



Photo by Bob Hollis



Marin Household Hazardous Waste Program

Fiscal Year 2018/19 Report





Fiscal Year 2018/19 Summary

The Marin Household Hazardous Waste (HHW) Program had another productive and successful year, once again ending FY 2018/19 significantly under budget while maintaining exemplary service.

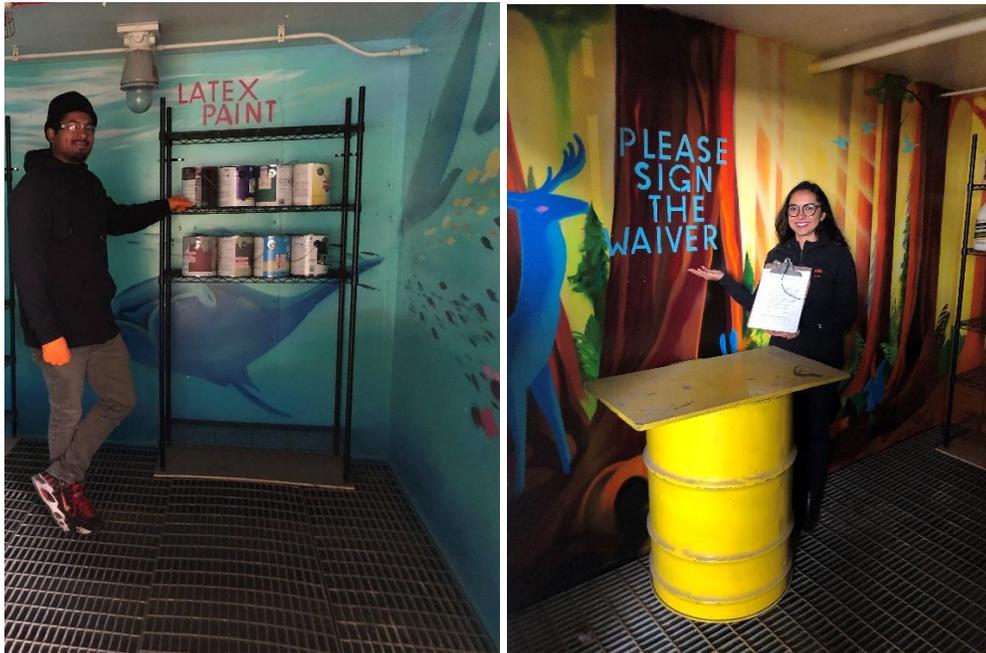
The Marin Recycling & Resource Recovery Association (MRRRA) welcomed two new HHW employees, HHW Associate Hugo Solorzano and HHW Technician Diego Reyes. The HHW Associate, a new position, is responsible for scheduling appointments for commercial customers, responding to residential customer inquiries, and assisting the HHW Program Manager with data collection and analysis. HHW Technicians handle and package household hazardous waste.

Every second matters in an emergency; knowing where to go can save lives and property. To that end, emergency maps were posted in five locations at the HHW Facility. In case of emergency, employees and guests at the Facility can check the nearest map for information on evacuation routes, emergency exits, and fire extinguishers.

The success of the HHW Program depends on residents and small businesses knowing how to dispose of household hazardous waste. With new residents and businesses arriving in Marin County on a regular basis, community outreach is essential. The HHW

Facility expanded its outreach efforts in the last year, culminating in the unveiling of the enhanced facility [website](#) in May 2019. For the first time, the HHW Facility also co-sponsored the annual Día de los Muertos celebration in East San Rafael, and new shirts and sweaters were provided to employees as part of the facility's branding efforts.

The interior of the facility's reuse area was redesigned to provide a more intuitive and pleasurable experience for customers. Included in the redesign was a custom paint job by a local artist as well as written shelf labels and customer instructions.



Finally, two successful West Marin Toxic Away Day temporary collection events were held, one in October 2018 in Bolinas and another in May 2019 in Point Reyes Station. Approximately 80 residents participated, collectively bringing in more than 11,000 pounds of household hazardous waste.

