CITY OF SANTA BARBARA ADDITION TO FINAL ENVIRONMENTAL IMPACT REPORT (SCH#2012111093)

SINGLE USE CARRYOUT BAG ORDINANCE
August 1, 2013

INTRODUCTION

This document is a City-prepared addition to the Final Environmental Impact Report (EIR) for the Single-Use Carryout Bag Ordinance ("Study Area Ordinance") that was prepared for jurisdictions within Santa Barbara and Ventura counties by the Beach Erosion Authority for Clean Ocean and Nourishment (BEACON) in May 2013 (SCH #2012111093).

The City of Santa Barbara is the Lead Agency and proposes an ordinance to ban plastic carryout bags that is consistent with the ordinance analyzed in the Final EIR. This City addition to the Final EIR clarifies environmental effects associated with adoption of the ordinance within the City of Santa Barbara. The City of Santa Barbara Ordinance would prohibit the free distribution of single-use carryout paper and plastic bags and require certain retail establishments to charge customers ten cents ($0.10) for single-use recyclable paper bags at the point of sale.

The Final EIR evaluation concludes that no substantial adverse environmental effects would result from the Ordinance and no mitigation is required. Beneficial environmental effects were identified in the areas of biological and marine resources, water quality and storm water systems, solid waste, and visual aesthetics. The new information contained in this City addition to the Final EIR involves only minor modifications to the Final EIR to clarify impacts within the City of Santa Barbara jurisdiction. There have been no substantial changes in existing environmental conditions since preparation of the Final EIR (SCH#2012111093).

The EIR was circulated for public review from February 12, 2013 to March 28, 2013. Written responses to comment are provided in the Final EIR. A lead agency recirculates an EIR for comment prior to its certification only when significant new information involving significant impacts is added to the Final EIR (Section 15088.5 of the California Environmental Quality Act (CEQA) Guidelines). New information is not "significant" unless the EIR is changed in such a way that that deprives the public of meaningful opportunity to comment on a substantial adverse environmental effect of the project or a feasible way to mitigate such an effect. Recirculation of

the EIR is not necessary for this City addition to the Final EIR since the new information contained in this addition merely clarifies and makes insignificant modifications to the EIR. The opportunity for public comment is provided prior to and at the City Planning Commission hearing on Final EIR certification.

PROJECT DESCRIPTION

The proposed City of Santa Barbara Single-Use Carryout Bag Ordinance ("City Ordinance") would prohibit the free distribution of plastic and paper carryout bags and impose a minimum ten cent charge on recyclable paper carryout bags at regulated stores. Reusable bags could be sold or given out by a retailer without charge. The stores that would be affected are located within the City limits and include grocery stores, pharmacies, convenience stores, and other similar retail stores which sell a limited line of grocery items. Restaurants and fast food providers would be exempt from the City Ordinance.

Consistent with the EIR analysis with a ban on single-use plastic carryout bags and a minimum charge of ten cents for recycled paper bags, it is assumed that 65% of plastic bag use would be switched to reusable bags (each assumed to be re-used 52 times), and 30% would switch to recycled paper bags, and 5% of plastic bags would remain to account for exempt retailers. An estimated 47,302,542 plastic bags are currently used annually within the City of Santa Barbara. With the City Ordinance, as shown in Table 1, it is estimated that total single-use carryout bag usage would be reduced to approximately 16,555,890 bags per year.

Table 1: Existing and Proposed Carryout Bag Use

Area	Existing Total Plastic Bags Used Annually	Proposed Reusable Bags (65% Switch to Reusable)[1]	Proposed Paper Bags (30% switch to paper)[1]	Proposed Plastic Bags (5% Remain)[2]	Proposed Total Carryout Bags Used Annually
BEACON Study Area	658,241,406	8,228,018	197,472,422	32,912,070	238,612,510
City of Santa Barbara	47,302,542	591,282	14,190,763	2,365,127	17,147,172

[1] Rates used in the City of San Jose Final EIR, SCH # 2009102095, October 2010.
[2] Rate used in the City of Sunnyvale Final EIR, SCH # 2011062032, November 2011.
Source: BEACON Single Use Bag Final EIR, May 2013, Appendix C.

As discussed in Section 6.0 Alternatives, the Final EIR includes an Alternative (Alternative 4) that considers a ban on both single-use plastic and paper bags. Alternative 4 was considered to be "environmentally superior" to the Proposed Study Area Ordinance (with a $0.10 fee on paper bags), because Alternative 4 is expected to result in the use of fewer recyclable paper bags (and more reusable bags).

