

OFFICE OF THE
COUNTY ADMINISTRATOR

Matthew H. Hymel
COUNTY ADMINISTRATOR

January 12, 2015

Marin County Civic Center
3501 Civic Center Drive
Suite 325
San Rafael, CA 94903
415 473 6358 T
415 473 4104 F
CRS Dial 711
www.marincounty.org/cao

Jack Nixon, Foreperson
Marin County Civil Grand Jury
3501 Civic Center Drive, Room 275
San Rafael, CA 94903

Re: Updates to the May 13, 2014 Response to the Civil Grand Jury Report,
Recycling by the Marin County Government: Walking the Talk

Dear Mr. Nixon,

On May 13, 2014, the Board of Supervisors tendered a response to the Grand Jury Report: *Recycling by the Marin County Government: Walk the Talk*. As promised in that response, the following narrative provides updates on implementation of zero waste programs at the Civic Center since May 13th.

Foodwaste to Energy: Staff has worked with Marin Sanitary Service to establish a "Foodwaste to energy" diversion program for the pre-consumer food scraps from the cafeteria.

Staff Training: Custodial staff has been trained in being more diligent in opening bags of office waste deposited in the Civic Center dumpster so that it may be sorted out and diverted by Marin Sanitary Service.

Addition of Cardboard Service: Staff has worked with Marin Sanitary Service to add a source separated collection bin for used cardboard. While some of this material was previously recycled via the mixed recovery that takes place on the Civic Center loading dock dumpster, this new service is yielding higher levels of diversion and higher material quality.

Reduction of Garbage Service: With the various new diversion programs that have been implemented the dumpster serviced at the Civic Center loading dock has been reduced in size from 25 cubic yards capacity to 18 yards.

Upgrading Recycling Bins in Civic Center Hallways: Department of Public Works staff has worked with the Civic Center Conservancy Commission to identify architecturally appropriate upgraded recycling and waste bins for the

Civic Center hallways. A pilot location is expected to be installed in February 2015 before proceeding to a larger building-wide replacement.

Waste Audit: At the request of the County, Marin Sanitary Service conducted another waste audit of the Civic Center – copy attached. Significant improvement was seen from the last audit. The latest diversion rate is now at 72%. (please see attached report)

Continuous Improvement: A working group comprised of Public Works and Parks staff, Marin Sanitary Service, and other invitees as appropriate, is meeting on a regular basis to identify and implement ongoing zero waste improvements to the Civic Center.

Zero Waste Day: On September 24, 2014 Public Works and Marin Sanitary Service staffed tables at the Civic Center arches and welcomed staff and visitors with zero waste information and distributed 480 reusable water bottles, 450 coffee mugs, 800 reusable shopping totes 500 produce bags, and 120 home composting containers.

Please let us know if you have any questions or concerns.

