



Memorandum

TO: TRANSPORTATION AND ENVIRONMENT COMMITTEE

FROM: Kerrie Romanow

SUBJECT: SEE BELOW

DATE: November 20, 2012

Approved /s/ (Ed Shikada)

Date 11/21/12

SUBJECT: BRING YOUR OWN BAG ORDINANCE IMPLEMENTATION RESULTS AND ACTIONS TO REDUCE EPS FOAM FOOD WARE

RECOMMENDATION

1. Accept this report on the first year results of the City's Bring Your Own Bag Ordinance and on actions in other jurisdictions implementing ordinances to reduce the use of single-use carryout bags as well as expanded polystyrene (EPS) foam food service ware.
2. Refer item to Council with a recommendation to:
 - a. Direct staff to return to Council in February 2013 with a draft ordinance to phase-out the use of Expanded Polystyrene (EPS) foam food service ware at restaurants and food service establishments (restaurants) in San José;
 - b. Conduct stakeholder outreach to obtain input on ordinance development;
 - c. Provide feedback and policy guidance on implementation parameters including :
 - i. A January 1, 2014 effective date for 'large' San José restaurants;
 - ii. A January 1, 2015 phase-in date for 'small' San José restaurants;
 - iii. Inclusion of common exemptions for non-take out packaging such as prepackaged foods packed outside of San José, meat and produce trays, ice chests and coolers;
 - iv. Inclusion of hardship exemptions based on substitute product availability; and
 - v. Inclusion of a financial hardship exemption.

The accompanying staff report will also include the implementation, cost, and stakeholder outreach plans.

OUTCOME

This report updates the Committee on the City's Bring Your Own Bag Ordinance. Numerous staff surveys, observations, and enforcement efforts demonstrate that the Bring Your Own Bag

Ordinance has been successful at affecting community norms towards shopping with reusable bags and reducing single-use plastic bag litter in City creeks and streets. Additionally, this report responds to prior City Council direction to present options for eliminating EPS foam food ware litter Citywide. This report provides an update on recent policy steps implemented by other jurisdictions to prohibit expanded polystyrene (EPS) foam food ware packaging. Reducing the use of single-use carryout bags and EPS supports the City's Stormwater Permit requirement to reduce trash from the storm drain system from entering local creeks and enhance water quality; reduces litter in City streets and neighborhoods; and lowers the cost of litter control. Committee approval of the recommendations will allow staff to begin work on an ordinance that would phase out EPS foam food service ware at San José restaurants and food service establishments.

EXECUTIVE SUMMARY

Actions to ban single-use carryout bags and EPS foam food ware packaging are emerging as a best practice for cities and are key strategies for reducing litter and protecting water quality. On January 1, 2012, the City's Bring Your Own Bag (BYOB) Ordinance became effective. The ordinance prohibits retail establishments from providing customers with single-use carry out bags except for recycled content paper bags, which retail establishments may sell for a 10-cent charge. The goal for the BYOB Ordinance was to reduce environmental and litter impacts associated with the production, use, and disposal of single-use bags by motivating shoppers to carry reusable bags.

Over the past eleven months, staff conducted outreach to the community about the importance of shopping with reusable bags, responded to complaints about retailers' compliance with the BYOB ordinance, informed retailers and enforced the ordinance, and conducted litter surveys and visual observations to measure the impact and results of the BYOB Ordinance. All of the key indicators monitored by staff show downward trends in presence of single-use plastic bags in street, storm drain, and creek litter, and an upward trend in use of reusable bags by shoppers.

Since the passage of San José's BYOB Ordinance in December 2010, multiple cities in Santa Clara County and throughout the country have begun to improve existing ordinances or pursue new bag ban ordinances in their jurisdictions. Staff will be further evaluating emerging implementation issues and other national bag ban trends and will return to Council in summer 2013 with any recommended modifications to the BYOB Ordinance including a potential review of the scheduled increase of the minimum store charge from ten cents to 25 cents effective January 1, 2014.

As with the recent momentum in bag ban actions, many communities in Santa Clara County are also actively developing ordinances to ban the use of EPS foam food ware by restaurants for local adoption. In response to Council direction, staff completed research and analyses of impacts and potential costs of EPS alternatives in San José, and recommends that the Committee consider a phase out of EPS foam food service ware that would begin to reduce EPS litter and allow small restaurants additional time to adjust and comply.