HHW Program Overview

The Marin HHW Program is a combination of HHW services provided at the Marin HHW Facility and at West Marin Toxic Away Days. Residents of Marin County, except Novato, may drop off their HHW at the facility or at the collection events for free, and residents of San Rafael may have their waste picked up from their house for a fee. Conditionally Exempt Small Quantity Generator (CESQG)¹ businesses may drop off their hazardous waste for a fee. The facility is operated by Marin Recycling & Resource Recovery Association and managed by the San Rafael Fire Department.

¹ Entities that generate no more than 100 kilograms (220 pounds) of hazardous waste per month. The term CESQG is no longer being used in federal regulations, having been replaced by VSQG (Very Small-Quantity Generator) in 2017. However, the California Department of Toxic Substances Control (DTSC) does not yet reference VSQG in its regulations or statutes.

The Marin HHW Facility offers a reuse area where like-new products are available for residents and businesses to take for free. The reuse area is open to the public during facility hours. Additionally, we offer reprocessed latex paint for a fee to the public and to local jurisdictions for the use of graffiti abatement, offered in white, beige, and gray.

Household battery collection bins are conveniently located at fire stations and select businesses across Marin County. These bins are only for use by Marin County households and the batteries are then brought to the Marin HHW Facility and sent for recycling. This program is run separately from the JPA’s Bulb and Battery Program.

The following table is a brief summary of the number of people who participated in the Marin HHW Program and the amount of waste that was collected in FY 2018/19. The HHW Program collected 1,512,855 pounds of hazardous waste overall, down 9.7% from the FY 2017/18 total of 1,676,279 pounds. This change was largely driven by a decrease in collections of paint and electronic waste. [PaintCare](#), our paint stewardship partner, opened several new drop-off locations in Marin County in the last year as an alternative to the HHW Facility. Additionally, quantities (by weight) of electronic waste, especially devices containing cathode ray tubes (CRTs), have decreased for several consecutive years as devices have become lighter and technologies have improved.

<u>Program Type</u>	<u>Pounds Collected</u>	<u>Household Participants</u>	<u>CESQG Participants</u>
Marin HHW Facility	1,501,660	26,808	429
Bolinas Toxic Away Day	5,171	40*	N/A
Pt. Reyes Toxic Away Day	6,024	40*	N/A
Reuse Area	55,207	N/A	

*=approximate total; does not account for walk-ins



Budget

The HHW Facility's FY 2018/19 budget allocation was \$1,632,084, a 7.1% increase from the FY 2016/17 budget of \$1,523,266. This increase was higher than usual to allow for the Facility to hire an HHW Associate. Financially, the Marin HHW Program ended the year \$104,450 under budget.

Over the course of the fiscal year, the Marin HHW Program recovered \$101,906 in outside funding; most of this came from CESQGs, with additional money received from battery recycling.

Separately, the San Rafael Fire Department organized two Toxic Away Day events, with total expenses of \$19,574.

Temporary HHW Collection Events 2018/2019 Expenses

<u>Expense Item</u>	<u>Actual</u>
 <u>Labor Costs</u>	
Bolinas	\$2,475
Pt. Reyes Station	\$1,980
Labor Costs Subtotal	\$4,455
 <u>Disposal Costs</u>	
Bolinas	\$4,408
Pt. Reyes Station	\$5,862
Disposal Costs Subtotal	\$10,270
 <u>Supply Purchase Costs</u>	
Bolinas	\$1,687
Pt. Reyes Station	\$1,551
Supply Purchase Costs Subtotal	\$3,238
 <u>Outreach Costs</u>	
Bolinas	\$895
Pt. Reyes Station	\$716
Outreach Costs Subtotal	\$1,611
 GRAND TOTAL:	 \$19,574



