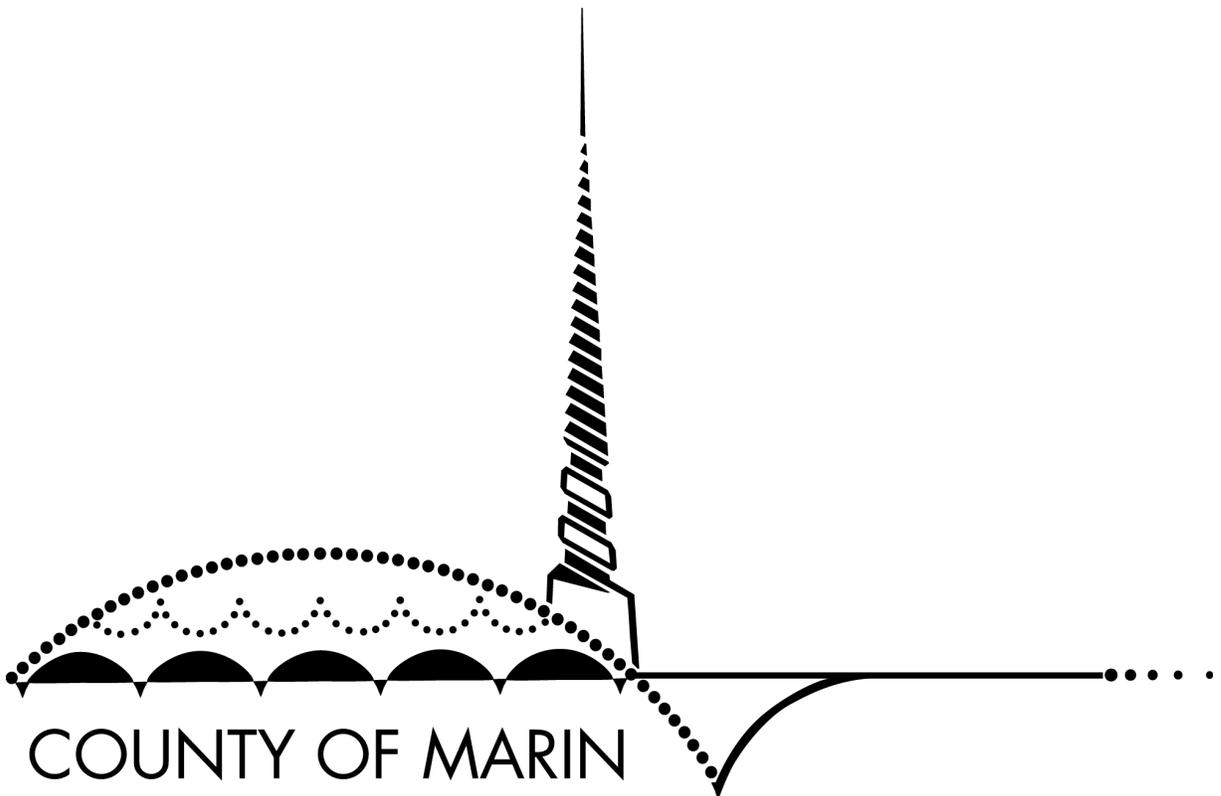


2013/2014 MARIN COUNTY CIVIL GRAND JURY

# RECYCLING BY THE MARIN COUNTY GOVERNMENT: WALKING THE TALK

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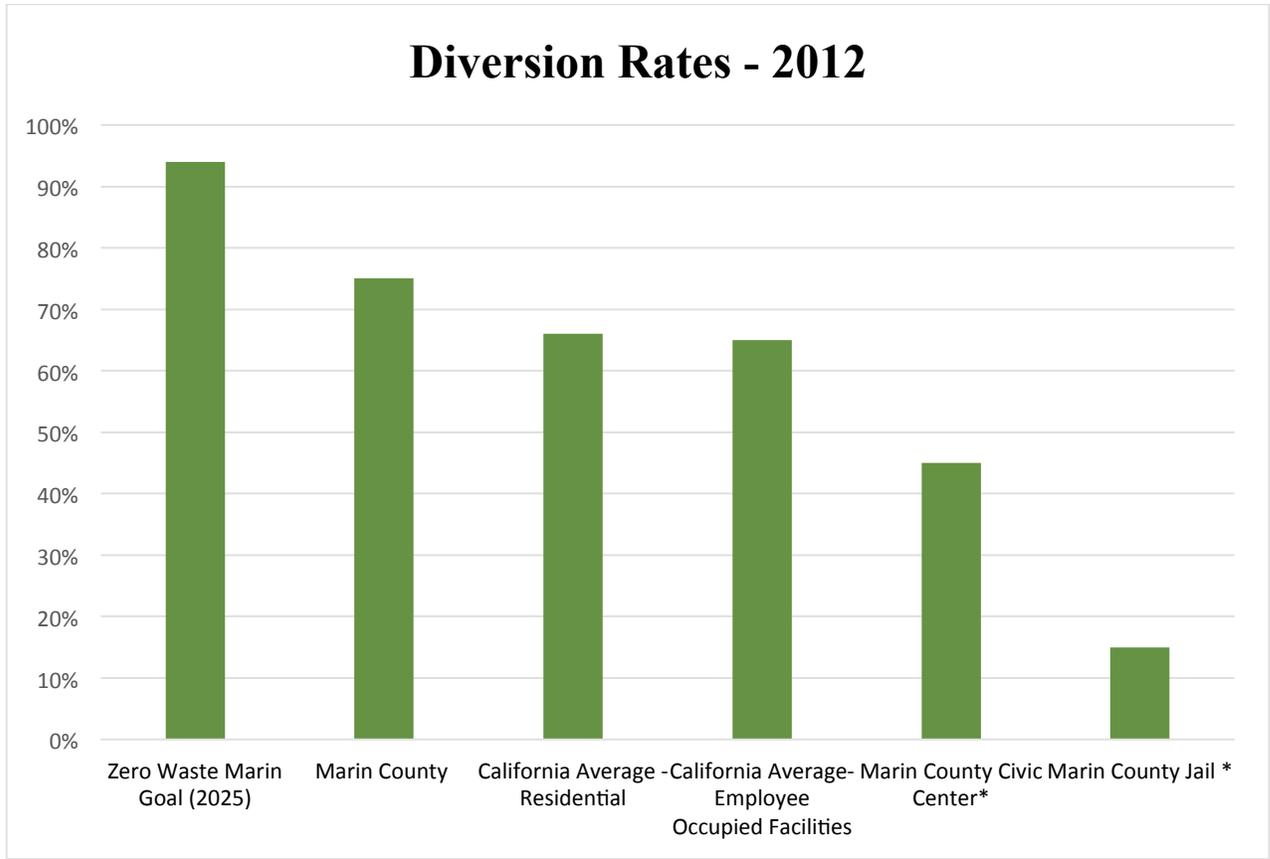
## RECYCLING BY THE MARIN COUNTY GOVERNMENT: WALKING THE TALK

### SUMMARY

A statement made to the Marin County Grand Jury perfectly sums up the County government's attention to recycling. When asked if a garbage bin containing a mixture of paper, plastic, food, and unrecyclable garbage would be recycled, a County leader replied, "Of course it will be recycled. This is Marin!" In fact, none of it would be recycled. While sustainability and recycling may be a part of the culture of the Marin County government, the practices of recycling, composting, and reuse by County employees and by visitors to the Civic Center are neither actively promoted nor made easy to accomplish. There is some talk, but there's not nearly enough walk.

The Grand Jury decided to assess how well both the population of Marin County as a whole recycles and how well the County of Marin government recycles by studying their diversion rates. The diversion rate is the percentage of waste diverted from traditional disposal (landfilling or incineration) and recycled or composted. The higher the diversion rate, the more waste is being recycled or composted and not sent to a landfill. For the County of Marin government, we focused on two of its largest facilities: the Civic Center and the County Jail.

