



# Memorandum

**TO:** TRANSPORTATION AND  
ENVIRONMENT COMMITTEE

**FROM:** John Stufflebean

**SUBJECT:** SEE BELOW

**DATE:** 10-22-07

Approved

Date

10/24/07

**SUBJECT: SPECIAL EVENT PERMIT REQUIREMENT FOR RECYCLING AND  
EVALUATION OF RECYCLING AT CITY VENUES AND EVENTS**

## RECOMMENDATION

Recommend that City Council direct staff:

1. For following five special events, Italian Family Days, Tapestry and Talent, Cinco de Mayo, San José Jazz Festival, and Independence Day:
  - a. Implement Zero Waste programs
  - b. Provide compostable food service ware and compostable collection and processing.
  - c. Require food vendor participation in the compostable foodware program.
2. Implement a program for certifying events that meet specific criteria for “Going Green,” “Green,” or “Zero Waste” events;
3. Effective January 1, 2008, require special events as a condition of their Event Authorization to specify that food vendors use # 1 (PET) plastic recyclable or compostable beverage containers for events with greater than 30,000 attendees;
4. Implement a pilot program to recycle and compost garbage from City special events and venues through specialized off-site processing;
5. Evaluate ways to improve recycling at the San José Mineta International Airport, San José McEnery Convention Center, and other showcase City venues by providing technical assistance and services; and
6. Create example agreement language and web resources to support event organizers and vendors in recycling program implementation.

## OUTCOME

Approval of this recommendation will provide sustainable model programs that improve waste reduction at City events and venues. These programs will support the following City goals: Urban Environmental Accords Actions 4, 5 and 6, City’s proposed Green Vision Goal #7, and proposed Zero Waste goals, and will make the City a model for best practices in recycling for the public. Large venues and events generate substantial quantities of solid waste, primarily compostable materials such as food waste, and recyclable materials such as beverage containers,

corrugated cardboard, paper, and glass. Implementation of this recommendation will result in significantly increased recycling and composting of this waste stream, keeping these resources out of City landfills.

## **BACKGROUND**

At its June 19, 2007 meeting, Council adopted policy direction which established several requirements for any event that has an average of 1,000 attendees or more and which occurs on City property, streets, and/or park land. The policy direction requires event organizers to allow San José Conservation Corps (SJCC) access to their event to provide a level of recycling service established by the Director of Environmental Services. As part of Council action, staff was directed to evaluate options for improving these recycling programs for the Fall 2007 Transportation and Environment Committee work plan. Staff also conducted assessments at the Mineta San José International Airport, San José McEnery Convention Center and HP Pavilion to identify opportunities at these venues for further waste reduction.

## **ANALYSIS**

### EVALUATION OF RECENT LARGE EVENT RECYCLING

During summer 2007, staff assisted with recycling efforts at three large events: America Festival, San José Grand Prix, and the Comcast San José Jazz Festival. These were the first events where Environmental Services Department (ESD) staff worked in partnership with the SJCC to implement recycling programs at large City events. The table below presents event statistics and diversion results. Following the table is a synopsis of the improvement opportunities developed from these events.

#### *Statistics and Results*

	<b><u>America Festival</u></b>	<b><u>Grand Prix</u></b>	<b><u>Jazz Festival</u></b>
Event Dates:	July 1 and 4, 2007	July 27-29, 2007	August 10-12, 2007
# of Event Attendees:	45,000	129,000	88,000
Crew Size:	29 people/day	66 people/day	58 people/day
Materials Diverted:	Cardboard, Bottles, Cans	Cardboard, Bottles, Cans	Cardboard, Bottles, Cans, Mixed Paper, Paper Towels, Food, Food Soiled Paper, Food Serviceware
Total Discards:	15.73 Tons	48 Tons	19.52 Tons
Diversion Level:	36%	36%	59%

*Summary of Improvement Opportunities*

After evaluation of these large event recycling programs, staff identified several key recommendations for improving this service. Those recommendations are summarized below:

- Commence the planning process six to nine months in advance by preparing an event planning document that clearly defines goals and responsibilities and by holding periodic meetings with responsible parties;
- Work with event organizers to include language in their vendor agreements requiring use of recyclable and/or compostable products;
- Perform more comprehensive and frequent crew coordination, education, and supervision;
- Establish a strong public outreach plan including event posters and signs, public announcements, and EcoStation monitors and signage; and
- Hold a post-event debriefing meeting with representatives from each responsible party to discuss the event's successes and solicit recommendations for future improvement.

A report including a description of each event and an evaluation on ways to improve events is included as Attachment A - Evaluation of Current City Special Event Recycling.

ASSESSMENT OF SPECIAL EVENT PERMIT REQUIREMENTS

*City Partnership for Zero Waste Efforts at Top Events*

Staff recommends working with the five largest events (based on attendance) for the next two years to implement Zero Waste programs. These events currently are: the Italian Family Days, Tapestry and Talent, Cinco de Mayo, Jazz Festival, and Independence Day. A report of the Zero Waste pilot program conducted at the 2007 Comcast Jazz Festival is included as Attachment B - 2007 San José Jazz Festival – Case Study.

To significantly impact diversion at the top five events, food scraps and food containers need to be diverted from the waste stream. It is estimated that these materials account for at least 37% of the event materials. Compostable food service ware is readily available from a number of local suppliers. As a result, the diversion of food service ware, which is a significant portion of the event discards, needs to occur through use of compostable food service ware (not recyclable food service ware) and collection and processing of compostable items including food and the food service ware.

