

**CITY OF BERKELEY**  
**DRAFT ENVIRONMENTAL INITIAL STUDY**  
ORDINANCE TO REDUCE SINGLE-USE PLASTIC AND PAPER CHECKOUT BAGS

---

**PROJECT DESCRIPTION**

**1. PROJECT TITLE**

Ordinance to Reduce Single-Use Plastic and Paper Checkout Bags

**2. LEAD AGENCY NAME AND ADDRESS**

City of Berkeley  
Department of Public Works  
2180 Milvia Street  
Berkeley, CA 94704

**3. CONTACT PERSON AND PHONE NUMBER**

Andy Schneider, City of Berkeley Recycling Program Manager, (510) 981-6357

**4. PROJECT SPONSOR'S NAME AND ADDRESS**

City of Berkeley  
Department of Public Works, Solid Waste Management Division  
2180 Milvia Street  
Berkeley CA, 94704

**5. PROJECT LOCATION**

City of Berkeley, Citywide.

**6. COMPREHENSIVE PLAN DESIGNATION**

All General Plan Land Use Districts

**7. ZONING**

All Zoning Districts

**8. PROJECT DESCRIPTION**

The project is a proposed Ordinance which would reduce the use of single use plastic checkout bags (plastic bags) and paper checkout bags (paper bags) in Berkeley, thereby reducing the number of them that are manufactured, and the number that are released to the natural environment or disposed of in landfill. Plastic bags include compostable plastic bags. The Ordinance would prohibit retail product stores from making plastic bags available at checkout stands, and would require them to charge a fee of 25 cents on each paper checkout bag. Paper checkout bags would be required to have minimum post consumer recycled content.

This ordinance applies to bags provided at the checkout counter. It does not apply to plastic or paper bags used within the store to contain produce, bulk or meat products, Product packaging on the shelf is not affected. Purchases made with food stamps, WIC, and other such government-provided programs would be exempt from the fee on paper bags. Plastic bags may continue to be used for take-out of prepared food.

This ordinance establishes a ban rather than a fee on plastic carryout bags, because current California state law prohibits local jurisdictions from placing a fee on plastic bags. (Source 1).

The project would be implemented in two phases: The first phase would be effective six months from the date of adoption, and apply to supermarkets and large pharmacies, as defined in the Public Resources Code. The second phase would be effective twelve months from the date of adoption, and would apply to all retail stores, as defined in the City's zoning ordinance.

The City will work with merchant and community groups to implement a public education campaign, prior to implementation of phases one and two of the ordinance. This will include joining with regional media promotions of "bring your own bag", promotions with local merchant associations, press events, bag distribution, and presence at community events.

The draft ordinance language is provided below:

# ENVIRONMENTAL CHECKLIST AND DISCUSSION OF IMPACTS

---

## EVALUATION OF ENVIRONMENTAL IMPACTS

- 1) A brief explanation is required for all answers except "No Impact" answers that are adequately supported by the information sources a lead agency cites in the parentheses following each question. [A "No Impact" answer is adequately supported if the referenced information sources show that the impact simply does not apply to projects like the one involved (e. g. the project falls outside a fault rupture zone). A "No Impact" answer should be explained where it is based on project-specific factors as well as general standards (e. g. the project will not expose sensitive receptors to pollutants, based on a project-specific screening analysis).]
- 2) All answers must take account of the whole action involved, including off-site as well as on-site, cumulative as well as project-level, indirect as well as direct, and construction as well as operational impacts.
- 3) Once the lead agency has determined that a particular physical impact may occur, then the checklist answers must indicate whether the impact is potentially significant, less than significant with mitigation, or less than significant. Potentially Significant Impact” is appropriate if there is substantial evidence that an effect may be significant. If there are one or more “Potentially Significant Impact” entries when the determination is made, an EIR is required.
- 4) “(Mitigated) Negative Declaration: Less Than Significant With Mitigation Incorporated” applies where the incorporation of mitigation measures has reduced an effect from “Potentially Significant Impact” to a “Less than Significant Impact.” The lead agency must describe the mitigation measures, and briefly explain how they reduce the effect to a less than significant level (mitigation measures from Section 17, “Earlier Analysis,” may be cross-referenced).
- 5) Earlier analysis may be used where, pursuant to the tiering, program EIR, or other CEQA process, an effect has been adequately analyzed in an earlier EIR or negative declaration. Section 15063 (C)(3) (D). In this case, a brief discussion should identify the following:
  - a) Earlier Analysis Used. Identify and state where they are available for review. Can refer to other studies to support conclusions
  - b) Impacts Adequately Addressed. Identify which effects from the above checklist were within the scope of and adequately analyzed in an earlier document pursuant to applicable legal standards, and state whether such effects were addressed by mitigation measures based on the earlier analysis.
  - c) Mitigation Measures. For effects that are “Less than Significant with Mitigation Measures Incorporated,” describe the mitigation measures, which were incorporated or refined from the earlier document and the extent to which they address site-specific conditions for the project.
- 6) Lead agencies are encouraged to incorporate into the checklist references to information sources for potential impacts (e.g. general plans, zoning ordinances). Reference to a previously prepared or outside document should, where appropriate, include a reference to the page or pages where the statement is substantiated.
- 7) Supporting Information Sources: A source list should be attached, and other sources used or individuals contacted should be cited in the discussion.