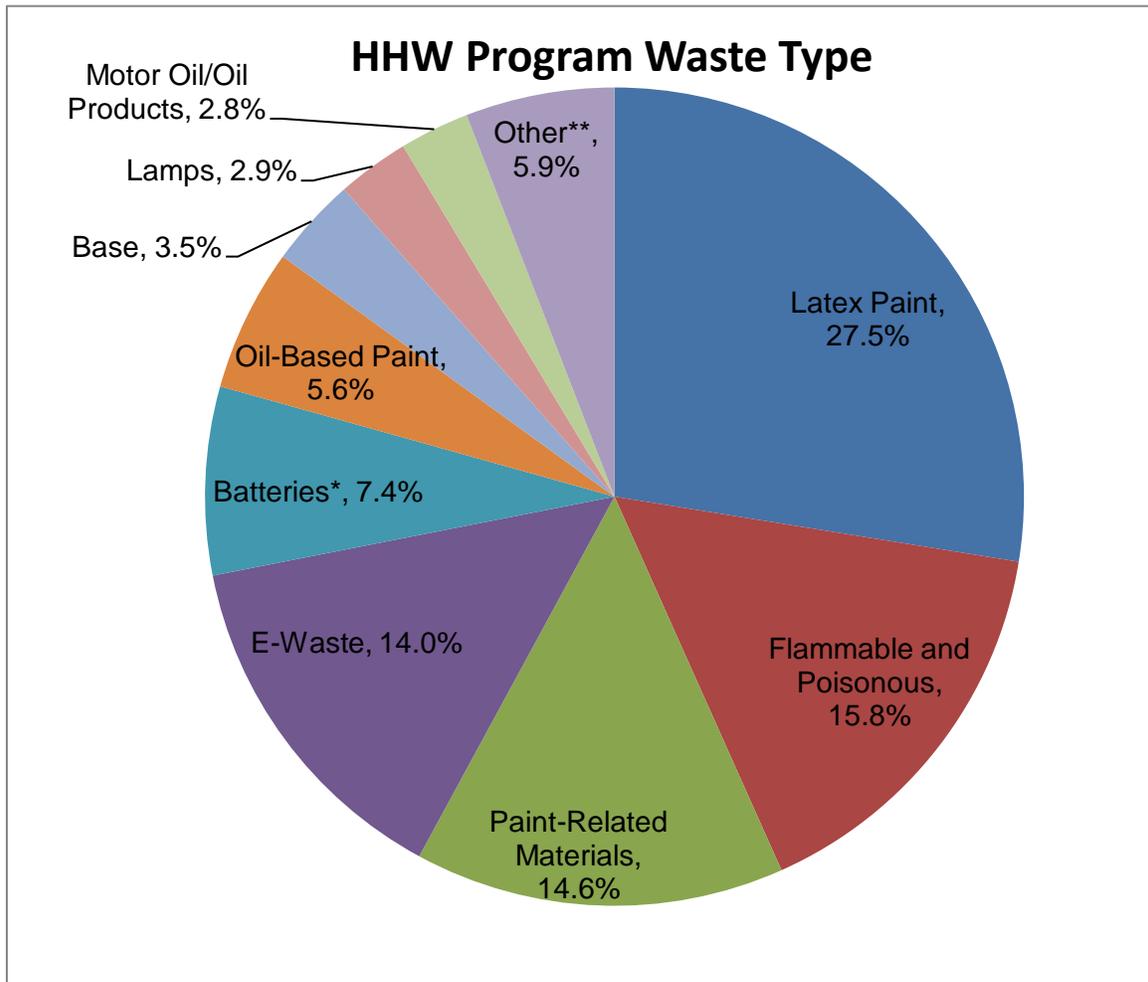
HHW Facility 2018/2019 Actual Results

<u>Expense Item</u>	<u>Actual</u>
Classified Personnel	\$ 472,613.49
Vacation pay	\$ 46,809.27
Group Life/Health Insurance	\$ 92,758.97
Worker's Compensation	\$ 67,992.92
Retirement	\$ 21,911.40
Payroll Taxes	\$ 39,885.00
PERSONNEL SUBTOTAL	\$ 741,971.05
Legal and Professional	\$ 0
Travel & Conference	\$ 6,424.38
Training Instruction & Medical Examinations	\$ 0
Professional Dues and Subscriptions	\$ 0
Equipment Rental/Repair	\$ 11,584.45
Waste Disposal Costs	\$ 384,122.93
Advertising & Community Promotions	\$ 3,600.00
Insurance & Surety Bonds	\$ 16,207.32
Admin. Allocation	\$ 70,537.88
Office Supplies	\$ 26,906.76
Clothing & PPE Supplies	\$ 41,996.68
Miscellaneous Supplies & Materials	\$ 79,391.92
Maintenance Buildings & Improvements	\$ 4,160.00
NON-PERSONNEL SUBTOTAL	\$ 644,932.33
Operating Ratio	\$ 145,586.52
Rental/Land	\$ 97,050.24
EXPENSES SUBTOTAL	\$ 1,532,489.90
OUTSIDE FUNDING SOURCES:	
E-Waste Monies	\$ (0)
Batteries Monies	\$ (3,711.00)
Paint Sale Monies	\$ (0)
CESQG Monies	\$ (98,195.36)
OUTSIDE FUNDING SUBTOTAL	\$ (101,906.36)
GRAND TOTAL	\$ 1,527,633.80
Approved Budget for FY 2018/19	\$ 1,632,084.23
Under budget	\$ 104,450.43

Waste Analysis

The following waste totals include the West Marin Toxic Away Days.

The facility continues to save money by partnering with PaintCare, which pays the San Rafael Fire Department to take certain paint products from the facility for recycling. The oil-based paint category only includes items on PaintCare's accepted materials list; it does not include paint that has been bulked with other flammable liquids. About one-third of the Marin HHW Facility's annual waste (by weight) went to PaintCare, with paint-related materials such as thinners and resins that are not a part of PaintCare accounting for an additional 14.6% of HHW program waste.