Staff identified an opportunity to purchase the compostable food service ware in bulk at a significant discount. This pricing advantage can benefit large events in San José as well as other venues that may want to participate in pilot programs using these materials. The cost to provide compostable food ware at the Jazz Festival, the largest of the five recommended events, was \$12,000 in 2007. The cost per event is expected to decrease as the City purchases these materials in bulk and the use of these materials becomes more widespread.

By offering compostable foodware to larger special events and venues, during the next two years, the City will have the opportunity to get this program established. Staff will evaluate increasing requirements for more wide-spread use of compostable food ware, and include this information in next year's Transportation and Environment Committee status report.

#### *City Promotion of Green Events*

While it is not practical for ESD staff to directly implement recycling programs at every event in San José, it would be advantageous if event organizers were acknowledged in some formal way for their attempts at "greening" their events. As social and environmental consciousness for "greening" and Zero Waste becomes more mainstream, the advertising and promotional benefits of being "green" and hosting a "Zero Waste event" are increasing. The City could further encourage this by offering event organizers different levels of certification for greening their events. Based on their commitment, organizers could use a City-issued logo at their events and in promotional material. ESD staff would determine the criteria for green certifying events.

#### *Required Use of Recyclable or Compostable Beverage Containers*

The current event policy direction has no requirement for the use of recyclable or compostable beverage containers. City permit conditions prohibit the use of bottles or cans at events, resulting in the generation of approximately 100,000 cups at a typical large event. Recyclable beverage containers would be limited to #1 (PET); this type of plastic is most readily recyclable due to market demand. Other plastic cups, even marked as recyclable (#2 through #7) used by event vendors are not readily marketable by recyclers and are routinely landfilled. It is important that all vendors participate in this type of program. If some vendors are using #2, #6 or #7 plastics while others are compliant with the requirement for #1 plastics, it may be very difficult for event staff to distinguish between them without a considerable level of effort. It is estimated that the 2007 Comcast Jazz Festival alone generated approximately 175,000 #6 plastic beer cups which were land filled. Such a requirement would be placed on the event organizer to ensure that the vendor agreement language requires use of the recyclable beverage containers by all vendors at the events over 30,000 attendees. Both San Francisco and Sonoma County limit the types of allowable plastics at special events due to these market issues.

The fiscal impact of such a requirement on the vendors is neutral. Based on information provided by beverage suppliers, the recyclable #1 plastic cups cost about the same as the #6 plastic cups currently used at the vast majority of City events. Staff has confirmed that it is feasible for beverage distributors to provide #1 plastic cups within the recommended timeframe and the distributors are already taking steps to do so.

#### *Mixed Waste Recycling Pilot*

ESD staff will work with selected events and venues over the next two years on a pilot program for processing mixed waste from large events to achieve additional diversion. This processing capacity is becoming available locally and presents a significant opportunity for the City to improve waste diversion performance by delivering the garbage from events to a sorting facility to remove more recyclables from this waste stream. Once sorted, this mixed waste can be processed in a composting facility to ensure beneficial use from the organic components. During

the pilot program, staff can determine the actual cost per event and evaluate the success of this technology.

## ASSESSMENT OF LARGE VENUE RECYCLING

### *San José Mineta International Airport*

At the Airport's request, ESD has been working with airport staff over the past two years to improve their recycling program. ESD had a consultant assess all operational areas of the San José Mineta International Airport this past summer. This contractor evaluated the Airport's existing recycling program and waste management system, including where individual types of recyclables and wastes are generated and how they are collected and disposed. The evaluation of the Airport is included as Attachment C to this report. Key recommendations include the following:

- Improve recycling container set outs to enhance visibility and signage and describe acceptable recyclable materials;
- Enhance vendor requirements to use recyclable or compostable beverage and food service ware;
- Implement a pilot program for sorting of mixed waste to recover recyclables and to compost organic-rich portions of the mixed waste stream;
- Implement a pilot program to conduct on-site composting using an in-vessel system, if practical; and,
- Provide input into the North Terminal construction and operations to increase recycling capabilities and efficiencies.

### *San José McEnery Convention Center*

The Convention Center has greatly increased their recycling activities over the last few years. In May of 2007, the Convention Center requested assistance from ESD to help further improve their recycling services and recently to assist with implementing a compostable foodware program. This facility currently separates cardboard, mixed paper, plastics, beverage containers, and pallets for recycling. Convention Center staff works with individual vendors that participate in events at the Convention Center to make sure that they understand how to use the waste management and recycling systems at the Convention Center. However, some of the recyclable materials are still discarded by vendors that are not complying with the recycling program. The Convention Center would be able to achieve a higher diversion rate if a staff member could be stationed on the loading dock while shows were being set up or torn down, to explain to the vendors what to do with specific materials.

The Convention Center food preparation areas have reduced the amount of non-recyclable food service items, and are switching to all reusable (washable), recyclable or compostable service ware items. City staff is actively discussing the proposed composting program with the Convention Center. If the City provides a service to haul these wastes from the food service operations to a compost facility, the Convention Center will have already made the changes necessary to insure that most of these materials could be composted through the new program.

*HP Pavilion*

The HP Pavilion recycles cardboard through a local cardboard recycler, and beverage containers through SJCC. Several years ago, the management of the HP Pavilion contracted with a hauler to collect mixed paper for recycling and made arrangements for organic wastes from the facility to be composted. This system was designed to achieve an overall diversion of over 95%, and made the HP Pavilion a national model that was given an award by the US EPA.