BACKGROUND

Single use plastic bags and expanded polystyrene (EPS) foam food service ware has become a significant environmental problem in San José creeks and neighborhoods and for communities throughout the Bay Area. Local creeks, the San Francisco Bay, and the Pacific Ocean have become the final repositories for consumer items and waste materials including single use plastic bags, EPS food service ware, and other plastics. Several local waterways have been formally listed as “impaired by trash” under the Federal Clean Water Act. These include Silver Creek, Coyote Creek, Saratoga Creek, San Tomas Aquino Creek, the Guadalupe River, and the lower San Francisco Bay shoreline. This has triggered regulatory action to significantly reduce the amount of trash reaching our waterways. Furthermore, the unsightliness of trash and litter creates an aesthetic blight that negatively impacts the livability of City neighborhoods and the water quality in local creeks.

On January 1, 2012, the City took steps to begin to address these issues when the City’s Bring Your Own Bag (BYOB) Ordinance became effective. The ordinance prohibits retail establishments from providing customers with single-use carry out bags except for recycled content paper bags, which retail establishments may sell for a 10 cent fee. In an Information Memorandum to Council dated March 14, 2012, staff reported the initial results of the ban indicated a largely successful transition for residents and businesses using and providing reusable bags. The City’s enforcement approach for the BYOB Ordinance emphasizes retailer education consistent with the approach for other stormwater inspection programs. In response to compliance complaints, the retailer has the opportunity to either confirm that they are meeting the ordinance requirements or make needed adjustments to comply.

Like single-use plastic bags, EPS also presents a litter concern. EPS foam is lightweight and floats, and it readily travels from land to inland waterways and out to the ocean. EPS foam easily breaks into small pieces which are commonly mistaken for food as birds and other marine wildlife ingest these plastic pieces. The report, [Plastic Debris in the California Marine Ecosystem](#), commissioned by the Ocean Protection Council, points out that, “Plastic debris places a variety of marine species including turtles, fish, seabirds, mammals, and invertebrates at risk of ingestion and/or entanglement. Entanglement and ingestion can result in a range of documented impacts including lacerations, drowning, limited feeding, digestive ulcers, and starvation, limited predator avoidance, and reduced reproductive output.” Due to these negative wildlife and water quality impacts, plastic debris such as EPS has become a priority concern to citizens, municipalities, and water quality regulators.

The ubiquity of EPS litter and the difficulty of cleaning it up once it becomes litter have been documented in multiple studies intended to assess the health of San José creeks. According to a study conducted last year by the Bay Area Stormwater Management Agencies Association (BASMAA), in San José and other jurisdictions, preliminary data shows that EPS foam comprised approximately 7.8 percent of the trash in the storm sewer system. As part of that study, a device recently installed in the San José storm sewer system that captures trash from an area of more than 200 acres in central San Jose was recently cleaned-out after six months of

operation. Preliminary data shows that approximately 10.8 percent of the trash in that unit was found to be EPS foam. This finding was consistent with a 2001 [Caltrans study](#) that found 15 percent of the total trash in storm drains by volume was EPS. A 2011 study of beach debris conducted by Save Our Shores in Santa Cruz County found that before the imposition of a ban in that county, EPS comprised 12.66 percent by count of all trash found in the storm sewer system.

In 2011, staff conducted comprehensive stakeholder process, officially named Green-To-Go, to gain public input regarding potential policy action to reduce EPS foam food service ware litter. Results of the Green-To-Go process were reported to the T&E Committee at its December 5, 2011 meeting. In general, concerns that were shared during the stakeholder process included that alternatives to EPS are more costly and less effective than EPS, and that bans on EPS would not reduce overall litter. Feedback from local restaurant operators was varied. Some restaurants were concerned over the resulting increase in costs, while a few shared their positive experience adapting to the change in other jurisdictions.

Since San José's implementation of the BYOB Ordinance, other cities throughout California and the nation have followed San José's model and adopted similar ordinances. Cities are also moving forward with actions to ban EPS foam food ware, which is viewed as a high priority pollutant in waterways by environmental groups and water quality regulators. On January 24, 2012, Council directed staff to actively support a regional approach to countywide adoption of prohibitions to eliminate EPS; support state legislation on EPS; to cease City funded purchases of EPS foam food ware; continue investigations of pricing of alternative options and cooperative purchase opportunities to lower costs of alternatives; and return to the T&E Committee with options for eliminating EPS foam food ware litter citywide in Fall 2012. The City has prohibited the use of EPS at special events, with over 1,000 attendees, on City property since 2009. On April 24, 2012, Council approved revisions to the City's Environmental Preferable Procurement Policy which specifically prohibited City funded purchases of EPS. In 2012, Council also supported SB 568 which would have regulated EPS take-out food packaging state-wide; this bill ultimately failed.

