

This Environmental Impact Report (EIR) analyzes the potential for significant environmental impacts associated with the proposed Ordinances to Ban Plastic Carryout Bags in Los Angeles County (proposed ordinances). The proposed ordinances would be implemented for certain stores within the County of Los Angeles (County), California.

The proposed ordinances consist of an ordinance that would prohibit certain stores and retail establishments from issuing plastic carryout bags in the unincorporated territory of the County, as well as the County's encouragement of the adoption of comparable ordinances by each of the 88 incorporated cities within the County.

## **ES.1 EXISTING CONDITIONS**

Stores that would be affected by the proposed ordinances currently offer a combination of paper carryout bags, plastic carryout bags, and reusable bags to consumers. Based on a survey of bag usage in the County in 2009, 18 percent of the total number of bags used in stores that do not make plastic carryout bags readily available were reusable bags; however only 2 percent of the total number of bags used in stores that do make plastic carryout bags readily available were reusable bags (Appendix A, Bag Usage Data Collection Study).

## **ES.2 PROPOSED PROJECT**

The proposed ordinances would ban the issuance of plastic carryout bags by any retail establishment, defined herein, that is located in the unincorporated territory or incorporated cities of the County. The retail establishments that would be subject to the proposed ordinances include any that (1) meet the definition of a "supermarket" as found in the California Public Resources Code, Section 14526.5; (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.

## **ES.3 AREAS OF KNOWN CONTROVERSY<sup>1</sup>**

The proposed ordinances involve several areas of known controversy. Several public comments were received during the scoping period for Initial Study for the proposed ordinances that can be grouped into four broad categories: socioeconomic impacts, impacts of compostable bags, impacts to public health, and impacts of plastic carryout bags versus impacts of paper carryout bags.

### **Socioeconomic Impacts**

During the scoping period for the Initial Study for the proposed ordinances, members of the public (including representatives from the plastic bag industry) indicated concern about the socioeconomic impacts of the proposed ordinances upon the plastic bag manufacturing industry, stores that would be affected by the proposed ordinances, and

retail customers. The County will prepare an economic impact analysis of the proposed ordinances for consideration during the decision-making process for the EIR. The economic impact analysis will model various scenarios of impacts to illustrate the potential range of costs that may be caused as an indirect impact of the proposed ordinances.

### **Compostable Bags**

During the scoping period for the Initial Study for the proposed ordinances, certain members of the public suggested that the County should consider requiring stores to provide compostable or biodegradable plastic carryout bags as an alternative to offering just plastic or paper carryout bags. However, the proposed ordinances include a ban on the issuance of compostable and biodegradable bags due to the lack of commercial composting facilities in the County that would be needed to process compostable plastic carryout bags,<sup>2</sup> and also due to the availability of evidence supporting the conclusion that oxo-biodegradable plastic bags do not result in benefits to the environment compared with standard plastic bags.<sup>3,4,5,6</sup> This issue is discussed in more detail in Section 4.0, Alternatives to the Proposed Ordinances, of this EIR.

### **Public Health Impacts**

Several public comments were received during the scoping period for the Initial Study for the proposed ordinances that indicated concern about the public health impacts of the use of reusable bags. However, as is the case for any reusable household item that comes into contact with food items, such as chopping boards, tableware, or table linens, reusable bags do not pose a serious public health risk if consumers care for the bags accordingly and/or clean the bags regularly. Similarly, carts, shelves, and conveyor belts at food stores must be kept clean to avoid health risks. Reusable bags that are made of cloth or fabric, by the definition established by the proposed ordinances, must be machine washable. Reusable bags made of durable plastic are not machine washable, but can be rinsed or wiped clean. Commentators do note that the health risks, if any, from reusable bags can be minimized if the consumer takes appropriate steps, such as washing and disinfecting the bags, using them only for groceries and using separate bags for raw meat products, being careful with where they are stored, and allowing bags to dry before folding and storing.<sup>7,8,9</sup> A representative of the County Department of Public Health has stated that the public health risks of reusable bags are minimal.<sup>10</sup>

### **Impacts of Plastic Carryout Bags versus Impacts of Paper Carryout Bags**

Several public comments (including those from representatives of the plastic bag industry) were received during the scoping period for Initial Study for the proposed ordinances that indicated concern that the proposed ordinances would cause an increase in the number of paper carryout bags used in the County, which would cause corresponding impacts to the environment. As a result of these public comments, impacts of paper carryout bags on air quality pollutant emissions, greenhouse gas

emissions, wastewater generation, water consumption, energy consumption, eutrophication, solid waste generation, and water quality have been addressed throughout Section 3.0, Existing Conditions, Impacts, Mitigation, and Level of Significance after Mitigation, of this EIR.