Significant changes have recently taken place in the local waste management industry. As such, Staff is confirming that compostable materials are still being processed, and that this high level of recycling is still occurring. The City is required by State Law (AB 2176) to annually report to the California Integrated Waste Management Board for the top 10% of venues in its jurisdiction, the types and amounts of materials disposed and diverted at these locations, as well as a description of the recycling programs that the large venues utilize. If this level of waste diversion is not occurring at the HP Pavilion, then the City can work with the HP Pavilion to insure that their contractor is processing their wastes to maximize diversion opportunities. Additionally, the HP Pavilion and the City could assess the feasibility of using compostable food service ware like other major Bay Area stadiums such as the Oakland Coliseum.

**EVALUATION AND FOLLOW-UP**

Staff will return to the Transportation and Environment Committee in late 2008 to provide a follow-up evaluation of these pilot initiatives.

**PUBLIC OUTREACH/INTEREST**

This memorandum will be posted on the City's website for the Transportation and Environment Committee Agenda of November 5, 2007, and the Council Agenda of November 19, 2007. The revised guidelines will be emailed to the event organizers by the end of November. ESD will incorporate this information on their website as well as in the development of vendor information for events.

The criteria below do not apply to this memo.

- Criterion 1:** Requires Council action on the use of public funds equal to \$1 million or greater.
- 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.
- 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.

**COORDINATION**

This memorandum has been coordinated with the Airport; Parks, Recreation, and Neighborhood Services; Planning, Building and Code Enforcement; Office of Cultural Affairs; Office of the City Attorney; and City Manager's Budget Office.

**COST IMPLICATIONS**

Staff estimates a cost of approximately \$150,000 in staff time, contractor and supply costs to provide recycling and composting pilot programs outlined in this report. These funds will come from Environmental Services existing event and public area recycling budget and include some grant funds from the State of California. Staff is also pursuing additional grant resources to implement these pilot initiatives.

Fund #	Appn #	Appn Name	RC	Total Appn	Amt For Contract	2007-08 Proposed Operating Budget (Page)	Last Budget Action (Date, Ord No.)
423	0762	Non-Personal/ Equipment	500559	\$4,418,251	\$150,000	VIII-40	06/26/07 Ord No 28086

**CEQA**

Exempt: File PP07-097.

  
JOHN STUFFLEBEAN  
Director, Environmental Services

Attachments:

- A. Evaluation of Current City Special Event Recycling
- B. 2007 San José Jazz Festival – Case Study
- C. Assessment of Large Venue Recycling- San José Mineta International Airport

For questions, please contact Jo Zientek, Deputy Director, Environmental Services Department, (408) 535-8557.

**Attachment A**  
**EVALUATION OF CURRENT CITY SPECIAL EVENT RECYCLING**

**DESCRIPTION OF EVENTS**

In addition to the evaluation of the 2007 San José Jazz Festival (Attachment B), staff evaluated the following additional events in 2007.

*America Festival*

The America Festival was held on July 1 and July 4, 2007, at Discovery Meadow Park and attracted approximately 45,000 attendees. ESD staff worked with SJCC to provide cardboard, bottle, and can recycling for event attendees and vendors. This event represents the beginning of the learning process for ESD staff and SJCC in their cooperative efforts towards large event recycling programs. During the first day of the event, the ESD and SJCC team identified several challenges including lack of outreach, scavenging, high contamination rates, communication barriers, and inadequate recycling containers. As the team regrouped for the second day of the event they were able to improve the number of available recycling containers, improve communication amongst the team, and reduce contamination rates. ESD staff was able to get an announcement made from the stage about the recycling program during this second day. The combination of these things improved public awareness of the program. Throughout the event, ESD staff was able to conduct waste audits to identify opportunities for future program enhancements at this and other events in the City.

*San José Grand Prix*

The San José Grand Prix was held on July 27 through 29, 2007 in downtown San José and had an attendance of approximately 129,000 people. SJCC provided recycling containers and staff to manage the recycling program. ESD staff was also at the event to assist with the program management as well as to conduct waste audits and identify opportunities for future events. At the event, recycling containers were generally paired with the garbage containers and flags were used to indicate where recycling was available. This recycling setup was useful because event attendees easily located recycling containers and generally demonstrated a desire to participate in the program. Vendors who expected to generate large volumes of recyclable materials were identified and accommodations were made for those vendors to ensure that they would have adequate, readily available recycling capacity to encourage their participation in the program. Several challenges came up during the event including lack of access to certain event areas, misused and damaged equipment, uncooperative vendors, non-recyclable materials used by vendors, the waste hauler's inadequate frequency of servicing containers, and scavenging. While these challenges are not out of the ordinary for this size event, they provided ESD staff insight into the types of specific measures which could be used to improve future events.

**ASSESSMENT OF SPECIAL EVENT PERMIT REQUIREMENTS**

*1,000 Attendees as Minimum Threshold*

The current policy direction adopted by Council establishes an average daily attendance of 1,000 or more persons as the minimum level required to comply with the event recycling permit requirements. The implication of this requirement is that SJCC will provide recycling assistance at the vast majority of permitted events in San José, approximately 114 events annually. This

compliance threshold captures approximately 78% of City events held on City property ensuring that recycling programs are offered and materials are diverted from the largest practical number of events. The table below summarizes 2007 event information to provide perspective on the number and size of events in San José.