- 8) The explanation of each issue should identify:
- a) The significance criteria or threshold, if any, used to evaluate each question; and
  - b) The mitigation measure identified, if any, to reduce the impact to less than significance.

**DISCUSSION OF IMPACTS**

The following Environmental Checklist was used to identify environmental impacts, which could occur if the proposed project is implemented. The left-hand column in the checklist lists the source(s) for the answer to each question. The sources cited are identified at the end of the checklist. Discussions of the basis for each answer and a discussion of mitigation measures that are proposed to reduce potential significant impacts are included.

**A. AESTHETICS**

Issues and Supporting Information Resources	Sources	Potentially Significant Issues	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
<b>Would the project:</b>					
a) Substantially degrade the existing visual character or quality of the site and its surroundings?	4,5,6				X
b) Have a substantial adverse effect on a public view or view corridor?	15				X
c) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	4,5,6				X
d) Violate existing Comprehensive Plan policies regarding visual resources?	17				X
e) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	17				X
f) Substantially shadow public open space (other than public streets and adjacent sidewalks) between 9:00 a.m. and 3:00 p.m. from September 21 to March 21?	17				X

**DISCUSSION:**

A Bag Reduction Ordinance is being proposed by the City of Berkeley because single use plastic checkout bags (plastic bags) have been found in litter on land and in the marine environment and therefore have a significant existing negative aesthetic impact. By proposing an ordinance that seeks to promote reusable checkout bags and ban certain plastic checkout bags, the City of Berkeley seeks to create a regulation that will reduce an existing negative environmental impact.

Plastic litter collection from beaches, state highways, cities and counties costs the State of California \$303.2 million each year. (Sources 4,6). This not only creates an unsightly environment, but also has been found to be harmful to marine life. Plastic checkout bags have captured global concern because a portion of them migrates to the ocean environment. The City of Berkeley can be a source of this

ocean contamination because urban runoff can carry bags to San Francisco Bay, and because offshore winds can blow plastic bags into the bay. (Source 5).

In February 2009 the San Francisco Bay Regional Water Quality Control Board added Berkeley's Codornices and Strawberry creeks to the Clean Water Act Section 303 (d) List of Impaired Waters. The impairment listing is due to trash in these creeks, which impacts wildlife and recreational enjoyment. (Source 5). The City is required to submit a plan to correct these violations.

The governors of California, Oregon and Washington signed a Resolution, dated February 9, 2007, titled: "Resolution of the California Ocean Protection Council on Reducing and Preventing Marine Debris". This resolution states that "60 to 80 percent of all marine debris and 90 percent of floating debris is plastic; and comes from land-based sources...plastic and other debris litters our beaches, and represents a threat to California's \$46 billion ocean-dependant, tourism-oriented economy and in certain instances may pose a public health threat. The governors have asked that we "Reduce the sources of plastic marine debris ..." On November 20, 2008 the Ocean Protection Council adopted a final implementation recommendation to charge consumers a fee on all single-use plastic and paper checkout bags as an incentive for consumers to switch to reusable bags. (Source 6). The City of Berkeley's proposed Ordinance is an initial step to reduce the source of plastic bags in the natural environment, including the marine environment.