* = "Batteries" category includes household, rechargeable, and car batteries. These are individually listed in the table on page 8.

** = Quantities of other waste types are included in the table on page 8.

HHW Program Waste Totals by Type in Pounds

Waste Type	Pounds	% of Total
Latex Paint	416,721	27.5
Flammable and Poisonous	238,514	15.8
Paint-Related Materials	220,898	14.6
E-Waste	211,720	14.0
Oil-Based Paint	85,249	5.6
Household Batteries	71,445	4.7
Base	53,534	3.5
Lamps	43,152	2.9
Motor Oil/Oil Products	41,605	2.8
Car Batteries	24,655	1.6
Aerosol Cans	22,364	1.5
Asbestos	21,480	1.4
Rechargeable Batteries	16,405	1.1
Acid	15,705	1.0
Antifreeze	10,015	0.7
Oxidizer	5,080	0.3
Used Oil Filters	2,646	0.2
PCB-containing	2,005	0.1
Sharps	1,009	0.1
Thermostats	70	0.0
Mercury-Containing Items (except Thermostats)	58	0.0
unclassified	8,525	0.6
FY 18/19 Total:	1,512,855	
FY 18/19 Monthly Average:	126,071	



Destination Method

Destination methods are based on the CalRecycle 303a reporting categories. Compared to the previous fiscal year, the percentage of waste (by weight) being recycled was down slightly, from 63% to 58%; this was primarily due to a decrease in collections of paint and electronic waste. Common waste items that are recycled are latex paint, e-waste, batteries, and motor oil.

Otherwise, the destination percentages are similar to those from prior years, with slight increases for reuse and destructive incineration. Only 1.5% of waste was landfilled.