In 2012, the average diversion rates for employee-occupied and residential locations in the state of California were, 65 percent and 66 percent, respectively. The entire population of the County of Marin had a diversion rate of 75 percent, well above the state average. However, the Grand Jury estimates that the diversion rates of the Marin County Civic Center and Marin County Jail were only 45 percent and 15 percent, respectively. The graph below illustrates the performance of Marin County as a whole, the Civic Center, and the Marin County Jail as compared to the California state averages and the Zero Waste Marin goal of 94 percent diversion by 2025. (*See Background and Discussion Sections for details.*)



Sources: Zero Waste Marin, CalRecycle. \*Estimated by the Grand Jury (See Tables 1 and 2 for details.)

During this investigation, the Grand Jury found that there are many opportunities for the County government to divert more material from the landfill and to increase reuse and composting. These include continuing to recycle steel cans used by the County Jail kitchen (implemented during this investigation), providing glass, plastic, and aluminum recycling bins in the offices of the Civic Center, composting food waste from the County Jail, and promoting reuse of coffee and tea containers in the Civic Center. (See the Recommendations section of this report.)

Given the commitment of the Marin County government to the Zero Waste Marin goal, it should be a leader with respect to recycling, composting, and reuse. The environmental footprint of the County government’s business practices is paramount as with over 2,000 employees it is the largest employer in the County and can set an example for other employers. The Marin County government should “Walk the Talk” when it comes to recycling, composting, and reuse.

The County deserves credit for rapidly making a number of improvements to its recycling practices and, hence, increasing its diversion rate in response to the Grand Jury investigation. For example, the Marin County Jail began a program to recycle the steel cans used in its kitchen, reducing its weekly volume of garbage going to the landfill by approximately 25 percent.

The Grand Jury recommends that the County of Marin government examine its recycling, composting, and reuse practices and policies and act to increase its diversion rate. Specific recommendations on how to divert more material are provided in the Recommendations section of this report. In addition, the Grand Jury recommends that the County develop a multi-year plan for recycling, composting, and reuse that includes measurable performance metrics and goals. Conducting annual audits can help measure actual performance to goal.

## **BACKGROUND**

Marin prides itself on its prioritization of sustainability and a healthy environment. Overall, the population of Marin County recycles more actively than other California counties. In 2012, the diversion rate in Marin County was 75 percent as compared to 65-66 percent for the State of California (CalRecycle). Again, the diversion rate is the percentage of waste materials diverted from traditional disposal (landfilling or incineration) and recycled or composted. Nonetheless, the County as a whole is not meeting the Zero Waste Marin targets established by the Marin Hazardous and Solid Waste Joint Powers Authority (Marin JPA). To reach the Zero Waste Marin goal of a 94 percent diversion rate by 2025, the Marin JPA's interim goal for 2012 was 80 percent but the actual rate was only 75 percent. The citizens, businesses, and governments of Marin County will need to recycle and compost substantially more than we are currently to meet the Zero Waste Marin goal of 94 percent by 2025.

Despite the County's intentions around recycling, upon starting our term in July 2013, members of the Grand Jury quickly realized that recycling one's own garbage is not an easy thing to do at the Civic Center.

Based on the overall County's failure to meet its own targets for waste reduction and our own experience with recycling at the Civic Center, the Grand Jury decided to investigate the County government's recycling practices. The purpose of our investigation was to determine the effectiveness of recycling and composting by the Marin County government in its offices and facilities and to make specific recommendations for improvement. For logistical reasons we focused our investigation on the Marin County Civic Center and the Marin County Jail; however, our approach can be used as a model for other County employee-occupied facilities.

## **APPROACH**

The Grand Jury began its investigation in September 2013 by meeting with the County Administration to learn about recycling and composting initiatives and performance within its offices and facilities. In the Grand Jury's initial interviews, the Department of Public Works provided us with a report called the Marin County Buildings Diversion Report-2012, which contained diversion rates for the Civic Center, two other smaller County-owned facilities, and two large venue events. The Grand Jury then requested information to determine the locations of all County owned and leased facilities and to

determine the number of employees and the garbage collection services at the largest facilities.

The Grand Jury decided to focus on the recycling and composting activities in two of the three largest county facilities: the Marin County Civic Center and the Marin County Jail. As a follow-up to these interviews, we toured the Civic Center three times and the County Jail once to observe the waste streams and recycling practices within each facility. The Grand Jury, through direct observation, was able to confirm the procedures for garbage and recyclable materials, the availability of recycling opportunities for employees, and the approach taken by custodial staff regarding recycling.

The Grand Jury interviewed Marin Sanitary Service, the garbage hauler for both the Civic Center and the County Jail. Marin Sanitary Service performed a waste characterization study of the Civic Center and the County Jail, and sent a report of its study to the Grand Jury in November 2013. The November 2013 Marin Sanitary Service waste characterization study (2013 Marin Sanitary Service study) also contains recycling information on other locations. (See Appendix 1.) We visited Marin Sanitary Service's Marin Resource Recovery Center to observe first-hand how the waste coming from the Civic Center is handled in this facility.

The Grand Jury sought to determine how and when employees of the County are educated about recycling and how best to recycle on the job. We reviewed the County employee intranet, interviewed the Human Resources Department, reviewed historic employee communications, and asked employees about recycling communications. We also toured four departments in the Civic Center to observe employee recycling practices.

The Grand Jury met with individuals from the County Board of Supervisors, County Administration, the Department of Public Works, Marin County Parks, the County Sheriff's Office, the Community Development Agency, and a member of the "Green Team." The "Green Team" is a group of County employees who participated in the Fall 2013 Leadership Academy, a joint management development initiative of the County of Marin and Dominican University.

Most County employees with whom the Grand Jury spoke during the course of this investigation were cordial, extraordinarily helpful, and truly interested in reducing the environmental footprint of the Marin County government.

## **DISCUSSION**

Marin County leadership and administration largely believe that recycling is a part of the County government culture and that the County has been doing a good job recycling in its offices and facilities, although not everyone agrees. The Grand Jury spoke with administrative leaders who do not think the County government is strongly oriented towards recycling in its own business practices. Some elected and administrative officials have no knowledge as to what is recycled or how waste is separated for recycling in the facilities for which they are ultimately responsible.

The notion that the County government has been doing a good job recycling was supported by erroneous data that the Department of Public Works received from Marin Sanitary Service in the Marin County Buildings Diversion Report-2012. This report indicated that in 2012 the diversion rate was 84 percent for the Civic Center; the report also contained diversion rates for two other facilities and two public events. The County Jail was not included in this report, and neither the Department of Public Works nor Marin Sanitary Service had any diversion rate data for the County Jail.

The facility level diversion rate percentage for each location in the Marin County Buildings Diversion Report-2012 was based upon the assumption that the diversion rate for each location's waste was the same as that of all waste processed at the Marin Resource Recovery Center (78.56 percent). This was a questionable assumption as it applied a diversion rate for an entire large waste processing facility with many types and sources of waste to a small number of locations for which it processes only a specific type of waste. This is analogous to assuming that your neighbor recycles 75 percent of his or her plastic because the County as a whole recycles 75 percent of its waste of all types and from all sources. The result of this assumption was to overstate significantly the actual diversion rate for the County buildings in the Marin County Buildings Diversion Report-2012.

In addition to not realizing the Marin County Buildings Diversion Report-2012 significantly overstated the diversion rate in the facilities evaluated, the County may not have focused much attention on recycling because they were under the misconception that recyclables placed in the regular garbage were being extracted at the Marin Resource Recovery Center and recycled. This is discussed in greater detail under the section below titled, **The Marin County Civic Center and Grounds**.

Lastly, the County government's promotion of recycling, composting, and reuse to its employees is limited. In searching the employee intranet in September 2013, we could not find any information on how, what, or why to recycle at work. A link to "County Offices Recycling" was not active. When the Grand Jury re-checked in January 2014, some information had been added to the site on where to recycle bottles and cans, paper, cardboard, and batteries. We reviewed the County employee newsletter, *FYI*, for 2013 and found no articles on recycling, composting, and reuse. The Grand Jury reviewed *Frankly Speaking*, a newsletter published 3 times a year for and by employees that covers a range of topics, for the years 2011-2013 and did not find a single article on recycling, composting, or reuse. Lastly, the County reported that it communicates with employees via notifications sent with their paychecks; but no employee we spoke with was able to recall ever getting one of these notifications that addressed recycling, composting, or reuse.