While the intent of the Ordinance is to effect a transition to reusable bags, some substitution of paper bags for plastic will occur. This small conversion would still improve the litter situation because these bags will degrade more quickly in the natural environment than Plastic bags. The addition of a fee on all other single use checkout bags would foster a more comprehensive transition to reusable bags and further reduce paper debris and litter. The Ordinance would continue to improve, not degrade, the visual aesthetics of Berkeley, and it's marine neighbors.

**Mitigation Measures:** None Required.

---

## B. AGRICULTURAL RESOURCES

In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Dept. of Conservation as an optional model to use in assessing impacts on agriculture and farmland.

Issues and Supporting Information Resources	Sources	Potentially Significant Issues	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
<b>Would the project:</b>					
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	2				X
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	2				X

Issues and Supporting Information Resources	Sources	Potentially Significant Issues	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
<b>Would the project:</b>					
c) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use?	2				X

**DISCUSSION:**

According to the *Adopted General Plan (2001-2002)* there are no significant agricultural resources in Berkeley. None is shown in that document’s Existing Land Use map, or the Land Use Diagram. The *Land Management Element* states “agriculture in Berkeley is limited to personal and community gardens”. (Source 2).

To the extent that a ban on plastic bags increases the use of paper shopping bags, it could increase the growth and harvest of timber to produce them. However, the proposed ordinance is designed to result in a net decrease in paper harvest for bag production. The fee on paper bags is a financial incentive to shift to reusable bags instead of paper. Paper bags shopping bags will be required to contain at least 40% post consumer paper. (Sources 9,11,12)

**Mitigation Measures:** None Required.

---

**C. AIR QUALITY**

Issues and Supporting Information Resources	Sources	Potentially Significant Issues	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
<b>Would the project:</b>					
a) Conflict with or obstruct with implementation of the applicable air quality plan?	4,6,17				X
b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?	11				X
c) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?	17				X
d) Expose sensitive receptors to substantial levels of toxic air contaminants?	17				X
e) Create objectionable odors affecting a substantial number of people?	17				X
f) Not implement all applicable construction emission control measures recommended in the <i>Bay Area Air Quality Management District CEQA Guidelines</i> ?	17				X
g) Alter the air movement, moisture, or temperature, or cause any change in climate?	17				X

## **DISCUSSION:**

Associated air emissions within Berkeley come primarily from the transport of bags to Berkeley stores by distributors, and after use, to recycling or landfill locations. Other emissions occur from the manufacturing process itself.

The Ordinance is designed to convert the use of single use plastic and paper checkout bags to a high percentage of reusable bags at stores in Berkeley. Ultimately, this will result in less air emissions both within Berkeley and outside of Berkeley because reusable bags take less energy to produce per bag-use and would need to be hauled to stores in smaller amounts once reusables are fully implemented. Thus, emissions at the point of manufacturing and on the streets of Berkeley would both be reduced.

Life cycle analyses of the relative environmental impacts of manufacturing and transporting paper compared to plastic single use bags reach different conclusions. Some studies conclude that paper bags have more impact than plastic, (Source 7), while a more recent study concludes that paper bags have substantially less impact than plastic. (Source 8). The analyses differ in the specific pollutants measured, the manufacturer's location, sources of raw materials and energy, manufacturing practices, and the degree of local recycling of the product. (Sources 7,9,10,11).

A 2005 study of various proposed plastic and paper bag levies in Scotland concludes that setting a fee on both plastic and paper bags results in improvement in all eight environmental indicators considered, because of the resulting shift to reusable bags. (Source 9). There is general agreement that a shift to reusable bags has less environmental impact than any single use bag system. (Sources 9,10,11). Therefore, to minimize possible negative impacts of conversion to paper bags, the Ordinance is designed to reduce total bag use, whether paper or plastic, and to minimize the impact of those paper bags that are used.

