to air quality, biological resources, hydrology and water quality, and utilities and service systems.

## II.A AESTHETICS

### Significant Impact:

None.

## Finding:

The recommended ordinances will not result in significant impacts to aesthetics. Therefore, no mitigation is required.

## Rationale:

The above finding is made based on the analysis in the EIR and Initial Study for the ordinances, including in, but not limited to, Section 2.0, Environmental Checklist, and Section 3.0, Environmental Analysis, of the Initial Study. The recommended ordinances will not have a substantial adverse effect on a scenic vista, will not substantially damage scenic resources within a state scenic highway, will not substantially degrade existing visual character or quality, and will not create a new source of substantial light or glare.

## II.B AGRICULTURE AND FORESTRY RESOURCES

## Significant Impact:

None.

## Finding:

The recommended ordinances will not result in significant impacts to agriculture and forest resources. Therefore, no mitigation is required.

#### Rationale:

The above finding is made based on the analysis in, but not limited to, the EIR and Sections 2.0 and 3.0 of the Initial Study for the ordinances, as well as additional analysis undertaken to support the EIR, as discussed in response to Comment No. 25 from the American Chemistry Council in Section 13 of the Final EIR. There are no Prime Farmlands, Unique Farmlands, Farmlands of Statewide Importance, forest land, or timberland that would be significantly impacted by the recommended ordinances. No Farmlands will be converted to nonagricultural use, and the recommended ordinances will not conflict with zoning for agriculture, forest land, or any Williamson Act contracts. The majority of paper carryout bags supplied to the greater Los Angeles metropolitan area are produced in and delivered from states outside of California, or from countries outside of the United States, such as Canada (see EIR, page 3.1-17). The State CEQA Guidelines state, "An evaluation of the environmental effects of a proposed project need not be exhaustive, but the sufficiency of an EIR is to be reviewed in the light of what is reasonably feasible";<sup>1</sup> based on this stipulation, the County finds that a detailed analysis of impacts to forest resources is too speculative and would be unreasonably burdensome. Specifically, the location and type of forest (certified sustainable, plantations, reforested, etc.) and the amount of wood fiber procured from trees that could be attributed to the project is unknown. Section 15145 of the State CEQA Guidelines states, "If, after a thorough investigation, a lead agency finds that a particular impact is too speculative for evaluation, the agency should note its conclusion and terminate discussion of the impact."

## II.C AIR QUALITY

#### Significant Impact:

None.

#### Finding:

The recommended ordinances will not result in significant impacts to air quality. Therefore, no mitigation is required.

#### **Rationale:**

The above finding is made based on the analysis included in, but not limited to, Sections 2.0 and 3.0 of the Initial Study and Sections 3.1, Air Quality, and 4.0, Alternatives, of the EIR for the ordinances. The recommended ordinances (analyzed as Alternative 5) will not conflict with or obstruct implementation of the applicable air quality plan; will not violate any air quality standard or contribute substantially to an existing or projected air quality violation; will not result in a cumulatively considerable net increase of any criteria pollutant for which the County is in non-attainment under an applicable federal or state ambient air quality standard; will not expose sensitive receptors to substantial pollutant concentrations; and will not create objectionable odors affecting a substantial number of people. The recommended ordinances will ban the issuance of plastic carryout bags and impose a fee or charge on the issuance of paper carryout bags, and therefore will not result in significant criteria pollutant emissions from the manufacture, distribution, and disposal of paper or

<sup>&</sup>lt;sup>1</sup> California Code of Regulations, Title 14, Division 6, Chapter 3, Section 15151, Appendix G.

plastic carryout bags. The analysis in Section 4.2.6 of the EIR (see Section 12.2 of the EIR), which evaluated a conservative scenario using the Ecobilan life cycle assessment, indicated an overall decrease in indirect emissions of criteria pollutants as a result of 50 percent of customers switching from using plastic carryout bags to using paper carryout bags. Nevertheless, any indirect increase in air pollutant emissions from paper carryout bag manufacturing facilities affected by the recommended ordinances will be controlled by the facility owners in compliance with applicable local, regional, and national air quality standards. Any indirect increase in air pollutant emissions from end of life of paper carryout bags, including from truck trips transporting paper carryout bag waste to landfills in the County, are currently controlled by regional and state regulations, including South Coast Air Quality Management District (SCAQMD) Rule 1150.1, Control of Gaseous Emissions from Landfills; SCAQMD Rule 1193, Clean On-road Residential and Commercial Refuse Collection Vehicles; California Air Resources Board's Solid Waste Collection Vehicle Rule; and by the County controlling for emissions by requiring in its new refuse agreements that alternative-fuel refuse vehicles be used.<sup>2,3,4,5</sup> Therefore, indirect air quality impacts due to a potential increase in the demand for paper carryout bags will be below the level of significance. Since the recommended ordinances will not cause a significant impact to air quality, will not generate a significant number of vehicle trips, and will not promote employment or population growth, the recommended ordinances will cause a less than significant cumulative air quality impact. Implementation of the recommended ordinances would be consistent with the policies, plans, and regulations for air quality set forth by the County. Any related projects in the County must also comply with the County's air quality regulations. Therefore, implementation of the recommended ordinances will not result in a cumulatively considerable contribution to a significant cumulative impact.

#### II.D BIOLOGICAL RESOURCES

#### **Significant Impact:**

None.

#### Finding:

The recommended ordinances will result in beneficial impacts to biological resources. Therefore, no mitigation is required.

#### **Rationale:**

The above finding is made based on the analysis included in, but not limited to, Section 3.2, Biological Resources, and Section 4.0 of the EIR and Sections 2.0 and 3.0 of the Initial

<sup>&</sup>lt;sup>2</sup> County of Los Angeles, Department of Public Works. 11 May 2010. Award of Contract for Walnut Park Garbage Disposal District. Available at: http://file.lacounty.gov/bos/supdocs/54560.pdf

<sup>&</sup>lt;sup>3</sup> County of Los Angeles, Department of Public Works. 11 May 2010. Award of Contract for Athens/Woodcrest/Olivita Garbage Disposal District. Available at: http://file.lacounty.gov/bos/supdocs/54567.pdf

<sup>&</sup>lt;sup>4</sup> County of Los Angeles, Department of Public Works. 11 May 2010. Award the Contract for Firestone Garbage Disposal District. Available at: http://file.lacounty.gov/bos/supdocs/54559.pdf

<sup>&</sup>lt;sup>5</sup> County of Los Angeles, Department of Public Works. 19 January 2010. Award of Contract for an Exclusive Franchise Agreement to Valley Vista Services, Inc. for the Unincorporated Area of Hacienda Heights. Available at: http://file.lacounty.gov/bos/supdocs/52931.pdf

Study for the ordinances. The recommended ordinances (analyzed as Alternative 5) will not adversely impact State-designated sensitive habitats; rare, threatened, or endangered species; locally important species; or federally protected wetlands; and will not conflict with any habitat conservation plan, natural community plan, or any approved state, local, or regional plans. The recommended ordinances will have the potential to result in beneficial impacts to biological resources, as they will, among other things, reduce the amount of litter attributable to plastic carryout bags throughout the County, and particularly within the storm drain system, which drains directly to the Pacific Ocean. Similarly, implementation of the recommended ordinances will not result in a cumulatively considerable contribution to a significant cumulative impact.

## II.E CULTURAL RESOURCES

### Significant Impact:

None.

### Finding:

The recommended ordinances will not result in significant impacts to cultural resources. Therefore, no mitigation is required.

## Rationale:

The above finding is made based on the analysis included in Section 2.0 and Section 3.0 of the Initial Study for the ordinances. The recommended ordinances (analyzed as Alternative 5) will not cause a substantial adverse change in the significance of a historical resource, archeological resource or paleontological resource. The recommended ordinances will not disturb any human remains.

## II.F GEOLOGY AND SOILS

## Significant Impact:

None.

## Finding:

The recommended ordinances will not result in significant impacts to geology and soils. Therefore, no mitigation is required.

## Rationale:

The above finding is made based on the analysis included in, but not limited to, the EIR and Sections 2.0 and 3.0 of the Initial Study for the ordinances. Although potentially active faults are known to exist in the County of Los Angeles, the recommended ordinances will not cause any additional risk of strong seismic ground shaking or ground failure. The recommended ordinances will not cause any substantial risks to life or property due to landslides, soil erosion, or unstable or expansive soil.

### II.G HAZARDS AND HAZARDOUS MATERIALS

#### Significant Impact:

None.

#### Finding:

The recommended ordinances will not result in significant impacts to hazards and hazardous materials. Therefore, no mitigation is required.

### Rationale:

The above finding is made based on the analysis included in, but not limited to, the EIR and Sections 2.0 and 3.0 of the Initial Study for the ordinances. The recommended ordinances (analyzed as Alternative 5) will not create a significant hazard to the public or the environment, handle hazardous materials within one-quarter mile of an existing or proposed school, be located on a site which is included on a list of hazardous materials sites, or result in a safety hazard for people residing or working in the County.

## II.H HYDROLOGY AND WATER QUALITY

### Significant Impact:

None.

## Finding:

The recommended ordinances will not result in significant impacts to hydrology and water quality. Therefore, no mitigation is required.

## Rationale:

The above finding is made based on the analysis included in, but not limited to, Section 3.4, Hydrology and Water Quality, and Section 4.0 the EIR and Sections 2.0 and 3.0 of the Initial Study for the ordinances. The recommended ordinances (analyzed as Alternative 5) will not violate any water guality standards or waste discharge requirements; will not substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there will be a net deficit in aquifer volume or a lowering of the local groundwater table level; will not substantially alter the existing drainage pattern of the area in a manner that will result in substantial erosion or siltation; will not substantially alter the existing drainage pattern of the area or substantially increase the rate or amount of surface runoff in a manner that will result in flooding; will not create or contribute runoff water that will exceed the capacity of existing or planned storm water drainage systems or provide substantial additional sources of polluted runoff; will not otherwise substantially degrade water quality; will not place housing within a 100-year flood hazard area; will not place within a 100-year flood hazard area structures that will impede or redirect flood flows; will not expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam; and will not cause inundation by seiche, tsunami, or mudflow. The recommended ordinances will result in

positive impacts to drainage by reducing the amount of plastic carryout bag trash that may originate from sources in the County and be transported from rivers to oceans, and may improve surface water quality caused by anticipated reductions in the use of plastic carryout bags. Any indirect impacts related to increased demand for manufacturing of paper carryout bags or reusable bags would be controlled by the USEPA and the Regional Water Quality Control Boards (RWQCBs) under the federal CWA and other applicable federal, state, and/or local regulations. Therefore, implementation of the recommended ordinances will not result in a cumulatively considerable contribution to a significant cumulative impact.

## II.I LAND USE AND PLANNING

#### Significant Impact:

None.

#### Finding:

The recommended ordinances will not result in significant impacts to land use and planning. Therefore, no mitigation is required.

### Rationale:

The above finding is made based on the analysis included in, but not limited to, the EIR and Sections 2.0 and 3.0 of the Initial Study for the ordinances. The recommended ordinances (analyzed as Alternative 5) will not cause the physical division of an established community; will not conflict with any applicable land use plan, policy, or regulation; and will not conflict with any applicable habitat conservation plan or natural community conservation plan.

## II.J MINERAL RESOURCES

#### Significant Impact:

None.

#### Finding:

The recommended ordinances will not result in significant impacts to mineral resources. Therefore, no mitigation is required.

#### Rationale:

The above finding is made based on the analysis included in, but not limited to, the EIR and Sections 2.0 and 3.0 of the Initial Study for the ordinances. Although there are mineral resource areas of value to the region or to the residents of the state within the County, the recommended ordinances will not affect the extraction of these resources. Further, the recommended ordinances will not result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan.

#### II.K NOISE

#### Significant Impact:

None.

#### Finding:

The recommended ordinances will not result in significant impacts to noise. Therefore, no mitigation is required.

#### **Rationale:**

The above finding is made based on the analysis included in, but not limited to, the EIR and Sections 2.0 and 3.0 of the Initial Study for the ordinances. The recommended ordinances (analyzed as Alternative 5) will not generate noise levels in excess of standards; will not generate excessive groundborne vibration; and will not generate a substantial permanent, temporary, or periodic increase in ambient noise levels.

### **II.L POPULATION AND HOUSING**

#### Significant Impact:

None.

#### Finding:

The recommended ordinances will not result in significant impacts to population and housing. Therefore, no mitigation is required.

#### Rationale:

The above finding is made based on the analysis included in, but not limited to, the EIR and Sections 2.0 and 3.0 of the Initial Study for the ordinances. The recommended ordinances (analyzed as Alternative 5) will not result in direct or indirect population growth. The recommended ordinances do not include construction of new homes or businesses and do not extend infrastructure into areas not currently served by roads or other infrastructure. The recommended ordinances do not include the construction of any new housing units and will not alter the need for residential development in the County. Furthermore, the recommended ordinances will also not result in the displacement of a substantial amount of people.

#### II.M PUBLIC SERVICES

#### Significant Impact:

None.

#### Finding:

The recommended ordinances will not result in significant impacts to public services. Therefore, no mitigation is required.

#### Rationale:

The above finding is made based on the analysis included in, but not limited to, the EIR and Sections 2.0 and 3.0 of the Initial Study for the ordinances. The recommended ordinances (analyzed as Alternative 5) will not result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities. The recommended ordinances will not affect acceptable service ratios, response times, and other performance objectives for the public services of fire protection, police protection, schools, parks, and other public facilities.

#### II.N RECREATION

#### Significant Impact:

None.

#### Finding:

The recommended ordinances will not result in significant impacts to recreation. Therefore, no mitigation is required.

#### **Rationale:**

The above finding is made based on the analysis included in, but not limited to, the EIR and Sections 2.0 and 3.0 of the Initial Study for the ordinances. The recommended ordinances (analyzed as Alternative 5) will not induce substantial growth or concentration of population beyond regional projections. Therefore, no individual park or recreation facility will experience physical deterioration. The recommended ordinances will not result in a significant increase in the number of people, residents, or visitors that will avail themselves of existing park facilities. The recommended ordinances do not include the construction of any recreational facilities, and thus will not require additional or the expansion of existing such facilities.

#### II.O TRAFFIC AND TRANSPORTATION

#### **Significant Impact:**

None.

#### Finding:

The recommended ordinances will not result in significant impacts to traffic and transportation. Therefore, no mitigation is required.

#### Rationale:

The above finding is made based on the analysis included in, but not limited to, the EIR and Sections 2.0 and 3.0 of the Initial Study for the ordinances. The recommended ordinances (analyzed as Alternative 5) will not conflict with an applicable plan, ordinances or policy establishing measures of effectiveness for the performance of the circulation system; will not conflict with an applicable congestion management program; will not result in a change in air traffic patterns; will not substantially increase hazards due to a design feature; will not result in inadequate emergency access; and will not conflict with adopted plans, policies, or programs regarding public transit.

#### II.P UTILITIES AND SERVICE SYSTEMS

#### Significant Impact:

None.

#### Finding:

The recommended ordinances will not result in significant impacts to utilities and service systems. Therefore, no mitigation is required.

