



COUNTY of NAPA
DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

STEVEN LEDERER
Director

CHRISTINE M. SECHELI, R.E.H.S.
Assistant Director

December 20, 2007

Ms. Dana Stokes
California Integrated Waste Management Board
Statewide Technical and Analytical Resources Division
1001 I Street, MS-9A
Sacramento, CA 95812

Subject: Napa County Household Hazardous Waste Grant (15th Cycle) Submission of Completed Report and Request for Reimbursement

Dear Ms. Stokes:

Attached please find Napa County's final report for the subject grant and invoices supporting our request for \$7,0000.00 reimbursement for the work performed in accordance the terms of the grant.

Please feel free to contact me if you have any questions.

Sincerely,

Steven Lederer
Director, Napa County Department of Environmental Management
Manager, Upper Valley Waste Management Agency

Cc:
Chairman of the Board, UVWMA and NVWMA

Household Hazardous Waste Grant (15th Cycle) 2006-2007

Countywide Coordination Grant

PROPOSED ACTIVITIES:

1.0 Determine U-Waste and HHW in the waste stream

1.1 Perform Demographic Study of the NVWMA and UVWMA service area

California Department of Finance demographic data is referenced in Table 1, "NVWMA and UVWMA Per Capita Generation of Batteries", to establish population, household numbers/sizes for use in determining generation of batteries based on statewide averages.

1.2 Research U-Waste and HHW waste stream per CIWMB statistics

In 2001, there were 507,259,000 batteries sold in California and only 0.55% of these batteries were recycled¹. With the California population at approximately 35,000,000 in 2005, and with approximately 34,400,000 pounds of batteries sold, about one pound of waste batteries are produced per person per year². The WMA Form 303 report states the current HHW program in the WMA collects a combined total of approximately 1750 pounds of household batteries annually. This amounts to .013 pounds per person per year, or only 1.3% of the one pound state generation average per person. Therefore approximately 130,250 pounds of batteries, or 98.67% of the Napa County generated total of approximately 132,000 pounds, are not recovered on an annual basis.

With cellular phone subscription in the United States at 195 Million units³, and with an average life of 18 months, 125 million cell phones are landfilled annually⁴. With an estimated US population of 295,734,134 for July 2006, this equates to approximately .42 cell phones per person. In Napa County this equates to 55,440 cell phones disposed annually.

With approximately 85% of all fluorescent lamps (mercury lamps) being generated by business, about 1 Billion lamps are discarded per year, or 3.4 units per person⁵. With 30% currently being recycled nationally⁶, in Napa County, this calculates to 448,800 total lamps generated, and approximately 314,000 lamps discarded annually.

¹ "Household Universal Waste Generation in California" – California Integrated Waste Management Board (CIWMB) 2002

² "Household Universal Waste Generation in California" - CIWMB 2002

³ ICR Survey.com

⁴ charityguide.org

⁵ www.gov.pe.ca and US Census Bureau Quick Facts, calculated

⁶ National Electrical Manufacturers Association

calculated. Long-term funding will incorporate these rates in order to maintain long-term viability for the program.

2.4 Estimate ongoing funding needs per household

Once data could be gathered through the program, per pound costs for recycling batteries will be known and per household rates calculated. Long-term funding will incorporate these rates in order to maintain long-term viability for the program.

2.5 Analyze collection efficiency using a dollar per pound recovery model

See Table 1, "NVWMA and UVWMA Per Capita Generation of Batteries"

3.0 Supervise the design and/or revision of HHW public education programs and brochures

3.1 Review existing HHW program literature and public outreach efforts

A 24-page, multi-color recycling guide (see attached HHW related pages) funded by the city and county of Napa, Upper Valley Waste Management Agency, Napa Vallejo Waste Management Authority and the California Integrated Waste Management Board is posted online at www.napamax.org. The guide highlights the opportunities within the community to reduce, reuse and recycle before landfilling—referencing phone numbers of organizations in the community, hours of operation/locations of HHW facilities, ways to reduce generation of many common, everyday items, and reasons to avoid throwing toxic HHW in the trash. The existing guide is published annually, and can be found online and is also referenced in the local phone books.