ANALYSIS

BYOB Ordinance Implementation Results

Staff anticipated that following the implementation of the ordinance, there would be a measurable reduction in the number of bags found as litter in City creeks, neighborhoods, and the storm drain system. This reduction in bags was further expected to carry over into a reduction in the volume of waste that would have to be sorted and recycled, or sent to landfills.

To measure the impact of the ordinance on litter reduction, the City conducted litter surveys of trash collected from creeks and rivers, storm drain catch basins, and neighborhood sidewalks. Litter surveys of creeks were conducted over a standardized length of 300 feet and along streets and sidewalks for a length of 100 feet. Trash collected during litter surveys was sorted and characterized to establish what percentage of the litter found in the environment was single-use

plastic bags. Similarly, storm drain catch basins, retrofitted with trash capture screens, were repeatedly sampled in order to establish an accumulation rate for plastic bags into the storm drain system. As summarized in Table 1, the ordinance had an observable effect on the reduction of plastic bags in the environment. The various litter surveys demonstrated a reduction in bag litter of approximately 89 percent in the storm drain system, 60 percent in the creeks and rivers, and 59 percent in City streets and neighborhoods, when compared to data collected from 2010 and/or 2011 (pre-ordinance) to data from 2012 (post-ordinance).

To assess behavior change in bag use, City staff conducted visual observations of customers at retail stores before and after the ordinance went into effect. City staff observed shoppers leaving selected retail stores for one hour and counted the number and type of bags, or absence of a bag, that customers used to carry their purchases. Visual observations were made at a variety of store types, including grocery stores, pharmacies, and general retailers in different San José neighborhoods at the same stores both before and after implementation of the BYOB Ordinance. Observation records show that reusable bag use increased greatly following the implementation of the ordinance, from almost 4 percent of bags observed to approximately 62 percent of bags observed. In addition, the percentage of customers that chose not to use a bag, and instead carry items by hand, more than doubled. The overall impact was that the average number of single-use bags used per customer decreased from 3 bags to 0.3 bags per visit following the implementation of the ordinance. Results from store observations reflect that the ordinance has had the intended effect of reducing the use of single-use bags.

The three recycling companies that operate material recovery facilities that sort San José's residential recycling were asked to monitor the volume of plastic film, or retail plastic bags, that were collected at their facilities following implementation of the ordinance. Although not all three facilities exclusively handle waste and recyclables from San José, two of the three companies noted a distinct reduction in the volume of plastic film and plastic retail bags. California Waste Solutions (CWS), which collects the recycling for 80 percent of San José single family residential properties, reported a 24 percent reduction in retail plastic bags, and Green Waste Recovery, which processes waste from multi-family properties for recycling, reported a 10-15 percent decline in the volume of plastic film. CWS also reported a significant reduction in the amount of plastic bags/film wrapped around the discs and axles on the screening machines, and 35-50% reduction in downtime directly associated with the reduced presence of plastic bags/film coming into their facility. San José's third recycling facility, GreenTeam, which handles only 23 percent of the City's single family recyclables has not seen a noticeable reduction in incoming plastic film or plastic bags. GreenTeam's facility also handles material from the cities of Campbell, Los Gatos, Monte Sereno, and Saratoga. It is possible that changes in incoming volumes of plastic bags are less apparent because of the materials coming in from other cities that do not yet have bans in place.