During the scoping period for the Initial Study, public comments were received that indicated concern that an increase in paper carryout bags would lead to increased numbers of delivery trucks required to transport paper carryout bags to stores. However, as detailed in Section 3.1, Air Quality, and Section 3.3, Greenhouse Gas Emissions, the number of delivery trucks required as a potential indirect impact of the proposed ordinances would be minimal, and therefore would not be expected to result in significant impacts upon traffic and transportation.

During the scoping period for the Initial Study, public comments were received about the potential impacts of plastic carryout bags with regard to aesthetics, particularly at litter hotspots in the County. As the proposed ordinances aim to reduce the amount of plastic carryout bags in litter in the County, the proposed ordinances would not be expected to cause indirect adverse impacts to aesthetics, and no further analysis is warranted.

During the scoping period for the Initial Study, public comments were received about the potential impacts of plastic carryout bags with regard to depletion of fossil fuel resources. As the proposed ordinances aim to decrease the number of plastic carryout bags used throughout the County, there would be no expected adverse impacts upon fossil fuel reserves, and no further analysis is warranted.

#### **ES.4 ISSUES TO BE RESOLVED**

The analysis undertaken in support of this EIR determined that there are several environmental issue areas related to CEQA that are not expected to have significant impacts resulting from implementation of the proposed project. These issue areas are agriculture and forest resources, aesthetics, 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. These issue areas, therefore, were not carried forward for detailed analysis in the EIR. Certain plastic bag industry representatives have postulated that the banning of plastic carryout bags could potentially result in the increased manufacture of paper carryout bags, which may lead to potentially significant environmental impacts; therefore, the County has decided to carry forward five environmental issues for more detailed analysis in this EIR: air quality, biological resources, greenhouse gas emissions, hydrology and water quality, and utilities and service systems.

#### **ES.5 SUMMARY OF IMPACTS FOR THE PROPOSED ORDINANCES**

The analysis undertaken in support of this EIR evaluated whether implementation of the proposed ordinances would cause significant impacts to air quality, biological resources,

greenhouse gas emissions, hydrology and water quality, and utilities and service systems. Table ES.5-1, *Summary of Impacts*, summarizes the impacts related to each issue area analyzed that might result or can be reasonably expected to result from implementation of the proposed ordinances.

**Table ES.5-1  
SUMMARY OF IMPACTS**

<b>Impact</b>	<b>Level of Significance</b>
<b>Air Quality</b>	
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.	The analysis undertaken for this EIR determined that impacts related to air quality that would be expected to arise from implementation of the proposed ordinances would be below the level of significance. Therefore, no mitigation measures are required.
<b>Biological Resources</b>	
The proposed ordinances would be expected to result in beneficial impacts to biological resources.	The analysis undertaken for this EIR determined that no significant adverse impacts related to biological resources would be expected to arise from implementation of the proposed ordinances. Therefore, no mitigation measures are required.
<b>Greenhouse Gas Emissions</b>	
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 greenhouse gas emissions during 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.	The analysis undertaken for this EIR determined that direct impacts related to greenhouse gas emissions that would be expected to arise from implementation of the proposed ordinances would be below the level of significance. However, because there are no local, regional, State, or federal regulations establishing significance on a cumulative level, and because certain representatives of the plastic bag industry have claimed that paper bags are significantly worse for the environment from a greenhouse gas (GHG) emissions perspective, on this basis, and specific to this project only, and because the County is attempting to

	<p>evaluate the impacts of the project from a very conservative worst-case scenario, it can be determined that the impacts may have the potential to be cumulatively significant. There are no feasible mitigation measures for these cumulative impacts, so the consideration of alternatives is required. However, GHG emissions from any paper carryout bag manufacturing facilities or landfills affected by the proposed ordinances will be controlled by the owners of the facilities in accordance with any applicable regional, State, and federal regulations pertaining to GHG emissions.</p>
<p><b>Hydrology and Water Quality</b></p>	
<p>The proposed project 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 during 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.</p>	<p>The analysis undertaken for this EIR determined that impacts related to hydrology and water quality that would be expected to arise from implementation of the proposed ordinances would be below the level of significance. Therefore, no mitigation measures are required.</p>
<p><b>Utilities and Service Systems</b></p>	
<p>The proposed project 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.</p>	<p>The analysis undertaken for this EIR determined that impacts related to utilities and service systems that would be expected to arise from implementation of the proposed ordinances would be below the level of significance. Therefore, no mitigation measures are required.</p>