3.2 Identify public relations opportunities within existing program

Napa County hosts many events and programs throughout the year. Newsletters are published quarterly by Upper Valley Disposal Service, and mobile events are planned for e-waste recycling and other HHW. These events are published on the County of Napa's website, www.co.napa.ca.us, and recycling options and guidelines are also featured. General information regarding battery, cell phone and fluorescent tube recycling can also be found on the website and will be distributed through these existing information portals in addition to flyers that can be inserted into monthly billing statements.

3.3 Draft battery related information for insertion to existing literature

See Attached Brochure from www.co.napa.ca.us, "Universal Waste in Napa County & How it Affects You" This guide-sheet was drafted during the course of the grant study and clearly explains what u-waste is, what items are considered u-waste, the problems regarding these toxic substances, how they should be handled, and where they should be disposed of safely. The 24-page guide at www.napamax.org features the same information, and this 2006-2007 edition of the guide features a more in-depth look at u-waste, and batteries specifically.

**Table 1:
NVWMA and
UVWMA Per Capita Generation of Batteries**

Projected 2006 Battery Generation in California in pounds	34,380,127
Estimated California population in 2005	35,000,000
Estimated waste batteries generated per person per year in pounds (approx.)	1
Projected 2006 Total Handling Cost ^{2,3}	\$ 31,072,760
Estimated education, collection, and processing per person per year	\$ 0.50
Estimated disposal only from MRF/TS per pound per year (approx.)	\$ 0.50
Total Estimated Program Cost per pound of batteries - generation to disposal	\$ 1

Projected Annual Program Costs by Jurisdiction	Population Served	Projected Annual Recovery Rates in Pounds		
		at 50% targeted recovery Year 1	at 60% targeted recovery Year 2	at 75% targeted recovery Year 3 ⁵
Napa	71,412	35,706	42,847	53,559
American Canyon	9,375	4,688	5,625	7,031
Calistoga	5,223	2,612	3,134	3,917
St. Helena	6,006	3,003	3,604	4,505
Uninc. Napa County	31,280	15,640	18,768	23,460
Yountville	3,257	1,629	1,954	2,443
Totals	126,553	63,277	75,932	94,915
Three Year Recovery in Pounds from 50% to 60% to 75% Recovery	234,123			
Total Program Cost at \$1/pound recovery	\$ 234,123			
Persons per household average, Napa County ⁴	2.65			
Annual Program Cost per Household	\$ 2.65			
Cost per household per month	\$ 0.22			

1. "Household Universal Waste Generation in California" - CIWMB 2002
2. "Household Universal Waste Generation in California" - CIWMB 2002; 2006 costs projected
3. Handling costs referenced are for surveyed Household Hazardous Waste facilities per 1, and 2 above.
4. Table 2: E-5 City/County Population and Housing Estimates, California Department of Finance, January 2005
5. Recovery Rate reflects one half of program costs in year three due to six month staggered start with UVWMA.

Table 2:

UVWMA HHW Generation

Upper Valley Waste Management Agency

Estimated California population in 2005 - 35,000,000

	Est. Pct.	+/-	Est. Tons ²	Est. per capita in # per year	Callistoga	Napa	St. Helena	Uninc. Napa County	Yountville	Total WMA Pounds Generated
Population ¹					5,223	71,412	6,006	31,280	3,257	117,178
Electronics	1.20%		481,353							
Brown Goods	0.10%	0.00%	41,394	2.37	12,354	168,916	14,206	73,989	7,704	277,169
Computer-related Electronics	0.30%	0.20%	119,917	6.85	35,790	489,344	41,156	214,343	22,318	802,951
Other Small Consumer Electronics Television and Other Items with CRTs	0.20%	0.10%	93,273	5.33	27,838	380,618	32,011	166,719	17,359	624,545
	0.60%	0.50%	226,769	12.96	67,681	925,373	77,827	405,333	42,205	1,518,419