Table 1: Summary of BYOB Results

Metric Method	Pre-Ordinance	Post-Ordinance
Creek and River Litter Surveys	<ul style="list-style-type: none"> • 15 sites, 2,037 single-use plastic bags • 12.2 percent of total litter in 2010 • 8.2 percent of total litter in 2011 	<ul style="list-style-type: none"> • 10 sites, 513 single-use plastic bags • 3.7 percent of total litter (2012)
Neighborhood Litter Survey	<ul style="list-style-type: none"> • 107 sites; 15,701 pieces of trash • 5.1 percent of the litter found were single-use plastic bags 	<ul style="list-style-type: none"> • 31 sites; 3,675 pieces of trash, • 2.1 percent of the litter found were single-use plastic bags
Storm Drain Catch Basin Litter Surveys	<ul style="list-style-type: none"> • Average rate of 3.6 single-use plastic bags/inlet/year 	<ul style="list-style-type: none"> • Average rate of 0.4 single-use plastic bags/inlet/year
Retail Store Visual Bag Observations	<ul style="list-style-type: none"> • Average of 3 single-use bags per customer • 3.6 percent of bags were reusable bags • 19 percent of customers not using a bag 	<ul style="list-style-type: none"> • Average of 0.3 single-use bags per customer • 62.4 percent of bags were reusable bags • 43 percent of customers not using a bag
Materials Recovery Facilities		<ul style="list-style-type: none"> • Green Waste Recovery reports 10-15 percent reduction in plastic film • California Waste Solutions reports a 24 percent reduction in retail plastic bags

Bag Ban Enforcement Results

Enforcement is conducted through a complaint-based program, which entails contacting and/or conducting field inspections of businesses upon receipt of complaints through email or phone. Since implementation of the ordinance in January 2012, ESD has received 210 emails and 170 phone calls with questions or complaints related to the BYOB Ordinance. Council offices reported receiving inquiries from residents and businesses primarily in January and February, with most reporting few to no inquiries by March. Feedback was mixed with approximately 200 of the inquiries being against the ordinance, five in support and personal feedback at reusable bag giveaway events and community meetings generally positive. Since then, calls to Council offices have generally decreased to an average of less than one call or email per month. The Mayor’s Office reported the highest activity with an average of five calls or emails per month about the BYOB Ordinance.

Staff conducted visual business observations in February 2012 and October 2012 at randomly selected retailers throughout the City representing a variety of business types and sizes. Results

revealed no significant trends in compliance or bag types provided to customers based on business location or size and indicated that few businesses (~4 percent) are providing the non-compliant single-use plastic bags to their customers. Findings also suggest that most stores (55-63 percent) are supplying the recycled content paper bags, but the percent of stores supplying thicker plastic bags (which meet the definition of “reusable bag”) at no charge has nearly doubled (15 percent to 29 percent) over the past eight months. Businesses may be transitioning over to the thicker plastic (reusable) bags to avoid the additional requirements (e.g. charging customers, itemized receipts, record keeping) associated with providing recyclable paper bags.

National Bag Ban Trends

Since the passage San José’s BYOB Ordinance in December 2010, multiple cities in Santa Clara County and throughout the country have begun to improve existing ordinances or pursue new bag ban ordinances in their jurisdictions. Recent trends for these new ordinances are to include restaurants, have stricter guidelines for reusable and paper bags, and require minimum store charges for reusable bags. To date, four out of 16 Santa Clara County municipalities have a single-use bag in effect, covering almost 70 percent of the County’s population. Seven Santa Clara County cities and towns are actively exploring local bans. Attachment A summarizes many of the recent nationwide bag ban ordinances and policy deliberations.

Future Modifications to BYOB Ordinance

San José’s BYOB Ordinance includes a scheduled increase in minimum store charge for the sale of recycled content paper bags from 10 cents to 25 cents per bag starting January 1, 2014. The institution of the minimum store charge was intended to curb demand for paper bags and incentivize shopping with reusable bags. At the time the ordinance was adopted, research suggested that combining a ban on plastic bags with a 10-cent store charge would be sufficient to avoid significant environmental impacts, but this outcome was uncertain. It was clear at the time that a 25-cent charge would avoid any significant impacts by adequately curbing paper bag use. Over the past eleven months, initial implementation data suggests that the 10-cent charge has influenced significant changes in behavior. Staff will be evaluating the extent of these behavior changes to determine if the scheduled increase to a 25-cent charge is warranted. Additionally, the provisions of the ordinance will be reviewed with consideration to the apparent retailer trend towards providing free thicker plastic bags, which may meet the definition of reusable, but in practice are single-use. Staff will be further evaluating these issues and other national bag ban trends and will return to Council in summer 2013 with any recommended modifications to the BYOB Ordinance.

Update on Expanded Polystyrene Foam Food Ware Actions

Prohibition on use of City Funds to Purchase EPS Foam Food Service Ware

On April 24, 2012 the Council approved an amendment to the City’s Environmental Preferable Procurement Policy (EP3) to provide guidelines for the prohibition of the purchase of EPS foam food service ware. City Administrative Policy 5.1.13, Prohibition of City Funding for Purchase of Expanded Polystyrene Food Service Ware was approved and became effective on June 28, 2012. The approved Administrative Policy was posted to the City’s Administrative Policy Manual and information about the new Administrative Policy was distributed to all City

employees as a payroll flyer. Purchasing reports show that only one purchase of EPS foam food ware was made between April and September 2012. The City’s Green Team Coordinator and EP3 lead has received no complaints about the implementation of the Administrative Policy.