<u># of Attendees</u>	<u># of Events/Year</u>	<u>% of Total Events</u>
Less than 1,000	33	22%
1,000 – 5,000	72	49%
5,000 – 10,000	22	15%
10,000 – 25,000	6	4%
25,000 – 50,000	6	4%
50,000 – 100,000	4	3%
100,000 +	4	3%
Total	147	100%

While the diversion impact of recycling at the events may not be significant in comparison to the impact of other City-wide residential and commercial programs, the public education opportunity of the recycling program is valuable. Having recycling and composting programs at events demonstrates the City’s commitment to diversion and its proposed 75% diversion and Zero Waste goals and reinforces the importance of recycling to event attendees and event organizers. As such, the cost of the event recycling efforts may result in a higher than average cost per ton of diverted material. However, this cost should be viewed as a public education and outreach cost, which has lasting effects well beyond the diversion at the event and the capacity to influence behavior towards recycling on a larger scale.

It should be noted that AB 2176 requires events with an average of 2,000 attendees per day to comply with state event recycling requirements. The City should continue to track the costs associated with recycling at events particularly events of different attendance levels to determine the cost effectiveness of the recycling program and periodically evaluate the appropriateness of the City’s 1,000-attendee threshold.

*Required Use of SJCC*

The June 2007 policy direction adopted by the City Council requires all events meeting the minimum 1,000-person attendee threshold to allow SJCC to establish a recycling program at their event. SJCC’s recycling program has been very helpful to date and has resulted in significant and improving diversion rates at the three events that they have supported. The use of a consistent recycling contractor is helpful in creating a unified program appearance from one event to another so that attendees and vendors that participate in events throughout the year are presented with a familiar set of options for recycling their materials.

During the first few events, SJCC and the City developed more effective logistical and communication procedures. As they provide these services to more events, the recycling activities will become increasingly efficient and efforts will be expended in improving the performance of the programs. If new and different service providers are used from one event to the next, this experience and efficiency will be lost and progress will be delayed. SJCC provides valuable continuity to the program.

One of the major obstacles in managing the success of the recycling efforts is that event organizers use a separate service provider for collection of litter and garbage throughout the event. Because of this, there are frequent problems in coordinating the, potentially conflicting, goals and efforts of SJCC and litter/garbage teams. Ideally, event organizers will utilize the same crew for the performance of both services. Having one service provider responsible for both recycling and garbage allows for provider focus on diversion, potentially increasing material sorting, reducing contamination of the recyclables stream, and increasing the presence of recycling staff to reinforce the public education goals of the program.

The City should continue to require event organizers to allow access to SJCC to establish recycling programs and promote effective coordination of SJCC staff and garbage collection and litter abatement crews per existing permit requirements. SJCC should continue to staff these events with dedicated personnel who are committed to improving the recycling performance of the programs established.

#### *Required Use of Recyclable or Compostable Food Service Ware*

To significantly impact diversion at events, food scraps and food containers need to be diverted from the discards. It is estimated that these materials account for 37% of the event materials. As with the requirement for recyclable or compostable beverage containers, there is no requirement in the current policy direction for large events to use recyclable or compostable food service ware. Unlike the beverage containers, the availability of recyclable food service ware is very limited and not as practical from the perspective of sorting and marketing the material. Compostable food service ware is readily available from a number of local suppliers including the one used by the City for the Comcast San José Jazz Festival. As a result, the diversion of food service ware, which is a significant portion of the event discards, needs to occur through use of compostable food service (not recyclable food service ware) and collection and processing of the compostable items.

In cases where a compostable program is in place, especially if it provided by the City, the event organizer could be required to ensure vendor participation. The fiscal impact of purchasing compostable food service ware is similar to purchasing recyclable and compostable beverage containers. It is critical that vendors comply so that event attendees can be instructed to place all food service ware in the composting container. If some products are compostable and others are not, the materials can not be differentiated and the compostable materials will be contaminated with the non-compostable food service ware. ESD staff is currently working with the Z-Best Compost Facility to verify that composting the containers does not create operational difficulties for the processor.

#### *Ban on Materials*

Since January 2007, ESD staff worked on implementing diversion programs at four events to identify best practices for improving large event recycling programs. One of the consistent problems identified at each event has been the presence of certain non-recyclable materials like polystyrene, plastic bags, and non-recyclable vendor give-aways. These items are constructed for single-use and are frequently discarded within minutes of attendees receiving them. As such, they must be disposed of at the event. This results in litter throughout the event grounds,

increased disposal demands, and contamination of recyclable and compostable materials. Furthermore, these non-recyclable items do not reinforce the City's message of zero waste.

Several communities including Berkeley and San Francisco have implemented bans on polystyrene use at large events and restaurants generally because of their non-recyclable and non-durable nature. Polystyrene is often mistaken as recyclable by many vendors and event attendees, contaminating the recyclable stream, because polystyrene containers are labeled with the chasing recycling arrows.

The problems associated with non-recyclable give-aways and plastic bags are potentially larger than the problems with polystyrene because these materials end up littered throughout the event grounds. These materials create general blight and potentially other environmental problems if they make it outside the event grounds into the creeks or rivers.

While staff considered requiring ban on these materials from the largest events (50,000 attendees or more), the event organizers and vendors may object to such a ban as vendors often purchase their give-away products many months in advance and may have a strong preference for a particular give away. This requirement may be more appropriate to pursue as a City-wide ban because it creates an infrastructure for alternative products and does not unfairly target event organizers and vendors.

#### *City Partnership for Zero Waste Efforts at Top Events*

The City's proposed adoption of goals to achieve 75% diversion and Zero Waste necessitate a substantial change in the way in which generators think about and manage their wastes. By placing an emphasis on recycling and newer methods of diverting materials (such as composting), these large events can serve as a valuable forum for educating event organizers, attendees, and vendors. The City's participation at large events to deliver a strong message about maximizing diversion was initiated with the San José Jazz Festival. In 2007 ESD staff worked closely with the organizer of the Jazz Festival to maximize the diversion potential, successfully diverting nearly 60% of the waste from that event. This event involved the City funding of EcoStation collection containers, compostable food service ware, compostable beverage containers, and City provision of significant staffing for planning, coordination, and execution of the program.