Household

	Est. Pct.	+/-	Est. Tons ²	Est. per capita in # per year	Callistoga	Napa	St. Helena	Uninc. Napa County	Yountville	Total WMA Pounds Generated
Hazardous Waste	0.20%		73,599							
Paint	0.00%	0.00%	19,203	1.10	5,731	78,361	6,590	34,324	3,574	128,581
Vehicle and Equipment Fluids	0.00%	0.00%	1,000	0.06	298	4,081	343	1,787	186	6,696
Used Oil	0.00%	0.00%	548	0.03	164	2,236	188	980	102	3,669
Batteries ³	0.10%	0.00%	34,021	1.94	10,154	138,829	11,676	60,810	6,332	227,801
Remainder - Composite HHW	0.00%	0.00%	18,827	1.08	24,018	328,382	27,618	143,838	14,977	538,833

Metal 1.50% 618,039

Major Appliances	1.50%	2.10%	616,663	35.24	184,047	2,516,408	211,639	1,102,241	114,770	3,945,057
Used Oil Filters	0.00%	0.00%	1,376	0.08	411	5,615	472	2,460	256	8,803

1. City/County Population and Housing Estimates, California Department of Finance, January 2005
2. Composition of California's Overall Disposed Waste Stream by Material Type, Waste Characterization Study, CIWMB 2004
3. Assumed automobile batteries

ARE ELECTRONICS A PROBLEM?

The simple answer is "Yes"...



With upgrading and newer features, larger quantities of electronic products are becoming obsolete. Today, e-waste is a large portion of our waste stream and the numbers are only expected to increase.

E-waste dumped in landfills can contaminate groundwater, posing a risk to the environment and public health.

About California's eRecycle fee



When you purchase a new TV or computer monitor, the recycling fee is from \$6-\$10, depending on the screen size. This money is used for collection, processing, and recycling these items.

COMPUTER PRIVACY

If you are thinking of selling or donating an old computer...

- You may be wondering how to protect private information saved on it. The only way to ensure that this information will not get into the wrong hands is to delete it from your hard drive.
- Deleting these files does not erase data from your hard drive; neither will reformatting your hard drive.
- The safest way to protect your private information and ensure compliance with software agreements is to overwrite the data saved on your computer with hard drive erasing software.
- You can download this software free of charge or purchase it from a computer retailer.

*To learn more on how to overwrite data visit:
www.nrcrg.org (see "articles") or www.ecr.org*

*For additional information
Napa Valley Personal Computers Users Group
recycler@nrcrg.org*

FREE E-WASTE COLLECTION EVENT EVERY JUNE

*Napa Valley College
Napa Campus, South Parking Lot*

E-waste materials are part of the u-waste items. Dispose of many of these e-waste items FREE!

Look for a coupon for this free June event. Look for a Year-Round Coupon mailed to NRWS/NCRWs customers for options other than the June event.

FREE to Napa County residents and businesses ONLY!

WHAT WILL BE ACCEPTED at this event?

- Televisions, Computer Monitors & Flat Screens
- Computer Equipment: computers, laptops, keyboards, printers, scanners, cables, mouses
- Office Equipment: telephones, fax machines, & copiers
- Consumer Electronics: tape players, VCRs, stereo equipment, radios, PDAs, cell phones, etc.