Nevertheless, as discussed in Section 6.0 Alternatives of the Final EIR, the Proposed Study Area Ordinance would not have any significant adverse impacts; therefore, adopting an environmentally superior alternative rather than the Proposed Study Area Ordinance would not avoid any significant adverse environmental effects.

The City objectives for the City Ordinance would be the same as the objectives for the Study Area Ordinance as described in the Final EIR:

- Reducing the environmental impacts related to single-use plastic carryout bags, such as impacts to biological resources (including marine environments), water quality, and utilities (solid waste)
- Deterring the use of paper bags by retail customers
- Promoting a shift toward the use of reusable carryout bags by retail customers
- Reducing litter and the associated adverse impacts to storm water systems, aesthetics, and marine and terrestrial environments

ENVIRONMENTAL IMPACTS

This section addresses each of the environmental issues studied in the Final EIR, comparing the effects of the City Ordinance within the City of Santa Barbara with the effects on the larger Study Area evaluated in the Final EIR.

The City Ordinance would not change the level of significance of any of the impacts identified as less than significant or beneficial in the EIR or Initial Study (Appendix A of the Final EIR). Each of those impacts would remain less than significant for the City Ordinance.

Air Quality

The City Ordinance impacts related to air quality would be the same as identified in the Final EIR. The City's existing and proposed bag use was considered in the Final EIR analysis, which analyzed bag use in unincorporated Santa Barbara and Ventura counties and within 16 municipalities in those two counties. The City Ordinance does not involve any construction activities; therefore there would be no regional or localized construction impacts. Operational impacts include emissions associated with bag manufacture, transportation, and use as well as emissions resulting from increased delivery trips.

Emissions from Manufacture, Transportation and Use

As described in Section 4.1 of the Final EIR, the City Ordinance is expected to result in an overall decrease in ozone and atmospheric acidification (AA) emissions.

Table 2 shows the estimated daily emission changes that would result if the Counties of Santa Barbara and Ventura and cities in the Study Area (including Santa Barbara) were to implement a plastic bag ban ordinance similar to the City Ordinance. The emissions related to converting from plastic to paper and reusable bags as a result of the City Ordinance are shown in Table 2. Ozone and atmospheric acidification emissions would be expected to decrease in Santa Barbara. Therefore, as determined in the Final EIR, air quality impacts from the manufacture, transportation, and use of carryout bags would be beneficial compared to existing conditions.

Table 2: Estimated Changes in Ozone and Atmospheric Acidification Emissions

Ordinance Jurisdiction	Existing Emissions from Carryout Bags		Change in Emissions from Ordinance	
	Ozone Emissions (kg/year)	AA Emissions (kg/year)	Ozone Emissions (kg/year)	AA Emissions (kg/year)
BEACON Study Area	15,140	713,534	(8,195)	(244,306)
City of Santa Barbara	1,088	51,276	(589)	(17,556)

() Denotes a decrease in emissions compared to existing conditions.
Source: BEACON Single Use Bag Final EIR, May 2013, Appendix D.

Emissions Resulting From Increased Delivery Trips

Similar to the effects identified area-wide in the EIR, the City Ordinance would be expected to potentially result in incrementally more delivery truck trips to transport paper and reusable carryout bags to affected stores. The EIR identified an overall increase of approximately 1.87 truck trips per day throughout the Study Area. Using the EIR methodology to determine truck trips, the City of Santa Barbara's contribution to this increase would be approximately 0.13 truck trips per day.[1]

As shown in Table 3, the increase of truck trips expected area-wide would not result in exceeding any air pollution thresholds of impact significance set by the Santa Barbara County Air Pollution Control District (SBCAPCD) and used by local jurisdictions. The City Ordinance would account for approximately 7% of the increase in the number of truck trips from the larger EIR Study Area, resulting in emissions in reactive organic gases (ROG), nitrogen oxides (NO_X), and particulate matter (PM_{10}) emissions much less than SBCAPCDs thresholds. Therefore, impacts related to mobile emissions from the City Ordinance would be less than significant.

Table 3: Study Area Ordinance-Generated Operational Emissions from Truck Deliveries

Emissions	Emissions (lbs/day)		
	ROG	NO_x	PM_{10}
BEACON Study Area	0.08	0.41	0.04
Thresholds	25	25	80
Threshold Exceeded?	No	No	No

Source: BEACON Single Use Bag Final EIR, May 2013, Appendix D.