The following sections examine the diversion rate and recycling, composting, and reuse practices at the Marin County Civic Center and Marin County Jail in more detail.

**The Marin County Civic Center and Grounds**

The Marin County Civic Center has approximately 970 employees. In 2012, 243 tons of garbage were removed from the Civic Center by Marin Sanitary Service. This equates to 486,000 lbs. per year and 1,944 lbs. per business day (250 days/year). When the Grand Jury began its investigation, the Civic Center had a 25-yard debris box, in which all garbage, with the exception of paper and some glass, aluminum, and plastic, was deposited.

Based on the 2013 Marin Sanitary Service study, the Grand Jury recalculated the diversion rate for the Civic Center for 2012 and estimated it to be only 45 percent. Many recyclable materials were ending up in the landfill instead of being recycled or composted. (See Table 1.)

<b>Table 1: 2012 Estimated Diversion Rate</b>				
<b>Marin County Civic Center</b>				
<b>Civic Center Regular Service</b>	<b>Tons<sup>1</sup></b>	<b>Percent Diverted</b>	<b>Tons Diverted</b>	<b>Tons Landfill</b>
Civic Center loading dock 25-yard debris box	178.77	25% <sup>2</sup>	44.69	134.08
Glass, Plastic & Aluminum <sup>3</sup>	3.24	100%	3.24	
Super Mix (Paper) <sup>3</sup>	61.03	100%	61.03	
	243.04		108.96	134.08
<b>Total Diverted - Civic Center</b>			<b>45%</b>	
<sup>1</sup> Tonnage provided by Marin Sanitary Service in the Marin County Buildings Diversion Report-2012 <sup>2</sup> Twenty-five percent is the highest possible percent diverted given that an estimated 75% of the contents were in plastic bags that go directly to the landfill without being opened (2013 MSS waste characterization study). The Grand Jury used this figure to give the Civic Center maximum credit for their recycling activity. <sup>3</sup> Items separated and deposited into recycling bins as discussed below.				

Prior to the fall 2013, the County Department of Public Works was under the assumption that all plastic bags deposited in large open debris boxes (*see* photos on page 8) were opened, dumped, and sorted through to remove recyclables at the Marin Resource Recovery Center. In fact, the Marin Resource Recovery Center does not open any plastic bags of garbage. They only sort through open garbage that can be easily seen by workers on a conveyor belt. All materials in closed plastic bags go directly to the landfill.

Based on this misunderstanding, the Department of Public Works thought that paper and glass/plastic/aluminum put in to the regular garbage was still being recycled; hence, they may not have been greatly concerned about employees and visitors not using recycling bins. Unfortunately, this meant that all waste generated at the Civic Center, with the exception of most paper, most cardboard, and the limited contents of the hallway recycling bins, was going directly to the landfill. Prior to this investigation, even the bags loaded with recyclable bottles and cans from the cafeteria recycling bins were going to the landfill because the cafeteria vendor was placing the contents of these bins into the debris box in closed plastic bags.

During the course of the Grand Jury's investigation, the Department of Public Works became aware of the fact that bags are not opened at the Marin Resource Recovery Center. As a solution, the janitorial staff at the Civic Center started dumping all non-bathroom bags in to the 25-yard debris box so they became loose garbage in the box and could be sorted easily. This practice was quickly discontinued because the positioning of the debris box relative to the loading dock would allow only a small portion of the box to be filled in this manner. Subsequent to this, the Grand Jury was told that the janitorial staff was going to simply leave the non-bathroom bags open in the debris box and that Marin Resource Recovery Center would dump the open bags out and sort through them. A trip by the Grand Jury to the Marin Resource Recovery Center in January revealed that the Marin Resource Recovery Center does not actively dump the contents out of open bags. The bags move down a conveyor belt system and at one point drop 5-6 feet and fall on to one of two conveyor belts. Some of the contents of open bags spill out in this process and can be sorted through by workers further down the conveyor belt. Leaving bags open increases the recycling rate over using closed bags; however, recyclables that do not fall out of the bags are missed and go to the landfill. In addition, the workers on the conveyor belt fail to remove some of the recyclables going down the belt, and those also go to the landfill.

The 2013 Marin Sanitary Service study found that over 55 percent of the audited material in the 25-yard debris box at the Civic Center was recyclable material. In other words, while 55 percent of the waste could be recycled from the debris box, at most only 25 percent was being recycled.



**Civic Center:** 25-yard debris box filled with closed plastic bags headed for the landfill



**Marin Resource Recovery Center:** Closed plastic bags from the Civic Center move down the conveyor belt and ultimately to the landfill. Marin Resource Recover Center employees do not open these bags. They do attempt to remove recyclables that are visible on the conveyor belt.

The Grand Jury followed and analyzed each recyclable and compostable waste stream in the Civic Center to identify opportunities for improvement. To maximize the diversion rate, Marin Sanitary Service recommends that all recyclable materials be separated at the source and placed into the appropriate container. The following is a discussion of each waste stream:

**Paper:**

- The Civic Center recycles paper through a well-established collection system in each department. In the offices toured by the Grand Jury, almost every desk had a small paper recycling bin that could then be dumped in to a larger departmental cart, which is emptied by Marin Sanitary Service two times per week.
- Paper recycling is not available for visitors in public areas.
- Individual departments at the Civic Center contract separately for confidential document disposal.
- The County government is working towards going paperless. For example, a member of the Board of Supervisors told the Grand Jury that the Board has gone paperless and the Board packets are no longer printed.
- The 2013 Marin Sanitary Service study found that 9 percent of the waste in the 25-yard debris box destined for the landfill was paper, suggesting there is still room for improvement in paper recycling.

**Cardboard:**

- According to the Department of Public Works, the Civic Center loading dock has no room for a cardboard recycling container. Therefore, cardboard is put into the 25-yard debris box and is pulled out at the Marin Resource Recovery Center and recycled unless it is contaminated by other contents in the debris box.

**Glass, Aluminum & Plastic:**

- The Civic Center does not have a building-wide system for collecting glass, aluminum, and plastic in the offices. Employees are asked to take these items to one of the recycling bins provided for visitors in the public hallways. These bins are often a substantial distance from their offices.
- Some offices have introduced their own bins for collecting recyclables, and employees of that department maintain these bins on an *ad hoc* basis. A number of employees indicated that individuals in their department take the recyclables home to be recycled. These employees have stepped up and taken charge to make sure the recyclable materials from their offices do not end up in a landfill!
- The ten hallway recycling bins available to visitors are used infrequently and generally do not fill up in an entire week of use. The janitorial staff empties these bins once per week and takes them to the custodial loading dock, where they are picked up by Marin Sanitary Service. Observation by the Grand Jury indicates that a week's worth of recycling put into these bins does not fill three 64-gallon recycling carts.



**Civic Center:** A week's worth of bottles and cans

- The beige hallway recycling bins are difficult to see from any distance. They were designed to blend in with the building interior and are painted in the same beige color as the walls. These bins have two round holes in which to insert bottles and cans but do not allow for the insertion of larger recyclable items that are not round. There is no signage on or around the hallway bins other than small labels: “Aluminum Cans” and “Glass & Plastic Bottles Only”. Items deposited in each hole are kept separate in this bin; however, they are combined when put in to the recycling carts at the custodial loading dock.



**Civic Center:** Hallway recycling bins are difficult to spot and lack signage



**Civic Center:** Hallway recycling bin

- The County of Marin Civic Center is a California and National Historic Landmark. Modifications as to the number, size, color, and signage of recycling bins may need to be reviewed by the Frank Lloyd Wright Civic Center Conservancy.
- The cafeteria services vendor empties the plastic bags from the cafeteria recycling bins into the 25-yard debris box located at the main loading dock.
- The 2013 Marin Sanitary Service study found 11percent of the waste generated by the Civic Center was comprised of glass, plastic, and aluminum. This is an indication that there is room to improve recycling of these items.