#### **Rationale:**

The above finding is made based on the analysis included in, but not limited to, Section 3.5, Utilities and Service Systems, and Section 4.0 the EIR and Sections 2.0 and 3.0 of the Initial Study for the ordinances. The recommended ordinances (analyzed as Alternative 5) will not be expected to exceed wastewater treatment requirements of the applicable regional water quality control board; will not require or result in the construction of new water or wastewater treatment facilities; will not require or result in the construction of new storm water drainage facilities or expansion of existing facilities; will not require new or expanded entitlements for water supply; will not result in a determination by the wastewater treatment provider that it has inadequate capacity to serve the ordinances' projected demand in addition to the provider's existing commitments; will not be served by a landfill with insufficient permitted capacity to accommodate the ordinances' solid waste disposal needs; and will comply with federal, state, and local statutes and regulations related to solid waste. The recommended ordinances will lead to reduced operational impacts and costs associated with storm drain system maintenance due to a reduction in plastic carryout bag litter. Based on existing capacities, adoption of the recommended ordinances will not result in adverse impacts to storm drain systems, water supply, solid waste, energy consumption, or wastewater treatment. Therefore, implementation of the recommended ordinances will not result in a cumulatively considerable contribution to a significant cumulative impact.

# SECTION III POTENTIAL ENVIRONMENTAL EFFECTS THAT CAN BE MITIGATED TO BELOW THE LEVEL OF SIGNIFICANCE

The analysis undertaken in the EIR for the recommended ordinance to ban the issuance of plastic carryout bags and impose a fee or charge on paper carryout bags at a greater number of stores (analyzed as Alternative 5) determined that the incorporation of mitigation measures is not expected to reduce the potential indirect impact of the recommended ordinances to GHG emissions to below the level of significance. While the incorporation of mitigation measure GHG-1 will be implemented to monitor and reduce the use of paper carryout bags resulting from the recommended ordinances and will indirectly offset end-of-life GHG emissions to the maximum extent feasible, the County has decided that no emission reduction credit will be taken for the measure, and for the purposes of the decision-making process, the County will proceed with the conclusion that indirect impacts to GHG emissions will remain cumulatively considerable.

# SECTION IV SIGNIFICANT UNAVOIDABLE ADVERSE IMPACTS THAT CANNOT BE MITIGATED TO BELOW THE LEVEL OF SIGNIFICANCE

Based on a conservative analysis, the County has determined that cumulative indirect GHG emissions resulting from implementation of the recommended ordinances will have the potential to result in significant unavoidable impacts even with implementation of mitigation measure GHG-1, which will be expected to reduce significant adverse impacts to GHG emissions to the maximum extent feasible. Consequently, in accordance with Section 15093 of the State CEQA Guidelines, a Statement of Overriding Considerations has been prepared (see Section IX of this document) to substantiate the County's decision to accept this potential unavoidable adverse environmental effect because it is outweighed by the potential benefits afforded by the recommended ordinances.

## IV.A GREENHOUSE GAS EMISSIONS

#### Significant Impact:

Indirect impacts resulting from the decomposition of paper carryout bags in landfills will be potentially cumulatively significant under the County's conservative worst-case analysis.

#### Finding:

The County Board of Supervisors finds that changes or alterations have been required in, or incorporated into, the recommended County ordinance that avoid or substantially lessen its significant environmental effect as identified in the EIR. Specifically, incorporation of mitigation measure GHG-1, described below, will monitor, reduce use of, and encourage further recycling of paper carryout bags, and will indirectly offset end-of-life GHG emissions to the maximum extent feasible. However, despite mitigation, impacts from the decomposition of paper carryout bags in landfills will remain cumulatively significant under a conservative worst-case analysis. Further, with respect to the impacts that could occur if the County's 88 incorporated cities adopted similar ordinances, the Board of Supervisors finds that incorporation of changes or alterations similar to those set forth in mitigation measure GHG-1 are within the responsibility and jurisdiction of those agencies and not the County. Such changes have been adopted by such other agencies or can and should be adopted by such other agencies. However, the Board of Supervisors acknowledges that the feasibility of such changes or alterations similar to those set forth in mitigation measure GHG-1, including the feasibility of each element of such a mitigation measure, is within the sole discretion of such other agencies. The Board of Supervisors finds that specific economic, legal, social, technological, or other considerations make additional mitigation measures infeasible.

#### Mitigation Measure:

*Mitigation Measure MM-GHG-1* Implement and/or expand public outreach and educational programs to increase the percentage of paper carryout bags that are recycled curbside.

If the adopted ordinance includes a fee or charge on the issuance of paper carryout bags of at least \$0.05, consider increases to the fee or charge to further reduce consumption of paper carryout bags.

Distribute reusable grocery bags, free of charge within the project area to encourage further transitions to reusable bags. Consider public/private partnerships to offset costs of distribution.

Implement an outreach program for affected stores to encourage consumer transition to reusable bags, to reduce double bagging, and to encourage reuse and in-store recycling of paper carryout bags.

Encourage grocery stores to implement energy efficiency technology particularly in relation to storage of cold and frozen foods (assuming a reduction of 0.65 metric ton carbon dioxide equivalent for each megawatt hour saved<sup>1</sup>).

Consider converting public vehicles to low-emitting fuels (assuming a reduction of 0.45 metric ton carbon dioxide equivalent for each 1,000 vehicle miles traveled2). Consider funding conversion of vehicles through participation in South Coast Air Quality Management District's Carl Moyer Program.

### Rationale:

The above finding is based on the analysis included in Sections 2.0 and 3.0 of the Initial Study and Sections 3.3 and 4.0 of the EIR. The recommended ordinances (analyzed as Alternative 5 in the EIR) will not directly generate GHG emissions that may have a significant impact on the environment, and will not conflict with any applicable plan, policy, or regulation of an agency adopted for the purpose of reducing the emissions of GHGs. The recommended ordinances will ban the issuance of plastic carryout bags and impose a fee or charge on the issuance of paper carryout bags, and therefore will not result in significant GHG emissions from the overall life cycle of paper or plastic carryout bags. However, indirect impacts resulting from end of life from the decomposition of paper carryout bags in landfills will be cumulatively significant under a conservative worst-case analysis. Mitigation measure GHG-1 will reduce the cumulative impact by increasing public awareness, promoting recycling of paper bags, promoting use of reusable bags, and encouraging further efforts to reduce GHG emissions. While the County will not take credits for the reduction in GHG emissions resulting from mitigation measures, these measures will be expected to reduce GHG emissions from the decomposition of paper carryout bags in landfills to the greatest extent feasible. It is also important to note that GHG emissions from landfills located in the County are already controlled in accordance with applicable regional, State, and federal regulations pertaining to GHG emissions. Any potential increases in GHG emissions due to decomposition of paper carryout bags in landfills in the County will be controlled by Antelope Valley Air Quality Management District (AVAQMD) Rule 1150.1 or SCAQMD Rule 1150.1. Therefore, current regulations will aid in mitigating impacts to GHG emissions resulting from decomposition of paper carryout bags in landfills; additional feasible mitigation separate from mitigation measure GHG-1 is not available.

<sup>&</sup>lt;sup>1</sup>Emission factors taken from http://www.epa.gov/cleanenergy/energy-resources/calculator.html#results

<sup>&</sup>lt;sup>2</sup> Emission factors taken from http://www.epa.gov/cleanenergy/energy-resources/calculator.html#results

Moreover, the County anticipates that the \$0.10 fee or charge on paper carryout bags included in the recommended County ordinance will significantly reduce the number of consumers that will use paper carryout bags in place of plastic carryout bags, while still retaining an option for consumers to purchase paper carryout bags. It would be infeasible at this time to implement a full ban on the issuance of paper bags, as the County anticipates a certain transition period for consumers to become aware of and adapt to the recommended County ordinance, particularly, to remember to take and use reusable bags at affected stores. In addition, visitors to the County may not be aware of recommended County ordinance and may not know to take and use reusable bags at affected stores in the County.

Implementation of a fee or charge on the issuance of paper carryout bags will help to minimize the number of paper carryout bags used in the County and any corresponding GHG emissions due to the decomposition of paper carryout bags in landfills. If the paper carryout bag fee decreases conversion to paper carryout bags by 80 to 90 percent, similar to what occurred with the Ireland and Washington, DC, bag fees, indirect impacts to GHG emissions would be reduced even further. The recommended ordinances will require each affected store to issue a quarterly report of the total number of paper carryout bags provided to customers, along with a summary of any efforts undertaken by the store to promote the use of reusable bags. The County will keep and analyze these reports to determine and ensure that consumers in the County are using fewer carryout bags. The County will also use the reports to assess whether the recommended ordinances are having the desired effects, and if other measures are needed. The County will also conduct additional public outreach through an education program to increase the percentage of paper carryout bags that are diverted from landfills. Currently, there is nearly universal access to curbside recycling throughout the County where homeowners can conveniently recycle paper bags. Additional public education and outreach would increase the number of bags recycled and further reduce indirect impacts to GHG emissions. Any remaining cumulative GHG emission impacts are overridden as described in Section IX, Statement of Overriding Considerations.

The County acknowledges that some commenters on the Draft EIR have called for mitigation to reduce potential health impacts from reusable bags. However, the there is no evidence available to the County that suggests that use of reusable bags results in any environmental impacts such that mitigation would be required or would be appropriate. It is expected that consumers will wash their reusable bags along with the rest of their laundry, and it is unlikely that the need to wash reusable bags will require the average consumer to do additional loads of laundry. In addition, all wastewater that enters the sewer pipeline in the County is subjected to a secondary treatment at a minimum, thus avoiding further significant adverse impact to the natural environment.<sup>3</sup>

In addition, commenters have suggested that carbon offsets be used to reduce GHG emissions. The County finds that carbon offsets are infeasible at this time for the recommended County ordinance. Payment of an infinite number of carbon offsets for a potentially unlimited amount of time lacks a sufficient legal nexus (i.e. results from a highly attenuated GHG source based on speculative life cycle data that may not be directly attributable to the County and the cities), and is more appropriately considered when specific project-level details are known for the manufacturing and disposal facilities. As noted in response to Comment No. 8 of the July 16, 2010, comment letter from Save the Plastic Bag Coalition (see Section 13 of the EIR), and as provided in the Natural Resource Agency's statement of reasons for revisions to the State CEQA Guidelines, "In some instances, materials may be manufactured for many different projects as a result of general market

<sup>&</sup>lt;sup>3</sup> Sanitation Districts of Los Angeles County. Accessed on: 15 October 2010. "Wastewater Treatment and Water Reclamation." Web site. Available at: http://www.lacsd.org/about/wastewater\_facilities/moresanj/default.asp

demand, regardless of whether one particular project proceeds. Thus, such emissions may not be 'caused by' the project under consideration. Similarly, in this scenario, a lead agency may not be able to require mitigation for emissions that result from the manufacturing process. Mitigation can only be required for emissions that are actually caused by the project [State CEQA Guidelines, Section 15126.4(a)(4)]."<sup>4</sup>

Furthermore, the County believes that imposition of carbon offset fees would be infeasible for policy considerations and economic reasons, and would fail to meet the objectives of the recommended County ordinance. There are still outstanding policy concerns regarding carbon offsets and their approach and effectiveness.<sup>5,6,7,8,9,10,11</sup> Economically, imposition of carbon offset fees could deter future adoption of the recommended ordinances or alternatives by the County's incorporated cities, especially given the economic hardship facing the County and many cities,<sup>12,13,14,15,16,17</sup> and therefore would not further the objectives of the recommended ordinances: (1) conduct outreach to the County's 88 incorporated cities to encourage adoption of comparable ordinances; (2) reduce the Countywide consumption of plastic carryout bags from the estimated 1,600 plastic carryout bags per household in 2007, to fewer than 800 plastic bags per household in 2013; (3) reduce by 50 percent by 2013 the Countywide contribution of plastic carryout bags to litter that blights public spaces Countywide; (4) reduce by \$4 million the County's, cities', and County Flood Control District's costs for prevention, cleanup, and enforcement efforts to reduce

<sup>13</sup> Luhby, Tami. 6 October 2010. "City budgets slammed by falling property taxes." Available at: http://money.cnn.com/2010/10/06/news/economy/cities\_property\_taxes/index.htm

<sup>14</sup> Dougherty, Conor. 25 May 2010. "States, Still Grappling with Budget Woes." *The Wall Street Journal*. Available at: http://online.wsj.com/article/SB10001424052748704792104575264772303847934.html

<sup>15</sup> Riccardi, Nicholas. 7 October 2010. "Cities' budgets squeezed by housing crunch." *Los Angeles Times*. Available at: http://articles.latimes.com/2010/oct/07/nation/la-na-league-20101007

<sup>&</sup>lt;sup>4</sup> California Natural Resources Agency. December 2009. *Final Statement of Reasons for Regulatory Action: Amendments to the State CEQA Guidelines Addressing Analysis and Mitigation of Greenhouse Gas Emissions Pursuant to SB97.* Available at: http://ceres.ca.gov/ceqa/docs/Final\_Statement\_of\_Reasons.pdf

<sup>&</sup>lt;sup>5</sup> Mitchell, Dan. 5 May 2007. "How Clean Is Your Carbon Credit?" *The New York Times*. Available at: http://www.nytimes.com/2007/05/05/business/05online.html

<sup>&</sup>lt;sup>6</sup> Revkin, Andrew. 29 April 2007. "Carbon-Neutral Is Hip, but Is It Green?" *The New York Times*. Available at: http://www.nytimes.com/2007/04/29/weekinreview/29revkin.html?ex = 1335499200&en = d9e2407e4f1a20f0&ei = 5124

<sup>&</sup>lt;sup>7</sup> Davies, Nick. 16 June 2007. "The Inconvenient Truth about the Carbon Offset Industry." *The Guardian*. Available at: http://www.guardian.co.uk/environment/2007/jun/16/climatechange.climatechange

<sup>&</sup>lt;sup>8</sup> Kaste, Martin, National Public Radio. 28 November 2006. "'Carbon Offset' Business Takes Root." Available at: http://www.npr.org/templates/story/story.php?storyId = 6548098

<sup>&</sup>lt;sup>9</sup> Monbiot, George. 18 October 2006. "Selling Indulgences." *The Guardian*. Available at: http://www.monbiot.com/archives/2006/10/19/selling-indulgences/

<sup>&</sup>lt;sup>10</sup> David Suzuki Foundation. Accessed on: 25 October 2010. "The problems with carbon offsets from tree-planting." Web site. Available at: http://www.davidsuzuki.org/issues/climate-change/science/the-problems-with-carbon-offsets-from-tree-planting/

<sup>&</sup>lt;sup>11</sup> Granda, Patricia. 2005. Carbon Sink Plantations in the Ecuadorian Andes: Impacts of the Dutch FACE-PROFAFOR monoculture tree plantations' projects on indigenous and peasant communities. Quito, Ecuador: Acción Ecológica. Available at: http://www.wrm.org.uy/countries/Ecuador/face.pdf

<sup>&</sup>lt;sup>12</sup> CBS Evening News. 26 March 2010. "City, State Budgets Crippled Nationwide." Available at: http://www.cbsnews.com/stories/2010/03/26/eveningnews/main6336699.shtml

<sup>&</sup>lt;sup>16</sup> Semuels, Alana. 18 October 2010. "California Cities are Lowering Standards to Raise Revenue." *Los Angeles Times*. Available at: http://www.latimes.com/business/la-fi-desperate-cities-20101018,0,7536692.story

<sup>&</sup>lt;sup>17</sup> County of Los Angeles Chief Executive Office. 5 August 2010. Memorandum re: Sacramento Update. Available at: http://file.lacounty.gov/bc/q3\_2010/cms1\_150053.pdf#search="shortfall"
litter in the County; (5) substantially increase awareness of the negative impacts of plastic carryout bags and the benefits of reusable bags, and reach at least 50,000 residents (5 percent of the population) with an environmental awareness message; and (6) reduce Countywide disposal of plastic carryout bags in landfills by 50 percent from 2007 annual amounts.