Regional Progress with ESP Prohibitions

Fifty eight California cities and counties have passed EPS bans that prohibit its use as take-out food packaging at all restaurants. These agencies are listed in Table 2.

Table 2. CA Cities & Counties with EPS Bans at Restaurants

Alameda	Hercules	Redwood City
Albany	Hermosa Beach	San Bruno
Aliso Viejo	Laguna Beach	San Carlos
Belmont	Livermore	San Clemente
Berkeley	Malibu	San Leandro
Burbank	Marin (county)	Sausalito
Burlingame	Marina	San Francisco (city/county)
Calabasas	Menlo Park	San Clemente
Carpenteria	Millbrae	San Mateo (county)
Capitola	Monterey (city/county)	Santa Clara (county)
Carmel	Newport Beach	Santa Monica
Dana Point	Oakland	Santa Cruz (city/county)
Del Rey Oaks	Pacific Grove	Scotts Valley
Emeryville	Ojai	Seaside
Fairfax	Pacifica	Sonoma (county)
Foster City	Palo Alto	Watsonville
Fremont	Pittsburg	West Hollywood
Half Moon Bay	Portola Valley	
Hayward	Richmond	

The San Francisco Bay Area has been one of the most active regions of the country with regard to ordinances restricting EPS. This activity is the result of local agencies concern with reducing trash from single-use packaging that is made of plastic. Due to the durability and persistence of plastic in the creeks, bay, and ocean, local agencies have been pursuing bans on single-use plastic bags and EPS foam food ware packaging as these two types of take-out packaging are widely regarded to be the most ubiquitous and problematic. Staff have reviewed and summarized the EPS ordinances in 25 northern California jurisdictions in Attachment B.

Alameda County and many of its large cities have been early adopters of EPS bans. The City of Oakland approved its ban in 2007, around the same time as the City and County of San Francisco. More recently, San Mateo County has been particularly aggressive in eliminating EPS foam food ware packaging by passing ordinances in unincorporated San Mateo County (ban took effect 2011) and in all but five of its jurisdictions - the most recent of which was Menlo Park whose EPS ban took effect on November 1. Locally, in Santa Clara County, Sunnyvale,

Cupertino, Mountain View, and Morgan Hill have begun to take more active steps in pursuit of an EPS ban.

In response to Council requests and stakeholder concerns noted during the Green-To-Go process, staff has completed several comprehensive evaluations on the potential impacts of an EPS ordinance. Key findings from these evaluations are discussed below and can be used to guide policy direction.

Economic Impact Study

During the previous discussion by the Committee on potential EPS actions, questions were raised and additional information was requested to better understand the business impacts such an action would have on restaurants. Economic & Planning Systems, Inc. has conducted an economic impact study for the City (Attachment C). This study provides additional context regarding the implications of an EPS foam food service ware phase out would have on the operating conditions of the San José restaurant community. Economic Planning Systems has been providing economic analysis for local governments since 1983 with extensive experience evaluating the economic impacts of local government policies on businesses. Economic Planning Systems has extensive experience working with the San Jose's Department of Planning, Building, and Code Enforcement and the Office of Economic Development.

The economic impact study provided an in-depth analysis that has not been undertaken by any jurisdiction that has passed or is currently considering a ban on EPS foam food service ware. Intended to help inform policy development, the analysis focuses on the potential cost impacts resulting from a change in the cost of take-out food packaging, the potential restaurant responses (including potential changes in menu pricing), and a discussion of how consumers may respond to these changes. In summary, the economic impact study concluded that while the take-out food packaging costs may initially increase business costs, San José's overall restaurant community will not be substantially affected by a phase out on EPS foam food service ware; however, the economic impact on individual restaurants will vary considerably based on the type of restaurant (full service vs. limited service) and annual sales revenue, and could range from none to substantial.