**Food Waste:**

- The Civic Center cafeteria does not compost food waste. All pre-consumer (kitchen) and post-consumer (what's left on the plate) food waste goes to a landfill.
- In the 2013 Marin Sanitary Service study, food waste comprised 5 percent of the Civic Center's waste.
- The cafeteria at the Civic Center was invited to participate in Marin Sanitary Service's Food-to-Energy Program. The cafeteria has not yet begun to participate in this program. Under the Food-to-Energy Program, food waste is converted in to energy via anaerobic digestion.

### **Landscaping Waste:**

- County Park employees rake up loose landscaping waste on the Civic Center Grounds and place it in the back of a small dump truck to be taken to Marin Sanitary Service for composting.
- Some landscaping waste generated from smaller pruning jobs is put into plastic bags and placed in the 18-yard debris box located off Peter Behr Drive. The Department of Public Works and the County Parks Department assumed that these bags were being opened by Marin Sanitary Service. They were not being opened and this landscaping waste was going directly to the landfill.
- The 2013 Marin Sanitary Service study noted, “A large portion of the material [in the 18-yard box for yard waste debris] is in bags” and is not being composted. Based on a visual check of this debris box in January 2014, the Grand Jury found that a large portion of the material in the box was still in bags.



**Civic Center Grounds:** 18-yard debris box with landscaping waste in plastic bags headed for the landfill

### **Reuse:**

- The 2013 Marin Sanitary Service study stated, “Garbage can be reduced at the source of production with smarter purchasing policies that include recyclable and reusable products.”
- The report also noted that coffee cups and clamshells were a prevalent source of garbage sent to the landfill from the Civic Center. These two items, provided by the cafeteria vendor, are fully compostable. The problem is that there is nowhere for employees or visitors to the Civic Center to put these compostable items except in the regular garbage destined for the landfill. Even if the cafeteria vendor collected the used compostable cups and clamshells, they would not be picked up for composting because Marin Sanitary Service does not offer postconsumer food composting services to commercial organizations.

- The cafeteria at the Civic Center offers a sizable discount on coffee and tea if the buyer brings his or her own cup. A cup of coffee costs \$2.18 but is only \$1.09 if you bring your own cup. Likewise, the price of tea drops from \$1.64 to \$1.09 with your own cup. These discounts exist to encourage reuse and reduce waste. Unfortunately, they are not advertised anywhere in the cafeteria, and it took more than six months for the Grand Jury to realize that they were even offered!
  
- The Civic Center cafeteria should be commended for many of their green practices, including using washable plates and utensils for those dining in the cafeteria.

The Grand Jury did not study or visit the County garage located near the Civic Center.

### Marin County Jail

The Marin County Jail houses, on average, 280 inmates. In 2012, 137 tons of garbage were removed from the Jail by Marin Sanitary Service. This equates to 274,000 lbs. per year or 751 lbs. per day. The jail has a 20-yard compactor, in which all garbage, with the exception of paper and cardboard, was deposited when the Grand Jury started its investigation.

Using data acquired from Marin Sanitary Service and CalRecycle, the Grand Jury estimates the diversion rate for the Marin County Jail for 2012 was 15 percent. This 15 percent estimated rate is heavily dependent upon the assumption used for the weight of cardboard per cubic yard. The Grand Jury used the highest weight (100 lbs.) we found from a credible source in order to give the County Jail maximum credit. (See Table 2.)

<b>Table 2: 2012 Estimated Diversion Rate Marin County Jail</b>				
<b>Marin County Jail</b>	<b>Tons</b>	<b>Percent Diverted</b>	<b>Tons Diverted</b>	<b>Tons Landfill</b>
20-yard rollout compactor <sup>1</sup>	137.07	0%	0	137.07
Paper <sup>2</sup>	1.2	100%	1.2	0
Cardboard <sup>3</sup>	23.4	100%	23.4	0
	161.67		24.6	137.07
<b>Total Diverted - County Jail</b>			<b>15%</b>	
<sup>1</sup> Tonnage provided by Marin Sanitary Service <sup>2</sup> 33 gallons of shredded paper = 8 lbs. (CalRecycle) Three 64 gal.cans full and collected wkly = 192 gal./wk. = 46.5 lbs./week = 2,420 lbs./yr. = 1.2 tons/yr. <sup>3</sup> One cubic yard of cardboard flattened uncompacted = 100 lbs. (CalRecycle, U.S. EPA) One 3 yard cart collected 3 times/wk. = 9 cubic yds./wk. = 900 lbs./wk. = 46,800 lbs./yr. = 23.4 tons/yr.				

As with the Civic Center, too many recyclable materials from the County Jail are ending up in the landfill instead of being recycled or composted. Based on the 2013 Marin Sanitary Service study, as much as 60 percent of what the County Jail was sending to the landfill prior to this investigation could have been recycled. In fact, however, it may not be possible for the County Jail to recycle all of these materials because the jail has significant safety and security issues that must be taken in to account.

The Grand Jury followed and analyzed each recyclable or compostable waste stream in the County Jail to identify opportunities for improvement. The following is a discussion of each waste stream:

**Paper and Cardboard:** The County Jail actively recycles paper and cardboard. Receptacles are provided and a collection system established. The 2013 Marin Sanitary Service study found that by volume 3 percent of the waste in the compactor destined for the landfill was paper, including newspapers and shredded paper, and 5 percent was cardboard.

**Steel Cans:** The 2013 Marin Sanitary Service study showed that by volume 25 percent of the waste generated by the County Jail was comprised of the steel cans used by the kitchen. During the course of this Grand Jury investigation, the County Jail began recycling steel cans, thereby recycling 25 percent of the waste that had previously gone to the landfill. The Grand Jury witnessed the process and the new recycling bins filled with steel cans during our visit to the County Jail.

**Milk Cartons:** Single serving milk cartons were a prevalent source of the garbage from the County Jail in the Marin Sanitary Service report. The report states, “A facility wide push to use dispensed milk could have tremendous diversion effects.” The County Jail indicated that there are difficulties with the implementation of a milk dispensing system related to sanitation and drink ware but they are actively investigating a workable system.

**Food Waste:**

- The Marin County Jail does not compost food waste, and both kitchen and post-consumer food waste go to the landfill.
- The 2013 Marin Sanitary Service study found that 27 percent of the garbage generated by the County Jail was food waste.
- Marin Sanitary Service has not historically offered composting of postconsumer food waste to commercial customers. Nonetheless, they believe it may be possible to pick up post-consumer food waste from the Jail for the Food-to-Energy Program because potential contaminants are very limited.

**Recycling and Reuse: Planning, Policies, and Performance**

Unless commitment is made, there are only promises and hopes; but no plans.

- Peter Drucker, business professor and author

The Grand Jury was unable to locate recycling or reuse policies or plans written by the County for its own green business practices. We received the Marin County Buildings Diversion Report-2012 from the Department of Public Works; no additional performance data was supplied to the Grand Jury by the Department of Public Works or County leadership.

County administration has recently focused limited attention on the environmental impact of the County's business practices. A group of employees participating in the Leadership Academy-Fall 2013, sponsored jointly by the County and Dominican University, were asked as part of a final project to focus specifically on the following problem statement: How could the County of Marin improve the environmental impacts of its business practices? The "Green Team" presented its project at the Leadership Academy graduation in December 2013, where they identified the following problems:

- The County has highly developed external policies but lacks internal policies.
- Green practices are inconsistent throughout the County.
- Knowledge of green practices is lacking.
- A "Green" strategic plan is not yet in place.

The "Green Team" is confident that a green culture is embedded in the County but believes behavioral change is required. The team presented an idea to create a game to encourage waste reduction by employees via teamwork and competition and estimated that, if only 10 percent of the County plays, the County could send 16,800 fewer single-use cups to the landfill in a 12-week period.

## **FINDINGS**

### **Marin County Government:**

- F1. The Marin County Government Board of Supervisors and Administration do not appear to have written plans or policies on recycling, composting and reuse in County owned and occupied facilities. This results in less than optimal behavior and performance with respect to these activities.
- F2. A recycling, composting, and reuse plan with meaningful and measurable goals and the creation and dissemination of internal policies regarding recycling, composting, and reuse could improve the County government's diversion rate.
- F3. County employees do not perceive clear direction or an imperative from leadership on the importance of recycling, composting, and reuse.
- F4. Recycling practices are inconsistent across County departments and facilities.
- F5. Educating employees and visitors on how, why, and where to recycle, compost, and reuse, while making it easier for everyone to accomplish these activities, would improve the County government's diversion rate.