The Ordinance minimizes impacts in two ways:

1) The fees on paper checkout bags will discourage their use, and enable greater in-store promotion of reusable bags, thereby hastening the conversion to a high percentage of reusable bags.

In 2008 the City of Seattle commissioned a study of the environmental, economic and social impacts of various programs to reduce the use of single-use carryout bags. (Source 11). As part of this study, the contractor prepared a sensitivity analysis, which predicts the shift from single use to reusable bags at various fee levels. It concluded that a fee on both paper and plastic would result in reduced bag use as follows:

60% bag reduction at 10 cents

70% reduction at 20 cents

80% reduction at 25 cents.

2) The requirement that paper shopping bags have a high post-consumer recycled content will ensure that paper bag manufacturing is done with minimum impact. Bags that meet these recycled content requirements are available from a manufacturer in Arizona, and are widely used by Northern California markets. They were developed in response to San Francisco's recycled content requirements. This manufacturer further reduces production impacts by using glues and inks with no volatile organic compounds. (Sources 12, 13).

A recent study by Palo Alto concludes that emissions associated with the worst-case short-term conversion are negligible and would not result in a deterioration of air quality, or new exceedences of standards. (Source 14, 15).

**Mitigation Measures: No further measures required.**

The ordinance imposes a fee on paper checkout bags to discourage their use, and to hasten the conversion to a high percentage of reusable bags, which have the least environmental impact. The ordinance also requires paper checkout bags to be made with a high post consumer recycled content, which further reduces their impacts.

**D. BIOLOGICAL RESOURCES**

Issues and Supporting Information Resources  Would the project:	Sources	Potentially Significant Issues	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	6				X
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the California Department of Fish and Game or US Fish and Wildlife Service?	5,6				X
c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	6				X
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	6				X
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	9				X
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	17				X

**DISCUSSION:**

A Bag Reduction Ordinance is being proposed by the City of Berkeley because single use plastic checkout bags have been found by the thousands in litter on land and in the marine environment and are therefore a significant existing negative impact. By proposing an ordinance that seeks to promote

reusable checkout bags and ban plastic bags at specified stores within its jurisdiction, the City of Berkeley seeks to create a regulation that will reduce an existing negative impact on wildlife.

The Governors of California, Oregon and Washington signed a Resolution, dated February 9, 2007, entitled: "Resolution of the California Ocean Protection Council on Reducing and Preventing Marine Debris." This resolution states that "60 to 80 percent of all marine debris and 90 percent of floating debris is plastic; and comes from land-based sources...plastic and other debris litters our beaches, and represents a threat to California's \$46 billion ocean-dependant, tourism-oriented economy and in certain instances may pose a public health threat. The 2007 International coastal Cleanup (ICC) report produced by the Ocean Conservancy further found that bags were the fourth most common debris item collected worldwide, but that bags were by far the most common dangerous debris item (capable of harming wildlife and humans). The governors have asked that we "Reduce the sources of plastic marine debris..." The City of Berkeley's proposed Ordinance will reduce Plastic bags in the marine environment.

Paper checkout bags, an alternative checkout bag, unlike plastic, break down quickly in the environment. Therefore, the Ordinance will not have significant impacts on biological resources. (Source 6).

As to f), There are no adopted habitat conservation plans or natural community conservation plans in Berkeley or in adjacent communities that could be affected.

**Mitigation Measures:** None required.

**E. CULTURAL RESOURCES**

<b>Issues and Supporting Information Resources</b>	<b>Sources</b>	<b>Potentially Significant Issues</b>	<b>Potentially Significant Unless Mitigation Incorporated</b>	<b>Less Than Significant Impact</b>	<b>No Impact</b>
<b>Would the project:</b>					
a) Cause a substantial adverse change in the significance of a historical resource as defined in 15064.5?	17				<b>X</b>
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to 15064.5?	17				<b>X</b>
c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	17				<b>X</b>
d) Disturb any human remains, including those interred outside of formal cemeteries?	17				<b>X</b>
e) Adversely affect a historic resource listed or eligible for listing on the National and/or California Register, or listed on the City's Historic Inventory?	17				<b>X</b>
f) Eliminate important examples of major periods of California history or prehistory?	17				<b>X</b>

**DISCUSSION:**

The proposed project would have no impact in the category of cultural resources, as it involves no construction work or physical changes.