The economic impact study estimated that there are approximately 2,000 restaurants in San Jose. About 63 percent of these restaurants are characterized as "full-service," meaning waiter/waitress service is provided and orders are taken while the patron is seated. As such, "full-service" restaurants do not widely use take-out food containers. In contrast, the remaining 37 percent of San Jose restaurants are considered "limited-service," meaning patrons order at a cash register, use a drive-thru, or select items from a food bar. These limited service restaurants more routinely provide take-out food containers as part of their business. It is estimated that take-out food packaging represents approximately 0.34 percent of total sales for "full-service" restaurants and 1.57 percent of total sales for "limited service" restaurants.

Economic Planning Systems notes in the study that restaurants are responding to supply cost fluctuations on a daily basis. The report describes a number of approaches that affected

restaurants often use when adapting to cost increases. These strategies include introducing and marketing new menu items that have lower input costs, reducing energy costs, adjusting portion sizes, or altering ingredients of menu items. Another option for some would be to change how take-out food is served or packaged. For example, a switch from a \$0.10 EPS clamshell to a \$0.02 paper plate and \$0.03 piece of foil would reduce the packaging costs by half. The economic impact study acknowledges that every restaurant will have its own unique set of circumstances and could not generalize how restaurants would adapt.

Economic & Planning Systems also interviewed staff from a number of Bay Area cities that have adopted EPS bans. The conclusions of the consultant's interviews corroborated the findings from phone surveys of 28 California jurisdictions conducted by staff in 2011. The conclusions of the consultant's survey are as follows:

- There have been no in-depth studies made of the economic impacts to local restaurants in any community that has undertaken a ban.
- Economic development staff in the cities where EPS bans have been implemented have not observed adverse economic impacts from their imposition.
- Opinions vary on the feasibility, efficacy, and equitability of economic hardship provisions. Most cities that offer hardship exemptions have received no applications for the exemption from restaurants. Many cities noted a preference from the business community for a policy that is consistently applied to all restaurants.
- Staff in these cities expressed the need for all restaurants to be treated equally and that a proposed ban should provide no food service establishment with an advantage over another. Secondly, they expressed concern over the price of alternatives.
- A number of the interviewees underscored the importance of establishing an enforcement process by which restaurant compliance with the ban could be verified.

The key findings of this economic impact analysis concluded that there could be short-term cost increases experienced by a relatively small number of "limited-service" restaurants. The study further concludes that there will be no overall effects on the viability of the San José restaurant industry. Short-term cost impacts experienced by individual restaurants will vary for each restaurant depending on each business's unique circumstances.

However, the analysis concludes that take-out packaging cost increases would rarely be the sole cause of a restaurant closing its business. In addition, the report states that phasing in the provisions, whereby larger "chain-style" restaurants would be prohibited from using EPS before smaller sole proprietor restaurants is a feasible policy option. In some instances, these "chain-style" restaurants already have to comply with EPS ordinances in other cities.

Cost and Waste Diversion of Alternative Products

More than any other concern raised by stakeholders is the cost of suitable alternatives to EPS. Cascadia Consulting Group (Cascadia) has prepared an analysis for commonly used take-out packaging products. The purpose of this research was to better understand EPS foam food service ware for costs and divertability from landfill disposal in San José. A group of key, commonly used, food service ware product categories were selected. Cascadia conducted a

thorough look at pricing from restaurant suppliers and retail establishments in order to provide a detailed source document that also served as a basis for the aforementioned economic impact analysis, and as a guide for subsequent policy discussion. In addition, Cascadia studied whether each material was divertable from the landfill via the City’s current recycling or composting programs. The study examined a group of the most commonly used types of food service ware including plates, clamshells (hinged containers), bowls, cold drink cups, and hot drink cups. The common types of food service ware packaging included in this study are: Expanded Polystyrene (EPS) foam, Natural Fiber (Paper and Bagasse), Rigid Plastic (PET, Polypropylene, and PS) and Compostable Plastic (Polylactic Acid).

Table 3 shows food service ware material types that are readily available and the means by which these materials can be recycled, composted, or disposed in San José’s current solid waste management sectors.