The EIR analyzed alternatives in accordance with the recommendations of Section 15126.6 of the State CEQA Guidelines, which require evaluation of a range of reasonable alternatives to the project, or to the location of the project, that would feasibly attain most of the basic objectives of the project but could potentially avoid or substantially lessen any of the significant effects of the project, and evaluation of the comparative merits of the alternatives. The discussion of alternatives is intended to focus on four criteria:

- Alternatives to the proposed ordinances or their location that may be capable of avoiding or substantially reducing any significant effects that a project may have on the environment
- Alternatives capable of accomplishing most of the basic objectives of the proposed ordinances and potentially avoid or substantially lessen one or more of the significant effects
- The provision of sufficient information about each alternative to allow meaningful evaluation, analysis, and comparison with the proposed ordinances
- The no-project analysis of what would be reasonably expected to occur in the foreseeable future if the proposed ordinances were not approved

Pursuant to Section 15126.6(e)(2) of the State CEQA Guidelines, if the environmentally superior alternative is the No Project Alternative, the EIR shall also identify an environmentally superior alternative among the feasible action alternatives. The analysis of alternatives should be limited to those that the County determines could feasibly attain most of the basic objectives of the proposed ordinances. Section 15364 of the State CEQA Guidelines defines feasibility as "capable of being accomplished in a successful manner within a reasonable period of time, taking into account economic, environmental, legal, social, and technological factors."

Alternatives addressed in the EIR were derived from work undertaken by the County, as well as from comments received in response to the NOP and NOA of the EIR and from interested parties who attended the public scoping meetings. As a result of the Initial Study, comments received during the scoping period and public review period for the Draft EIR, and the environmental analysis undertaken in the Draft EIR, six alternatives, including the No Project Alternative, were determined to represent a reasonable range of alternatives:

- 1. No Project Alternative
- 2. Alternative 1, Ban Plastic and Paper Carryout Bags in Los Angeles County
- 3. Alternative 2, Ban Plastic Carryout Bags and Impose a Fee on Paper Carryout Bags in Los Angeles County
- 4. Alternative 3, Ban Plastic Carryout Bags for All Supermarkets and Other Grocery Stores, Convenience Stores, Pharmacies, and Drug Stores in Los Angeles County
- 5. Alternative 4, Ban Plastic and Paper Carryout Bags for All Supermarkets and Other Grocery Stores, Convenience Stores, Pharmacies, and Drug Stores in Los Angeles County
- 6. Alternative 5, Ban Plastic Carryout Bags and Impose a Fee on Paper Carryout Bags for All Supermarkets and Other Grocery Stores, Convenience Stores, Pharmacies, and Drug Stores in Los Angeles County

The effectiveness of each alternative to achieve the basic objectives of the proposed ordinances was evaluated in relation to the statement of objectives described in Section 2.0, *Project Description*, of the EIR. The proposed ordinances would meet all of the basic objectives established by the County (Table V-1, *Ability of the Proposed Ordinances and Alternatives to Attain County Objectives*). Although the No Project Alternative would not meet most of the basic objectives of the proposed ordinances, it was analyzed as required by CEQA.

TABLE V-1
ABILITY OF THE PROPOSED ORDINANCES AND ALTERNATIVES
TO ATTAIN COUNTY OBJECTIVES

Objective	Proposed Ordinances	No Project	Alternative 1	Alternative 2	Alternative 3	Alternative 4	Alternative 5
Conduct outreach to all 88 incorporated cities of the County to encourage adoption of comparable ordinances	Yes	No	Yes	Yes	Yes	Yes	Yes
Reduce the Countywide consumption of plastic carryout bags from the estimated 1,600 plastic carryout bags per household in 2007 to fewer than 800 plastic bags per household in 2013	Yes	No	Yes	Yes	Yes	Yes	Yes
Reduce the Countywide contribution of plastic carryout bags to litter that blights public spaces by 50 percent	Yes	No	Yes	Yes	Yes	Yes	Yes
Reduce by \$4 million the County's, cities', and Flood Control District's costs for prevention, cleanup, and enforcement efforts to reduce litter in the County	Yes	No	Yes	Yes	Yes	Yes	Yes
Substantially increase awareness of the negative impacts of plastic carryout bags and the benefits of reusable bags, and reach at least 50,000 residents (5 percent of the population) with an environmental awareness message	Yes	No	Yes	Yes	Yes	Yes	Yes
Reduce Countywide disposal of plastic carryout bags in landfills by 50 percent from 2007 annual amounts	Yes	No	Yes	Yes	Yes	Yes	Yes

Although the No Project Alternative would reduce potential impacts to air quality and GHG emissions compared with the proposed ordinances, impacts to biological resources, hydrology and water quality, and utilities and service systems would be exacerbated, rather than avoided or reduced. In addition,

the No Project Alternative would not meet any of the basic objectives of the proposed ordinances established by the County. Although the proposed ordinances originally studied in the EIR meet all of the basic objectives, the proposed ordinances were deemed to be infeasible as they are environmentally inferior to the alternatives analyzed in the EIR because they do not restrict the issuance of paper carryout bags and only affect a limited range of stores. Alternatives 1, 2, 3, 4, and 5 would meet all of the basic objectives established by the County. Alternatives 3, 4, and 5 would result in additional benefits to biological resources as a result of reduced consumption of plastic carryout bags due to a greater number of stores being included in the proposed ordinances. As with the proposed ordinances, and consistent with the County's evaluation of impacts resulting from paper carryout bags from a conservative worst-case scenario, Alternative 3 may have the potential to result in cumulatively considerable impacts to GHG emissions because it would not limit the issuance of paper carryout bags. Alternatives 2 and 5 would be expected to reduce consumption of paper carryout bags through implementation of a fee. Unlike the proposed ordinances, Alternatives 1 and 4 would not result in any increase in the use of paper carryout bags, but these alternatives were deemed infeasible because Alternatives 1 and 4 do not allow an option for consumers to purchase carryout bags.

Table V-2, *Comparative Analysis of Impacts of the Proposed Ordinances and Alternatives,* provides a comparative analysis for the originally proposed ordinances, the No Project Alternative, and the six alternatives discussed in this document. Based on the analysis, the Environmentally Superior Alternative is Alternative 4. This alternative is capable of creating the maximum reductions in the consumption of both paper and plastic carryout bags, and would meet all of the six objectives of the proposed ordinances. Alternative 5 will also result in a significant reduction in the use of plastic carryout bags, while retaining an option for consumers to purchase paper carryout bags.

As a result of the CEQA process, including the analysis of the alternatives and public comments, the County has determined that Alternative 5 is feasible, and has decided to adopt Alternative 5 as the recommended County ordinance. The County will encourage each of the 88 incorporated cities in the County to adopt comparable ordinances.

Table V-2 denotes comparative analyses as neutral (similar/equivalent impacts compared with the proposed ordinances), positive (reduced adverse impacts or increased beneficial impacts compared with the proposed ordinances), or negative (increased adverse impacts compared with the originally proposed ordinances).

 TABLE V-2

 COMPARATIVE ANALYSIS OF IMPACTS OF THE PROPOSED ORDINANCES AND ALTERNATIVES

Resource	Originally Proposed Ordinances	No Project	Ban Plastic and Paper Carryout Bags in Los Angeles County	Ban Plastic Carryout Bags and Impose a Fee on Paper Carryout Bags in Los Angeles County	Ban Plastic Carryout Bags for All Supermarkets and Other Grocery Stores, Convenience Stores, Pharmacies, and Drug Stores in Los Angeles County	Ban Plastic and Paper Carryout Bags for All Supermarkets and Other Grocery Stores, Convenience Stores, Pharmacies, and Drug Stores in Los Angeles County	Ban Plastic Carryout Bags and Impose a Fee on Paper Carryout Bags for All Supermarkets and Other Grocery Stores, Convenience Stores, Pharmacies, and Drug Stores in Los Angeles County
Air Quality	The proposed ordinances may indirectly result in an increased demand for paper carryout bags, which may subsequently result in increased criteria pollutant emissions from the manufacture, distribution, and disposal of paper carryout bags, which would be offset to some degree by the anticipated reduction in plastic carryout bags and increase in reusable bags. <i>Impact:</i> Emissions due to the life cycle of paper carryout bags are below the level of significance	The No Project Alternative would not result in a potential increase in the use of paper carryout bags, but would not result in any decrease in the use of plastic carryout bags. The No Project Alternative would result in criteria pollutant emissions from the manufacture, distribution, and disposal of plastic carryout bags, which would be offset to some degree by the fact that there would be no increase in the use of paper carryout bags. However, the No Project Alternative would not encourage a transition to the use of reusable bags. <i>Comparative Impact:</i> Neutral	Alternative 1 would not result in a potential increase in the use of paper or plastic carryout bags, and would result in a greater use of reusable bags. Alternative 1 would not result in criteria pollutant emissions from the manufacture, distribution, and disposal of paper carryout bags. <i>Comparative Impact:</i> Positive	Alternative 2 would not result in as much of a potential increase in the use of paper carryout bags, while reducing the use of plastic carryout bags and increasing the use of reusable bags. Alternative 2 would not result in the same degree of criteria pollutant emissions from the manufacture, distribution, and disposal of paper carryout bags. <i>Comparative Impact:</i> Positive	Alternative 3 may indirectly result in an increased demand for paper carryout bags, which may subsequently result in increased criteria pollutant emissions from the manufacture, distribution, and disposal of paper carryout bags, which would be offset to some degree by the anticipated reduction in plastic carryout bags and increase in reusable bags. <i>Comparative Impact:</i> Negative	Alternative 4 would not result in a potential increase in the use of paper or plastic carryout bags, and would result in a greater use of reusable bags. Alternative 4 would not result in criteria pollutant emissions from the manufacture, distribution, and disposal of paper carryout bags. <i>Comparative Impact:</i> Positive	Alternative 5 will substantially reduce the use of plastic carryout bags. Due to the implementation of a fee on the issuance of paper carryout bags, the degree of increase in use of paper carryout bags will be limited, and Alternative 5 will result in a greater use of reusable bags. Criteria pollutant emissions due to the life cycle of paper carryout bags will be below the level of significance. <i>Comparative Impact:</i> Positive
Biological Resources	The proposed ordinances would be expected to result in beneficial impacts to biological resources as they would reduce the amount of litter attributable to plastic carryout bags in the County of Los Angeles storm drain system, which drains directly to the Pacific Ocean. <i>Impact:</i> Beneficial	No Project Alternative would not result in a significant reduction in the use and disposal of plastic carryout bags within the County. Therefore, the No Project Alternative would not assist in reducing marine litter attributed to plastic carryout bag waste, which has been shown to have potentially significant adverse impacts upon biological resources. <i>Comparative Impact:</i> Negative	Alternative 1 would be expected to result in beneficial impacts to biological resources as it would reduce the amount of litter attributable to plastic carryout bags in the County of Los Angeles storm drain system, which drains directly to the Pacific Ocean. <i>Comparative Impact:</i> Neutral	Alternative 2 would be expected to result in beneficial impacts to biological resources as it would reduce the amount of litter attributable to plastic carryout bags in the County of Los Angeles storm drain system, which drains directly to the Pacific Ocean. <i>Comparative Impact</i> : Neutral	Alternative 3 would be expected to result in additional beneficial impacts to biological resources as it would further reduce the amount of litter attributable to plastic carryout bags in the County of Los Angeles storm drain system, which drains directly to the Pacific Ocean. <i>Comparative Impact</i> : Positive	Alternative 4 would result in additional beneficial impacts to biological resources, as it would further reduce the amount of litter attributable to plastic carryout bags in the County storm drain system, which drains directly to the Pacific Ocean. <i>Comparative Impact:</i> Positive	Alternative 5 will result in additional beneficial impacts to biological resources as it would further reduce the amount of litter attributable to plastic carryout bags in the County of Los Angeles storm drain system, which drains directly to the Pacific Ocean. <i>Comparative Impact:</i> Positive
Greenhouse Gas Emissions	The proposed ordinances may indirectly result in an increased demand for paper carryout bags. The increase in demand for paper carryout bags may result in increased GHG emissions as a result of the manufacture, distribution, and disposal of paper carryout bags, which would be offset to some degree by the anticipated reduction in plastic carryout bags and increase in reusable bags. <i>Impact:</i> Life cycle impacts resulting from paper carryout bags would be cumulatively significant under a conservative worst-case analysis	The No Project Alternative would not result in a potential increase in the use of paper carryout bags, but would not result in any decrease in the use of plastic carryout bags. The No Project Alternative would result in GHG emissions from the manufacture, distribution, and disposal of plastic carryout bags, which would be offset to some degree by the fact that there would be no increase in the use of paper carryout bags. However, the No Project Alternative would not encourage a transition to the use of reusable bags. <i>Comparative Impact:</i> Neutral	Alternative 1 would not result in a potential increase in the use of paper or plastic carryout bags, and would result in a greater use of reusable bags. Alternative 1 would not result in GHG emissions from the manufacture, distribution, and disposal of paper carryout bags. <i>Comparative Impact:</i> Positive	Alternative 2 would not result in as much of a potential increase in the use of paper carryout bags, while reducing the use of plastic carryout bags and increasing the use of reusable bags. Alternative 2 would not result in the same degree of GHG emissions from the manufacture, distribution, and disposal of paper carryout bags. <i>Comparative Impact:</i> Positive	Alternative 3 may indirectly result in an increased demand for paper carryout bags. The increase in demand for paper carryout bags may result in increased GHG emissions as a result of the manufacture, distribution, and disposal of paper carryout bags, which would be offset to some degree by the anticipated reduction in plastic carryout bags and increase in reusable bags. <i>Comparative Impact:</i> Negative	Alternative 4 would not increase use of paper or plastic carryout bags, and would result in a greater use of reusable bags. Alternative 4 would not result in GHG emissions from the manufacture, distribution, and disposal of paper carryout bags. <i>Comparative Impact:</i> Positive	Alternative 5 will result in substantial reductions in the use of plastic carryout bags and would result in a greater use of reusable bags. Due to the implementation of a fee on the issuance of paper carryout bags, the degree of increase in use of paper carryout bags would be limited. Alternative 5 will not result in significant cumulative GHG emissions from the manufacture and distribution of paper carryout bags, but GHG emissions from the disposal of paper carryout bags in landfills may remain cumulatively considerable.