EXAMPLES OF ITEMS NOT ACCEPTED

- Household appliances: such as blenders, toaster ovens, coffee makers, hair dryers, irons, curling irons, vacuums, smoke detectors

FOR MORE INFORMATION

Napa County Dept. of Environmental Management 253-4471
Napa Recycling & Hazardous Waste Info Line 257-9292
Department of Toxic Substances Control (DTSC) 800-727TOXIC
www.zerowaste.ca.gov

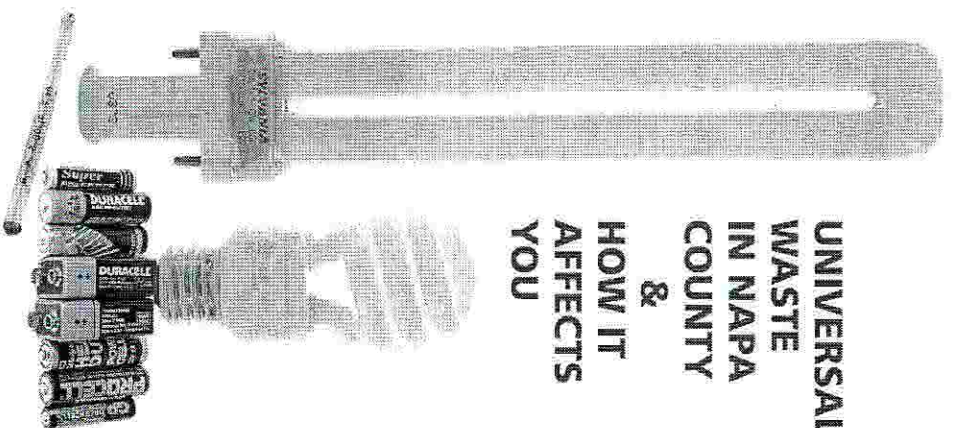


Published by City and County of Napa & NRWS/NCRWs

May 2006

Please note that organizations and fees may change without notice. The mentioned websites and organizations represents no recommendations by the City and County of Napa or NRWS/NCRWs.

UNIVERSAL WASTE IN NAPA COUNTY & HOW IT AFFECTS YOU



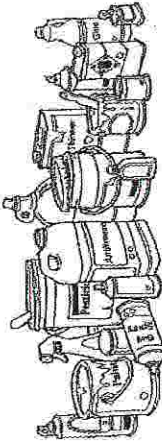
As of February 9, 2006, all "universal waste" materials have been banned from the trash. If not disposed of properly, these items will release toxic substances that find their way into our air, water and eventually into the food we eat.

Please read on...

Cleaners Syringes Household Batteries Medications Herbicides Solvents Antifreeze Asbestos Photo Chemicals

Napa-Vallejo HOUSEHOLD HAZARDOUS WASTE COLLECTION FACILITY

For residents in Napa County, Cities of Vallejo & Benicia, and Unincorporated Solano County.
For Business Wastes see opposite side.



Household Hazardous Wastes are **UNWANTED or UNSABLE** products with toxic ingredients.

OPEN
Every Friday & Saturday
9am - 4pm

Households:
No appointment required / No charge
Businesses:
Appointment only / Charge for service

**REDUCE TOXIC WASTE
FROM THE START**

- ▶ Buy the right product for the job.
- ▶ Choose the least toxic product.
- ▶ Buy only as much as you can use up.
- ▶ Store products properly so they don't become unusable.

**FOR MORE INFORMATION
CALL 1-800-984-9661**

Fluorescent Light Bulbs Small Propane Tanks Old Gasoline Drain Openers Pesticides Contaminated Soil Motor Oil

Recyclable Hazardous Wastes

Motor oil, oil filters, latex paint auto batteries & antifreeze can be recycled EVERYDAY.

5 locations in Solano County!

call: 1-800-CLEANUP
or www.recycle-guide.com

4 locations in Napa County!

call: 257-9292 or see list in SBC phone book yellow pages under "recycle"