**Mitigation Measures:**

None Required.

**F. GEOLOGY, SOILS AND SEISMICITY**

Issues and Supporting Information Resources	Sources	Potentially Significant Issues	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
<b>Would the project:</b>					
a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:					
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.	17				X
ii) Strong seismic ground shaking?	17				X
iii) Seismic-related ground failure, including liquefaction?	17				X
iv) Landslides?	17				X
b) Result in substantial soil erosion or the loss of topsoil?	17				X
c) Result in substantial siltation?	17				X
d) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?	17				X
e) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?	17				X
f) Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?	17				X

**DISCUSSION:**

The proposed project would not have an impact on the City of Berkeley’s geology, soils and seismicity, as it involves no construction work or physical changes.

Mitigation Measures: None Required.

## G. HAZARDS AND HAZARDOUS MATERIALS

Issues and Supporting Information Resources	Sources	Potentially Significant Issues	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
<b>Would the project:</b>					
a) Create a significant hazard to the public or the environment through the routing transport, use, or disposal of hazardous materials?	17				X
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	17				X
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	17				X
d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	17				X
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?	17				X
f) For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working the project area?	17				X
g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	17				X
h) Expose people or structures to a significant risk of loss, injury, or death involving wild land fires, including where wild lands are adjacent to urbanized areas or where residences are intermixed with wild lands?	17				X

### DISCUSSION:

The proposed project addresses only plastic, paper and reusable bags, and will not involve or affect the handling, transportation, use, disposal, or emission of hazardous materials.

**Mitigation Measures:** None required.

## H. HYDROLOGY AND WATER QUALITY

Issues and Supporting Information Resources	Sources	Potentially Significant Issues	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
<b>Would the project:</b>					
a) Violate any water quality standards or waste discharge requirements?	17				X
b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?	17				X
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner, which would result in substantial erosion or siltation on- or off-site?	17				X
d) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner, which would result in flooding on- or off-site?	17				X
e) Create or contribute runoff water which would exceed the capacity of existing or planned storm water drainage systems or provide substantial additional sources of polluted runoff?	17				X
f) Otherwise substantially degrade water quality?	17				X
g) Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?	17				X
h) Place within a 100-year flood hazard area structures which would impede or redirect flood flows?	17				X
i) Expose people or structures to a significant risk of loss, injury or death involve flooding, including flooding as a result of the failure of a levee or dam or being located within a 100-year flood hazard area?	17				X
j) Inundation by seiche, tsunami, or mudflow?	17				X

### DISCUSSION:

The proposed project will not negatively impact hydrology or water quality.

The proposed project is expected to help the City improve water quality and meet regional standards. In February 2009, the San Francisco Bay Regional Water Quality Control Board added Codornices and Strawberry Creeks to the list of Impaired Waters, under Clean Water Act Section 303(d) due to trash in those creeks. Both creeks scored “poor” in regards to litter harmful to wildlife.

In general, a ban on plastic and a fee on paper is expected to reduce overall bag use in favor of reusable bags, thereby reducing any off-site impacts of manufacturing and transporting single-use paper and plastic bags.

**Mitigation Measures:**

None Required.

**I. LAND USE AND PLANNING**

Issues and Supporting Information Resources	Sources	Potentially Significant Issues	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
<b>Would the project:</b>					
a) Physically divide an established community?	17				<b>X</b>
b) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?	17				<b>X</b>
c) Conflict with any applicable habitat conservation plan or natural community conservation plan?	17				<b>X</b>
d) Substantially adversely change the type or intensity of existing or planned land use in the area?	17				<b>X</b>
e) Be incompatible with adjacent land uses or with the general character of the surrounding area, including density and building height?	17				<b>X</b>
f) Conflict with established residential, recreational, educational, religious, or scientific uses of an area?	17				<b>X</b>
g) Convert prime farmland, unique farmland, or farmland of statewide importance (farmland) to non-agricultural use?	17				<b>X</b>

**DISCUSSION:**

The proposed project is consistent with existing City code and policies and enhances the City’s sustainability policies in its reduction of the use of single-use bags and the promotion of reusable bags. The citywide project is consistent with the 2002 General Plan and the 2009 Climate Action Plan. The policy in the General Plan most directly supporting is the Environmental Management Element, policy #EM-7, concerning waste reduction. Action ‘J’ states, “Encourage reusable bags and packaging.”