Table 3. Packaging End of Life

Food Ware Type	Single-Family Residential	Multi-Family Residential	Commercial	Special Events
EPS	Landfill	Landfill	Landfill	Landfill
Rigid Plastic	Recycled, <i>if sorted by resident</i>	Recycled, <i>if sorted by resident or sorted at materials recovery facility</i>	Recycled	Recycled
Compostable Paper Natural Fibers	Landfill	Composted	Composted	Composted, <i>if sorted</i>
Compostable Plastic PLA	Landfill	Potentially compostable	Potentially compostable	Composted, <i>if sorted</i>

It is currently not possible to recycle food contaminated EPS service ware profitably in San Jose. Soiled EPS foam food service ware is difficult and costly to clean due to the absorbing nature of the material. The difficulty in being able to sufficiently clean EPS food service ware, paired with the low commodity value of this material, makes it very difficult to recycle. Even when food contaminated EPS is successfully collected, there are few to no manufacturing facilities, either domestic or abroad, willing to remanufacture it into new products due to the contamination. The City of San José’s own curbside collection program has tried to divert this material to recycling on numerous occasions over the past 15 years.

A 2011 report on EPS Food Containers in Los Angeles County developed by the County of Department of Public Works states that “thirty-two cities allow EPS containers to be deposited in the recycling bin at curbside. However, most of the material recovery facilities (MRFs) do not

process EPS and instead landfill the material.” Staff conducted a phone survey of material recovery facilities in the South Bay Area, including Green Waste, Allied Waste, and GreenTeam of San José and found that there were no large-scale recyclers currently accepting food contaminated EPS. Feedback from local recyclers indicated that recycling food-contaminated EPS is costly and that markets for this material are transient and unstable, making it difficult to collect on a sustained basis. Furthermore, storing sufficient volumes of EPS is costly for recycling facilities.

Most alternative packaging types are either compostable or recyclable in at least some part of the City’s waste management system. There are two exceptions: EPS foam is neither compostable or recyclable in any of the of solid waste management sectors and must be landfilled; and, natural fiber products, such as Bagasse and paper, are compostable in most solid waste management sectors, except in San José’s current single-family curbside collection program.

Depending on the size and configuration of the container, the research found that most recyclable or compostable alternatives were within \$0.01 - \$0.03 of the EPS food service ware products. A full summary is included in Attachment D. For some product categories, such as an 8 ounce hot drink cups, the survey found a readily available alternative that was less costly than its EPS counterpart. However, there were two instances (3-compartment and “hoagie style” clamshells) where the alternative material clamshell or hinged container was \$0.08 - \$0.13 more. In response, a restaurant could decide to explore other packaging containers at lower costs instead of making a like for like switch.

Packaging End of Life

Staff, working with its local industry stakeholders, has been testing a variety of food packaging materials to determine which alternatives actually perform as a compostable when diverted from the landfill. Staff is also confirming with local recyclers that materials collected for recycling, such as rigid plastic take-out containers, are being captured and marketed in local recycling operations. This analysis would provide information on how alternative products would be handled within San José’s existing solid waste and diversion infrastructure. A final report of the findings is expected by the end of the year.

Conclusion

San Jose took a leadership role with the implementation of the BYOB Ordinance. As a result, many cities throughout the country have modeled their own bans after San Jose’s BYOB Ordinance. After a year of implementation, all indicators show that the ban has reduced the presence of single use plastic bags in street and creek litter, at the City’s solid waste processing facilities, and that residents have changed their behavior and are more frequently shopping with reusable bags. The City expended approximately \$190,000 of storm sewer operating funds (446) for outreach of the BYOB ordinance through implementation with existing staff and no change in service levels. While the BYOB Ordinance required retail stores to change their practices, there are no reports of sustained negative impacts on local retailers.

A phasing out of EPS foam food ware can have significant benefits for wildlife, water quality, and trash reduction in streets and creeks; and with other cities pursuing similar phase outs, greater regional environmental benefit is likely. Based on the findings of the studies that have been conducted to date, the City could regulate EPS foam food service ware in a way that would minimize the impact to San José restaurants, address some of the issues raised by the stakeholders, and ease the transition for small businesses by:

- Providing up to a one-year lead time, such as for the BYOB Ordinance, that would allow restaurants adequate time to transition including using up current stock of EPS foam food service ware, identify appropriate alternative products, and research best pricing for alternatives.
- Providing a phased implementation to give smaller restaurants additional time to transition and comply with the change. A delayed implementation date for small businesses could result in lower prices for alternative products as the market adjusts to increasing demand for alternative products resulting from not just San Jose's EPS phase out, but from other South Bay city ordinances. ESD Staff would work with stakeholders and the Office of Economic Development to refine the definition of large and small restaurants that would ease implementation and enforcement.
- Allowing restaurants more flexibility in their choice of alternative products which would include compostables as well as recyclables. By not specifying that restaurants switch to only compostables products, a restaurant would be able to identify more cost effective alternatives, such as rigid plastic products, that meet their business needs and that can also benefit the City because it can be diverted from landfill.