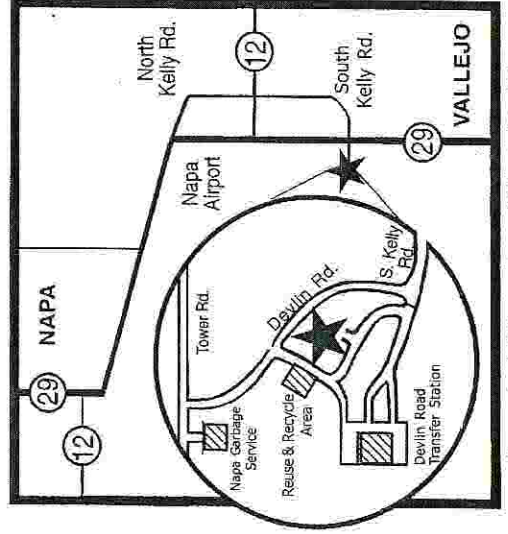
Business Program

Napa & Solano County Businesses that generate less than 220 lbs. or 27 gal. of hazardous waste per month may be eligible to use the "Conditionally Exempt Small Quantity Generator" program. There is a charge for this service. Call 800-984-9661 for information & appointment.



PLEASE REMEMBER

- Pack products carefully to avoid spills or mixing.
- Transport in trunk if possible.
- No radioactives, explosives, ammunition, PCBs or electronic wastes are accepted.
- **15 gallons or 125 lbs maximum per trip.**

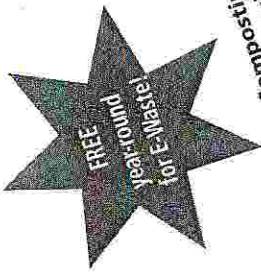


Household Hazardous Waste Facility
889A Devilin Rd., American Canyon

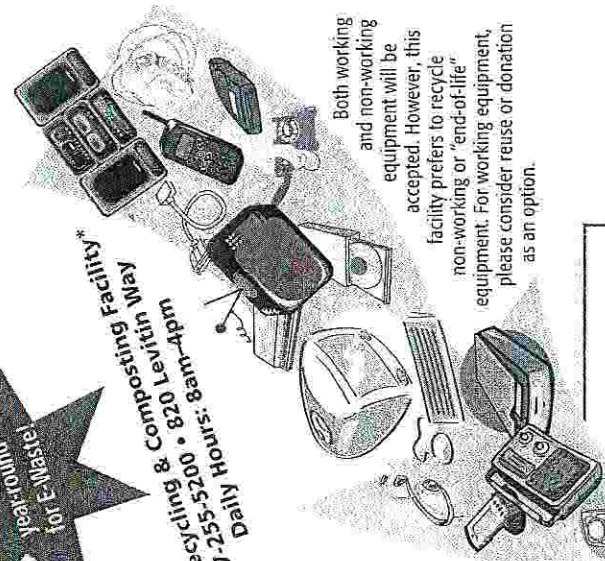
Napa Recycling & Composting Facility

now accepts

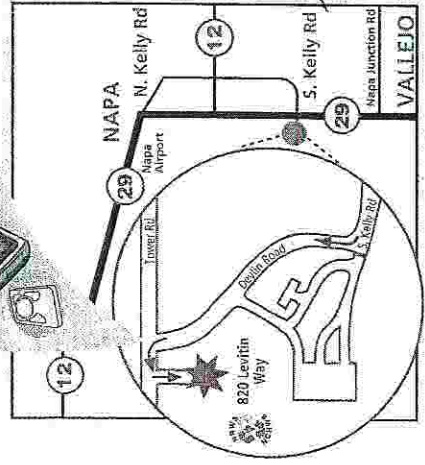
E-Waste FREE!



Napa Recycling & Composting Facility
 820 Levittin Way • 925-552-2000 • Daily Hours: 8am-4pm



Both working and non-working equipment will be accepted. However, this facility prefers to recycle non-working or "end-of-life" equipment. For working equipment, please consider reuse or donation as an option.



* This facility accepts several other types of recyclable materials for a fee - including clean yardwaste, wood, concrete, etc. Please see the recycling guide in your Napa phone book for more details.

Please see reverse for complete list of accepted E-waste

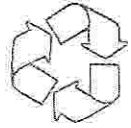
Napa Recycling & Composting Facility

now accepts

E-Waste FREE!