Biological Resources

The City of Santa Barbara's General Plan identifies Mission, Arroyo Burro, San Roque, and Sycamore creeks as the major creek systems within the City that provide drainage from the mountains and hills and states that these creeks are largely natural in appearance. These creeks contribute substantially to the aesthetic quality of the City, function as important ecological resources, provide connecting linear open space links from the hillsides to the shoreline, and aesthetic enhancement of recreational, residential, and commercial areas.

As identified in the Final EIR for the Study Area Ordinance, the City Ordinance would result in a reduction in the use and disposal of plastic carryout bags and an increase in the use and disposal of recycled paper and reusable bags. As such, the City Ordinance would incrementally reduce the amount of single-use plastic bag litter that could enter the marine and terrestrial environments and affect sensitive species. The City Ordinance would also be anticipated to increase consumer

[1] Existing bag use in the City of Santa Barbara is estimated to be 47,302,542 plastic bags per year. Assuming that 30% of existing plastic bag use would switch to paper (14,190,783 paper bags), 65% would switch to reusable bags (591,282 reusable bags assuming 52 uses a year) and 5% would remain (2,365,127 plastic bags) to account for exempt retailers. Assuming 2,080,000 plastic bags per truck load, 217,665 paper bags per truck load, and 108,862 reusable bags per truck load.

use of recycled paper and reusable carryout bags, which, as discussed in the Final EIR, have not been widely noted to have adverse impacts on biological resources. Although reusable bags may eventually be disposed of as solid waste, they are heavier than plastic carryout bags, can be reused multiple times, and the number of reusable bags that would likely end up as litter and impact biological resources would therefore be lower. In addition, because paper bags are not as resistant to biodegradation, paper bags do not persist in the marine environment for as long as plastic bags. For the reasons stated above, consistent with the findings of the Final EIR, the City Ordinance would result in beneficial effects on sensitive wildlife species and habitats.

Greenhouse Gas Emissions

Carryout bags have the potential to contribute to the generation of greenhouse gas emissions (GHGs) either through emissions associated with the manufacturing process of carryout bags, truck trips delivering carryout bags to retailers or through disposal during landfill degradation. The SBACPCD does not have adopted GHG emissions thresholds or a GHG emissions reduction plan.

The City of Santa Barbara's Climate Action Plan was adopted in September 2012. Past, present, and forecasted future citywide greenhouse gas emissions were analyzed in the Plan and associated Addendum to the 2010 Final Program EIR for the Plan Santa Barbara General Plan Update in comparison to the State and City greenhouse gas emissions targets (year 2020 total emissions at 1990 level; 2020 and 2035 per capita vehicle emissions at 2005 level). The analysis demonstrates that citywide emissions are decreasing. With continued implementation of existing State and City legislative measures, citywide emissions associated with growth under the General Plan would meet and surpass these State and City emissions targets. The City Climate Action Plan constitutes a citywide mitigation program for greenhouse gas emissions in accordance with SB 97. Regardless, consistent with the Final EIR analysis, the City Ordinance is evaluated based on the project-level threshold of 4.6 metric tons CO_2e per service population per year based on the County of Santa Barbara's interim approach for evaluating GHG emissions. Based on existing population and employment data provided by the California Department of Finance, the existing population in the City of Santa Barbara used for this analysis is 89,082.[2]

Manufacturing, Transportation, Washing and Disposal

As discussed in the Final EIR, the manufacture, transport, and disposal of a single-use paper bag generates 3.3 times more GHG emissions than the manufacture, transport, and disposal of a single-use plastic bag. If only used once, the manufacture, use, and disposal of a reusable carryout bag results in 2.6 times the GHG emissions of a single-use HDPE plastic bag. However, reusable carryout bags are intended to be used multiple times. With reuse of carryout bags, the total carryout bags that would be manufactured, transported, and disposed of would be reduced. Washing and cleaning of reusable bags would use electricity or natural gas and therefore would incrementally increase energy production-related GHG emissions.