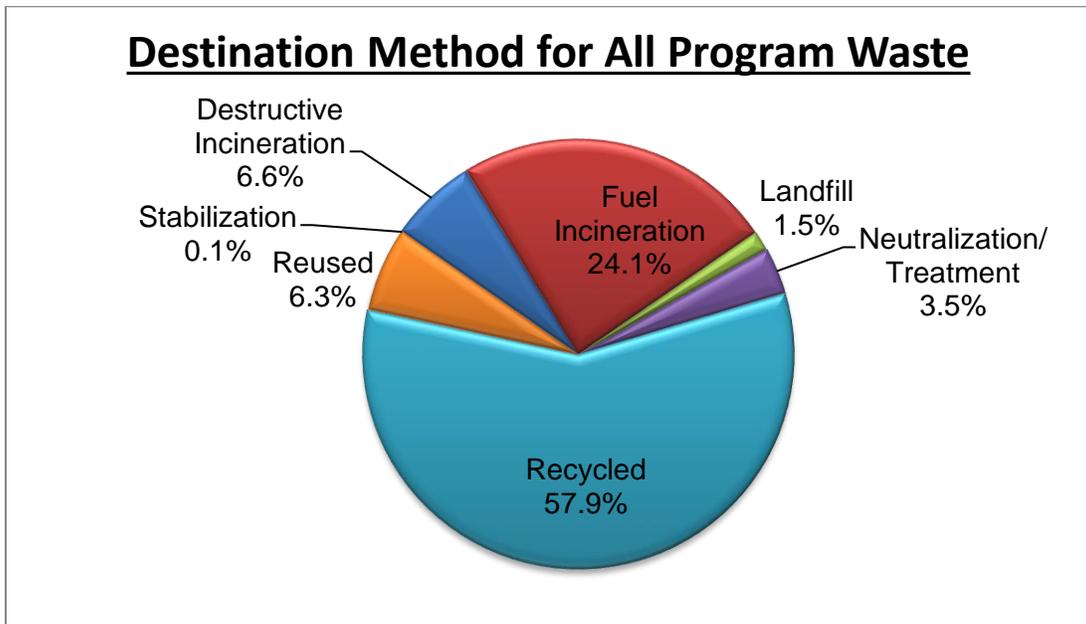
Reuse as a share of waste increased slightly. Most of the reused items were e-waste, household cleaners, pesticides, and paint products.

There are two types of incineration: destructive and fuel. The goal of destructive incineration is to simply destroy the material. During fuel incineration, energy is recovered through the burning process and sometimes material will also be recovered. The most common types of HHW used for fuel incineration are oil-based