TABLE V-2 COMPARATIVE ANALYSIS OF IMPACTS OF THE PROPOSED ORDINANCES AND ALTERNATIVES, Continued

Resource	Originally Proposed Ordinances	No Project	Ban Plastic and Paper Carryout Bags in Los Angeles County	Ban Plastic Carryout Bags and Impose a Fee on Paper Carryout Bags in Los Angeles County	Ban Plastic Carryout Bags for All Supermarkets and Other Grocery Stores, Convenience Stores, Pharmacies, and Drug Stores in Los Angeles County	Ban Plastic and Paper Carryout Bags for All Supermarkets and Other Grocery Stores, Convenience Stores, Pharmacies, and Drug Stores in Los Angeles County	Ban Plastic Carryout Bags and Impose a Fee on Paper Carryout Bags for All Supermarkets and Other Grocery Stores, Convenience Stores, Pharmacies, and Drug Stores in Los Angeles County
Hydrology and Water Quality	The proposed ordinances may indirectly result in an increased demand for paper carryout bags. The increase in demand for paper carryout bags may result in increased eutrophication impacts as a result of the manufacture of paper carryout bags, which would be offset to some degree by positive impacts to surface water quality and drainage caused by anticipated reductions in the manufacture, transport, and disposal of plastic carryout bags. <i>Impact:</i> Impacts due to the life cycle of paper carryout bags would be below the level of	The No Project Alternative would not result in a potential increase in the use of paper carryout bags, but would not result in any decrease in the use of plastic carryout bags. Unlike the proposed ordinances, the No Project Alternative would not result in potential indirect increases in eutrophication caused by a potential increase in consumer use of paper carryout bags. However, the No Project Alternative may also result in potential indirect impacts to surface water quality caused by the life cycle of plastic carryout bags and drainage caused by plastic carryout bag litter.	Alternative 1 would not result in a potential increase in the use of paper or plastic carryout bags, and would result in a greater use of reusable bags. Alternative 1 would not result in increased eutrophication impacts as a result of the manufacture of paper carryout bags, and would result in positive impacts to surface water quality and drainage caused by anticipated reductions in the use of plastic carryout bags.	Alternative 2 would not result in as much of a potential increase in the use of paper carryout bags, while reducing the use of plastic carryout bags and increasing the use of reusable bags. Alternative 2 would not result in the same degree of increased eutrophication impacts as a result of the manufacture of paper carryout bags, and would result in positive impacts to surface water quality caused by anticipated reductions in the use of plastic carryout bags. <i>Comparative Impact:</i> Positive	Alternative 3 may indirectly result in an increased demand for paper carryout bags. The increase in demand for paper carryout bags may result in increased eutrophication impacts as a result of the manufacture of paper carryout bags, which would be offset, to some degree, by positive impacts to surface water quality caused by anticipated reductions in the use of plastic carryout bags. <i>Comparative Impact:</i> Negative	Alternative 4 would not result in a potential increase in the use of paper or plastic carryout bags, and would result in a greater use of reusable bags. Alternative 4 would not result in increased eutrophication impacts as a result of the manufacture of paper carryout bags, and would result in positive impacts to surface water quality caused by anticipated reductions in the use of plastic carryout bags. <i>Comparative Impact:</i> Positive	Alternative 5 will result in substantial reductions in the use of plastic carryout bags and increased use of reusable bags. Due to the implementation of a fee on the issuance of paper carryout bags, the degree of increase in use of paper carryout bags would be limited. Alternative 5 will not result in significant eutrophication impacts as a result of the manufacture of paper carryout bags, and will result in positive impacts to surface water quality caused by anticipated reductions in the use of plastic carryout bags.
	significance		Comparative Impact: Positive				
Utilities and Service Systems	The proposed ordinances may indirectly result in an increased demand for paper carryout bags. The increased demand for paper carryout bags may result in increased water consumption, energy consumption, wastewater generation, and solid waste generation due to the manufacture, distribution, and disposal of paper carryout bags, which would be offset to some degree by the anticipated reduction in plastic carryout bags. <i>Impact:</i> Impacts due to the life cycle of paper carryout bags would be below the level of significance	The No Project Alternative would not increase impacts to utilities and service systems that would result from the implementation of the proposed ordinances as it would not result in an increase in the consumer use of paper carryout bags. However, due to the fact that the No Project Alternative would not result in significant reductions in the disposal of plastic carryout bags in the County, the No Project Alternative would not create any potential benefits to utilities and service systems. The No Project Alternative would not lead to reduced operational impacts and costs associated with storm drain system maintenance. <i>Comparative Impact:</i> Negative	Alternative 1 would not result in a potential increase in the use of paper or plastic carryout bags, and would result in a greater use of reusable bags. Alternative 1 would lead to reduced operational impacts and costs associated with storm drain system maintenance due to the reduction in plastic carryout bag litter. Alternative 1 would not result in increased water consumption, energy consumption, wastewater generation, and solid waste generation due to the manufacture, distribution, and disposal of paper carryout bags.	Alternative 2 would not result in as much of a potential increase in the use of paper carryout bags, while reducing the use of plastic carryout bags and increasing the use of reusable bags. Alternative 2 would lead to reduced operational impacts and costs associated with storm drain system maintenance due to the reduction in plastic carryout bag litter. Alternative 2 would not result in the same degree of increased water consumption, energy consumption, wastewater generation, and solid waste generation due to the manufacture, distribution, and disposal of paper carryout bags. <i>Comparative Impact:</i> Positive	Alternative 3 may indirectly result in an increased demand for paper carryout bags. The increased demand for paper carryout bags may result in increased water consumption, energy consumption, wastewater generation, and solid waste generation due to the manufacture, distribution, and disposal of paper carryout bags, which would be offset, to some degree, by the anticipated reduction in plastic carryout bags. <i>Comparative Impact:</i> Negative	Alternative 4 would not result in a potential increase in the use of paper or plastic carryout bags, and would result in a greater use of reusable bags. Therefore there would be no impacts to increased water consumption, energy consumption, wastewater generation, and solid waste generation due to the manufacture, distribution, and disposal of paper carryout bags or plastic carryout bags. Alternative 4 would lead to reduced operational impacts and costs associated with storm drain system maintenance due to the reduction in plastic carryout bag litter.	Alternative 5 will result in substantial reductions in the use of plastic carryout bags and would result in a greater use of reusable bags. Due to the implementation of a fee on the issuance of paper carryout bags, the increase in use of paper carryout bags will be limited. Alternative 5 will not result in significant impacts related to increased water consumption, energy consumption, wastewater generation, and solid waste generation impacts as a result of the manufacture of paper carryout bags. Alternative 5 will result in positive impacts to surface water quality caused by anticipated reductions in the use of plastic carryout bags. <i>Comparative Impact:</i> Positive
			Comparative impact: Positive			Comparative Impact: Positive	Comparative impact: Positive

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## V.A NO PROJECT ALTERNATIVE

#### **Description of Alternative**

Under the No Project Alternative, the County would not pass an ordinance to ban the issuance of plastic carryout bags by certain stores in the unincorporated territories of the County, and would not encourage the adoption of comparable ordinances by the 88 incorporated cities within the County. Under this alternative and as discussed in detail in Section 4.2.1 of the EIR, potential impacts to air quality and GHG emissions would not increase in comparison with the proposed ordinances. However, in comparison with the proposed ordinances, impacts to biological resources, hydrology and water quality, and utilities and service systems would be exacerbated, rather than be avoided or reduced. In addition, the No Project Alternative would not meet any of the basic objectives of the proposed ordinances established by the County, including those relating to litter. The No Project Alternative has been analyzed in detail in the EIR in accordance with the requirements of CEQA.

#### **Effectiveness in Meeting Project Objectives**

As shown in Table V-1, the No Project Alternative would not accomplish any of the basic objectives of the proposed ordinances established by the County. The No Project Alternative would not facilitate encouragement of the 88 incorporated cities of the County to adopt ordinances to ban the issuance of plastic carryout bags. The No Project Alternative would not assist in reducing the Countywide consumption of plastic carryout bags, would not result in a reduction of plastic carryout bag litter that blights public spaces and marine environments, and would not reduce the County's, cities', and Flood Control District's costs for prevention, clean-up, and enforcement efforts to reduce litter in the County. The No Project Alternative would not increase public awareness of the negative impacts of plastic carryout bags and the benefits of reusable bags. In addition, the No Project Alternative would not assist in reducing Countywide disposal of plastic carryout bags in landfills.

#### Comparison of Effects of the No Project Alternative to Effects of the Proposed Project

The regulatory framework and existing conditions would be the same as that described for the proposed ordinances. A summary comparison of this alternative to effects of the proposed ordinances is presented in Table V-2. The analysis presented in the table, and as further detailed in Section 4.2.1 of the EIR, shows that this alternative differs from the proposed ordinances in the assessment of air quality, biological resources, GHG emissions, hydrology and water quality, and utilities and service systems.

**Feasibility**: The Board of Supervisors finds that specific economic, legal, social, technological, or other considerations make this alternative infeasible and therefore rejects this alternative.

**Rationale:** The No Project Alternative would meet none of the six objectives of the proposed ordinances (Table V-1). The No Project alternative would not result in any reduction in the use of plastic carryout bags within the County. Without the reduction in use, none of the six objectives of the proposed ordinances can be met.

Moreover, in comparison with the proposed ordinances, the No Project Alternative would exacerbate impacts to biological resources and hydrology and water quality, and would not have positive impacts to utilities and service systems, because it would allow continued distribution of plastic carryout bags in the County. With respect to biological resources, as discussed in the EIR, including in Sections 4.2.1.3, 3.2, and 13.0, the No Project Alternative would not assist in reducing litter attributable to

plastic carryout bag waste, would not improve habitats and aquatic life, and would not result in potentially beneficial impacts upon sensitive habitats, because it would not significantly reduce the use and disposal of plastic carryout bags within the County. The No Project Alternative would continue to exacerbate rather than avoid or reduce impacts to biological resources.

With respect to hydrology and water quality, as discussed in the EIR, including in Section 3.4, Section 4.2.1.3, and Section 13.0, the No Project Alternative would continue to exacerbate impacts because it would not significantly reduce the use of plastic carryout bags in the County. The No Project Alternative would not assist in meeting TMDL requirements, water quality standards, or waste discharge requirements because it would allow continued contribution of plastic carryout bags that can become litter in major surface water systems in the County drainage areas, the Pacific Ocean, and inland drainages in the Antelope Valley. The No Project Alternative would also not result in potentially beneficial impacts to surface water drainage, storm drain systems, or surface water quality in the County, and would not assist the County in attaining TMDLs because the alternative would not result in a decrease of the use of plastic carryout bags.

With respect to utilities and service systems, as discussed in the EIR, including in Sections 3.5, Section 4.2.1.3, and Section 13.0, the No Project Alternative would not result in significant reductions in the use and disposal of plastic carryout bags in the County, and therefore would not result in any potential benefits to landfills and would not lead to reduced operational impacts and costs associated with storm drain system maintenance.

Finally, the No Project Alternative would not provide any of the benefits set forth in the Statement of Overriding Considerations (see Section IX).

# V.B ALTERNATIVE 1: BAN PLASTIC AND PAPER CARRYOUT BAGS IN LOS ANGELES COUNTY

#### **Description of Alternative**

Alternative 1 would extend the scope of the proposed ordinances to include a ban on the issuance of both paper and plastic carryout bags in Los Angeles County, and encouraging the 88 incorporated cities to adopt similar proposed ordinances. Alternative 1 would ban the issuance of paper and plastic carryout bags from the same stores addressed by the proposed ordinances, that is, those within the County that (1) meet the definition of a "supermarket" as found in the California Public Resources Code, Section 14526.5, and (2) are buildings that have 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 and have a pharmacy licensed pursuant to Chapter 9 of Division 2 of the Business and Professions Code. As with the proposed ordinances, Alternative 1 would affect approximately 67 stores in the unincorporated areas of the County and approximately 462 stores in the incorporated cities of the County.<sup>1,2</sup>

As with the proposed ordinances and as discussed in detail in Sections 3.0 and 4.2.2 of the EIR, Alternative 1 would not result in significant adverse impacts to air quality, biological resources,

<sup>&</sup>lt;sup>1</sup> As a result of the voluntary Single Use Bag Reduction and Recycling Program, the County has determined that 67 stores in unincorporated areas would be affected by the proposed County ordinance.

<sup>&</sup>lt;sup>2</sup> Number of stores in the 88 incorporated cities of the County was determined from the infoUSA database for businesses with North American Industry Classification System codes 445110 and 446110 with a gross annual sales volume of \$2 million or higher and a square footage of 10,000 square feet or greater. Accessed on: 29 April 2010.

hydrology and water quality, and utilities and service systems, and would achieve additional benefits. In that there would be no transition from plastic to paper carryout bags if both types of bags were banned, impacts to air quality, biological resources, GHG emissions, hydrology and water quality, and utilities and service systems would be eliminated, reduced, or avoided.

## **Effectiveness in Meeting Project Objectives**

As shown in Table V-1, Alternative 1 would meet all of the ordinance objectives that were identified by the County. In addition, Alternative 1 would also serve to reduce Countywide consumption of paper carryout bags and the Countywide disposal of paper carryout bags in landfills.

## Comparison of Effects of the Alternative to Effects of the Proposed Project

The regulatory framework and existing conditions would be the same as that described for the proposed ordinances. A summary comparison of this alternative to effects of the ordinances is presented in Table V-2. The analysis presented in the table shows that this alternative would result in positive impacts to air quality, GHG emissions, hydrology and water quality, and utilities and service systems when compared to the proposed ordinances.

## Finding:

The Board of Supervisors finds that specific economic, legal, social, technological, or other considerations make this alternative infeasible and therefore rejects this alternative.

## Rationale:

This alternative meets all of the basic objectives of the proposed ordinances (Table V-1) and would not result in an increase in the use of paper carryout bags. However, a ban on the issuance of both plastic and paper carryout bags is infeasible because the County prefers an option at this time for consumers to purchase carryout bags. The County anticipates a certain transition period for consumers to become aware of and adapt to the recommended ordinances, particularly to remember to take and use reusable bags at affected stores. In addition, visitors to the County may not be aware of recommended ordinances and may not know to take and use reusable bags at affected by Alternative 1 (compared to Alternatives 3, 4, or 5), the alternative would not produce the additional benefits to biological resources that would result from banning the issuance of plastic bags at a greater number of stores. For the same reason, the alternative would not provide as large of a reduction in litter that is attributable to plastic carryout bags. Therefore, it would also not provide a comparable opportunity for reduction of costs related to litter prevention, cleanup, and disposal of plastic carryout bags, nor a comparable reduction in litter that blights public spaces.

#### V.C ALTERNATIVE 2: BAN PLASTIC CARRYOUT BAGS AND IMPOSE A FEE ON PAPER CARRYOUT BAGS IN LOS ANGELES COUNTY

#### **Description of Alternative**

Alternative 2 would extend the scope of the proposed ordinances to include a fee on the issuance of paper carryout bags in Los Angeles County, and encouraging the 88 incorporated cities to adopt similar proposed ordinances. Alternative 2 would require a fee for issuance of paper carryout bags by

the same stores addressed by the proposed ordinances, that is, those within the County that (1) meet the definition of a "supermarket" as found in the California Public Resources Code, Section 14526.5, and (2) are buildings that have 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 and have a pharmacy licensed pursuant to Chapter 9 of Division 2 of the Business and Professions Code. As with the proposed ordinances, the number of stores that could be affected by Alternative 2 in the unincorporated areas of the County is approximately 67.<sup>3</sup> The number of stores that could be affected by Alternative 2 in the incorporated cities of the County is approximately 462.<sup>4</sup>

As with the proposed ordinances and as discussed in detail in Section 4.2.3 of the EIR, Alternative 2 would not result in significant adverse impacts to air quality, biological resources, hydrology and water quality, and utilities and service systems, and would achieve additional benefits. Alternative 2 would be expected to result in a minimal transition from plastic to paper carryout bags due to a fee on the issuance of paper carryout bags, and therefore in comparison with the proposed ordinances would eliminate, reduce, or avoid impacts to air quality, biological resources, hydrology and water quality, and utilities and service systems. However, because it is not possible to know the exact percentage of increase from plastic to paper carryout bags under Alternative 2, the indirect impacts from the life cycle of paper carryout bags may be cumulatively considerable, depending on the actual percentage increase despite the presence of a fee.