**ES.6 ALTERNATIVES TO THE PROPOSED ORDINANCES**

As a result of the formulation process for the proposed ordinances, the County explored alternatives to the proposed ordinances to assess their ability to meet most of the objectives of the proposed ordinances and provide additional beneficial impacts to the environment. Alternative ordinances were recommended during the scoping process

and were evaluated in relation to the objectives of the proposed ordinances and the ability of the alternatives to result in additional beneficial impacts to the environment (Section 4.0). Six alternatives to the proposed ordinances required under CEQA have been carried forward for detailed analysis in this EIR:

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

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 is incapable of meeting any of the basic objectives of the proposed ordinances established by the County. Alternatives 1, 2, 3, 4, and 5 would meet all of the basic objectives established by the County for the proposed ordinances. Alternatives 3, 4, and 5 would result in additional benefits to biological resources due to reduced consumption of plastic carryout bags. As with the proposed ordinances, and considering that the County is attempting to evaluate the 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 place any limitation on 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 be expected to result in any increase in the consumption of paper carryout bags.

<sup>1</sup> Sapphos Environmental, Inc. 1 December 2009. Ordinances to Ban Plastic Carryout Bags in Los Angeles County Initial Study. Prepared for: County of Los Angeles, Department of Public Works. Pasadena, CA.

<sup>2</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](http://dpw.lacounty.gov/epd/PlasticBags/PDF/PlasticBagReport_08-2007.pdf)

<sup>3</sup> Loughborough University. January 2010. Assessing the Environmental Impacts of Oxo-degradable Plastics Across Their Life Cycle. London, UK. Available at: [http://randd.defra.gov.uk/Document.aspx?Document=EV0422\\_8858\\_FRP.pdf](http://randd.defra.gov.uk/Document.aspx?Document=EV0422_8858_FRP.pdf) Prepared for the Department for Environment, Food, and Rural Affairs.

<sup>4</sup>European Plastic Recyclers. 10 June 2009. Press Release: Oxo Degradable Additives are Incompatible with Mechanical Recycling. Brussels, Belgium. Available at: <http://www.plasticsrecyclers.eu/docs/press%20release/EuPR%20Press%20Release%20-%20OXO%20Degradables%20Incompatibility%20with%20Plastics%20Recycling.pdf>

<sup>5</sup> Pearce, Fred. 18 June 2009. "Biodegradable plastic bags carry more ecological harm than good." Available at: <http://www.guardian.co.uk/environment/cif-green/2009/jun/18/greenwash-biodegradeable-plastic-bags>

<sup>6</sup> California Integrated Waste Management Board. June 2007. Performance Evaluation of Environmentally Degradable Plastic Packaging and Disposable Food Service Ware - Final Report Available at: <http://www.calrecycle.ca.gov/Publications/Plastics/43208001.pdf>

<sup>7</sup> Dragan, James, County of Los Angeles, Department of Public Health, Los Angeles, CA. 17 March 2010 to 9 April 2010. E-mail correspondence with Nilda Gemeniano, County of Los Angeles, Department of Public Works, Alhambra, CA.

<sup>8</sup> Health Canada. 10 August 2010 (Last modified). "Food Safety Tips for Reusable Grocery Bags and Bins." Web site. Available at: <http://www.hc-sc.gc.ca/fn-an/securit/kitchen-cuisine/reusable-bags-sacs-reutilisables-eng.php>

<sup>9</sup> Gerba, C. et. al. 9 June 2010. Assessment of the Potential for Cross Contamination of Food Products by Reusable Shopping Bags.

<sup>10</sup> Dragan, James, County of Los Angeles, Department of Public Health, Los Angeles, CA. 17 March 2010 to 9 April 2010. E-mail correspondence with Nilda Gemeniano, County of Los Angeles, Department of Public Works, Alhambra, CA.