City support with funding and staffing for diversion activities may be more reasonable and cost-effective for three to five of the highest attended events each year. The top events may be defined as events that have an attendance of more than 50,000 per day and occur over a period of less than 7 days. Approximately five events meet these criteria: Italian Family Days, Tapestry and Talent, Cinco de Mayo, Jazz Festival, and Independence Day. If ESD staff can work closely with a few top events each year, provide some level of subsidy during the introductory year(s) of the program, and establish a framework for creating Zero Waste events in San José, these efforts may begin to trickle down to smaller events. The best events to start with would naturally be those who express an interest in "greening" their events.

This trickle-down effect works by creating demand on the part of the event attendees and by institutionalizing these Zero Waste practices in the activities of the event organizers, vendors,

and attendees, most of whom participate in numerous events of varying sizes. Commitment of ESD staff and funds is only necessary in the first year or two of these types of programs to acclimate the event. After this introductory period, practices like controlling inputs through vendor agreements, requiring compostable or recyclable food service ware, banning polystyrene, hiring discards management and sorting crews, and performing public outreach become a normal part of event planning. Event attendees and vendors will also require less educational effort after the first year or two and they will more easily integrate waste diversion practices into their activities.

#### *City Promotion of Green Events*

As social and environmental consciousness for “greening” and Zero Waste becomes more mainstream, the advertising and promotional benefits of being “green” and hosting a “Zero Waste event” are increasing. The City could further encourage this by offering event organizers different levels of certification for greening their events. Once certified, events could use a City designed and approved logo for their events and use the certification in their promotional efforts. Below are suggestions for green certification categories.

- San José Going Green Event – To be certified as a “Going Green” event, event organizers must: 1) use SJCC staff for recycling collection and sorting of recyclable materials from the garbage; and, 2) make use of vendor agreement language which requires vendors to participate in the recycling program and use only recyclable beverage containers.
- San José Green Event – To be certified as a “Green” event, event organizers must meet all of the requirements of the “Going Green” events as well as: 1) implement a composting program; 2) require all vendors to use compostable food service ware, and 3) creating a promotional campaign surrounding the recycling and composting program at the event
- San José Zero Waste Event – To be certified as a “Zero Waste” event, event organizers must meet all of the requirements of the “Green” events and: 1) ban all non-compostable food service ware; and 2) make use of a crew for sorting materials to maximize diversion and minimize contamination.

#### *Other Permit Requirements*

As the City looks towards achieving a goal of 75% diversion and Zero Waste, increasing the requirements of the events is an important component of the effort particularly because of the opportunity to send a strong message to the event participants. To increase event diversion activities, the additional permit requirements described below may be warranted. Staff will continue to evaluate the need for such requirements during upcoming calendar year.

- Tiered Compliance Requirements – One potential enhancement to the current policy direction would be to introduce tiered requirements related to event size, with increasing requirements defined for larger events. The current requirements (i.e., use of SJCC for recycling collection) may be adequate for events that have 1,000 to 20,000 average daily attendees. However, it may be beneficial to introduce other requirements, specifically the use of recyclable or compostable beverage containers, for larger events such as those with 30,000 attendees per day or more. Another tier could be established for events with 50,000 or more attendees per day where organizers would be required to cooperate with City efforts towards creating a Zero Waste event (at the discretion of the Director of Environmental Services), use compostable food service ware and implement a composting program. Alternatively, the compliance tiers could be structured around the Going Green, Green Event,

and Zero Waste Event categories presented in the preceding section. By creating tiered requirements, the fiscal impact to smaller events is minimized while the public education impact and diversion results are maximized by targeting increasingly larger events for expanded waste reduction and recycling activities.

- Vendor Agreements – A pivotal component of creating high diversion levels at large events is the cooperation of vendors. This is due, in large part, to the fact that vendors, more than any other participant, introduce a wide variety of material types into the event. A wide array of materials creates confusion in the segregation of recyclable and compostable materials, challenges in educating vendors and event attendees on proper sorting methods, increased recycling crew time for sorting, contamination of recyclable and compostable materials, and potentially reduced diversion results. Many times vendors introduce materials that they are accustomed to using at other events and in their normal operations, with little regard for their impact on creating waste or ability to recycle or compost the materials. Vendors typically have an agreement with the event organizer which dictates certain behaviors and business practices. Staff intends to develop example agreement language that could assist event organizers. This best management practice is one that other cities provide to support for the events. Additionally, staff will evaluate creating a certification for vendors that comply with the event diversion programs so vendors can publicize their participation and commitment.

**ATTACHMENT B**  
**2007 San José Jazz Festival -- Case Study**

The 2007 San José Jazz Festival was held from August 10<sup>th</sup> through August 12<sup>th</sup> at a dozen locations throughout downtown San José. Over 88,000 people attended, and generated 19.52 tons of discards, 59% of which were diverted from disposal. This represents the most successful large event diversion program in San José history. The City's Environmental Services Department (ESD) staff worked with the event organizer to maximize diversion at the event. Key elements of the diversion program included City purchase and provision of compostable food service ware, utensils, and cups for all vendors; collection of discarded materials throughout the festival using EcoStations that provided four containers for event participants' segregation of compostables, bottles and cans, and paper. The success of the program can be attributed to ESD, the San José Conservation Corps (SJCC), Green Mary, and the event organizer's litter abatement crew. Each provided a crew that worked together to manage the recyclables, compostables, paper, and garbage.

