

Report from the Plastic Bag Subcommittee Regarding a Regional Approach to Single-Use Carryout Bags

**Jason Baker
Jim Griffith
Steve Tate**

Introduction

19 billion single-use plastic carryout bags are used in the state of California each year. These bags have a negative impact on wildlife, solid waste collection and recycling, and their widespread use costs local jurisdictions significant amounts of money in labor and equipment maintenance. As a result, several local jurisdictions have adopted or are pursuing adoption of plastic bag bans.

It appeared that the state would adopt a state-wide ban late last year, in the form of AB 1998, supported by Governor Schwarzenegger and the California Grocers Association. However, eleventh-hour lobbying by the American Chemistry Council caused the effort to fall short in the State Senate.

Sustainability

The debate over a plastic bag ban invariably leads to a discussion of the merits and costs of plastic versus paper bags. Plastic bags are widely viewed as the lesser choice, because they are made from non-renewable resources and because they do not biodegrade, two facts that are not true of paper bags. However, paper bags are in reality no more sustainable than plastic bags, in terms of the full product life cycles. The manufacture of paper requires large quantities of water, itself a limited resource. Additionally, the energy requirement for paper production also relies heavily on fossil fuels.

To an extent, the discussion of sustainability becomes waylaid when it delves into the debate of paper vs. plastic. For the purpose of establishing sustainable practices, the true goal is to eliminate all single-use practices, whatever the use, whatever the material being used. Towards that end, practices which encourage multi-use materials, such as reusable bags made of cloth or other durable materials, better decrease dependence on non-renewable resources, while contributing toward the overall zero waste goal. Nevertheless, the permanent nature of plastic bags gives paper the edge when single-use bags must be tolerated, particularly when high recycled content percentages are additionally required of paper bags.

Plastic Bag Impact

The actual impact of plastic bags is two-fold. Plastic grocery bags become a litter source far more easily than other bags, or even other single-use containers, because their lightweight nature causes them to go airborne quite easily. The result of this is that lightweight bags scatter to a much greater degree than those made from other materials, eventually finding their way to a water body and out to the ocean. In large water bodies, these bags never decompose, but break down into small pieces, entering the food chain or becoming a part of larger collections of floating refuse, like the Great Pacific Garbage Patch.

Managing to capture these bags creates additional problems for jurisdictions. In waste stations, the ultra-thin nature of bags causes them to wrap around and clog waste facility machinery. The Sunnyvale SMaRT Station® has an expensive and labor-intensive daily process to clean plastic bag refuse from its machinery.



Figure 1: Sunnyvale SMART Station Trommel, clogged with plastic bags



Figure 2: Cleaned Trommel

Similarly, Sunnyvale has litter-capturing devices designed to prevent plastics and other trash from being carried to creeks by storm run-off, and these devices must be frequently cleared of plastic bag debris.



Figure 3: storm drain retrofit device clogged with plastic bags

Alternative Approach

In response to the hazards posed by single-use plastic bags, several governmental agencies world-wide have advocated for or outright mandated multi-use bags, so as to minimize the energy and material requirements per bag use. A 2004 study on behalf of the French chain Carrefour discovered that after its third use, a reusable bag requires less energy than a single-use plastic bag.

Ireland is generally considered to be the case study for the effectiveness of a ban/fee combination. They instituted a mandatory fee of approximately \$0.21 for single-use plastic bags in 2002. After adoption of the fee, plastic bag use decreased 94%, and the presence of plastic bags in the waste stream dropped from 5% of the overall content to 0.32%. Ireland also discovered that the effectiveness of the fee decreased over time. As a result, the Irish government increased the fee to \$0.31 in 2007, and it saw a corresponding decrease in bag usage.

The Importance of Regional Action

Accepting the need for a plastic bag ban, two factors point to the importance of such a ban being adopted regionally. From a political perspective, when a city considers adopting a ban, a serious impediment is

the perception by policy makers that adopting a ban will put a city at an economic disadvantage as compared to neighboring cities that have not adopted a ban. Policy makers take into account that a ban may cause consumers to instead choose to shop at nearby stores in neighboring cities that do not have a ban. This sense of disadvantage can be a significant factor in whether or not jurisdictions adopt bans. Even when bans are adopted, differences in local ordinances can lead to shoppers' confusion as to whether they or merchants are correctly obeying local ordinances.

From a practical perspective, waste facilities tend to serve multiple cities. For example, the Sunnyvale SMaRT Station also serves residents of Mountain View and Palo Alto and many of the various recycling facilities in San Jose likewise each serve multiple cities. While cities can pass ordinances governing their own residents, they have no ability to regulate the behavior of residents of other cities. This renders cities unable to take effective action to prevent plastic bags from damaging waste facility machinery. Similarly, the responsibility for keeping clean the various county waterways falls to specific cities, but the plastic bags which enter those waterways do not strictly come from residents of the responsible cities or from businesses operating in those cities.

Both the practical and political problems inherent in the use of plastic bags point to the need for a regional strategy, or in individual municipalities acting in concert with a common vision.

Alternatives to a Ban

Opponents of a ban (particularly the American Chemistry Council and Save the Plastic Bag) tout recycling programs as an alternative to an all-out ban. In practice, plastic bags can only be recycled if they are relatively clean and free of contaminants, which is rarely the case for bags that have been used by consumers. Due to this, there is a very small and largely ineffective recycling market for such materials. Only 5% of plastic bags are actually recycled, a figure that includes recycling of clean bags from pre-consumer and industrial sources. In comparison, paper bags are recycled at a much higher rate¹ and can be easily recycled by nearly every household in Santa Clara County.