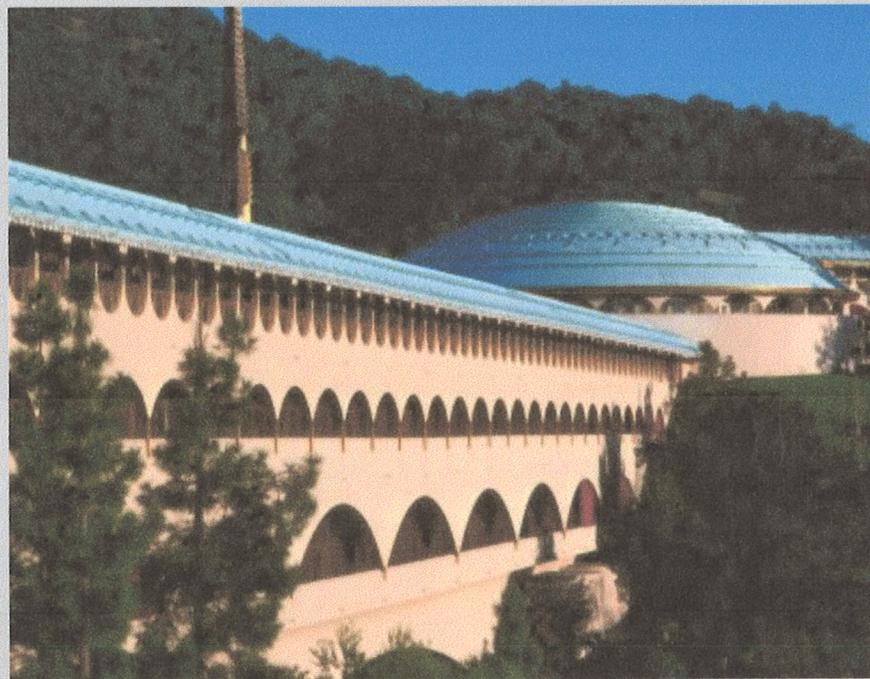
Sincerely,



Matthew H. Hymel
County Administrator

Attachment

2014 Diversion Report



Marin Sanitary Service

CONSERVATION – OUR EARTH, OUR MISSION, OUR JOB



10/08/14

Marin Civic Center Executive Summary

2013-2014 Refuse Weight Comparison

Weights were taken from a week in 2013 (second week in October) and compared to the weight from the same time in 2014. There was a noticeable reduction in the amount of waste generated totaling almost half a ton.

The box diversion rate was then applied each weekly tonnage and a total amount of garbage generated in a week was established.

The difference between the two years is due to the source separation of cardboard, food waste, and better source reduction policies.

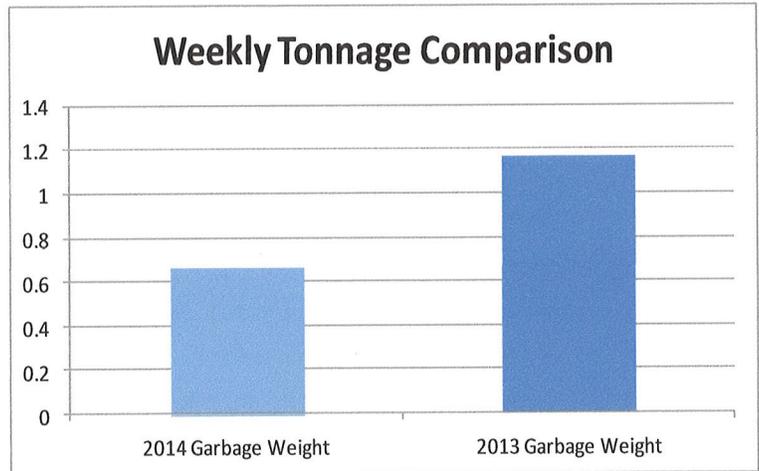


Figure 14. Weekly Tonnage of Waste Comparison

Notable Improvements:

- The previous 25 yard refuse box has been exchanged for a smaller 18 yard box.
- Implementation of the Food to Energy program at the Civic Center Cafeteria. This program collects all of the pre-consumer food waste from the kitchen prep area and converts it into a local source of renewable energy.
- There was a noticeable improvement in the amount of bags that were open in the 18 yard box. That loose material can now be sorted by MSS staff.
- Addition of a Cardboard bin that collects roughly 18 yards of cardboard a week. The material is much cleaner than material that is generally in the 18 yard bin and is highly recyclable.

Civic Center Diversion Rate (Facility-wide)

The 72% diversion figure (Figure 14) was derived from converting the 18 yard box into a gallon equivalent and combining that with the total amount of gallons or recycling services throughout the Civic Center (Figure 13). The County jail was not included into these figures because they have their own compactor and recycling services.

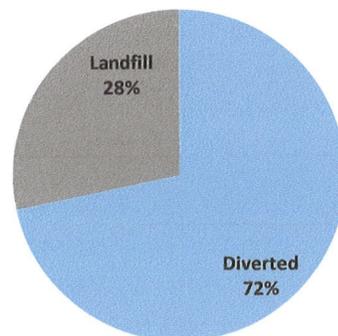


Figure 14. Waste audit results



Waste Audit

Civic Center 18 Yard Box

Methodology

On Wednesday October 8th, Marin Sanitary Service (MSS) Auditors performed a waste audit of the 18 yard R/O box at the Marin County Civic Center (Figures 1-3). The process lasted about 2 and a half hours and was documented by photos and data collection. The entire box was sorted and grouped into 8 categories by diversion methodology: Bagged Material, Open Refuse, Scrap Metal, Cardboard, Blue Cart Material, Brown Cart Material, Yard Waste, and E-Waste (Figure 4).

MSS auditors sorted the entire box and recycled all materials after the audit was complete. Material that were in tied bags were left in those bags to reflect the sorting practices at the Marin Resource Recovery Center (MRRRC). However, all of the loose refuse was sorted into the defined recovery streams.