**Marin County Civic Center and Grounds:**

- F6. The Grand Jury estimates that the actual diversion rate for the Civic Center building in 2012 was approximately 45 percent.
- F7. The Marin County government could do a better job recycling the waste generated in the Marin County Civic Center and on its immediate grounds.
- F8. The system for recycling paper in the Civic Center and County Jail is well established and, while there is room for improvement, it is a good example of successful recycling implementation.
- F9. The County may have an opportunity to reduce waste by moving to business processes that use no paper or less paper than current processes.
- F10. Prior to this investigation, the County Department of Public Works placed recyclable materials in closed plastic bags into the 25-yard debris box. These bags then went to the landfill and were not recycled. This includes materials placed in cafeteria bins labeled for recyclables. Recyclables were being sent to the landfill due to a misunderstanding of the policies of Marin Sanitary Service. The Department of Public Works made two attempts to remedy this during the Grand Jury's investigation; but, due to further misunderstanding, there is still considerable room for improvement.
- F11. It is not easy for employees of the Civic Center to recycle glass, aluminum, and plastic. Offices and departments generally do not have receptacles for these recyclables; and, if they do, it is an employee-driven initiative and not a service provided by the janitorial staff.
- F12. It is not easy for visitors to the Civic Center to recycle as available recycling receptacles are sparsely placed, difficult to see from even a short distance, and not labeled clearly and effectively.
- F13. The Civic Center could reduce food waste going to the landfill by providing pre-consumer food waste to the Marin Sanitary Service Food-to-Energy Program.
- F14. Marin County Parks could do a better job ensuring that landscaping waste put in the 18-yard debris box gets composted and not taken to the landfill. They could dump the landscaping waste out of the bags and reuse the bags.
- F15. The Civic Center cafeteria would be more effective in promoting reuse if they advertised in the cafeteria and elsewhere that there is a deep discount on coffee and tea with a reusable cup.

**Marin County Jail:**

- F16. The Grand Jury estimates the diversion rate for the County Jail was approximately 15 percent in 2012.
- F17. The Marin County Jail could do a better job recycling waste generated in the County Jail facility.

- F18. Improvements were made during the course of this investigation; for example, the Marin County Jail started recycling steel cans late in 2013.
- F19. The system for recycling paper at the County Jail is well established and while there is room for improvement, it is a good example of successful recycling implementation.
- F20. The Marin County Jail could eliminate a prevalent source of garbage by moving from a single serving milk carton system to a milk dispensing system.
- F21. It may be feasible to compost food waste generated by inmates at the Marin County Jail.

## **RECOMMENDATIONS**

The Marin County Civil Grand Jury recommends that:

- R1. The Marin County Board of Supervisors develop, adopt, and publish a written plan for recycling, composting, and reuse in all County government offices and facilities, including the Marin County Jail, and on County property. The plan should include measurable performance metrics and goals for these metrics and be updated every two years.
- R2. The Board of Supervisors create and publish an annual assessment of performance against goals as identified in R1 (above) to compare actual recycling, composting, and reuse performance with goal performance for each performance metric.
- R3. The Board of Supervisors request an annual waste characterization study and annual diversion rate statistics based on the current waste characterization study for each facility owned or occupied by the County Government with over 50 employees on site.
- R4. The Marin County Government increase recycling and reuse at the Civic Center by adopting the following:
  - a. Install glass/plastic/aluminum recycling bins in offices to be emptied by the janitorial staff into Marin Sanitary Service recycling carts.
  - b. Dispose of cafeteria recyclables in the Marin Sanitary Service recycling carts at the custodial loading dock; do not put them in bags in the 25-yard debris box.
  - c. Add recycling carts at custodial loading dock or have them picked up more often as needed to handle additional volume.
  - d. Work with the Frank Lloyd Wright Civic Center Conservancy to install additional recycling bins and improved signage in public areas. Discontinue separation of glass, plastic and aluminum, and provide paper recycling in the hallways for visitors.
  - e. Better educate employees and visitors as to how, what, and where to recycle.
  - f. Encourage county employees to recycle more effectively through improved communication.

- g. Encourage county employees to use reusable coffee and tea cups; advertise discount offered by the cafeteria.
  - h. Participate in Marin Sanitary Service's Food-to-Energy program.
  - i. Ensure that all cardboard and paper is recycled.
  - j. Dump landscape waste out of the plastic bags when it is put in to the 18-yard debris box. Reuse plastic bags.
- R5. The Marin County Jail continue to recycle steel cans and improve paper and cardboard recycling.
- R6. The Marin County Jail work to implement a milk dispensing system to reduce or eliminate the use of single serving milk cartons.
- R7. The Marin County Jail work with Marin Sanitary Service to develop a system to compost post-consumer food waste from the Jail.

## **REQUEST FOR RESPONSES**

Pursuant to Penal code section 933.05, the grand jury requests responses as follows:

From the following governing body:

- The Marin County Board of Supervisors, to Findings F1-F15 and to Recommendations R1, R2, R3, and R4.

The governing bodies indicated above should be aware that the comment or response of the governing body must be conducted in accordance with Penal Code section 933 (c) and subject to the notice, agenda and open meeting requirements of the Brown Act.

From the following individual:

- Marin County Sheriff, to Findings F16-F21 and to Recommendations R5, R6, and R7.

## **BIBLIOGRAPHY**

- California Department of Resources Recycling and Recovery (CalRecycle), California's Estimated Statewide Diversion Rates Since 1989, <http://www.calrecycle.ca.gov/lgcentral/goalmeasure/disposalrate/Graphs/EstDiversion.htm>
- California Department of Resources Recycling and Recovery (CalRecycle), Diversion Study Guide, Appendix I, Conversion Factors: Glass, Plastic, Paper, and Cardboard, <http://www.calrecycle.ca.gov/LGCentral/Library/DSG/IRcycl.htm>
- County of Marin Mission Statement, Goals, and Values, <http://www.marincounty.org/depts/bs/boards-and-commissions/member-handbook/marin-county-mission-statement-and-defining-values?p=1>

- County of Marin, Civic Center Employee Recycling, <http://www.marincounty.org/depts/pw/divisions/waste-management/civic-center-employee-recycling>
- *FYI*, Marin County employee newsletter distributed to County employees via e-mail (bi-weekly)
- *Frankly Speaking*, Marin County employee newsletter published by and for employees on the employee intranet (tri-annually)
- *Green Team*, Presented at the Marin County Leadership Academy at Dominican University, December 2013 (PowerPoint Presentation)
- *Marin County Buildings Diversion Report – 2012*
- Marin Sanitary Service, <http://www.marinsanitary.com>
- *Report for the Grand Jury: Working Towards Zero Waste*, Marin Sanitary Service, November 2013
- Zero Waste Marin, Marin Hazardous and Solid Waste Joint Powers Authority (JPA), <http://zerowastemarin.org/>

Reports issued by the Civil Grand Jury do not identify individuals interviewed. Penal Code Section 929 requires that reports of the Grand Jury not contain the name of any person or facts leading to the identity of any person who provides information to the Civil Grand Jury. The California State Legislature has stated that it intends the provisions of Penal Code Section 929 prohibiting disclosure of witness identities to encourage full candor in testimony in Grand Jury investigations by protecting the privacy and confidentiality of those who participate in any Civil Grand Jury investigation.

## GLOSSARY

**Composting:** The biological decomposition of organic materials such as leaves, grass clippings, brush and food waste into a soil amendment. Composting is a form of recycling.

**Debris Box:** A large, open, metal container for garbage available from a waste hauler in a range of sizes (3, 5, 10, 18, 25 cubic yards) into which nonhazardous waste can be placed for collection. At the Civic Center, the 25-yard debris box is picked up by Marin Sanitary Service and taken to the Marin Resource Recovery Center to be dumped and sorted.

**Diversion Rate:** The percentage of waste materials that is diverted from traditional disposal (landfilling or incineration) and recycled, composted or reused.