This case study report presents results of the Zero Waste efforts, describes the event coordination efforts for management and diversion of discards, and presents recommendations for future events.

**Event Statistics and Results**

# of Event Attendees:	88,000		
# of Food Vendors:	46		
# of Art, Crafts and Business Vendors:	110	<u>Tons Collected</u>	
City ESD Crew:	11/day	Compostables:	6.02
SJCC Recycling Crew:	32/day	Bottles and cans:	3.95
Litter Crew:	5/day	Cardboard:	1.55
Sorting Crew:	10/day	Waste:	8.00
Total Crew	58/day	TOTAL	19.52
# of EcoStations:	60	DISCARDS:	59%
		% DIVERTED:	

**Event Coordination**

The coordination for the greening of the San José Jazz Festival began months before the actual event and carried through to several weeks after including pre-event planning, set-up, event operations, tear-down, and post event debriefing. This comprehensive approach to the event coordination can be credited, in great part, for the success of the program and the future success of the large event greening efforts in San José.

**Planning**

City ESD staff began their efforts to green this event several months prior to the event. At the request of the Jazz Festival, the City met with the event organizer, who was interested in having this event meet or exceed "Greening" standards of other bay Area events. Through several meetings both in person and over the phone between ESD staff and the event organizer, a strategy for maximizing diversion was developed. That strategy included the following key elements:

1. The event organizer would promote the diversion program through vendor coordination, large banners announcing the program, and periodic announcements from the stages to educate customers about the program, include outreach in any event programs, flyers or other printed materials;
2. The City would coordinate the crews for managing the materials;
3. The City would provide EcoStations comprised of four Clear Stream™ collection containers (bottles and cans, paper, compostables, and garbage) to allow event attendees to sort their discards;
4. The City would purchase, provide, and coordinate the distribution of compostable food service ware, utensils, and cups (compostables) to all vendors at the event;
5. A compostable materials collection and processing contractor would allow for diversion of food scraps, food soiled paper, compostable food service ware, and compostable beverage cups;
6. The SJCC would manage the collection of recyclable and compostable materials from the EcoStations and from vendors;
7. Green Mary, a company that specializes in diverting materials from large events, would provide a crew to assist with sorting materials at the EcoStations and would sort recyclable and compostable materials consolidated at the dumpsters to remove contaminants; and,
8. Litter abatement crews would be responsible for collecting litter on the ground at the event as well as the garbage from the EcoStations.

Prior to the event, significant effort was expended on the part of the City to procure and arrange for the crews' services and supplies outlined in the strategy. The City met with each of the service and supply vendors to ensure that each understood their role and the purpose of their involvement. A significant amount of time was spent in selecting a compostables supplier and selecting the appropriate types of containers, utensils, and cups to balance cost-effectiveness and the requirements of the event's vendors.

#### Set-Up

The event set-up was a large and labor-intensive undertaking due to the large number of attendees; dispersed nature of the event locations; complexity of the EcoStations; and the fact that this was the first time that the City incorporated compostables into an event. ESD staff coordinated the efforts of several ESD interns, SJCC, and Green Mary to construct EcoStations and locate them at appropriate locations throughout the event.

Additional efforts were expended during the set-up phase of the event to distribute the compostable food ware to the vendors at each of the event locations. City staff and interns had to verify vendor orders and coordinate with the vendors to ensure that the products delivered to them met their needs. During this process, the City encountered some resistance from vendors who felt that the products provided to them were inconsistent with what they needed to serve food to their customers.

## Event Operations

Throughout the operating hours of the event, each of the crews performed their assigned functions, which were vital to the success of the program. Each group's responsibilities and efforts are summarized below.

### City ESD Staff and Interns

City staff and ESD interns were primarily responsible for the coordination of the efforts of the various crews and the distribution of compostables to vendors. The 11-person City crew established a base of operations near the main stage and was able to communicate with each other and with other crews. Throughout the course of the event, City crews assisted each of the other crews to ensure that their duties were completed.

### San José Conservation Corps

The SJCC crew was primarily responsible for the monitoring and collection of recyclable and compostable materials from the EcoStations. SJCC assigned three supervisors to the event, who were responsible for coordinating SJCC crew efforts with the City and other crews. Throughout the event, SJCC staff was dispersed to each of the event locations in small crews to monitor EcoStations, remove materials from EcoStations, and resolve overflow issues.

### Litter Abatement

The litter abatement crews were arranged for by the event organizer and were responsible for patrolling the event grounds to collect litter, monitor EcoStations, collect garbage from EcoStations, and communicate problems to City staff. Similar to the efforts of SJCC, litter abatement crews were dispersed throughout the event, at times working in small groups or individually.

### Green Mary

Green Mary's (a contractor provided by the City) crew was primarily responsible for sorting materials at the EcoStations and dumpsters to remove contaminants. The sorting efforts involved hand picking through the recyclables, compostables, and garbage to identify and recover recyclable and compostable materials that had been segregated incorrectly by event participants. In addition to sorting activities, Green Mary's crew patrolled each of the event locations, talked with event attendees about the recycling program, and assisted the City crews in managing the event's changing circumstances and reacting to deviations from the plan that occurred throughout the event.

### Tear-Down

Following the close of the event on Sunday night, each crew contributed to ensuring that the event locations were returned to their normal condition. All materials in the EcoStations were collected by City, SJCC, litter abatement, and Green Mary crews. All remaining compostables were packed away for future use by ESD Staff. The litter abatement crew patrolled each of the event locations to ensure that they were properly cleaned-up so that they would not create a blight or nuisance the next morning.