(Source 2). The policy in the Climate Action Plan most directly supporting is Chapter 6, Goal 5, Policy 'a': Goal 5 states "Expand efforts to eliminate waste at its source". Policy 'a' is to implement an ordinance to ban plastic checkout bags and place a fee on paper checkout bags at retail stores. (Source, 3).

**Mitigation Measures:**

None Required.

**J. MINERAL RESOURCES**

Issues and Supporting Information Resources	Sources	Potentially Significant Issues	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
<b>Would the project:</b>					
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	10				X
b) 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?	17				X

**DISCUSSION:**

The proposed project would have no impact on mineral resources in Berkeley. In a larger context, the ordinance would reduce the amount of oil and natural gas used to make plastic checkout bags for Berkeley shoppers.

**Mitigation Measures:**

None Required.

**K. NOISE**

Issues and Supporting Information Resources	Sources	Potentially Significant Issues	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
<b>Would the project:</b>					
a) Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	17				X
b) Exposure of persons to or generation of excessive ground borne vibrations or ground borne noise levels?	17				X
c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?	17				X
d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?	17				X

<b>Issues and Supporting Information Resources</b> <b>Would the project:</b>	<b>Sources</b>	<b>Potentially Significant Issues</b>	<b>Potentially Significant Unless Mitigation Incorporated</b>	<b>Less Than Significant Impact</b>	<b>No Impact</b>
e) For a project located within an airport land use plan or, where such a plan has not been adopted, would the project expose people residing or working in the project area to excessive noise levels?	17				<b>X</b>
f) For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?	17				<b>X</b>

**DISCUSSION:**

The proposed project would have no effect on the noise levels in the community.

**Mitigation Measures:**

None Required.

**L. POPULATION AND HOUSING**

<b>Issues and Supporting Information Resources</b> <b>Would the project:</b>	<b>Sources</b>	<b>Potentially Significant Issues</b>	<b>Potentially Significant Unless Mitigation Incorporated</b>	<b>Less Than Significant Impact</b>	<b>No Impact</b>
a) Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	17				<b>X</b>
b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?	17				<b>X</b>
c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?	17				<b>X</b>

**DISCUSSION:**

The proposed Ordinance would not add population or induce population growth, nor will it displace housing or people. The proposed Ordinance will result in no impact on population or housing.

**Mitigation Measures:**

None Required.

## M. PUBLIC SERVICES

Issues and Supporting Information Resources	Sources	Potentially Significant Issues	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
<b>Would the project:</b>					
a) Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:					
Fire protection?	17				X
Police protection?					X
Schools?					X
Parks?					X
Other public facilities?					

### DISCUSSION:

The proposed project would have no adverse impact on public services. On the contrary, the project is expected to reduce plastic bag litter, and the work associated with removing it from creeks, shoreline, streets, landscapes, and storm drains.

### Mitigation Measures:

None Required.

## N. RECREATION

Issues and Supporting Information Resources	Sources	Potentially Significant Issues	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
<b>Would the project:</b>					
a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	17				X
b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?	17				X

**DISCUSSION:**

Not applicable. The proposed project would have no effect on the use of existing neighborhood and regional parks or other recreational facilities and does not include construction or expansion of recreational facilities. It is expected to reduce bag litter in parks.

**Mitigation Measures:**

None Required.