**Marin Sanitary Service (MSS):** The waste management company that provides garbage and recycling collection services to the Civic Center and County Jail.

**Marin Resource and Recovery Center (MRRC):** A facility owned and operated by Marin Sanitary Service where the public can bring all types of non-hazardous commercial

and residential solid waste. All materials disposed of in this facility are sorted using state-of-the-art equipment to retrieve all recyclable materials. The facility is located on the Marin Sanitary Service premises at Jacoby Street in San Rafael.

**Reuse:** Using an object or material again, either for its original purpose or for a similar purpose, without significantly altering the physical form of the object or material. Reuse is a form of waste prevention.

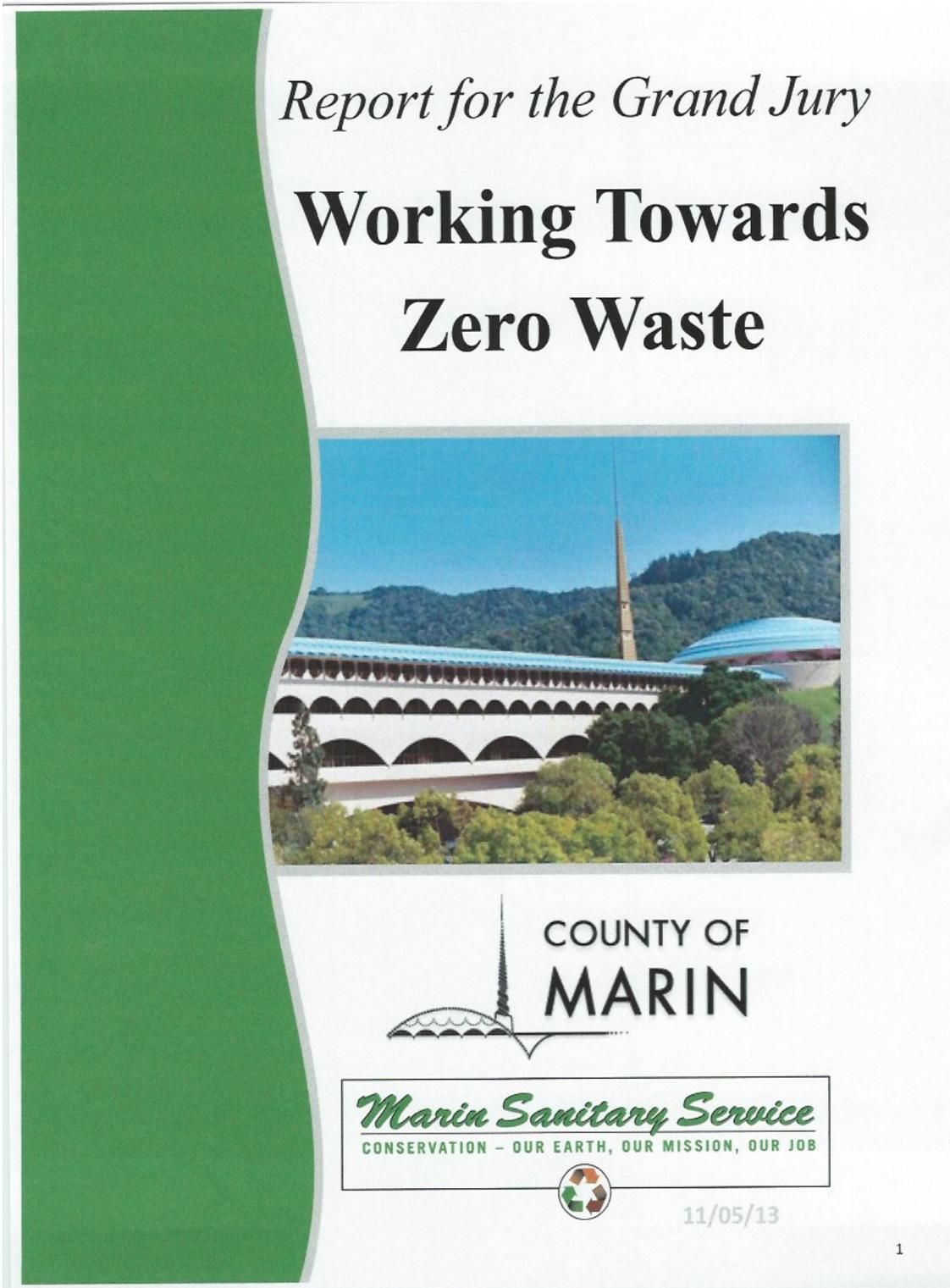
**Recyclable:** A substance or object that can be recycled.

**Recycling Cart:** A large container (32, 64, 96 gallons), typically with a lid and wheels, for collecting recyclable materials. At the Civic Center and County Jail recycling carts are dumped into a recycling truck for removal by Marin Sanitary Service.

**Recycling Bin:** A smaller container, typically without wheels, for collecting recyclable materials. A bin may or may not have a lid.

**Recycling:** Using waste as material to manufacture a new product. Recycling involves altering the physical form of an object or material and making a new object from the altered material.

**APPENDIX A: THE NOVEMBER 2013 MARIN SANITARY SERVICE WASTE CHARACTERIZATION STUDY**



*Report for the Grand Jury*

**Working Towards  
Zero Waste**

COUNTY OF  
**MARIN**

*Marin Sanitary Service*  
CONSERVATION - OUR EARTH, OUR MISSION, OUR JOB

11/05/13

1

## Waste Audit Civic Center Receiving dock

### Methodology

On Wednesday October 2nd Keith Nance, Jennifer Grenier, and Chance Shelley performed a waste audit on the 25 yard R/O box at the Marin County Civic Center. .89 tons of materials were collected from the 25 yard R/O box. For the purpose of the audit all bags were opened. Bags are not opened at MRRC. Only loose items are sorted and recycled. All contents were sorted and grouped into 8 categories by diversion methodology. (yard waste, garbage, glass/aluminum/plastic, cardboard, paper, filters, and food waste.) Figures 4-9 show the material groupings.



Figure 1. Pre-sort left side.



Figure 2. Pre-sort right side.

### Results Civic Center 25YD Box

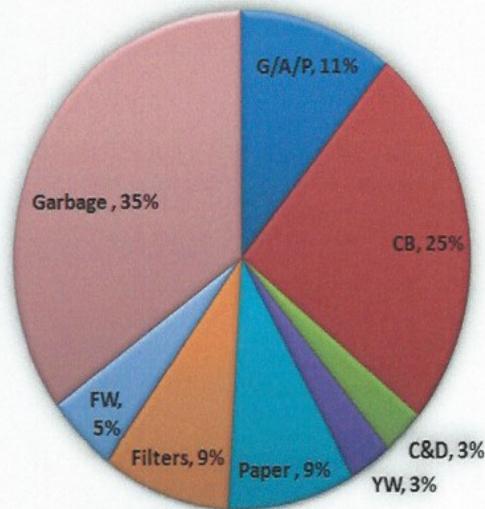


Figure 3. Waste audit results

## Results Civic Center Receiving Dock



Figure 4. Sorted cardboard.



Figure 5. Sorted paper.



Figure 6. Leftover garbage and food waste.



Figure 7. Air Filters.



Figure 8. Leftover garbage, food waste, and sorted yard waste.



Figure 9. Sorted bottles and cans.

## Recommendations Civic Center Receiving Dock

### Garbage: 35%

There were abnormal amounts of unrecyclable garbage that is destined for the landfill (See Figures 6 & 8) within the 25 cubic yard box. The majority was single use products and lunch waste in bags. We do not open bags and 75% of all materials in the 25 yard box were in bags. Make sure to open the bags so that recoverable material can be diverted. Garbage can be reduced at the source of production with smarter purchasing policies that include recyclable and reusable products. One prevalent source of garbage was coffee cups. A facility wide push to use reusable coffee mugs could have tremendous effects. Unrecyclable polystyrene (Styrofoam) cups and plates were also found. These can be substituted with reusable or recyclable products.