paint and flammable liquids, while poisons make up the majority of the waste sent for destructive incineration.

Among household hazardous wastes, only acids and bases go through neutralization and treatment. During this process, the pH of the waste is chemically adjusted to remove the hazard.

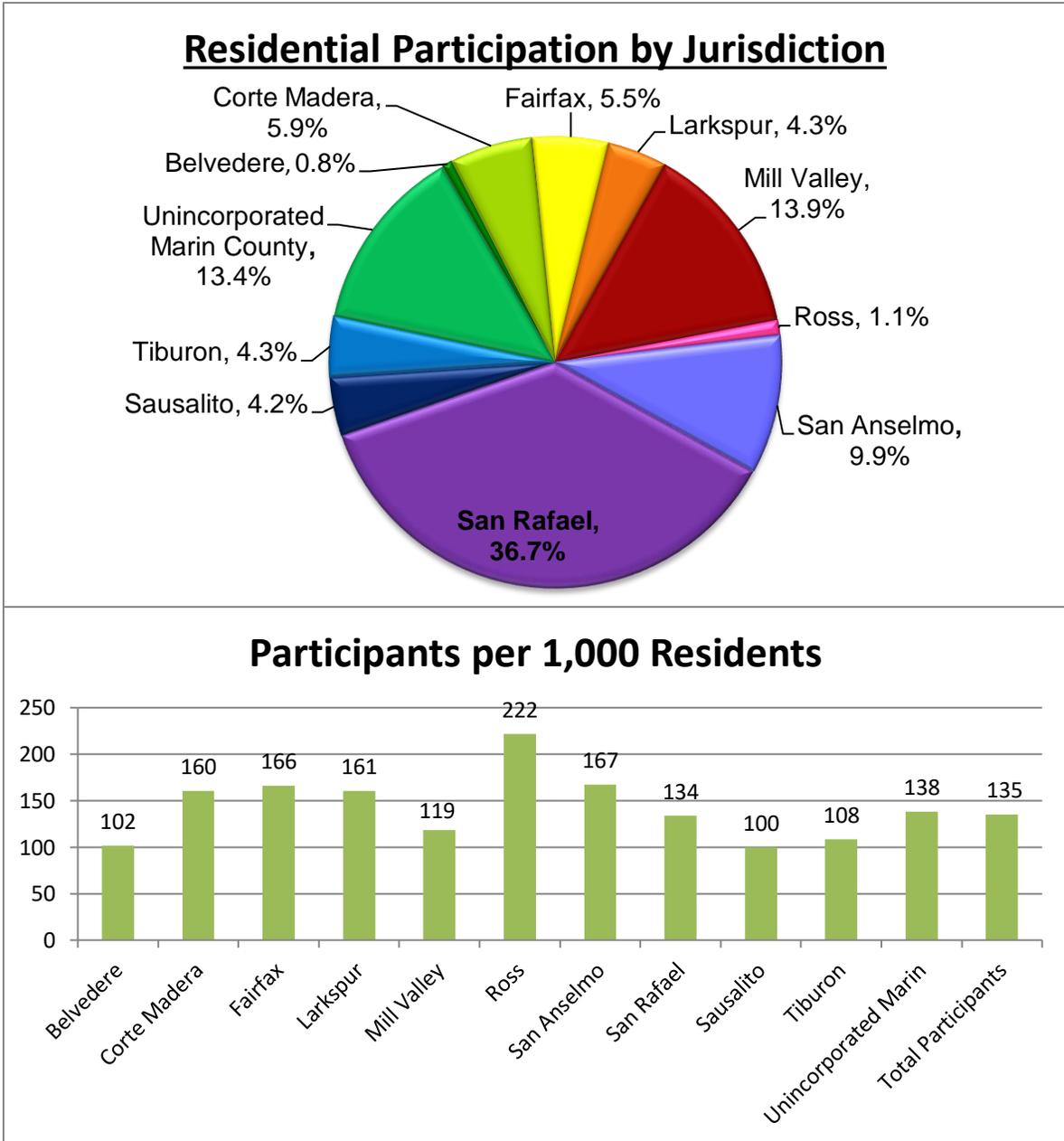
Just under 2,000 pounds of oxidizers were sent for stabilization, during which waste is brought to a solid or semi-solid state and is rendered non-hazardous.