Napa Recycling & Composting Facility
 820 Levittin Way • 925-552-2000 • Daily Hours: 8am-4pm



What will be accepted at this location?*

COMPUTER EQUIPMENT: computers & laptops, keyboards, printers, scanners, cables, mice
TELEVISIONS, COMPUTER MONITORS & FLAT SCREENS
OFFICE EQUIPMENT: telephones, fax machines, & copiers (*Please remove toner.*)
CONSUMER ELECTRONICS: microwaves, VCRs, tape players, stereo equipment, radios, PDAs, cell phones, etc.

EXAMPLES OF ITEMS NOT ACCEPTED:

Household appliances: such as blenders, toaster ovens, coffee makers, hair dryers, irons, curling irons, vacuums, smoke detectors
Computer software or CDs
Hazardous/toxic wastes: such as paints, solvents, used oil, etc

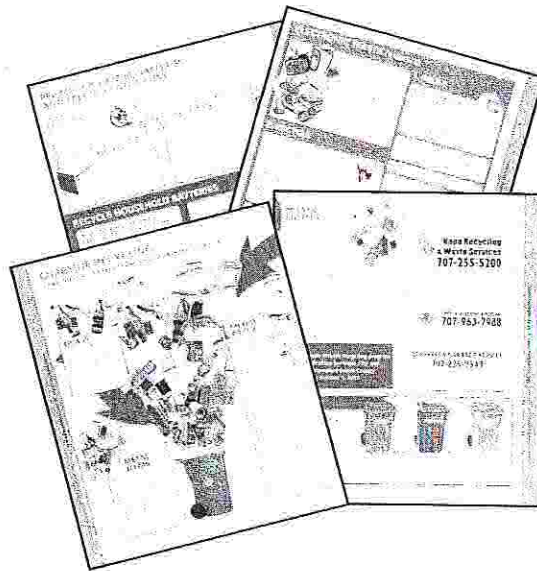
To learn how to erase personal information off your computer visit:
www.nvpcug.org/Erasing_Hard_Drive.htm
 or: www.crc.org/erase

For additional information please contact:
 Napa Valley Personal Computer Users Group
 E-mail: recycler@nvpcug.org
 To donate Pentium 3, fast Celeron, or newer computers to the **Computers-to-Schools** Program, e-mail: CTS@nvpcug.org

* This facility accepts several other types of recyclable materials - SEE REVERSE for more details.

Recycling information at your fingertips...

Napa's
Reduce/Reuse/Recycle Guide
in your phonebook yellow pages



Explore the Green in Your Yellow Pages

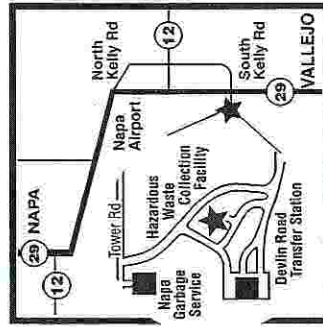
Look under "Recycling" for this 16-page guide about recycling programs, workshops, rebate incentives, donation alternatives and proper disposal of hazardous wastes.

*Recycle your outdated telephone directory in your
blue curbside recycling cart.*

WHERE & WHEN?

PERMANENT HAZARDOUS WASTE
COLLECTION FACILITY

Please call
1-800-984-9661
BY APPOINTMENT ONLY
Fridays & Saturdays
FOR DISPOSAL AT:
889A Devlin Road, Napa



IMPORTANT NUMBERS & WEBSITES:

Napa Co. Dept. of Environmental Management
707-253-4471

www.co.napa.ca.us/departments/environmental/default.asp

Solano Co. Dept. of Environmental Management
707-421-6765

www.solanocounty.com/Department/Department.aspx?NavID=84

CA Dept. of Toxic Substances Control - 800-618-6942
www.dtsc.ca.gov

HAZARDOUS WASTE DISPOSAL FOR BUSINESSES

Conditionally Exempt Small Quantity Generator PROGRAM

A Guide for Napa & Solano
County Businesses

**AFFORDABLE, SAFE
& LEGAL DISPOSAL**

WHAT IS A CESQG?