The Final EIR estimates that the Study Area Ordinance would contribute indirectly to an overall increase of approximately 10,919 metric tons of CO_2e emissions per year for manufacturing, transportation, washing, and disposal, or 0.0088 metric tons CO_2e per person per year, as shown in Table 4. Thus, the Final EIR determined that the Study Area Ordinance would not exceed

[2] California Department of Finance, "City/County Population and Housing Estimates" (May 2012)

GHG thresholds and therefore impacts related to a shift toward use of paper and reusable bags would be less than significant. Similarly, for the City Ordinance, the shift from plastic carryout bags to paper and reusable bags could be estimated to increase GHG emissions in the City by approximately 785 metric tons per year as shown in Table 4. As such, the City Ordinance would have a less than significant impact related to GHG emissions, consistent with the findings of the Final EIR.

Table 4: Estimated Increase in GHG Emissions from City Ordinance and Study Area Ordinance

Ordinance Jurisdiction	Total CO_2e Emissions (metric tons/year)[1]	Emissions per Capita (metric tons/year)
BEACON Study Area	10,919	0.0088
City of Santa Barbara	785	0.0088

[1] *Represents a net change in GHG emissions compared to existing plastic bag use.*
Source: BEACON Single Use Bag Final EIR, May 2013, Appendix D.

Consistency with Applicable GHG Plans and Policies

The City Ordinance would be consistent with the City of Santa Barbara General Plan climate policies, the City Climate Action Plan, the City Climate Action Team strategies, and measures suggested in the Attorney General's Greenhouse Gas Reduction Report as discussed in Tables 4.3-4, 4.3-5 and 4.3-6 of the Final EIR. Therefore, the City Ordinance would be consistent with the objectives of AB 32, SB 97, and SB 375. There would not be significant impacts associated with inconsistency with plans and policies.

Hydrology and Water Quality

Hydrology and water quality impacts would be similar to those identified in the Final EIR. The following discusses the impacts related to drainage and surface water quality that would result from implementation of the City Ordinance.

Drainage

Consistent with the findings of the Final EIR, the City Ordinance would not require construction of new structures or additional storm water infrastructure. Consequently, the capacity of existing storm water drainage would remain unchanged and redirecting storm water flows would be unnecessary. Single-use plastic bags that become litter may enter storm drains from surface water runoff or may be blown directly into local waterways by the wind. By banning plastic carryout bags within the City, the City Ordinance is expected to improve the existing drainage capacity by removing a substantial source of trash that can clog features of the system and reduce its capacity. Therefore, consistent with the findings of the Final EIR, the City Ordinance would not result in significant adverse impacts to hydrology and water quality related to drainage.

Surface Water Quality

As noted in the Final EIR, the manufacturing processes for single-use plastic, single-use paper, and reusable bags use various chemicals and materials. The City Ordinance is estimated to reduce plastic bag use by 95% and increase the use of recycled paper and reusable bags.

With implementation of the City Ordinance, approximately 17.1 million carryout bags (including single-use paper, single-use plastic, and reusable bags) would be manufactured for use in the City annually—a decrease of approximately 65% compared to existing conditions. Consequently, the City Ordinance would reduce the overall impacts to water quality associated with bag manufacturing. Furthermore, manufacturing facilities would be required to adhere to existing Federal, State and local regulations. Therefore, impacts to water quality related to the potential change of processing activities as a result of the City Ordinance would not be significant, which is consistent with the Final EIR analysis.

Utilities and Service Systems

Impacts to utilities and service systems as a result of the City Ordinance would be similar to impacts discussed in the Final EIR. The following summarizes the impacts related to water supply, wastewater collection and treatment, and solid waste for the City Ordinance compared to the findings contained in the BEACON Final EIR.

Water Supply

Carryout bags would indirectly result in water use through the manufacturing process of carryout bags. As discussed in the Final EIR, the conversion from plastic bags to paper carryout bags and reusable carryout bags would result in an increase of water use from the manufacturing process of paper and reusable bags. No manufacturing facilities of carryout bags are known to be located within either the County of Santa Barbara or the County of Ventura. Therefore, carryout bag manufacturing facilities would not use water supplies of either county or the City of Santa Barbara.

In addition to water use from manufacturing carryout bags, the City Ordinance may result in increased water use as reusable bags would be washed. The Final EIR determined that the area-wide water demand from washing reusable bags would increase by 470.5 acre-feet per year (AFY) under the assumption that all new reusable carryout bags would require monthly cleaning in either a washing machine or by rinsing.