## **Effectiveness in Meeting Project Objectives**

As shown in Table V-1, Alternative 2 would meet all of the objectives of the proposed ordinances identified by the County. In addition, Alternative 2 would also serve to reduce the Countywide consumption of paper carryout bags and the Countywide disposal of paper carryout bags in landfills.

#### Comparison of Effects of the Alternative to Effects of the Project

The regulatory framework and existing conditions would be the same as that described for the proposed ordinances. A summary comparison of this alternative to effects of the ordinances is presented in Table V-2. The analysis presented in the table shows that this alternative would be anticipated to result in positive impacts to air quality, hydrology and water quality, and utilities and service systems when compared with the proposed ordinances.

#### Finding:

The Board of Supervisors finds that specific economic, legal, social, technological, or other considerations make this alternative infeasible and therefore rejects this alternative.

# Rationale:

Alternative 2 meets all of the basic objectives of the proposed ordinances (Table V-1). Alternative 2 would also be expected to reduce consumption of paper carryout bags through

<sup>&</sup>lt;sup>3</sup> As a result of the voluntary Single Use Bag Reduction and Recycling Program, the County has determined that 67 stores in unincorporated areas would be affected by the proposed County ordinance.

<sup>&</sup>lt;sup>4</sup> Number of stores in the 88 incorporated cities of the County was determined from the infoUSA database for businesses with North American Industry Classification System codes 445110 and 446110 with a gross annual sales volume of \$2 million or higher and a square footage of 10,000 square feet or greater. Accessed on: 29 April 2010.

implementation of a fee. However, due to the limited number of stores that Alternative 2 would affect (compared to Alternatives 3, 4, or 5), it would not provide the additional benefits to biological resources that would result from banning the issuance of plastic bags at a greater number of stores. For the same reason, it would not provide as large of a reduction in litter attributable to plastic carryout bags. Therefore, it would also not provide a comparable opportunity for reduction of costs related to litter prevention, cleanup, and disposal, nor a comparable reduction in litter that blights public spaces.

#### V.D ALTERNATIVE 3: BAN PLASTIC CARRYOUT BAGS FOR ALL SUPERMARKETS AND OTHER GROCERY STORES, CONVENIENCE STORES, PHARMACIES, AND DRUG STORES IN LOS ANGELES COUNTY

#### **Description of Alternative**

Alternative 3 would extend the scope of the proposed ordinances to apply to all supermarkets and other grocery stores, convenience stores, pharmacies and drug stores, but not including restaurant establishments. Alternative 3 would ban the issuance of plastic carryout bags from stores within the County that (1) meet the definition of a "supermarket" as found in the California Public Resources Code, Section 14526.5, and (2) are buildings that have retail space that generates sales or use tax pursuant to the Bradley-Burns Uniform Local Sales and Use Tax Law and have a pharmacy licensed pursuant to Chapter 9 of Division 2 of the Business and Professions Code. In addition, Alternative 3 would apply to stores within the County that are part of a chain of convenience food stores, supermarkets and other grocery stores, convenience stores, pharmacies and drug stores in the County. The number of stores that could be affected by Alternative 3 in the unincorporated areas of the County is approximately 1,091.<sup>5</sup> The number of stores that could be affected by Alternative 3 in the incorporated cities of the County is approximately 5,084.<sup>6</sup> It was assumed that each store larger than 10,000 square feet currently uses approximately 10,000 plastic carryout bags per day,<sup>7</sup> and each store smaller than 10,000 square feet currently uses approximately 5,000 plastic carryout bags per day.<sup>8</sup> It is important to note that these numbers are likely very high, as 10,000 plastic carryout bags per day is more than twice the bag average reported by the California Department of Resources Recycling and Recovery (CalRecycle) in 2008 for AB 2449 affected stores. In 2008, 4,700 stores statewide affected

<sup>&</sup>lt;sup>5</sup> Number of stores in the unincorporated territories of the County was determined from the infoUSA database for businesses with North American Industry Classification System codes 445110, 445120, and 446110 with no filters for gross annual sales volume or square footage. Accessed on: 29 April 2010.

<sup>&</sup>lt;sup>6</sup>Number of stores in the 88 incorporated cities of the County was determined from the infoUSA database for businesses with North American Industry Classification System codes 445110, 445120, and 446110 with no filters for gross annual sales volume or square footage. Accessed on: 29 April 2010.

<sup>&</sup>lt;sup>7</sup> Based on coordination between the County Department of Public Works and several large supermarket chains in the County, it was determined that approximately 10,000 plastic carryout bags are used per store per day. Due to confidential and proprietary concerns, and at the request of the large supermarket chains providing this data, the names of these large supermarket chains will remain confidential. Reported data from only 12 stores reflected a total plastic carryout bags and rounded to approximately 10,000 bags per day.

<sup>&</sup>lt;sup>8</sup>Data from the infoUSA indicates that approximately 40 percent of the stores larger than 10,000 square feet in the unincorporated territories of the County are larger than 40,000 square feet. Therefore, the average size of the stores to be affected by the proposed County ordinance would be larger than 20,000 square feet. Accordingly, it would be reasonable to estimate that the stores smaller than 10,000 square feet that would be affected by Alternative 3 would be at less than half the size of the stores to be affected by the proposed ordinances and would use less than half the number of bags.

by AB 2449 reported an average of 4,695 bags used per store per day.<sup>9</sup> While 10,000 plastic carryout bags per store per day may not accurately reflect the actual number of bags consumed per day on average for stores larger than 10,000 square feet in the County unincorporated and incorporated areas, for the purposes of the EIR, this number was used to conservatively evaluate impacts resulting from a worst-case scenario. The same may also be true of the 5,000 plastic carryout bags per store per day estimate for stores less than 10,000 square feet. While the 5,000 plastic carryout bags per store per day may likely be very high, this number was used for the purposes of the EIR to conservatively evaluate impacts resulting from a worst-case scenario.

As with the proposed ordinances and as discussed in detail in Section 4.2.4 of the EIR, Alternative 3 would not result in significant adverse impacts to air quality, biological resources, or hydrology and water quality, and would achieve additional benefits. In that there would be an increased reduction in the consumption of plastic carryout bags, corresponding adverse impacts to air quality, biological resources, GHG emissions, hydrology and water quality, and utilities and service systems due to plastic carryout bags would be eliminated, reduced, or avoided. However, due to a likely increase in the demand for paper carryout bags, indirect impacts to air quality, biological resources, GHG emissions, hydrology and utilities and service systems due to paper carryout bags may be increased. As with the proposed ordinances, indirect GHG emission impacts due to the life cycle of paper carryout bags may have the potential to be cumulatively considerable.

## **Effectiveness in Meeting Project Objectives**

As shown in Table V-1, Alternative 3 would meet all six objectives identified by the County.

## Comparison of Effects of the Alternative to Effects of the Project

The regulatory framework and existing conditions would be the same as that described for the proposed ordinances. A summary comparison of this alternative to effects of the proposed ordinances is presented in Table V-2. The analysis presented in the table shows that this alternative would be anticipated to result in positive impacts to biological resources when compared to the proposed ordinances.

#### Finding:

The Board of Supervisors finds that specific economic, legal, social, technological, or other considerations make this alternative infeasible and therefore rejects this alternative.

#### Rationale:

This alternative meets all of the basic objectives of the proposed ordinances (Table V-1). However, as with the proposed ordinances, and consistent with the County's evaluation of impacts due to paper carryout bags under a conservative worst-case scenario, Alternative 3 may have the potential to result in cumulatively considerable indirect impacts to GHG emissions because it would not limit the issuance of paper carryout bags. It would also cause greater impacts to air quality, hydrology and water quality, and utilities and public services, than the proposed ordinances would cause, even though those impacts are below the level of significance.

<sup>&</sup>lt;sup>9</sup> Dona Sturgess, California Department of Resources Recycling and Recovery, Sacramento, CA. 29 April 2010. E-mail to Luke Mitchell, County of Los Angeles, Department of Public Works, Alhambra, CA.

#### V.E ALTERNATIVE 4: BAN PLASTIC AND PAPER CARRYOUT BAGS FOR ALL SUPERMARKETS AND OTHER GROCERY STORES, CONVENIENCE STORES, PHARMACIES, AND DRUG STORES IN LOS ANGELES COUNTY

#### **Description of Alternative**

Alternative 4 would extend the scope of the proposed ordinances to apply to all supermarkets and other grocery stores, convenience stores, pharmacies, and drug stores (as opposed to applying only to stores larger than 10,000 square feet under the proposed ordinances), but not including restaurant establishments. Alternative 4 would ban the issuance of plastic and paper carryout bags from stores within the County that (1) meet the definition of a "supermarket" as found in the California Public Resources Code, Section 14526.5, and (2) are buildings that generate sales or use tax pursuant to the Bradley-Burns Uniform Local Sales and Use Tax Law and have a pharmacy licensed pursuant to Chapter 9 of Division 2 of the Business and Professions Code. In addition, Alternative 4 would apply to stores within the County that are part of a chain of convenience food stores, all supermarkets and other grocery stores, convenience stores, pharmacies, and drug stores in Los Angeles County.

As with the proposed ordinances and as discussed in detail in Section 4.2.4 of the EIR, Alternative 4 would not result in significant adverse impacts to air quality, biological resources, hydrology and water quality, and utilities and service systems, and would achieve additional benefits. In that there would be an increased reduction in the consumption of plastic carryout bags, corresponding adverse impacts to air quality, biological resources, GHG emissions, hydrology and water quality, and utilities and service systems due to plastic carryout bags would be eliminated, reduced, or avoided. Unlike the proposed ordinances, Alternative 4 would not have the potential to result in cumulatively considerable impacts to GHG emissions.

Alternative 4 would affect approximately 1,091 stores in the unincorporated areas of the County and approximately 5,084 stores in the incorporated cities of the County.<sup>10</sup>,<sup>11</sup> It was assumed that each store larger than 10,000 square feet currently uses approximately 10,000 plastic carryout bags per day,<sup>12</sup> and each store smaller than 10,000 square feet currently uses approximately 5,000 plastic carryout bags per day.<sup>13</sup> It is important to note that these numbers are likely very high, as 10,000 plastic carryout bags per day is more than twice the bag average reported by the California Department of Resources Recycling and Recovery in 2008 for AB 2449 affected stores. In 2008, 4,700 stores

<sup>&</sup>lt;sup>10</sup> Number of stores in the unincorporated territories of the County was determined from the infoUSA database for businesses with North American Industry Classification System codes 445110, 445120, and 446110 with no filters for gross annual sales volume or square footage. Accessed on: 29 April 2010.

<sup>&</sup>lt;sup>11</sup>Number of stores in the 88 incorporated cities of the County was determined from the infoUSA database for businesses with North American Industry Classification System codes 445110, 445120, and 446110 with no filters for gross annual sales volume or square footage. Accessed on: 29 April 2010.

<sup>&</sup>lt;sup>12</sup> Based on coordination between the County Department of Public Works and several large supermarket chains in the County, it was determined that approximately 10,000 plastic carryout bags are used per store per day. Due to confidential and proprietary concerns, and at the request of the large supermarket chains providing this data, the names of these large supermarket chains will remain confidential. Reported data from only 12 stores reflected a total plastic carryout bags and rounded to approximately 10,000 bags per day.

<sup>&</sup>lt;sup>13</sup>Data from the infoUSA indicates that approximately 40 percent of the stores larger than 10,000 square feet in the unincorporated territories of the County are larger than 40,000 square feet. Therefore, the average size of the stores to be affected by the proposed County ordinance would be larger than 20,000 square feet. Accordingly, it would be reasonable to estimate that the stores smaller than 10,000 square feet that would be affected by Alternative 3 would be at less than half the size of the stores to be affected by the proposed ordinances and would use less than half the number of bags.

statewide affected by AB 2449 reported an average of 4,695 bags used per store per day.<sup>14</sup> While 10,000 plastic carryout bags per store per day may not accurately reflect the actual number of bags consumed per day on average for stores larger than 10,000 square feet in the County unincorporated and incorporated areas, for the purposes of the EIR, this number was used to conservatively evaluate impacts resulting from a worst-case scenario. The same may also be true of the 5,000 plastic carryout bags per store per day estimate for stores less than 10,000 square feet. While the 5,000 plastic carryout bags per store per day may likely be very high, for the purposes of the EIR, this number was used to conservatively evaluate impacts resulting from a worst-case scenario as well.

#### **Effectiveness in Meeting Project Objectives**

As shown in Table V-1, Alternative 4 would meet all of the six objectives identified by the County. In addition, Alternative 4 would also serve to reduce the Countywide consumption of paper carryout bags and the Countywide disposal of paper carryout bags in landfills.

#### Comparison of Effects of the Alternative to Effects of the Project

The regulatory framework and existing conditions would be the same as that described for the proposed ordinances. A summary comparison of this alternative to effects of the proposed ordinances is presented in Table V-2. The analysis presented in the table shows that this alternative would be anticipated to result in positive impacts to air quality, biological resources, GHG emissions, hydrology and water quality, and utilities and service systems when compared to the proposed ordinances.

#### Finding:

The Board of Supervisors finds that specific economic, legal, social, technological, or other considerations make this alternative infeasible and therefore rejects this alternative.

#### Rationale:

This alternative meets all of the basic objectives of the proposed ordinances (Table V-1) and would not result in any increase in the use of paper carryout bags. However, a ban on the issuance of both plastic and paper bags is infeasible at this time because the County prefer to retain an option for consumers to purchase carryout bags. The County anticipates a transition period for consumers to become aware of and adapt to the recommended ordinances, particularly to remember to take and use reusable bags at affected stores. In addition, visitors to the County may not be aware of recommended ordinances and may not know to take and use reusable bags at affected stores at affected stores in the County.

<sup>&</sup>lt;sup>14</sup> Dona Sturgess, California Department of Resources Recycling and Recovery, Sacramento, CA. 29 April 2010. E-mail to Luke Mitchell, County of Los Angeles, Department of Public Works, Alhambra, CA.

#### V.F ALTERNATIVE 5: BAN PLASTIC CARRYOUT BAGS AND IMPOSE A FEE ON PAPER CARRYOUT BAGS FOR ALL SUPERMARKETS AND OTHER GROCERY STORES, CONVENIENCE STORES, PHARMACIES, AND DRUG STORES IN LOS ANGELES COUNTY

#### **Description of Alternative**

To maximize to the greatest extent feasible the potential environmental benefit from a fee on the issuance of paper carryout bags, and to mitigate GHG-related impacts from a shift to paper carryout bag use, the County developed Alternative 5, which combines Alternatives 2, 3, and 4. Like Alternatives 3 and 4, Alternative 5 will affect all supermarkets and other grocery stores, pharmacies, drug stores, and convenience stores in the County, with no limits on square footage or sales volumes. Like Alternative 2, Alternative 5 will ban the issuance of plastic carryout bags and place a fee on the issuance of paper carryout bags at affected stores. Alternative 5 will ban the issuance of plastic carryout bags and impose a fee or charge of at least \$0.05 on the issuance of paper carryout bags from stores within the County that (1) meet the definition of a "supermarket" as written in the California Public Resources Code, Section 14526.5, and (2) are buildings that have retail space that generates sales or use tax pursuant to the Bradley-Burns Uniform Local Sales and Use Tax Law and have a pharmacy licensed pursuant to Chapter 9 of Division 2 of the Business and Professions Code. In addition, Alternative 5 will apply to other grocery stores, convenience stores, and drug stores within the County. Alternative 5, like Alternative 3 and 4, which included the same broader range of stores, will include a phased approach in that it will apply to large grocery stores and pharmacies prior to smaller grocery stores, convenience stores, and drug stores.