**O. TRANSPORTATION AND TRAFFIC**

Issues and Supporting Information Resources	Sources	Potentially Significant Issues	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
<b>Would the project:</b>					
a) Cause an increase in traffic which is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in a substantial increase in either the number of vehicle trips, the volume to capacity ratio on roads, or congestion at intersections)?	14			X	
b) Exceed, either individually or cumulatively, a level of service standard established by the county congestion management agency for designated roads or highways?	17				X
c) Result in change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?	17				X
d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	17				X
e) Result in inadequate emergency access?	17				X
f) Result in inadequate parking capacity?	17				X
g) Conflict with adopted policies, plans, or programs supporting alternative transportation (e.g., pedestrian, transit & bicycle facilities)?	17				X

**DISCUSSION:**

If the proposed Berkeley Bag Reduction Ordinance is adopted, the current practice of shipping checkout bags into Berkeley via truck would not change. Presently, checkout bags, whether they are plastic, paper or reusable, are shipped by distributors via truck to Berkeley’s markets. As discussed above under “Air Quality”, a worst-case impact of the proposed Ordinance would be the conversion of some plastic bag use to paper bags, which occupy more room in a truck, and the short-term delivery of

reusable bags. This conversion may result in a slight temporary increase in truck traffic, but would not be significant. The fee on paper bags, and the anticipated awareness campaign and promotional program for reusable bags will reduce the conversion to other single-use bags, and lessen the impact noted above. As people shift to using reusable bags, less transportation of bags will be needed.

**Mitigation Measures:**

None Required.

---

**P. UTILITIES AND SERVICE SYSTEMS**

<b>Issues and Supporting Information Resources</b>	<b>Sources</b>	<b>Potentially Significant Issues</b>	<b>Potentially Significant Unless Mitigation Incorporated</b>	<b>Less Than Significant Impact</b>	<b>No Impact</b>
<b>Would the project:</b>					
a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?	17				X
b) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	17				X
c) Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	17				X
d) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?	17				X
e) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has inadequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	17				X
f) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?	17				X
g) Comply with federal, state, and local statutes and regulations related to solid waste?	17				X
h) Result in a substantial physical deterioration of a public facility due to increased use as a result of the project?	17				X

**DISCUSSION:**

The proposed project would not significantly increase the demand on existing utilities and service systems, or use resources in a wasteful or inefficient manner. The project is expected to reduce bag waste currently disposed in landfills.

The plastic recycling industry is concerned that widespread use of compostable carry-out bags would contaminate plastic bag and film recycling, and result in landfilling plastic that is now recycled. Compostable bags are difficult to distinguish from non-compostable plastic bags and the public would inevitably include them in their bag recycling. (Source 16). The ordinance avoids such impacts by banning all plastic checkout bags, including compostable ones.

**Mitigation Measures:** None Required.

---

**Q. MANDATORY FINDINGS OF SIGNIFICANCE**

Issues and Supporting Information Resources  Would the project:	Sources	Potentially Significant Issues	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?	5,6				X
b) Does the project have impacts that are individually limited, but cumulatively considerable? (“Cumulatively considerable” means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?	17				X
c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	17				X

**DISCUSSION:**

The proposed Ordinance involves no construction or physical changes and will not impact wildlife. The proposal Ordinance is not part of a series of past or future actions that would have cumulative negative impacts. The anticipated environment impacts are positive: fewer single use checkout bags would be released to the environment.

The use of a fee on paper bags, and a companion program of promoting reusable bags will lead to a rapid conversion from plastic and paper to reusable bags, saving resources and reducing litter. Some substitution of paper bags for plastic may occur, but overall, use of all single-use bags will decrease and paper shopping bags will have a high post-consumer content. Paper degrades quickly in the natural environment, and will not damage wildlife as plastic bag litter does.