Consumers frequently defend the use of plastic bags by pointing out that they, themselves, reuse grocery bags to dispose of garbage or pet waste, thus filling them with waste and ensuring they make it to landfill. However, in practice, the first step in modern waste processing is to use sharp metal teeth to break bags into small pieces, so as to expose recyclable material inside to subsequent sorting processes. These small pieces are again prone to going airborne and escaping. Many bags also escape during garbage collection and transportation and at landfills themselves.

Status of Local Ban Efforts

- The City of Palo Alto implemented a ban on single-use plastic bags at its seven largest grocery stores in September, 2009, using a Mitigated Negative Declaration. This was challenged in court by plastic bag manufacturers, and the settlement allowed the ban to stand, with the understanding that any attempt to expand the ban would require the city to draft an EIR. Palo Alto is currently considering such an expansion.
- The City of San Jose passed a ban on single-use plastic bags by all retailers (excluding restaurants, non-profits, social organizations, and allowing bag use for fresh meat/produce/bakery items and certain paper goods), to take effect in January, 2012, allowing retailers to sell paper bags with a

¹ US Environmental Protection Agency, November 28, "Table 21: Recovery of Products in Municipal Solid Waste, 1960 to 2007." *Municipal Solid Waste in the United States: 2007 Facts and Figures*.

minimum 40% recycled content for \$0.10, to increase to \$0.25 in two years. The San Jose ban involved an EIR.

- The County of Santa Clara passed a ban on single-use plastic bags by retailers (excluding restaurants, non-profits, social organizations, and allowing bag use for fresh meat/produce/bakery items and certain paper goods) in April, 2011, allowing retailers to sell 100% recycled bags with a minimum 40% post-consumer waste for \$0.15. The Board of Supervisors adopted a Negative Declaration of environmental impact in approving the ordinance.
- The City of Sunnyvale has approved drafting an EIR on a potential single-use bag ban. Rincon Consultants, Inc. has been hired to prepare the EIR and the ordinance is scheduled to return to Council later this year. The proposed ban would apply to supermarkets with gross sales in excess of \$2 million per year, pharmacies and other large retailers with more than 10,000 square feet of floor space, and other food and beverage stores. Retailers can provide paper bags with at least 40% recycled content for a charge of at least \$0.15 per bag.
- The City of Milpitas is considering a ban and has directed staff to return with further research, a review of San Jose's EIR, results of public outreach on the subject, and a study of other single-use items such as those using expanded polystyrene (EPS).
- The Cities of Campbell, Cupertino, Los Altos, Los Gatos, and Mountain View have passed resolutions supporting a regional approach to the issue.
- The City of Los Altos has stated its objection to a bag fee, and its Environmental Commission is considering a bag use recommendation.
- The Santa Clara County Recycling and Waste Reduction Commission recommended both in April 2009 and February 2010 that all 16 county jurisdictions establish bans on all retailers except for restaurants, fast food establishments, exempting non-profit reuse stores (Goodwill) for one year if they have a reusable bag credit program.

Similar bans have been enacted in San Francisco, Oakland, Los Angeles County and Marin County. The Oakland ban was rescinded by court order after the city attempted its ban with a CEQA conditional exemption and no EIR. Marin County more recently adopted a ban using a conditional exemption and is deliberately taking on a legal challenge to that decision.

Legal Challenges

Two significant legal challenges exist to enforcing plastic bag bans. The first is posed by organizations such as the American Chemistry Council and Save the Plastic Bag, both of which have challenged bans that have not included an EIR. It is left to jurisdictions to decide if a ban falls under the requirements of the California Environmental Quality Act (CEQA), and jurisdictions which have opted not to draft an EIR have found themselves subject to legal challenges.

Manhattan Beach's use of a Negative Declaration to adopt an ordinance that banned plastic bags (without a mandatory charge on other single-use bags) was successfully challenged by Save the Plastic Bag Coalition at the trial and appeals court levels. The California Supreme Court accepted the City's appeal of the lower court decisions requiring an EIR, and it heard arguments in the case on May 4, 2011.

The second legal challenge may be posed by Proposition 26. The San Jose and Santa Clara County bans circumvented the Prop. 26 issue by refraining from having the government agency charging and collecting a bag fee themselves, but rather by allowing retailers to charge a mandatory fee as a cost recovery mechanism. The facts that the fee is directly imposed by (and goes to) retailers and that it is for cost recovery are seen by agencies' staffs as sufficient to survive a Prop. 26 challenge. To date, there have been no such challenges on bag fees within California.

Recommendation

- 1) In the interest of regional consistency, it is recommended that the Cities Association encourage its member cities to adopt ordinances restricting the distribution of single-use carryout bags.
- 2) It is further recommended that the Cities Association encourage its member cities to follow the San Jose process and ordinance as a model for their own ordinances.
- 3) It is further recommended that the Cities Association encourage its member cities to adopt ordinances in accordance with California Environmental Quality Act (CEQA) requirements, using the San Jose EIR as a template for drafting their own EIRs.
- 4) It is further recommended that cities establish a maximum fee of \$2 in fees per patron per purchase for the first three years of adoption of a single-use carryout bag ordinance, with no maximum after three years of adoption. This is in accordance with recommendations from the County Recycling and Waste Reduction Commission, which included this cap to minimize the impact of ordinances on low-income customers.
- 5) It is further recommended that the Cities Association encourage those cities which adopt ordinances to monitor their effectiveness, increasing bag fees as appropriate to maintain the effectiveness of such restrictions.

Respectfully submitted by Jason Baker, Jim Griffith, and Steve Tate, representing the Plastic Bag Subcommittee.