### Cardboard: 25%

Because of the lack of space at the receiving dock, a cardboard bin cannot be installed. If cardboard is added to the 25 yard box it cannot be put into bags (See Figure 4.) Anything in a bag is sent straight to the landfill. Make sure to break down the boxes before adding it to the container.

### Glass, Aluminum, & Plastic: 11%

Recyclable materials such as glass, aluminum and plastic containers should that are placed in the 25 yard container become very contaminated and are hard to remove from the non-recyclable material (See Figure 9.) To ensure that these resources are diverted, all materials should be source separated into MSS Brown dual sort containers. Space is an issue at the loading dock so we suggest they be taken to the dual sort carts located under the arch on Peter Behr Drive.

### Paper: 9%

When paper is added to a mixed material box it becomes contaminated with glass, liquids, and other materials that decrease its value as a commodity. All paper should be sorted inside the facility in the appropriate blue containers. A MSS representative picks these carts up internally and brings the paper back to MSS to be processed and recycled (See Table 1.)

### Air Filters: 9%

We sorted a large amount of air filters from the container (See Figure 7). This was not a type of material that is normally found in the container and was probably there in such quantities due to a maintenance operation. Due to it being composed of multiple materials air filters are sent to the landfill.

## Recommendations Civic Center Receiving Dock

### Food Waste: 5%

The cafeteria run by the Epicurean Group is a prime food to energy candidate. All pre-consumer food waste can be source separated at the cafeteria, picked up by our drivers, and converted to a renewable energy source via anaerobic digestion. Food waste is a very heavy material and is the cause of many problems in containers such as corrosion, odors, and vectors.



Benefits include:

*Potential Cost Savings-* Currently, MSS only charges for garbage. If you are able to divert enough food waste through the program, your garbage service may be reduced.

*Advertising-* Participants receive a window decal that will advertise that they are reducing as much waste as possible. The logo will also be available for electronic advertising.

*Competitive Advantage-* Research indicates that customers are 58% more likely to buy a company's product or service if that company is conscious of its environmental impact.

*Environmental Stewardship-* Participating in this program reduces greenhouse gas emissions, diverts waste from our overflowing landfills, and generates a renewable energy source right here in Marin County.

### C&D: 3%

Construction and demolition debris consists of divertible materials not collected in curbside recycling programs (paper, bottles, cans, containers). These items may include pallets, small electric appliances, lumber, etc. If a business is going to experience a large amount of C&D debris, MSS recommends that a temporary box be delivered to accommodate the abnormal loads. All temporary boxes are taken to the Marin Resource and Recovery facility to recover any divertible materials. Call (415) 456-2601 for debris box availability and pricing.

### Yard Waste: 3%

Most yard waste that was observed in the audit was seasonal or decorative waste; namely flowers and indoor plants. If large amounts of yard waste become consistent in the waste stream MSS could provide an organics cart for composting. Yard waste cannot go into the food to energy carts. Leave yard waste loose (not in bags) in the 25 yard box so that it may be diverted.

## Civic Center

### Current Level

Type & Size of Garbage Service:	Frequency	Location(s)
1- 25YD Refuse SVC	M/W/F	Receiving Dock.
Type & Size of Recycling Service:	Frequency	Location(s)
3- 64 GA Dual Sort	T/H/S	Peter Behr Dr. Loading Dock.
23- 64 GA Paper Service	T/H	Civic Center North First Floor RM 111, 114, 116, 119, & 123. 5 -64's by office doors. 126-132 4-64's in hallway. Second floor RM 241, 244, 245, & 246 4-64's Carts in hallway. RM 259-265 2-64's. RM 275. Court Floor 6- 64's
7- 20 GA Paper Slim Jim	T/H	Civic Center North Second Floor RM 275 5-Slims, Em 266 2-Slims
12- 64 Ga Paper Service	T/H	Civic Center South. Second Floor RM 200, 205, 207, & 208. Third Floor RM 329. Fourth Floor RM 400, 427, 414, 402.
26- 20 GA Paper Slim Jim	T/H	Civic Center South Second Floor 219-225. Third Floor RM 303, 304, 313, 315, 318, 324, 325, 329, 421, 412, 408, 404, & 402.

**Table 1. Current Services.**

Because of a lack of space at the receiving dock, the only source separated recyclable material are paper, bottles, and cans. A MSS driver enters the Civic Center complex and manually collects all of the paper recycling in the facility ranging in size from office sized slim jim containers to 64 GA carts (See Table 1.) All bottles and cans are picked up at the Peter Behr Dr. loading dock.

All other material is put in the 25 yard box at the receiving dock. Material put in this box becomes contaminated with other materials degrading its value and recyclability. Furthermore, all material put into bags is not sorted and is sent straight to the landfill.

## Civic Center

To increase diversion rates MSS suggests that Civic Center first source separate all glass, bottles, cans, and paper in the appropriate containers. All other material should be taken out of bags and placed into the 25 yard bin so it can be diverted. Material in bags will go straight to the landfill.

Over 55% of audited material in the 25 yard box is recoverable. However, this material is harder to divert when it is mixed in the box. The size and location of the box make adding other carts or bins nearly impossible (See Figure 10.) If the Civic Center wants to divert more and potentially reduce their bill, MSS will work on a creative solution to the space problem.

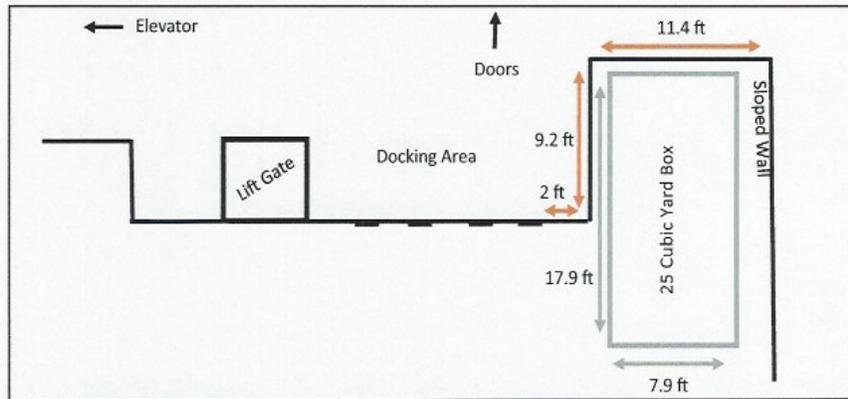


Figure 10. Current Box.

## Waste Audit Marin County Jail

### Methodology

On Monday October 7th Keith Nance, Jennifer Grenier, and Chance Shelley performed a waste audit on the 20 yard R/O compactor at the Marin County Jail. 2.09 tons of materials were collected from the 20 yard compactor. Due to the repetitive nature of the box contents and time constraints, 25% of the box was sorted. Materials were grouped into 7 categories by diversion methodology. (steel cans, garbage, glass/aluminum/plastic, cardboard, paper, rags, and food waste.) Figures 14-19 show the material groupings.



Figure 11. Pre-sort left side.



Figure 12. Pre-sort right side.

### Results

#### Marin County Jail

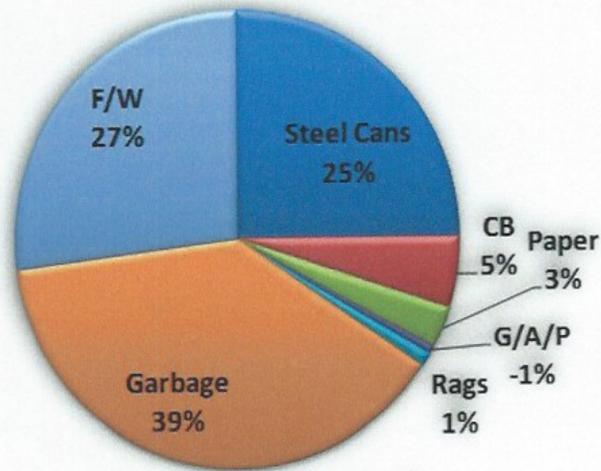


Figure 13. Waste audit break down.

Results  
Marin County Jail



Figure 14. Rags and old clothes.



Figure 15. Steel cans.



Figure 16. Shredded paper.



Figure 17. Newspaper.



Figure 18. Garbage.



Figure 19. Cardboard.