Figure 1. Pre-sort right side of box.



Figure 2. Pre-sort backside of box



Figure 3. Pre-sort left side of box

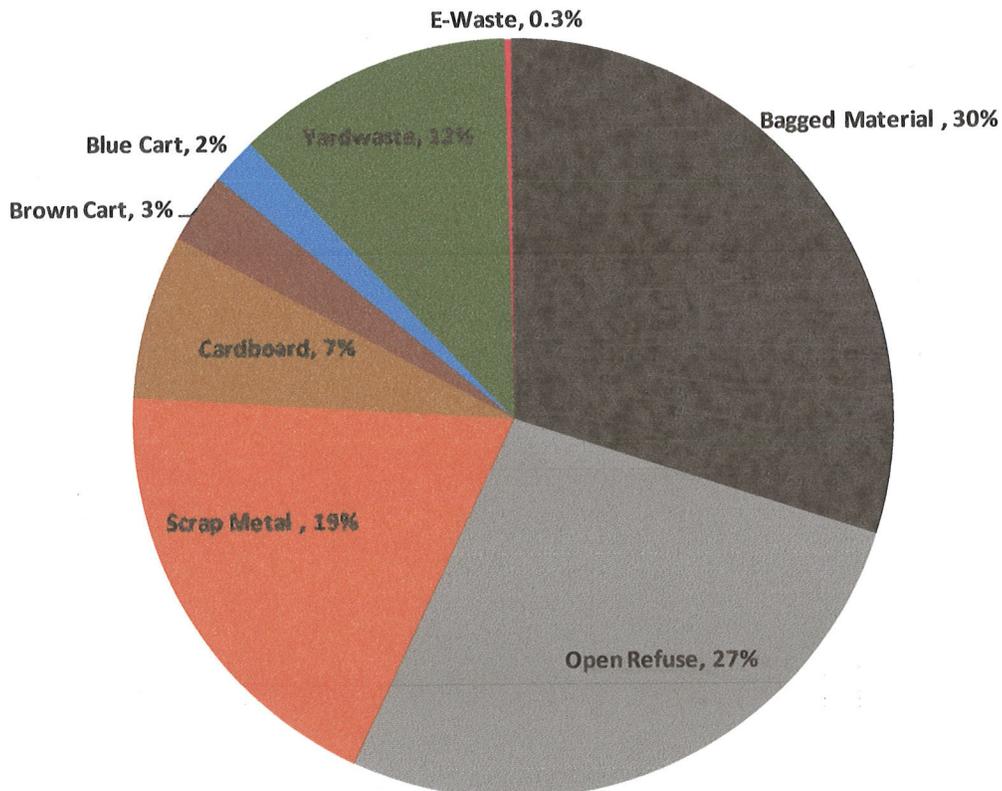


Figure 4. Waste audit results

Waste Audit

Civic Center 18 Yard Box

Bagged Material: 30%

Due to potential health hazards to our facility staff, tied plastic bags are not opened and sorted at the Marin Resource Recovery Center. All material in these tied bags will be sent straight to the landfill and not sorted (Figure 5).

Source separation is always the best way to divert material. However, if the material cannot be sorted, staff should be directed to empty the black garbage bags into the 18 yard box as long as there is some type of recoverable material inside. Bags from restrooms should remain tied.

Open Refuse: 30%

All boxes taken to the Marin Resource Recovery Center (MRRC) are emptied onto the floor and sorted mechanically with tractors to remove large recoverables. The loose material is then loaded onto a conveyor belt to have recyclables hand sorted out of the mix.

The loose materials in the Civic Center box consisted primarily of waste paper, plastic bags, and lunch waste (Figure 6). A large amount of bioplastic containers from the cafeteria was also present. These cannot be composted or recycled within the MSS system.

Food waste and small pieces of yard waste will not be sorted from the mix and will be sent to the transfer station prior to disposal at the landfill. Source separation of the food waste and yard waste will ensure they are recovered.

Scrap Metal: 19%

There was a large amount of ventilation ducts present in the box (Figure 7). This material can be fully recycled and is easy to pull out of the 18 yard box. Scrap metal can also be brought to the Marin Recycling Center to be sold at market value.

Yard Waste: 9%

There was an abundance of yard waste found in the box. The material seems to have come from landscaping that occurred during the audit period (Figure 8). This majority of this material will be sorted from the 18 yard box, but small pieces may not be diverted.