Alternative 5 will affect approximately 1,091 stores in the unincorporated areas of the County and approximately 5,084 stores in the incorporated cities of the County.<sup>15,16</sup> This is the same number of stores analyzed for Alternatives 3 and 4. It is assumed that each store larger than 10,000 square feet currently uses approximately 10,000 plastic carryout bags per day.<sup>17</sup> and that each store smaller than 10,000 square feet currently uses approximately 5,000 plastic carryout bags per day.<sup>18</sup> It is important to note that these numbers are very high, as 10,000 plastic carryout bags per day is more than twice the bag average reported by CalRecycle in 2008 for AB 2449 affected stores. In 2008, 4,700 stores

<sup>&</sup>lt;sup>15</sup> Number of stores in the unincorporated territories of the County was determined from the infoUSA database for businesses with North American Industry Classification System codes 445110, 445120, and 446110 with no filters for gross annual sales volume or square footage. Accessed on: 29 April 2010.

<sup>&</sup>lt;sup>16</sup> Number of stores in the 88 incorporated cities of the County was determined from the infoUSA database for businesses with North American Industry Classification System codes 445110, 445120, and 446110 with no filters for gross annual sales volume or square footage. Accessed on: 29 April 2010.

<sup>&</sup>lt;sup>17</sup> Based on coordination between the County Department of Public Works and several large supermarket chains in the County, it was determined that approximately 10,000 plastic carryout bags are used per store per day. Due to confidential and proprietary concerns, and at the request of the large supermarket chains providing this data, the names of these large supermarket chains will remain confidential. Reported data from only 12 stores reflected a total plastic carryout bags and rounded to approximately 10,000 bags per day.

<sup>&</sup>lt;sup>18</sup> Data from the infoUSA indicates that approximately 40 percent of the stores greater than 10,000 square feet in the unincorporated territories of the County are larger than 40,000 square feet. Therefore, the average size of the stores to be affected by the proposed County ordinance would be greater than 20,000 square feet. Accordingly, it would be reasonable to estimate that the stores smaller than 10,000 square feet that would be affected by Alternative 5 would be at less than half the size of the stores to be affected by the proposed ordinances and would use less than half the number of bags.

throughout California affected by AB 2449 reported using an average of 4,695 bags per store per day.<sup>19</sup> While 10,000 plastic carryout bags per store per day may not accurately reflect the actual number of bags consumed per day on average for stores larger than 10,000 square feet in the County, for the purposes of this EIR this number was used to conservatively evaluate impacts resulting from such a worst-case scenario. The same may also be true of the estimate of 5,000 plastic carryout bags per store per day for stores smaller than 10,000 square feet. While this estimate is likely very high, this number was used for the purposes of this EIR to conservatively evaluate impacts resulting from such a worst-case scenario as well.

As with the proposed ordinances, Alternative 5 will not result in significant adverse impacts to air quality, biological resources, or hydrology and water quality. Alternative 5 will achieve additional benefits due to a greater reduction in the use of plastic carryout bags. Alternative 5 will lead to a greater reduction in the consumption of plastic carryout bags as a result of including a greater number of stores than the proposed ordinances; therefore, life cycle impacts of plastic carryout bags to air quality, biological resources, GHG emissions, hydrology and water quality, and utilities and service systems will be eliminated, reduced, or avoided in comparison with the proposed ordinances. A minimal transition, as discussed below, from plastic to paper carryout bags will be expected to occur if a fee or charge were placed on the issuance of paper carryout bags. Alternative 5 impacts due to the life cycle impacts of paper carryout bags will be less than the impacts of Alternative 3, which would ban plastic carryout bags at the expanded number of stores without imposing a fee or ban on the issuance of paper carryout bags.

## **Effectiveness in Meeting Project Objectives**

As shown in Table V-1, Alternative 5 meets all of the basic objectives of the proposed ordinances established by the County. In addition, Alternative 5 will also serve to reduce Countywide consumption of paper carryout bags and the Countywide disposal of paper carryout bags in landfills.

#### Comparison of Effects of the Alternative to Effects of the Project

The regulatory framework and existing conditions will be the same as that described for the proposed ordinances. Table V-2 provides a summary comparison of Alternative 5 to the proposed ordinances. The comparative analysis presented in the table shows that Alternative 5 will result in positive impacts to air quality, biological resources, hydrology and water quality, and utilities and service systems.

#### Finding:

The Board of Supervisors finds that this alternative is feasible.

# Rationale:

This alternative meets all of the basic objectives of the proposed ordinances (Table V-1). The fee or charge on the issuance of paper carryout bags will allow for flexibility during the anticipated transition period that the County anticipates for consumers to become aware of and adapt to the recommended ordinances, particularly to remember to take and use reusable bags at affected stores, and for visitors to become aware of the recommended ordinances. Further,

<sup>&</sup>lt;sup>19</sup> Dona Sturgess, California Department of Resources Recycling and Recovery, Sacramento, CA. 29 April 2010. E-mail to Luke Mitchell, County of Los Angeles, Department of Public Works, Alhambra, CA.

because the Alternative 5 will affect a larger number of stores, it will be expected to afford additional benefits to biological resources because it will reduce plastic carryout bag litter, to the greatest extent feasible, that would otherwise end up in wildlife habitats. The alternative will provide for a larger reduction in litter attributable to plastic carryout bags; a greater opportunity for reducing costs related to litter prevention, cleanup, and disposal; and a greater improvement to the quality of life for County residents by reducing litter that blights public spaces.

# V.G PROPOSED ORDINANCES (ORIGINALLY PROPOSED PROJECT)

# **Description of Proposed Ordinances**

The proposed ordinances would ban the issuance of plastic carryout bags in the County, and would encourage the 88 incorporated cities to adopt similar ordinances. The proposed ordinances would ban the distribution of plastic carryout bags at affected stores within the County that (1) meet the definition of a "supermarket" as found in the California Public Resources Code, Section 14526.5, and (2) are buildings that have 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 and have a pharmacy licensed pursuant to Chapter 9 of Division 2 of the Business and Professions Code. The proposed ordinances would affect approximately 67 stores in the incorporated cities of the County and approximately 462 stores in the unincorporated territory of the County.

As discussed in detail in the EIR, including in Sections 3.0 and 13.0, the proposed ordinances would not result in significant adverse impacts to air quality, biological resources, hydrology and water quality, and utilities and service systems, and would achieve additional benefits. However, under the County's conservative worst-case scenario, the indirect impacts from the life cycle of paper carryout bags, including end of life, would have the potential to be cumulatively considerable.

# **Effectiveness in Meeting Project Objectives**

As shown in Table V-1, the proposed ordinances would meet all of the objectives identified by the County.

# Finding:

The Board of Supervisors finds that specific economic, legal, social, technological, or other considerations make the proposed ordinances infeasible and therefore rejects the originally proposed ordinances.

# Rationale:

The originally proposed ordinances meet all of the basic objectives (Table V-1). However, due to the limited number of stores that they would affect (compared to Alternatives 3, 4, or 5), the proposed ordinances would not provide the additional benefits to biological resources that would result from banning the issuance of plastic bags at a greater number of stores (as would Alternative 5). For the same reason, the proposed ordinances would not provide the largest reduction in litter attributable to plastic carryout bags; would not provide the greatest opportunity for reducing costs related to litter prevention, cleanup, and disposal; and would not provide the greatest public spaces.

# SECTION VI FINDINGS REGARDING MITIGATION MONITORING PROGRAM

# VI.A REQUIREMENTS OF MITIGATION MONITORING PROGRAM

Pursuant to Section 21081.6 of the Public Resources Code, when a public agency is making findings required by Section 21081, it must adopt a reporting or monitoring program for the changes made to the project or conditions of project approval adopted to mitigate or avoid significant effects on the environment.

The County hereby finds that the Mitigation Monitoring Program meets the requirements of Section 21081.6 of the Public Resources Code by providing a monitoring program designed to ensure compliance of the recommended County ordinance with mitigation measures adopted by the County.

#### VII.A LOCATION AND CUSTODIAN OF DOCUMENTS

Section 15091(e) of the California Code of Regulations, State CEQA Guidelines, requires the public agency to specify the location and custodian of the documents or other materials that constitute the record of proceedings upon which the decision is based. Section 10.0, References, of the EIR lists all sources used in the preparation of the environmental analysis. Unless otherwise noted, reference materials are located at the LACDPW, which shall also serve as the custodian of the documents constituting the record of proceedings upon which the County Board of Supervisors has based its decision related to the proposed ordinances. The designated location and custodian of documents is as follows:

County of Los Angeles c/o Department of Public Works Attn: Mr. Coby Skye Environmental Programs Division 900 South Fremont Avenue, 3rd Floor Alhambra, California 91803 Tel: (626) 458-5163

References not available from the LACDPW are located at Sapphos Environmental, Inc., and can be reviewed by contacting the following party:

Dr. Laura Watson Environmental Compliance Specialist Sapphos Environmental, Inc. 430 North Halstead Street Pasadena, California 91107 Tel: (626) 683-3547

# SECTION VIII CERTIFICATION REGARDING INDEPENDENT JUDGMENT

Pursuant to Section 21082.1(c) of the Public Resources Code, the County Board of Supervisors certifies that the Chief Executive Office, the LACDPW, and other County staff, have independently reviewed and analyzed the Final EIR on behalf of the County of Los Angeles. The Chief Executive Office, LACDPW, and other County staff reviewed the Draft EIR prepared by the County and required changes to the document prior to circulation for public review. The Draft EIR that was circulated for public review reflected the independent judgment of the Chief Executive Office and LACDPW, acting on behalf of the County of Los Angeles. The Final EIR similarly has been subject to review and revision by County staff and reflects the independent judgment of the County of Los Angeles.

As discussed in detail in Section 4.2.6 of the EIR, the indirect impacts from implementation of the recommended ordinances (analyzed as Alternative 5) will result in increased indirect GHG emissions from the decomposition of paper carryout bags in landfills, which will result in cumulatively significant impacts under the County's conservative worst-case analysis. This indirect impact is the only potentially significant impact that will result from Alternative 5. The EIR identified mitigation measure GHG-1 to mitigate GHG emission impacts from the recommended ordinances. While the implementation of mitigation measure GHG-1 will monitor and reduce the consumption of paper carryout bags and, to the maximum extent feasible, indirectly offset end-of-life GHG emissions resulting from the recommended ordinance, the County has decided that no emission reduction credits will be taken for the measure, and for the purposes of the decision-making process, the County will proceed with the conclusion that indirect impacts to end-of-life GHG emissions will remain cumulatively considerable.

Section 15093 of State CEQA Guidelines states that, when a public agency approves a project that will result in unavoidable significant impacts, it must state in writing specific reasons to support its decision. If specific economic, legal, social, technological, or other benefits of the project outweigh its unavoidable adverse environmental effects, the adverse effects may be considered "acceptable." Pursuant to Public Resources Code Section 21081(b) and Section 15093 of the State CEQA Guidelines, the Board of Supervisors has considered the benefits of the project along with the unavoidable environmental risks, and has adopted all feasible mitigation measures for the unavoidable significant impact. The Board of Supervisors has also examined a range of reasonable alternatives to the project, and has determined that adoption and implementation of the recommended ordinance (analyzed as Alternative 5) is the most desirable, feasible, and appropriate action. The County Board of Supervisors, as the lead agency for the project pursuant to CEQA, has determined that the economic and environmental benefits of the recommended ordinance outweigh the unavoidable adverse environmental effects resulting from the County's conservative worst-case scenario, and adopts the following Statement of Overriding Considerations.

The Board of Supervisors finds that each of the following benefits is an overriding consideration, independent of the other benefits, which warrants approval of the recommended County ordinance. Substantial evidence in the record supports this conclusion, and can be found in the preceding findings, EIR, Record of Proceedings documentation, and public hearings and proceedings for ordinances.

# IX.A ADVERSE ENVIRONMENTAL RISKS

Section 3.3 and Section 4.0 of the EIR identified and evaluated potentially significant cumulative impacts related to GHG emissions. Based on a conservative worst-case analysis, the indirect impacts to GHG emissions from the end-of-life of paper carryout bags may have the potential to be cumulatively considerable, depending on the actual percentage increase in conversion to paper carryout bags, the number of stores affected, the actual bag usage per day, the size of the fee or charge, and other relevant factors that are specific to each of the 88 incorporated cities within the County. In the development of this EIR, the County has recognized and acknowledged that each city has the authority to render an independent decision regarding implementation of its own ordinance. For the purposes of this EIR, the County has extended the worst-case scenario for the

County ordinance and alternatives to a scenario where all 88 cities adopt comparable ordinances. However, an individual determination, including for cumulative impacts, for each city would be contingent on the exact parameters of the city's proposed ordinance, consideration of the aboveidentified factors, the city's adopted thresholds of significance, and its projected AB 32 GHG emissions target.

Although the decomposition of paper carryout bags in landfills results in emissions of methane gas, a GHG, it is important to note that the results presented in the EIR are highly conservative and are likely to be overestimates for the County, as emissions from active landfills in the County are strictly controlled by SCAQMD Rule 1150.1, AVAQMD Rule 1150.1, and the new State requirements that regulate methane emissions from landfills in accordance with the goals of AB 32. The USEPA's Landfill Methane Outreach Program states that methane collection efficiency ranges from 60 to 90 percent.<sup>1,2</sup>

The conclusion that GHG emissions from the decomposition of paper carryout bags in landfills is expected to be cumulatively considerable is based on the County's conservative assumption of a 50-percent conversion from plastic carryout bags to paper carryout bags. However, if the paper carryout bag fee has the effect of decreasing conversion to paper carryout bags by 80 to 90 percent, similar to what occurred with the Ireland and Washington, DC, bag fees, indirect impacts to GHG emissions would be reduced. Although implementation of a fee of \$0.10 on the issuance of paper carryout bags, the recommended ordinances are expected to result in a limited increase in the use of paper carryout bags, so GHG emission impacts will still have the potential to remain as significantly adverse on a cumulative level.

The EIR analyzed Alternatives 1 and 4, which would ban the issuance of paper carryout bags and therefore would avoid any potentially significant cumulative GHG emission impacts due to a potential increase in disposal of paper carryout bags. However, County determined that a ban on the issuance of both plastic and paper carryout bags is infeasible at this time because the County requires an option for consumers to purchase carryout bags at this time. The County anticipates a certain transition period for consumers to become aware of and adapt to the recommended ordinances, particularly to remember to use reusable bags at affected stores. In addition, visitors to the County may not be aware of recommended ordinances and may not know to take and use reusable bags at affected stores in the County.