Proposed Next Steps

If Council directs staff to proceed with the recommendation to phase out EPS foam food service ware, staff will reinitiate plans to engage a broad spectrum of stakeholders to gain their perspectives regarding the phase out of EPS foam food ware. This includes a two-pronged approach consisting of one-on-one business and community stakeholder outreach and a Citywide public meeting. For the one-on-one business and community stakeholder outreach, staff will schedule meetings with key business stakeholders such as the chambers of commerce, California Restaurant Association, industry associations, neighborhood business associations, and environmental organizations. The objective of the stakeholder engagement efforts is to gather feedback that will refine the plan for the phase out of EPS foam food service ware, discuss implementation timeline and requirements, and identify areas where City staff can provide technical assistance to businesses to facilitate the transition. This information will guide the refinement of the EPS phase out outreach and implementation plan.

Additionally, staff will prepare a CEQA initial study for the proposed phase out ordinance. Based on the conclusions of the initial study prepared by other jurisdictions that have passed ordinances banning EPS foam food service ware, staff anticipates that a Negative Declaration will be the likely CEQA determination.

With the experience gained during the development and implementation of the BYOB ordinance, with the groundwork already established during the Green-To-Go process, and with the

extensive amount of research conducted on the subject, staff believes the resource needs for the development, implementation, and subsequent outreach will cost significantly less and manageable with exiting staff. Unlike the BYOB effort which entailed a significant amount of education to the public in addition to businesses, a phase out of EPS is simply an operational conversion of takeout food ware material that the affected restaurant community would undertake and does not require any behavior change of or result in any meaningful alteration of the restaurant experience for consumers. Furthermore, the affected sector requiring outreach for EPS is much smaller than that needed for the BYOB; and for many chain restaurants located in other cities with already existing EPS bans, the transition would be easier to implement. Staff will continue to search for efficiencies when developing its implementation outreach plan as well as enforcement program including leveraging already established communication vehicles to the restaurant community to conduct outreach including existing solid waste contract outreach requirements and the City's restaurant inspection programs. Staff has already begun to engage potential partners as part of the evaluation.

EVALUATION AND FOLLOW UP

Staff will return to Council in February 2013 with a draft ordinance to phase out EPS that incorporates stakeholder feedback for consideration and report out with further detail on implementation, including clearer definitions for phase-ins, exemptions, and timeline. Staff will continue to monitor trends in single-use bag bans and return in Summer or Fall of 2013 with recommended modifications to the City's Bring Your Own Bag Ordinance for Council consideration.

PUBLIC OUTREACH

- Criterion 1:** Requires Council action on the use of public funds equal to \$1 million or greater. **(Required: Website Posting)**
- Criterion 2:** Adoption of a new or revised policy that may have implications for public health, safety, quality of life, or financial/economic vitality of the City. **(Required: E-mail and Website Posting)**
- Criterion 3:** Consideration of proposed changes to service delivery, programs, staffing that may have impacts to community services and have been identified by staff, Council or a Community group that requires special outreach. **(Required: E-mail, Website Posting, Community Meetings, Notice in appropriate newspapers)**

While this report does not meet any of the criteria above, staff continues to conduct outreach and provide assistance to retailers and residents with questions related to the BYOB Ordinance. As staff proceeds with research of potential modifications to the BYOB Ordinance in 2013, staff will engage key stakeholders in consideration of potential changes.

In 2011, staff initiated a series of seven Green-To-Go public meetings to engage the community and gather input on the potential alternatives for reducing EPS litter. Approximately 4,800 San José restaurants were sent information about the meetings. In addition, 350 small restaurants were individually visited and encouraged to attend.

COORDINATION

This memorandum has been coordinated with the City Attorney's Office and the Office of Economic Development.

CEQA

Not a Project, File No.PP 10-069 (a), Informational Memos that involve no approvals of any City actions.

/s/

KERRIE ROMANOW

Director, Environmental Services

For questions please contact Napp Fukuda, Acting Deputy Director, Environmental Services, at (408) 793-5353

Attachment A: Overview of National Plastic Bag Ordinances by Jurisdiction

Attachment B: Overview of Key Northern CA EPS Ordinances by Jurisdiction

Attachment C: Economic Impact Analysis of Expanded Polystyrene Food Service Ware Costs

Attachment D: Summary of Cost of Alternative Food Service Ware