Installing a Yard Waste box at the Civic Center would ensure that all clean yard waste would be diverted.

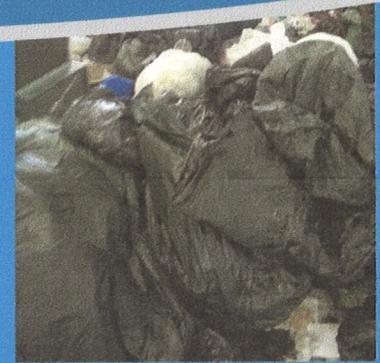


Figure 5. Bagged Refuse.



Figure 6. Open Refuse.



Figure 7. Scrap Metal.



Figure 8. Yard Waste.

Waste Audit

Civic Center 18 Yard Box

Cardboard: 7%

The percentage of Cardboard in the 18 yard bin dramatically decreased thanks to the addition of a 3 yard Cardboard bin that is serviced 6 days a week by Marin Sanitary Service (Figure 9). The majority of the cardboard found in the container were pieces that most likely came from offices that did not have direct access to the cardboard containers. Directing these offices to place the material into the a paper recycling bin would alleviate this problem.



Figure 9. Cardboard

Brown Cart Material: 3%

Recyclable materials such as glass, aluminum and plastic containers placed in the 18 yard container can be sorted at the Material Recovery Facility (MRF) but not at the same recovery rate as those containers collected in the source separated MSS brown carts (Figure 10). To ensure that these resources are diverted fully, source separation is key.



Figure 10. Bottles and Cans.

MSS auditors also noticed multiple bags full on containers that ended up in the 18 yard box. These bags were closed and normally would not be opened.

Paper: 2%

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 MSS blue carts. A MSS representative picks these carts up internally and brings the paper back to MSS to be processed and recycled.



Figure 11. Paper.

Most of the paper products found were unusual commodities such as bags, envelopes, and books (Figure 11).

Electronic Waste: <1%

During the audit, MSS auditors found small pieces of electronic (or hazardous) waste. No HHW should be disposed of in MSS collection containers. Staff should be educated that these items should be set aside and disposed of properly at the Marin Household Hazardous Waste Facility. Notable items were a printer, a digital alarm clock, batteries, and one CFL light bulb (Figure 12).



Figure 12. Electronic Waste

Marin Civic Center Additional Recycling Services

| Refuse Service: | | | | | |
|--------------------------------------|------------|--------------------------|-------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------|
| Number | Size (gal) | Type | Weekly Col- lections | Location(s) | Weekly Amount in Gallons |
| 1 | 4032 | 18 YD Refuse SVC | 3 | Rear Loading Dock. | 12096 |
| | | Diverted | | | 5685 |
| | | Landfill | | | 6411 |
| Source Separated Recycling Services: | | | | | |
| Number | Size (gal) | Type | Weekly Col- lections | Location(s) | Weekly Amount in Gallons |
| 3 | 64 | Dual Sort | 3 | Peter Behr Dr. Loading Dock. | 576 |
| 23 | 64 | Paper Service | 2 | 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 | 2944 |
| 7 | 20 | Paper Slim Jim Container | 2 | Civic Center North Second Floor RM 275 5-Slims, Em 266 2- Slims | 280 |
| 12 | 64 | Paper Service Cart | 2 | Civic Center South. Second Floor RM 200, 205, 207, & 208. Third Floor RM 329. Fourth Floor RM 400, 427, 414, 402. | 1536 |
| 26 | 20 | Paper Slim Jim Container | 2 | Civic Center South Second Floor 219-225. Third Floor RM 303, 304, 313, 315, 318, 324, 325, 329, 421, 412, 408, 404, & 402. | 1040 |
| 17 | 64 | Document Shredding Bins | 0.0385 | Marin County Public Admin 2 Xs a Year | 42 |
| 1 | 64 | Document Shredding Bins | 0.0385 | Marin County Admin 2 Xs a Year | 2 |
| 3 | 64 | Document Shredding Bins | 0.0577 | Marin County Sheriffs Depart- ment 3 Xs a Year | 11 |
| 1 | 64 | Document Shredding Bins | 0.0962 | Marin County Assessor- Record- er 5 Xs a Year | 6 |
| 1 | 672 | Cardboard Bin | 6 | Receiving Dock | 4032 |
| 1 | 64 | F2E Cart | 2 | Cafeteria | 128 |

Figure 13. Other Diversion Services