The City's portion of the expected 470.5 AFY water demand increase would be 44.2 AFY as a result of the City Ordinance. Total average year water demand in the City of Santa Barbara is estimated to be 14,000 AFY[3]. The estimated increase of water demand associated with the City Ordinance would represent approximately 0.32% of the total City water demand. This increase would not have significant impacts. Any increase in water supply necessary for paper carryout bag manufacturing would not impact Santa Barbara City or County water supplies. Consistent with the findings in the Final EIR, the City Ordinance would not necessitate new or expanded entitlements for water, and water supply impacts would be less than significant.

Wastewater Generation

As noted above and in the Final EIR, no manufacturing facilities for paper carryout bags appear to be located within the Study Area or City of Santa Barbara. Therefore, any increase in wastewater generation due to paper carryout bag manufacturing would not affect local wastewater treatment providers. The Final EIR assumed that 100% of the water used to wash reusable bags would become wastewater, identifying an increase in wastewater of approximately

[3] City of Santa Barbara Long-Term Water Supply Plan, 2011

470.5 acre-feet per year (AFY). This is equivalent to 153,300,948 gallons per year, or approximately 420,002 gallons per day. The City's portion would be 44.2 AFY, which is equivalent to 14,402,633 gallons per year, or approximately 39,433 gallons per day.

The El Estero Wastewater Treatment Plant, which serves the City of Santa Barbara, has a remaining capacity of 3.3 million gallons per day (MGD) and therefore has capacity to treat the potential incremental increase in wastewater resulting from the City Ordinance. The estimated increase of wastewater and impacts related to wastewater generation for the City Ordinance would be less than significant.

Solid Waste

The Final EIR provided two analyses for solid waste impacts, using EPA recycling estimates with two separate data sets: Ecobilan (2004) and Boustead (2007). Using the Ecobilan data, it was determined that a single-use plastic bag would generate 0.0065 kilograms (kg) of solid waste per bag per day, a paper bag would generate 0.0087 kg of waste per bag per day, and a reusable bag (used 52 times) would generate 0.001 kg of waste per bag per day. Using the Boustead data, it was determined that a single-use plastic bag would produce 0.004 kg waste per bag per day, while a paper bag would result in 0.021 kg of waste per bag. The Boustead analysis did not estimate the solid waste from reusable bags. Based on the Ecobilan data, the Final EIR estimated that the Study Area Ordinance would reduce solid waste by 2,596 tons per year. Based on the Boustead data, the Final EIR estimated that the Study Area Ordinance would result in an increase of approximately 1,814 tons of solid waste per year.

As shown in Table 5, the Study Area Ordinance would result in a reduction of approximately 2,596 tons of solid waste per year and the City Ordinance would result in a reduction of 222 tons of solid waste per year using the Ecobilan data. Using the Boustead data, the Study Area Ordinance would result in an increase of approximately 1,814 tons of solid waste per year and the City Ordinance would result in an increase of approximately 155.14 tons of solid waste per year, or 0.43 tons per day. As stated in the Final EIR, the permitted daily maximum throughput of the Tajiguas Sanitary Landfill, which serves the City of Santa Barbara, is 1,500 tons per day. Using the worst case scenario (the Boustead data) the potential increase of 0.43 tons of solid waste per day would represent approximately 0.029% of the daily capacity of the landfill. Thus, existing waste disposal facilities could accommodate estimated increases in solid waste related to the City Ordinance, and impacts related to solid waste would be less than significant.

Table 5: Solid Waste Generation Due to Plastic and Paper Carryout Bags

Ordinance Jurisdiction	Solid Waste Generation (tons/year)	
	Ecobilan	Boustead
BEACON Study Area	-2,596.27	1,813.50
City of Santa Barbara	-222.11	155.14

CONCLUSION

Based on analysis in the Final EIR and discussion in the City of Santa Barbara addition to the Final EIR, impacts from the proposed City of Santa Barbara Single-Use Carryout Bag Ordinance related to air quality, biological resources, greenhouse gas emissions, hydrology and water quality, and utilities and service systems were determined to be less than significant (Class 3) impacts or beneficial (Class 4).

Based on the above review of the project, in accordance with State CEQA Guidelines Section 15088.5, recirculation of the Environmental Impact Report prior to certification is not required, because new information and changes in project description, circumstances, impacts and mitigations are not substantial and do not involve new significant impacts or a substantial increase in the severity of previously identified impacts. The Final EIR (SCH#2012111093), including this City of Santa Barbara addition to the Final EIR constitute adequate environmental documentation in compliance with CEQA for the current project.

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