**Mitigation Measures:** None Required

## SOURCE REFERENCES

1. AB 2449, Chapter 845, Statutes of 2006, an act to add and repeal Chapter 5.1 (commencing with Section 42250 to Part 3 of Division 30) of the Public Resources Code.  
["http://www.zerowaste.ca.gov/PlasticBags/default.htm](http://www.zerowaste.ca.gov/PlasticBags/default.htm)
2. General Plan, City of Berkeley, Adopted 2001-2002
3. Berkeley Climate Action Plan, adopted June, 2009
4. California Integrated Waste Management Board, (Updated 11-17-07) "Recycle Plastic Grocery Bags", <http://www.zerowaste.ca.gov/PlasticBags/default.htm>
5. California Regional Water Quality Control Board. San Francisco Bay Region, Resolution No. #2-2009-0008, and Staff report, Evaluation of Water Quality Conditions for the San Francisco Bay Region, Proposed Revisions to Section 303(d) List (list of impaired waterways), February 2009.  
[http://www.waterboards.ca.gov/sanfranciscobay/water\\_issues/programs/TMDLs/303dlist.shtml](http://www.waterboards.ca.gov/sanfranciscobay/water_issues/programs/TMDLs/303dlist.shtml)
6. Resolution of the California Ocean Protection Council on Reducing and Preventing Marine Debris, (February 8, 2007, November 20, 2008 Implementation Strategy to Reduce and Prevent Ocean Litter. <http://resources.ca.gov/copc/>
7. "Resource and Environmental Profile Analysis of Polyethylene and Unbleached Paper Grocery Sacks", Franklin Associate, Ltd., 1990.
8. "Distribution in Paper Sacks", CIT Ekologik, Chalmers Industriteknik, 2000.
9. Cadman, Evans, Holland and Boyd; AEA Technology Environment: Environment Group Research Report: Proposed Plastic Bag Levy – Extended Impact Assessment; produced for the Scottish Executive, August 2005. ([www.scotland.gov.uk/publications](http://www.scotland.gov.uk/publications))
10. Fridge: "Socio-economic Impact Assessment of Proposed Plastic Bag Regulations", compares studies in Sources 7 and 8.
11. Alternatives to Disposable Shopping Bags and Food Service Items, Appendix N. Prepared for Seattle Public Utilities by Herrera Environmental Consultants, Inc., January 29, 2008, ([http://www.seattle.gov/util/Services/Recycling/Reduce, Reuse & Exchange/ProposedGreenFee/index.htm](http://www.seattle.gov/util/Services/Recycling/Reduce,_Reuse_&_Exchange/ProposedGreenFee/index.htm))
12. Personal communication with executives of DuroBag, and City staff interviews with managers of supermarkets in Berkeley
13. Tolleson, Arizona Paper Bag Plant Recognized for Environmental Efforts, October, 2007 ([www.durobag.com/news/permlink/2007](http://www.durobag.com/news/permlink/2007))
14. Eggleston, Brad; (March 12, 2007) Memorandum to Phil Bobel, City of Palo Alto "Short Term CO2 Emissions Impact of Restricting Polyethylene Plastic Checkout Bags" (Available from the City of Palo Alto)

15. Palo Alto City Council Report CMR 138:09: Approval of a Mitigated Negative Declaration and Adoption of an Ordinance... to Place a Limited Prohibition on Single-Use Plastic Checkout Bags. (<http://www.cityofpaloalto.org/knowzone/agendas/council.asp>)
16. Nina Bellucci Butler; "What's in Store for Plastic Bags" in Resource Recycling, June 2007.
17. Project Manager's knowledge of the project: Tania Levy, Associate Management Analyst, Department of Public Works

## DETERMINATION

---

On the basis of this initial evaluation:

<p>I find that the proposed project <b>COULD NOT</b> have a significant effect on the environment, and a <b>NEGATIVE DECLARATION</b> will be prepared.</p>	<p>X</p>
<p>I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A <b>MITIGATED NEGATIVE DECLARATION</b> will be prepared.</p>	
<p>I find that the proposed project <b>MAY</b> have a significant effect on the environment, and an <b>ENVIRONMENTAL IMPACT REPORT</b> is required.</p>	
<p>I find that the proposed project <b>MAY</b> have a “potentially significant impact” or “potentially significant unless mitigated” impact on the environment, but at least one effect: 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An <b>ENVIRONMENTAL IMPACT REPORT</b> is required, but it must analyze only the effects that remain to be addressed.</p>	
<p>I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or <b>NEGATIVE DECLARATION</b> pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or <b>NEGATIVE DECLARATION</b>, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.</p>	

\_\_\_\_\_  
**Recycling Program Manager**

\_\_\_\_\_  
**Date**

\_\_\_\_\_  
**Director of Public Works**  
**City of Berkeley**

\_\_\_\_\_  
**Date**