The economic and environmental benefits, as well as public policy considerations, resulting from implementation of the recommended ordinances override the potential cumulative indirect impacts associated with GHG emissions. Implementation of a fee on the issuance of paper carryout bags will minimize the number of paper carryout bags used in the County, as well as any corresponding GHG emissions due to the decomposition of paper carryout bags in landfills. The recommended ordinances will require each affected store to issue a quarterly report of the total number of paper carryout bags sold along with a summary of efforts, if any, undertaken by the store to promote the use of reusable bags. The County will keep records of these reports to ensure that consumers in the County are using fewer carryout bags and more reusable bags as a result of the recommended

<sup>&</sup>lt;sup>1</sup> California Air Resources Board. 17 June 2010. *Methane Emissions from Municipal Solid Waste Landfills*. Available at: http://www.arb.ca.gov/regact/2009/landfills09/landfillfinalfro.pdf

<sup>&</sup>lt;sup>2</sup> U.S. Environmental Protection Agency. Accessed on: 7 October 2010. "Landfill Methane Outreach Program." Web site. Available at: http://www.epa.gov/lmop/basic-info/index.html#a03

ordinances. The County will also use the reports to assess whether the desired effects of the recommended ordinances are being obtained. As part of mitigation measure GHG-1, the County will also implement and/or expand public outreach through an education program to increase the percentage of paper carryout bags that are diverted from landfills. There is nearly universal access to curbside recycling throughout the County, where paper bags can be recycled by homeowners conveniently. Additional public education and outreach would increase the number of bags recycled and further reduce indirect impacts to GHG emissions. Any remaining cumulative GHG emission impacts are overridden by the purpose of the recommended ordinances to substantially reduce the operational costs and environmental impacts associated with the use of plastic carryout bags in the County.

# IX.B OVERRIDING CONSIDERATIONS

The recommended ordinances are consistent with the County's commitment to environmental stewardship. The County determined that the economic and environmental benefits of implementing the recommended ordinances, as discussed below, outweigh and override the one adverse effect of the recommended ordinances, and any effect remaining after mitigation is deemed acceptable due to several overriding considerations.

It is a benefit that the recommended ordinances will assist the County in meeting all six of its basic objectives, which aim to reduce plastic carryout bag use and the associated litter that is found throughout the County:

- The recommended ordinances include outreach to all 88 incorporated cities of the County to encourage adoption of comparable ordinances.
- The recommended ordinances will assist in reducing the Countywide consumption of plastic carryout bags from the current estimate of 1,600 plastic carryout bags per household in 2007 to fewer than 800 plastic bags per household in 2013.
- The recommended ordinances will assist in reducing by 50 percent by 2013 the Countywide contribution of plastic carryout bags to litter that blights the County's public spaces.
- The recommended ordinances will assist in reducing by \$4 million the County's, cities', and Flood Control District's costs for prevention, cleanup, and enforcement efforts to reduce litter in the County.
- The recommended ordinances will assist in substantially increasing awareness of the negative impacts of plastic carryout bags and the benefits of reusable bags, and reach at least 50,000 residents (5 percent of the population) with an environmental awareness message.
- The recommended ordinances will assist in reducing Countywide disposal of plastic carryout bags in landfills by 50 percent from 2007 annual amounts.

The benefit that the recommended ordinances meet the County's basic objectives in conjunction with additional benefits described below outweigh and override the adverse environmental effect identified in the EIR.

#### **Economic Considerations**

It is a benefit that the recommended ordinances will help to reduce the costs associated with plastic carryout bag litter, and this consideration alone outweighs and overrides the one adverse

effect identified in the EIR. The recommended ordinances will help to reduce the amount of litter in the County attributable to plastic carryout bags and the associated costs to government for litter prevention, cleanup, and enforcement efforts. Research conducted by the LACDPW found that approximately 6 billion plastic carryout bags are consumed in the County each year, which is equivalent to approximately 1,600 bags per household per year.<sup>3,4,5</sup> California public agencies spend more than \$375 million each year for litter prevention, cleanup, and disposal. In the County, specifically, the County Flood Control District alone exhausted \$24 million of these public funds in 2008–2009 (the most recent data available), while LACDPW expended additional resources separate from and in addition to state funds to address litter.<sup>6,7</sup> By banning the issuance of plastic carryout bags at all supermarkets and other grocery stores, convenience stores, pharmacies, and drug stores in the County, the recommended ordinances will significantly reduce the number of plastic carryout bags used in the County, along with the associated litter attributable to plastic carryout bags.

Paper carryout bags are less likely than plastic carryout bags to be littered and to end up in storm water runoff because they are heavier (anywhere from 6 to 10 times) than plastic bags, and are therefore less likely to become airborne and scattered as litter.<sup>8</sup> Survey data received by LACDPW staff indicate that plastic carryout bag litter is a major operational problem for landfills within the County's incorporated and unincorporated areas. Landfill operators noted that plastic bags cause serious litter issues due to their lightweight nature and propensity to become airborne.<sup>9</sup> Each survey respondent indicated that it was costly and time consuming to provide cleanup crews to address the plastic bag litter problem in neighborhoods in County's unincorporated and incorporated areas that are adjacent to these landfills.<sup>10</sup>

Unlike regular plastic, paper is biodegradable and compostable; the paper used to make standard paper carryout bags is originally derived from wood pulp, which is a naturally biodegradable material.<sup>11</sup> Due to the biodegradable properties of paper, paper bags do not persist in the marine environment for as long as plastic bags.<sup>12</sup> A study performed in Washington, DC, showed that plastic bag trash accounted for 45 percent of the trash collected in tributary streams, and was the

<sup>8</sup> Cadman, J., S. Evans, M. Holland, and R. Boyd. 2005. *Proposed Plastic Bag Levy – Extended Impact Assessment Final Report*. Prepared for: Scottish Executive.

<sup>9</sup> County of Los Angeles Department of Public Works. 2007. Survey: All Solid Waste Facilities: Plastic Bag Analysis for the County of Los Angeles. Los Angeles, CA.

<sup>10</sup> County of Los Angeles Department of Public Works. 2007. Survey: All Solid Waste Facilities: Plastic Bag Analysis for the County of Los Angeles. Los Angeles, CA.

<sup>11</sup> County of Los Angeles, Department of Public Works. Accessed on: 28 April 2010. *Backyard Composting*. Web site. Available at: http://dpw.lacounty.gov/epd/sg/bc.cfm

<sup>12</sup> Andrady, Anthony L. and Mike A. Neal. 2009. "Applications and Societal Benefits of Plastics." In *Philosophical Transactions of the Royal Society B: Biological Sciences,* 364: 1977–1984.

<sup>&</sup>lt;sup>3</sup> California Integrated Waste Management Board. 12 June 2007. Board Meeting Agenda, Resolution: Agenda Item 14. Sacramento, CA.

<sup>&</sup>lt;sup>4</sup> U.S. Census Bureau. 2000. "State & County Quick Facts: Los Angeles County, California." Web site. Available at: http://quickfacts.census.gov/qfd/states/06/06037.html

<sup>&</sup>lt;sup>5</sup> At an average of slightly fewer than three persons per household

<sup>&</sup>lt;sup>6</sup> California Department of Transportation. Accessed: September 2009. "Facts at a Glance." *Don't Trash California*. Available at: http://www.donttrashcalifornia.info/pdf/Statistics.pdf

<sup>&</sup>lt;sup>7</sup> County of Los Angeles. October 2009. Los Angeles County Municipal Storm Water Permit (Order 01-182) Individual Annual Report Form. Available at: http://dpw.lacounty.gov/wmd/NPDESRSA/AnnualReport/2009/Appendix%20D%20-%20Principal%20Permittee%20Annual%20Report/Principal%20Permittee%20Annual%20Report.pdf

most abundant type of trash in the streams, probably due to the amount of brush and vegetation in streams that can snag the bags. More than 20 percent of the trash in rivers was also attributed to plastic bags. Paper products were not found in the streams except in localized areas, and were not present downstream. The study stated that political action to eliminate the use of free plastic carryout bags would effectively remove a significant portion of trash from streams and rivers.<sup>13</sup> The recommended ordinance will remove a significant source of litter from the County, thereby improving the quality of life for Los Angeles residents by reducing litter that blights public spaces and reducing the costs of litter cleanup.

#### **Environmental Considerations**

It is a benefit that the recommended ordinances will help to reduce the environmental impacts associated with plastic carryout bag use, and this consideration alone outweighs and overrides the one adverse environmental effect identified in the EIR. The County has approximately 75 miles of shoreline along the Pacific Ocean, into which the County's storm drain and flood control system empties. The CIWMB estimates that approximately 147,038 tons of plastic grocery and other merchandise bags were disposed of in California in 2003, about 0.4 percent of the state's overall waste stream by weight.<sup>14</sup> CIWMB states, "plastic film, especially grocery bags, constitutes a high percentage of litter, which is unsightly, costly to clean up, especially when it enters marine environments, and causes serious negative impacts to shore birds and sea life."<sup>15</sup> The CIWMB estimates that approximately 3.9 percent of plastic waste can be attributed to plastic carryout bags related to grocery and other merchandise. Several organizations have studied the effects of plastic litter: Caltrans conducted a study on freeway storm water litter;<sup>16</sup> the Friends of Los Angeles River conducted a waste characterization study on the Los Angeles River;<sup>17</sup> the City of Los Angeles conducted a waste characterization study on 30 storm drain basins;<sup>18</sup> and LACDPW conducted a trash reduction and a waste characterization study of street sweeping and trash capture systems near and within the Hamilton Bowl, located in Long Beach, California.<sup>19</sup> These studies concluded that plastic film (including plastic bag litter) composed between 7 to 30 percent by mass and between 12 to 34 percent by volume of the total litter collected.<sup>20</sup>

<sup>&</sup>lt;sup>13</sup> Anacostia Watershed Society. December 2008. *Anacostia Watershed Trash Reduction Plan*. Prepared for: District of Columbia Department of the Environment.

<sup>&</sup>lt;sup>14</sup> California Integrated Waste Management Board. December 2004. *Statewide Waste Characterization Study*. Sacramento, CA.

<sup>&</sup>lt;sup>15</sup> California Integrated Waste Management Board. Accessed on: 1 March 2010. *Plastic Film Cooperative Recycling Initiative. Problem Statement.* Available at: http://www.calrecycle.ca.gov/Plastics/Film/#Problem

<sup>&</sup>lt;sup>16</sup> Combs, Suzanne, John Johnston, Gary Lippner, David Marx, and Kimberly Walter. 2001. *Results of the Caltrans Litter Management Pilot Study*. Sacramento, CA: California Department of Transportation. Available at: http://www.owp.csus.edu/research/papers/PP020.pdf

<sup>&</sup>lt;sup>17</sup> City of Los Angeles. 18 June 2004. *Characterization of Urban Litter*, p.1–5. Prepared by: Ad Hoc Committee on Los Angeles River and Watershed Protection Division. Los Angeles, CA.

<sup>&</sup>lt;sup>18</sup> City of Los Angeles. 18 June 2004. *Characterization of Urban Litter*, p.1–5. Prepared by: Ad Hoc Committee on Los Angeles River and Watershed Protection Division. Los Angeles, CA.

<sup>&</sup>lt;sup>19</sup> County of Los Angeles, Department of Public Works, Environmental Programs Division. August 2007. An Overview of Carryout Bags in Los Angeles County: A Staff Report to the Los Angeles County Board of Supervisors. Alhambra, CA. Available at: http://dpw.lacounty.gov/epd/PlasticBags/PDF/PlasticBagReport\_08-2007.pdf

<sup>&</sup>lt;sup>20</sup> County of Los Angeles, Department of Public Works, Environmental Programs Division. August 2007. An Overview of Carryout Bags in Los Angeles County: A Staff Report to the Los Angeles County Board of Supervisors. Alhambra, CA. Available at: http://dpw.lacounty.gov/epd/PlasticBags/PDF/PlasticBagReport\_08-2007.pdf

During the 2008 International Coastal Cleanup led by the Ocean Conservancy, 400,000 volunteers picked up 6.8 million pounds of trash from lakes, rivers, streams, and ocean beaches around the world. One in every 10 items collected was a plastic bag. Plastic bags accounted for 12 percent of the total number of items collected, with a total of 1,377,141, and were the second most prevalent form of marine debris collected during the cleanup, after cigarettes / cigarette filters.<sup>21</sup>

A survey by the National Marine Debris Monitoring Program, funded by the USEPA, used standardized methodology to monitor marine debris in the United States over a 5-year period. The most abundant debris items found during the survey were straws, plastic beverage bottles, and plastic bags. According to survey data, approximately 50 percent of all marine debris in the United States originates from land-based activities, and approximately 30 percent of all marine debris originates from general sources, including plastic bottles and plastic bags. Plastic bags with a seam of less than 1 meter in length made up 9 percent of the total number of items recorded.<sup>22</sup> Furthermore, the survey saw a substantial increase in general-source items over the 5-year monitoring period, with an average annual increase of 5.4 percent.

Plastics break down into smaller pieces over time, eventually forming tiny particles of plastics called microplastics.<sup>23</sup> However, plastics are chemically resistant and do not biodegrade, so they persist in the marine environment.<sup>24</sup> A study of the coastal ocean conducted in 2002 near Long Beach, California, showed that on average there were eight pieces of plastic per cubic meter of coast. The average mass of plastic was 2.5 times greater than that of plankton, and was even greater after a storm.<sup>25</sup> Plastic fragments and plastic resin pellets used in the manufacture of plastic products can serve as vehicles for persistent organic pollutants such as polychlorinated biphenyls (PCB) and dichlorodiphenyltrichloroethan (DDT), which can cause adverse impacts to biological resources if ingested, including internal blockages and toxic poisoning.<sup>26,27,28,29</sup>

As discussed in Section 3.2 of the EIR, according to the RWQCB for the Los Angeles Region, trash can be harmful to wildlife species, and plastic bags are one of the more common items of trash observed by RWQCB staff.<sup>30</sup> Seabirds, sea turtles, and marine mammals that feed at or near the ocean surface are especially prone to ingesting plastic debris that floats, and can die as a result of

<sup>&</sup>lt;sup>21</sup>Ocean Conservancy. A Rising Tide of Ocean Debris and What We Can Do About It. International Coastal Cleanup 2009 Report. Available at: http://www.oceanconservancy.org/pdf/A\_Rising\_Tide\_full\_lowres.pdf

<sup>&</sup>lt;sup>22</sup> Sheavly, S.B. 2007. *National Marine Debris Monitoring Program: Final Program Report, Data Analysis and Summary*, 76 pp. Prepared by: Ocean Conservancy, Grant Number X83053401-02. Prepared for: U.S. Environmental Protection Agency, Washington, District of Columbia.

<sup>&</sup>lt;sup>23</sup> Thompson, R. C. 7 May 2004. "Lost at Sea: Where Is All the Plastic?" In Science, 304 (5672): 843.

<sup>&</sup>lt;sup>24</sup> Andrady, Anthony L. and Mike A. Neal. 2009. "Applications and Societal Benefits of Plastics." In *Philosophical Transactions of the Royal Society B: Biological Sciences,* 364: 1977–1984.