## Post-Event

Following the event, City crews and Green Mary prepared debriefing summaries and documented their recommendations for future improvements. City staff also met with event organizer to gather feedback on the event process. This step was critical to the success of future efforts towards similar programs because these documents, if reviewed during the planning stages, can provide valuable insight about how best to prepare for and manage the unexpected incidents that occurred.

## Summary of Recommendations

The program was a tremendous success, particularly considering it was the first San José event where this level of diversion was targeted. Based on the Jazz Festival experience, recommendations were developed for future large events with a substantial number of attendees. The following is a summary of the recommendations made by ESD staff and interns and Green Mary after their involvement in this program.

### Planning

- Start the planning process six to nine months prior to large events.
- Create a written plan before the event to ensure that responsibilities are divided up appropriately to each group and that each group has the tools and information needed to get their jobs done. Present this plan to all of the participating groups in a coordination meeting that is held two to three weeks prior to the event because this type of meeting will not be as effective at the event site.
- Assign leadership roles for each crew and agree on acceptable lines of communication between crews. Ensure that communications tools (e.g. walkie-talkies, cell phones, etc.) are provided, which are appropriate and sufficient in number for the communications network designed.
- Outfit crew members so they are readily recognizable by means of consistent uniforms if the event is too large for each crew member to personally know the others.
- Conduct a mandatory meeting with all of the vendors prior to the event to introduce them to the program, discuss compostables, demonstrate products, and ensure that orders are placed in a manner that is satisfactory to both the vendor and the City.
- Work with event organizers to ensure vendor compliance, and facilitate the use of recyclable or compostable materials. Additionally, vendors could be prohibited from introducing non-recyclable plastics, especially polystyrene and plastic bags, into the event. Vendor give-aways could also be recyclable, as many give-aways become trash or litter.
- If the City continues to partner with the events, the City should be included in press releases and should be allowed significant signage space throughout the event to promote the program.
- Where possible, the use of utility vehicles (modified golf carts) is recommended for distributing supplies and moving crew members efficiently. Determine in advance if such vehicles are allowable and appropriate for the environment and the event.

## Set-Up

- Establish a base of operations where people know they can come for supplies, information, assignments, and refreshments.
- Utilize the base of operations or a separate booth area for public education.
- Gather all crews together at some point early in the set-up process to communicate the common goals to everyone and to inspire people about their efforts during the course of the event.
- Provide a clear definition of responsibilities between the crews to ensure that tasks are performed correctly and consistently. For example, one crew should be responsible for constructing and configuring the EcoStations throughout the event so that attendees are presented with a consistent message.
- Set up EcoStations for the smallest number of sorts necessary to minimize confusion. Three streams (recyclable, compostable, and disposable) are adequate for most events with the disposable stream removed in true Zero Waste events and the compostables stream removed if that program is not available.
- Clearly label EcoStations with labeling and/or pictures that are meaningful to the audience. The term “compostables” seemed to be confusing to users who were frequently unaware that food could be deposited into this container.
- Ensure that constructed EcoStations are not easy to deconstruct and separate. If a material type can not be deposited readily at each EcoStation because if one of the containers is missing, the materials are likely to be deposited into the wrong container. (confusing, may look at rewording)
- Make one group responsible for coordination, oversight, and quality control and (if possible) do not make that group responsible for any of the operational aspects of the set-up.
- Ensure that sufficient crew size is available, taking into account the physical size of the event as well as the available time for set-up activities. If the event is spread out among many remote locations, as this one was, groups from each crew will be required for each location.
- Ensure that vendors are provided with sufficient capacity and containers (i.e.: trash, recycling) near their booth for managing their materials to prevent undesirable discard management practices.
- Use the set-up period as an opportunity to interact with vendors to ensure that they understand the system and that they know how to get support from the crews if they need it. This provides a good opportunity to verify that each vendor’s supplies are compliant with their agreements and the recyclable/compostable requirements of the event.
- Encourage vendors to advertise that they are contributing to the greening of the event by using compostables. Signage to this effect at the vendor booths would help with public education and may add to the attractiveness of the vendor for eco-conscious attendees.

## Event Operations

- It is helpful, if space and personnel are available, to have someone tracking work requests and dispatching crews to handle those requests. This type of coordination is less necessary at smaller and more compact events than it is with events of this size and physical layout.
- Crew leaders should assign specific individuals or teams to specific areas and tasks so that they take ownership of their area. This will also ensure that there are no areas that are neglected for long periods of time by roaming crews.
- Crew leaders should be allowed, to the extent possible, to manage their crews rather than performing the work. The leaders should stay in a consistent location where their crews can find them when they are needed and/or use communication devices.
- If a sorting crew is utilized, it should be clear what the crew is responsible for, so that sorting is done consistently and correctly and overlapping and inconsistent efforts are not applied. Identify which materials are recyclable and compostable and educate the crew so that they can quickly sort materials appropriately. Roaming sorting crews can be helpful and tend to reinforce the public education message, but may be more efficient if they are located at the dumpsters.
- Utilizing EcoStation monitors to inform the public about their sorting decisions would be more effective, as attendees often are confused by the signage or do not want to spend the time reading the signage. If personnel are not available to monitor each EcoStation, roaming monitors could be used or monitoring could be integrated into one of the other roles.
- Seed Clear Stream™ bags with the acceptable materials and examine appropriateness of materials in the containers during the event because attendees can be easily swayed to deposit materials inappropriately if a bad example was set.
- Provide public education to attendees related to the materials acceptable in the “Compostables” container, especially in communities where this sorting exercise is not regularly performed at home.
- During slow periods at the event, conduct waste assessments and surveys of attendees and vendors to assist in gathering data to help with future program improvements.
- Be prepared for the vendors and/or attendees to deconstruct and/or relocate the EcoStations. This can be prevented to some degree through more frequent monitoring, but crew members should be prepared with supplies to reconstruct if needed.
- Establish a communication method to notify event organizers if vendors are observed not participating in the program.