## Recommendations Marin County Jail

### Garbage: 39%

The majority of the material in the compactor was garbage (See Figure 20.) Garbage can be reduced at the source of production with smarter purchasing policies that include recyclable and reusable products. One prevalent source of garbage was milk cartons. A facility wide push to use dispensed milk could have tremendous diversion effects.

### Food Waste: 27%

The cafeteria run at the jail could divert large quantities of food waste from the compactor by implementing MSS' food to energy program. All pre-consumer food waste can be source separated at the cafeteria, picked up by our drivers, and converted to a renewable energy source via anaerobic digestion. There is even potential to include post-consumer food waste because the only contaminates could be milk containers and ketchup packets.



Benefits include:

*Potential Cost Savings-* Currently, MSS only charges for garbage. If you are able to divert enough food waste through the program, your garbage service may be reduced.

*Advertising-* Participants receive a window decal that will advertise that they are reducing as much waste as possible. The logo will also be available for electronic advertising.

*Competitive Advantage-* Research indicates that customers are 58% more likely to buy a company's product or service if that company is conscious of its environmental impact.

*Environmental Stewardship-* Participating in this program reduces greenhouse gas emissions, diverts waste from our overflowing landfills, and generates a renewable energy source right here in Marin County.

### Steel Cans: 25%

Most of the food served in the jail comes from large steel cans (See Figure 17.) These are highly recyclable and are a valuable commodity. The issue with these cans is that they are large in size and volume and will quickly fill our 64 gallon brown dual sort carts. We have requested that both ends of the cans be cut so the can will be flattened before it goes into the cart. All steel cans should be added to the brown dual sort containers in the back of the jail.

\*\* Dual Sort Carts have now been delivered.

### Cardboard: 5%

All cardboard at the facility should be added to the cardboard container on site instead of going into the compactor (See Figure 21.) MSS employees do not sort through compacted materials because the material becomes contaminated. All cardboard in the compactor ends up in the landfill.

## Recommendations Marin County Jail

### Paper: 3%

When paper is added to a compactor it becomes contaminated with glass, liquids, and other materials that decrease its value as a commodity (See Figure 19.) All paper should be sorted inside the facility in the appropriate blue containers for pick up. MSS also provides a confidential document shredding service that can be done on site or either brought back to MSS via a locked container (See Figure 18.)

### Textiles: 1%

Rags and old clothing were found in the compactor (See Figure 16.) This material is actually garbage and should continue to stay in the compactor.

### Glass, Aluminum, & Plastic: .5%

There was a minuscule amount of bottles and cans in the compactor because the general population is not allowed soda except on Saturday nights for good behavior. The material most likely came from office or administration staff. All bottles and cans can be added to the brown dual sort containers along with the steel cans.

### Current Level

Type & Size of Garbage Service:	Frequency
1 20 YD R/O Comp Refuse	M
<b>Type &amp; Size of Recycling Service:</b>	
3- 64 GA Paper Service	F
1-3YD Cardboard SVC	T/H/S

**Table 3. Current Services.**



### Recommendation(s)

Type & Size of Recycling Service:	Frequency	Location(s)
2- 64 GA Food Waste Carts	M/W/F	Rear Sally Port By Cardboard Bin.
**5- 64 GA Dual Sort Carts	M/W/F	Rear Sally Port By Cardboard Bin.

\*\*Already

**Table 4. Recommendation.**

## Juvenile Hall & Kitchen

The Marin County Juvenile Hall & Kitchen has two 3 cubic yard bins that are emptied once a week equaling 6 cubic yards of total weekly garbage service. The garbage bins are at separate locations; one being inside the gated area for inmate refuse and the other behind the kitchen for administrative and kitchen waste. The inmate bin is a mixture of material consisting of milk cartons, post-consumer food waste, plastic film, and other miscellaneous debris. (See Figure 20) There doesn't seem to be too much more to divert.



Figure 20. Waste stream visual

The administrative and kitchen bin mainly filled with unrecyclable materials and food waste from the kitchen. There are instances of misplaced recyclable paper and beverage containers but not enough to merit another bin. There is potential to start the kitchen on the Food to Energy program to divert all the food waste from the kitchen and turn it into a renewable energy source via anaerobic digestion.

### Current Services

Type & Size of Garbage Service:	Frequency
2- 3YD Refuse Bins	T
<b>Type &amp; Size of Recycling Service: Frequency</b>	
1- 64 GA Dual Sort Cart	W
1- 32 GA Dual Sort Cart	W
1- 64 GA Paper Service	H
1- 32 GA Paper Service	H
1- 2YD Cardboard Service	T

Table 5. Current Services.

### Recommendations

Current refuse and recycling services seem sufficient (See Table 5.) To increase diversion rates make sure employees and inmates know about diversion opportunities and why they are important. MSS can provide any necessary education, signage, or outreach materials that the facility may need.

MSS will contact the kitchen manager to set up the Food to Energy program. The service level will be determined by the amount of waste generated.

### Juvenile Services



Figure 21. Misplaced Materials.

The services provided at the offices at the Juvenile Services administration buildings are adequate (See Table 6.) There are minor contamination issues present, however, they can be mitigated through education and outreach.

Type & Size of Garbage Service:	Frequency
1- 2YD Refuse Service	T
<b>Type &amp; Size of Recycling Service: Frequency</b>	
3- 64 GA Paper Service	H
2- 64 GA Dual Sort Cart	W

Table 6. Current Services.

## 18 Yard Box

The 18 yard box off of Peter Behr Dr. is primarily used for yard waste debris (See Figure 22.) The box is routed to the Marin Resource Recovery Center so that all salvageable material can be diverted. A large portion of the material is in bags and if that material is to be diverted it needs to be taken out of the bag. (See Figures 23 & 24.)



Figure 22. 18 cubic yard box



Figure 23. Plastic bag contamination.



Figure 24. Other contaminants.

## County of Marin Department of Public Works Corporation Yard

The garage area at the public works initially had two 4 yard bins (See Table 7.) MSS exchanged one for a cardboard only bin (see Figure 25) to divert that material.

We also recommend that a paper recycling bin be included (See Table 8.) Conservation Corps of the North Bay collects all recyclable bottles and cans at the facility.



Figure 25. Current bins

### Current Service

Type & Size of Garbage Service:	Frequency
2- 4YD Refuse Bins	T/F

Table 7. Current Services.



### Recommendation(s)

Type & Size of Garbage Service:	Frequency	Status
1- 4YD Refuse Bins	T/F	Complete
<b>Type &amp; Size of Recycling Service:</b>		
1- 2YD Cardboard Service	T	Complete
1- 64 GA Paper Service	F	In Progress

Table 8. Recommendations.

## Marin County Parks

MSS only provides a 3 yard refuse bin for Marin County Parks (See Table 9) because Conservation Corps North Bay picks up bottles, cans, paper, and cardboard. MSS will be happy to pick up all of these materials because there are many recyclables left in the garbage. (See Figure 6.)



**Figure 26. Recyclables in Garbage.**

Type & Size of Garbage Service:	Frequency
1- 3YD Refuse Bin	T/F

**Table 9. Current Level**

## Conclusion

There are many opportunities for these three County Buildings to divert more material. Due to the large amount of plastic garbage bags in the large debris boxes (25 Yd and 18 Yd) during 2013, the facilities should expect a significant decrease in diversion from 2012. The way to improve this number is to source separate if possible and to follow the recommendations listed in this report.

Please contact Kim Scheibly, Municipal Contracts & Communication Manager, if you have any questions or concerns with any portion of this report. Contact Jennifer Grenier Selvig for Commercial Recycling needs and Chance Shelley to begin the Food To Energy Program.

<b>Contracts &amp; Communications</b>	<b>Commercial Recycling:</b>	<b>Organics Recycling:</b>
Kim Scheibly	Jennifer Grenier	Chance Shelley
Municipal Contracts & Communications Manager	Commercial Recycling Coordinator	Commercial Recycling Coordinator
Kim.Scheibly@marinsanitary.com	Jennifer.Grenier@marinsanitary.com	Chance.Shelley@marinsanitary.com
(415) 458-5514	(415) 458-5542	(415) 458-5530