Nearly all the landfilled waste consisted of asbestos.



Residential Participation

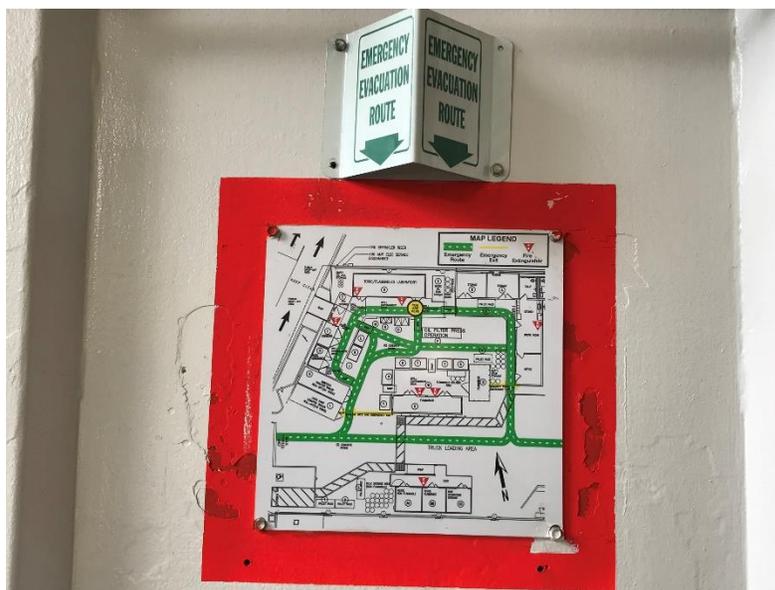
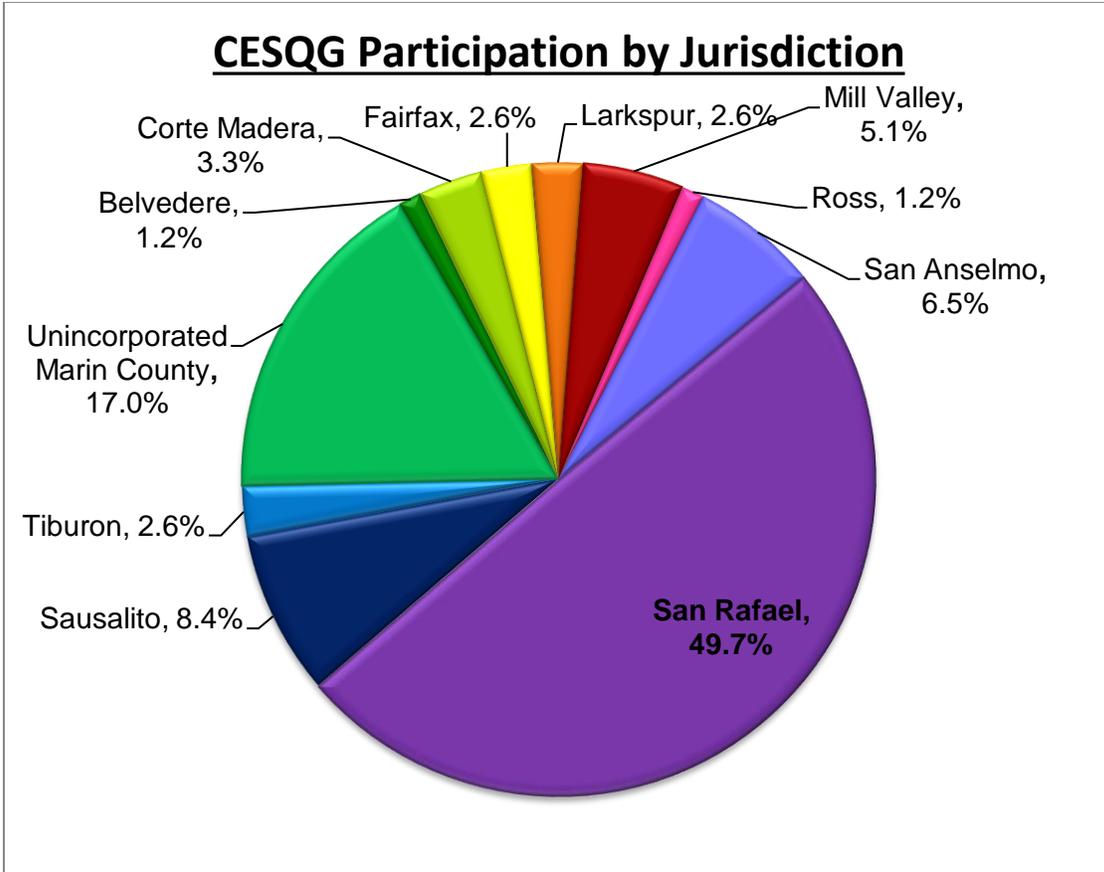
Participants are sorted by jurisdiction by reviewing the mailing address on their identifying documentation. Residents from unincorporated communities adjacent to a city thus are likely to be counted as city residents; for example, residents of Tamalpais Valley are counted as residents of Mill Valley. To account for this, city populations are based on U.S. Census ZIP Code Tabulation Area (ZCTA) data. The data show that residents from all over the service area use the facility.



* = City population based on ZIP Code Tabulation Area (ZCTA) data from U.S. Census Bureau

CESQG Participation

Although businesses from all over the county bring their hazardous waste to the facility, nearly half are from a single jurisdiction: San Rafael.



Looking Forward FY 2019/20

The HHW Program continues to seek out innovative approaches for enhancing recycling and reuse opportunities.

The Marin County Department of Public Works hired a new Waste Prevention Specialist, Andrew Shelton, in Summer 2019. We are excited for the opportunity to partner with Mr. Shelton on HHW-related events and projects impacting Marin County.

After the Marin HHW Facility's e-scrap processor, ECS Refining, permanently shut down at the end of June 2018, the facility has continued to work with its partner, Renew Computers, to manage output of electronic waste. However, instead of receiving revenue of approximately \$10,000 a year from e-waste, the facility now experiences a net loss from e-waste recycling. This is expected to be the new normal moving forward.

Despite this and other challenges, our excellent and hard-working staff will continue our mission to provide a safe and convenient way for members of the public and small businesses to dispose of their hazardous waste.