## Tear-Down

- Establish responsibilities (similar to set-up) identifying which crews will handle various tasks at each event location during the tear-down phase. This will help to eliminate gaps and overlapping efforts. Crew leaders should be responsible for confirming that an area has been completed and a central list should be maintained to ensure that all areas are completed.
- Provide for use of pick-up trucks and/or golf carts for collection of EcoStations and other supplies which have been dispersed throughout the event, if possible. Make clear who is

allowed to operate such vehicles and define where and when the vehicles will be used to maximize efficiency.

#### Post Event

- If practicable, convene a roundtable discussion of all crew leaders a few days after the event to discuss and record the successes and shortfalls of the event. Document the discussion at this meeting and prepare a memo to be used in the planning of the next event to ensure that successes are repeated and shortfalls are addressed.
- Document event statistics and results such as those presented at the beginning of this case study.

**ATTACHMENT C**  
**ASSESSMENT OF LARGE VENUE RECYCLING**  
**SAN JOSÉ MINETA INTERNATIONAL AIRPORT**

For the purposes of this study, the City's contractor Environmental Planning Consultants (EPC) categorized the airport into two main areas: public access areas and restricted access areas. The public access areas include secured and un-secured areas. Terminal A and Terminal C have completely different designs. Terminal A has only a few areas outside the secure part of the terminal for the public to spend time, whereas in Terminal C, the majority of shops and food service areas are in non-secured areas.

Public Access Areas

It is important to put a very visible front on the recycling programs in the public access areas, to show the City's commitment to recycling. The Airport has paired beverage container and paper recycling bins with trash bins throughout the public access areas. To increase the success of the recycling program, there should be more uniformity in the design of the trash and recycling containers and clearer signage that explains how the recycling program works.

Additionally, with the restrictions on liquids going through the security check points, there are large numbers of recyclable plastic containers being discarded in trash containers at the security checkpoints. Airport staff has placed separate beverage container recycling bins at these locations to increasing recycling in the terminals.

The wastes generated in the food service areas include a large range of material types. The recycling rate would be enhanced if the airport could work with the vendors (in particular, the largest vendors, Host Services and LSG Sky Chef) to standardize the food service ware and require that they either be recyclable or compostable. The Airport has recently introduced such requirements into their vendor specification documents to specifically address this issue and improve recycling opportunities.

Trash containers are placed throughout the parking and airport entry areas outside the terminals, but there are no recycling containers at these locations. It is typical that recycling containers in outdoor locations fill with more garbage than recyclables, but with enhanced signage and capacity, it is possible to improve the recycling participation in these areas. Another strategy to improve recycling rates that has worked well at other airports is to place a recycling container with every trash container.

Restricted Access Areas

Restricted access areas include the City offices at the airport, airline office spaces, and the areas on the airfield side of the terminal. In talking with staff in most of the office areas, it was found that there is an opportunity for additional staff education around the details of the recycling program. In addition, Baggage handling staff and others on the airfield side of the terminal generate small volumes of beverage containers and paper in their normal activities; however, there are no convenient recycling bins for them to use. Additional recycling bins could be provided in these areas to facilitate recycling on the airfield side.

One of the biggest sources of trash is the waste removed from the airplanes. Some airlines have an active recycling program; others do not. Because flights originate elsewhere and arrive in San José, it is difficult for San José to influence what is in this waste stream. Also, food service changes in the last few years have meant more pre-packaged food service, and more volumes of packaging wastes from airplanes. The airport can significantly affect the diversion of recyclable containers and packaging materials by modifying the airports waste handling agreements to provide for the processing of these materials. Discarded airline magazines are a significant waste stream from the airlines. The Airport could work with the airlines to promote the recycling of unused magazines when they are switched out each month.

### Waste Handling

Because much of the waste generation activities at the airport are beyond the control of the airport management, the configuration of waste management system will need to be modified for the City to achieve a Zero Waste Airport. The City should continue to recycle beverage containers, separated paper, and cardboard through the current system. The remainder of the wastes would then need to be processed to achieve the Zero Waste goal. This would require modifying the airport's waste hauling contracts. Specifically, the waste hauling contractor could implement mixed waste processing to recover recyclables and to compost organic-rich portions of the mixed waste stream.

It should be noted that the recycling activities at the North Terminal were not evaluated in this study because it is currently under construction. EPC staff met with airport staff to discuss the management of wastes and recyclable materials from the North Terminal, and while it is expected to be better than in Terminal A, there may be some opportunities to improve the logistics of the system if changes can be made before the terminal is completed.

When the South Terminal is being designed, the ESD could provide input in the design phase to ensure that adequate and appropriate space is allocated for trash and recycling bins and that servicing of the bins and movement of discarded materials throughout the terminal can be efficiently accomplished by the custodial staff.

### Summary

The key recommendations for the Airport are as follows:

- Improve recycling container set outs to enhance visibility and signage and describe acceptable recyclable materials;
- In the future, staff will evaluate establishing vendor requirements to use compostable beverage and food service ware;
- Modify the waste hauling contract to require sorting of mixed waste to recover recyclables and to compost organic-rich portions of the mixed waste stream; and,
- Provide input into the North Terminal construction and operations to increase recycling capabilities and efficiencies.