<sup>&</sup>lt;sup>27</sup> Takada, H. et. al. Pellet Watch: Global Monitoring of Persistent Organic Pollutants (POPs) using Beached Plastic Resin Pellets. Available at: http://www.tuat.ac.jp/~gaia/ipw/documents/takadaproceeding.pdf

<sup>&</sup>lt;sup>28</sup> Teuten, E. L. et. al. 2009. "Transport and release of chemicals from plastic to the environment and to wildlife." In *Philosophical Transactions of the Royal Society B: Biological Sciences, 364*: 2027-2045.

<sup>&</sup>lt;sup>29</sup> Todd, Peter, A. et. *al.* 2010. "Impacts of Pollution on marine life in Southeast Asia." In *Biodiversity and Conservation 19*: 1063–1082.

<sup>&</sup>lt;sup>30</sup> Regional Water Quality Control Board, Los Angeles Region. Revised 27 July 2007. "Trash Total Maximum Daily Loads for the Los Angeles River Watershed." Los Angeles, CA.

ingestion, starvation, suffocation, infection, drowning, and entanglement.<sup>31,32,33,34,35</sup> The recovery plan drafted by the National Marine Fisheries Service and the U.S. Fish and Wildlife Service for the endangered leatherback turtle (*Dermochelys coriacea*) lists ingestion of marine debris, including plastic bags, as one of the factors threatening this species.<sup>36</sup> The recovery plan states that leatherback turtles consume floating plastic, including plastic bags, because they mistake the floating plastic for jellyfish.<sup>37</sup> The recovery plans for the threatened green turtle (*Chelonia mydas*), loggerhead turtle (*Caretta caretta*), and olive ridley turtle (*Lepidochelys olivacea*) also note that ingestion of plastic bags is a serious threat to those species.<sup>38,39,40</sup> The recovery plan for the short-tailed albatross (*Phoebastria albatrus*) also indicates that ingestion of plastics is a serious threat to those species.<sup>38,39,40</sup> The recovery plan for the short-tailed albatross (*Phoebastria albatrus*) also indicates that ingestion of plastics is a serious threat to the federally endangered species.<sup>41</sup> Based on this evidence, the prevention of trash, such as plastic carryout bags, from entering the water bodies like the Los Angeles River can help improve habitats and benefit aquatic species.<sup>42</sup> Jared Blumenfeld, the USEPA's regional administrator for the Pacific Southwest, said recently that the ban on plastic carryout bags in American Samoa "will decrease the amount of plastic waste in the territory and directly protect marine and bird life in the Pacific."<sup>43</sup>

Although the recommended ordinance could increase the production, distribution, and disposal of paper carryout bags, the paper bags have the potential to biodegrade if they are sufficiently exposed to oxygen, sunlight, moisture, soil, and microorganisms (such as bacteria); they are denser and less susceptible to becoming airborne than plastic bags; and they generally have a higher

<sup>&</sup>lt;sup>31</sup> California Ocean Protection Council. 20 November 2008. *An Implementation Strategy for the California Ocean Protection Council Resolution to Reduce and Prevent Ocean Litter*. Available at: http://www.opc.ca.gov/webmaster/ftp/pdf/opc ocean litter final strategy.pdf

<sup>&</sup>lt;sup>32</sup> National Research Council, Committee on the Effectiveness of National and International Measures to Prevent and Reduce Marine Debris and Its Impacts. 2008. *Tackling Marine Debris in the 21st Century*.

<sup>&</sup>lt;sup>33</sup>U.S. Environmental Protection Agency. August 2002. Assessing and Monitoring Floatable Debris. Washington, DC.

<sup>&</sup>lt;sup>34</sup> California Ocean Protection Council. 20 November 2008. *An Implementation Strategy for the California Ocean Protection Council Resolution to Reduce and Prevent Ocean Litter*. Available at: http://www.opc.ca.gov/webmaster/ftp/pdf/opc ocean litter final strategy.pdf

<sup>&</sup>lt;sup>35</sup> Gregory, Murray R. 2009. "Environmental Implications of Plastic debris in Marine Settings --Entanglement, Ingestion, Smothering, Hangers-on, Hitch-hiking and Alien Invasions." In *Philosophical Transactions of the Royal Society B: Biological Sciences,* 364: 2013–2025.

<sup>&</sup>lt;sup>36</sup> National Marine Fisheries Service and U.S. Fish and Wildlife Service. 1998. *Recovery Plan for U.S. Pacific Populations of the Leatherback Turtle*. Available at: http://www.nmfs.noaa.gov/pr/pdfs/recovery/turtle\_leatherback\_pacific.pdf

<sup>&</sup>lt;sup>37</sup> National Marine Fisheries Service and U.S. Fish and Wildlife Service. 1998. *Recovery Plan for U.S. Pacific Populations of the Leatherback Turtle*. Available at: http://www.nmfs.noaa.gov/pr/pdfs/recovery/turtle\_leatherback\_pacific.pdf

<sup>&</sup>lt;sup>38</sup> National Marine Fisheries Service and U.S. Fish and Wildlife Service. 1998. *Recovery Plan for U.S. Pacific Populations of the East Pacific Green Turtle*. Available at: http://www.nmfs.noaa.gov/pr/pdfs/recovery/turtle\_green\_eastpacific.pdf

<sup>&</sup>lt;sup>39</sup> National Marine Fisheries Service and U.S. Fish and Wildlife Service. 1998. *Recovery Plan for U.S. Pacific Populations of the Loggerhead Turtle*. Available at: http://www.nmfs.noaa.gov/pr/pdfs/recovery/turtle\_loggerhead\_pacific.pdf

<sup>&</sup>lt;sup>40</sup> National Marine Fisheries Service and U.S. Fish and Wildlife Service. 1998. *Recovery Plan for U.S. Pacific Populations of the Olive Ridley Turtle*. Available at: http://www.nmfs.noaa.gov/pr/pdfs/recovery/turtle\_oliveridley.pdf

<sup>&</sup>lt;sup>41</sup>U.S. Fish and Wildlife Service. September 2008. *Short-tailed Albatross Recovery Plan*. Available at: http://alaska.fws.gov/fisheries/endangered/pdf/stal\_recovery\_plan.pdf

<sup>&</sup>lt;sup>42</sup> Regional Water Quality Control Board, Los Angeles Region. Revised 27 July 2007. "Trash Total Maximum Daily Loads for the Los Angeles River Watershed." Los Angeles, CA.

<sup>&</sup>lt;sup>43</sup> U.S. Environmental Protection Agency. 30 September 2010. "U.S. EPA applauds American Samoa's decision to ban plastic shopping bags." Available at:

http://yosemite.epa.gov/opa/admpress.nsf/0/921A87D72D9AAFC1852577AE007394F1

recycling rate than do plastic bags. The USEPA reported that the recycling rate for high-density polyethylene plastic bags and sacks was 11.9 percent in 2007, compared to a recycling rate of 36.8 percent of paper bags and sacks.<sup>44</sup> Currently, CIWMB estimates that less than 5 percent of plastic film in California is recycled.<sup>45</sup> The high recycling rate for paper bags and sacks is due in part to the availability of curbside recycling programs. The County currently has an education outreach program for curbside recycling, which includes paper carryout bags.<sup>46</sup> There is nearly universal access to curbside recycling throughout the County, where homeowners can conveniently recycle paper bags. The paper used to make standard paper carryout bags is originally derived from wood pulp, which is a naturally biodegradable and compostable material, and stores in the County are already using paper carryout bags composed of a minimum of 40 percent post-consumer recycled content. Therefore, based upon the available evidence, paper carryout bags are less likely to become litter than are plastic carryout bags.

#### **Public Policy Considerations**

The recommended ordinances are consistent with the County's commitment to environmental stewardship and its commitment to reduce carryout bag use and litter, while increasing the use of reusable bags and recycling in the unincorporated areas of the County.<sup>47</sup> This consideration is a benefit and alone outweighs and overrides the one adverse effect identified in the EIR. The County's commitment to this policy is demonstrated by its adoption of the County's voluntary Single Use Bag Reduction and Recycling Program in January 2008, which was a comprehensive strategy to reduce the consumption and disposal of plastic and paper carryout bags that sought to join the interests of supermarkets and retail stores, environmental groups, the plastic bag industry, local government, and the public. Further, from November 15 to December 17, 2009, the LACDPW conducted a Brag About Your Bag campaign to promote reusable bags Countywide, during which it distributed over 50,000 reusable bags at supermarkets throughout the County.<sup>48</sup>

The recommended ordinances are also consistent with the County's policy and agenda to support and/or sponsor Statewide legislation regarding carryout bags. The County's current policy is to "support legislation which reduces the environmental impacts of single-use carryout bags and decreases the financial burden on local governments to address those impacts, including legislation

<sup>&</sup>lt;sup>44</sup> U.S. Environmental Protection Agency. November 2008. "Table 21: Recovery of Products in Municipal Solid Waste, 1960 to 2007." *Municipal Solid Waste in the United States: 2007 Facts and Figures*. Washington, DC. Available at: http://www.epa.gov/waste/nonhaz/municipal/pubs/msw07-rpt.pdf. The referenced table included the recovery of post-consumer wastes for the purposes of recycling or composting, it did not include conversion/fabrication scrap. The report includes the recovery of plastic bags, sacks, and wraps (excluding packaging) for a total of 9.1 percent of plastic recovered in this category. The County of Los Angeles conservatively estimates that the percentage of plastic bags in this category for the County of Los Angeles is less than 5 percent.

<sup>&</sup>lt;sup>45</sup> California Integrated Waste Management Board. Accessed on: 1 March 2010. *Plastic Film Cooperative Recycling Initiative. Problem Statement.* Available at: http://www.calrecycle.ca.gov/Plastics/Film/#Problem

<sup>&</sup>lt;sup>46</sup> County of Los Angeles, Department of Public Works. Accessed on: 12 October 2010. Outreach Programs. Web sites. available at: http://dpw.lacounty.gov/epd/recycling/outreach.cfm and http://dpw.lacounty.gov/epd/recycling/crm.cfm

<sup>&</sup>lt;sup>47</sup> County of Los Angeles Board of Supervisors. 19 December 2006. "Policy No. 3.045, Energy and Environmental Policy." *Board of Supervisors Policy Manual*. Available at: http://countypolicy.co.la.ca.us/

<sup>&</sup>lt;sup>48</sup> County of Los Angeles. "Los Angeles County's Voluntary Single Use Bag Reduction and Recycling Program." Web site. Available at: http://www.bragaboutyourbag.org/

which seeks to promote the use of reusable bags, reduce the use of plastic or paper carryout bags, and/or increase at-store recycling of carryout bags."<sup>49</sup>

In addition, the recommended ordinances further the goals of the Countywide Strategic Plan, which directs the provision of operational effectiveness and community and municipal services. The recommended ordinances will reduce carryout bag use and associated litter, while promoting the use of reusable bags. The recommended ordinances will also help meet the goals of the Countywide Strategic Plan by implementing environmentally responsible practices to reduce the County's impacts and promote environmental stewardship, and by coordinating departmental resources effectively to cost effectively implement environmentally beneficial programs. The recommended ordinances will assist in reducing direct costs related to maintaining the County's storm water and flood control infrastructure. The recommended ordinances will also help reduce blight, litter, and other negative environmental impacts associated with carryout bags, while promoting sustainability, thereby improving the well-being of County residents. The County's efforts to reduce carryout bag consumption and litter, while increasing the use of reusable bags and recycling, are ongoing.

<sup>&</sup>lt;sup>49</sup> County of Los Angeles Chief Executive Office. 1 June 2010. Board Letter: Motion To Support AB 1998 (Brownley) Related to Single-Use Carryout Bags and Revise The County's State Legislative Agenda to Expand Existing Legislative Policy on Single-Use Carryout Bags (Item No. 64-C - Agenda of June 1, 2010). Los Angeles, CA.

Based on the foregoing findings and the information contained in the record, the Board of Supervisors of the County of Los Angeles makes the following findings with respect to the significant environmental impacts resulting from the Ordinances to Ban Plastic Carryout Bags in Los Angeles County pursuant to Section 15091 of the State CEQA Guidelines:

- Changes or alterations have been required in, or incorporated into, the recommended ordinance to avoid or substantially lessen the significant environmental effects as identified in the Final EIR.
- The changes and alterations for the recommended ordinance for the unincorporated area of the County are within the responsibility and jurisdiction of the County.
- With respect to the impacts that could occur if the County's 88 incorporated cities adopted similar ordinances, the Board of Supervisors finds that incorporation of changes or alterations similar to those set forth in mitigation measure GHG-1 are within the responsibility and jurisdiction of those agencies and not the County. Such changes have been adopted by such other agencies or can and should be adopted by such other agencies. However, the Board of Supervisors acknowledges that the feasibility of such changes or alterations similar to those set forth in mitigation measure GHG-1, including the feasibility of each element of such mitigation measure, is within the sole discretion of such other agencies.
- The mitigation measure identified in the Final EIR is feasible and will be required as a condition of approval of the recommended ordinance.

Based on the foregoing findings and the information contained in the record, the Board of Supervisors makes the following additional findings regarding the environmental impacts resulting from the Ordinances to Ban Plastic Carryout Bags in Los Angeles County:

- Comments, responses to comments, and revisions to the Draft EIR merely clarify and amplify the analysis presented in the EIR and require recirculation of the EIR according to the State CEQA Guidelines, Section 15088.5(b). Similarly, revisions to the definitions contained in the Draft EIR for the proposed ordinances, alternatives, and mitigation measures since publication of the Draft EIR do not result in any new significant impacts or any substantial increases in the severity of an environmental impact that was not described in the Draft EIR, and do not require recirculation according to the State CEQA Guidelines, Section 15088.5(b).
- After careful consideration of all comments, the Board of Supervisors recognizes that disagreements among experts still remain regarding the environmental impacts identified in the EIR. These disagreements are addressed in throughout the EIR, including in Sections ES.3, 3.0, 4.0, and 13.0, and the Board of Supervisors finds that substantial evidence supports the conclusions of the EIR.
- The recommended ordinance and the adoption of similar ordinances by each of the County's 88 incorporated cities (identified as Alternative 5 in the EIR) is feasible and

capable of meeting all of the basic objectives of the proposed ordinances. In Section 4.2.6, the EIR provides a detailed analysis of impacts resulting from adoption of the recommended ordinance and adoption of similar ordinances by the County's 88 incorporated cities.

• In the development of the EIR, the County recognized and acknowledged that each city has the authority to render an independent decision regarding implementation of its own comparable ordinance. For the purposes of this EIR, the County has extended the conservative worst-case scenario for the proposed ordinances and alternatives to a scenario where all 88 cities adopt comparable ordinances. However, each city has sole discretion in making an individual determination, including for cumulative impacts, regarding the exact parameters of the city's proposed ordinance, the actual percentage increase in conversion to paper carryout bags, the number of stores affected, the actual bag usage per day, the size of the fee or charge, if any, its projected AB 32 GHG emissions target, and any other relevant factors specific to each incorporated city.

Based on the foregoing findings and the substantial evidence contained in the record, and as conditioned by the foregoing findings:

- All effects on the environment due to the recommended ordinances have been eliminated or substantially lessened where feasible.
- Alternative 5 has been deemed feasible and capable of meeting all of the basic objectives of the proposed ordinances, and has been chosen to be carried forward for adoption.
- Any remaining significant environmental effects that have been found to be unavoidable are acceptable due to the overriding concerns set forth in the foregoing Statement of Overriding Considerations.