Businesses generating less than 220 pounds or 27 gallons of hazardous waste in any one month, are legally classified as a Conditionally Exempt Small Quantity Generator (CESQG).

Common businesses that could use the CESQG Program:

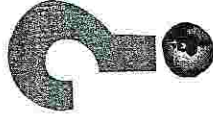
wineries
painters
printers
labs
vehicle repair
artists
builders
property managers
landscape contractors
pest control services
photofinishing shops

This program offers businesses an affordable way to comply with state laws and regulations for disposal of hazardous wastes. By participating in this program, wastes are consolidated and transported for many businesses, saving each business the expense of hiring an independent waste hauler.

WHY CESQG?

State and Federal law requires businesses to store and dispose of all hazardous waste properly.

For businesses that generate small amounts of hazardous wastes, this can be difficult & expensive.



To assist businesses with compliance and to protect the environment, Napa-Vallejo Waste Management Authority sponsors a business waste collection program for CESQG. Look inside for how you can use this program.

Protect your business & employees by disposing of unwanted, unused, and out-of-date hazardous wastes properly.

REDUCE AND PREVENT WASTE FROM THE START:

- 1) Buy the right product for the job.
- 2) Read the product label. Look for the words caution, warning, danger, or poison. Choose the least toxic product.
- 3) Buy only as much as you can use up.
- 4) Store products properly, so they don't become unusable.

SERVICIO PÚBLICO DE COLECCIÓN DE DESPERDICIOS PELIGROSOS COMO SU ÚLTIMA OPCIÓN.

En algunos casos, los desperdicios peligrosos no se pueden evitar. Por ejemplo, cuando usted compra una propiedad nueva, puede que "herede" productos guardados por más de treinta años.

El Servicio Público de Colección de Desperdicios Peligrosos del Valle de Napa existe para el depósito seguro y legal de productos peligrosos inutilizables.

Por favor, recuerde empaquetar los productos con cuidado, para que no se mezclen ni se derramen. Traspóñelos en la cajuela de su auto, de ser posible. El Centro acepta todo tipo de desperdicio peligroso, salvo:

- Radioactivos
- Explosivos
- Municiones
- PCBs

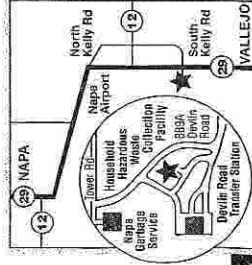
Por razones de seguridad de caminos, hay un límite de 15 galones o 125 libras de desperdicios peligrosos del hogar por cada viaje.

**Abierto CADA Viernes y sábado
9:00 am - 4:00 pm**

Domicilios:
No hay cobro,
No se necesita cita.

Empresas:
Hay cobro,
Sólo con cita.

Para más información
llamar al 1-800-984-9661



¿QUÉ SON LOS DESPERDICIOS PELIGROSOS DEL HOGAR?

Muchos de los productos que se encuentran en casa contienen sustancias nocivas que pudieran posiblemente lastimar al usuario o dañar al medioambiente cuando se manejan mal o se guardan incorrectamente.

Los productos peligrosos se convierten en "desperdicios" peligrosos cuando deseamos deshacernos de ellos. O se vuelven inutilizables, o bien, ya no nos hacen falta.

Es ilegal tirar desperdicios peligrosos del hogar a la basura, al suelo o a las alcantarillas.

¿CÓMO PUEDO SABER CUÁLES PRODUCTOS SON PELIGROSOS?

Los productos peligrosos del hogar caben en una o más de estas categorías:

Tóxico:

Veneno o letal al ingerir, tocar o inhalarse - hasta en cantidades pequeñas.

Inflamable:

Se enciende fácilmente.

Reactivo:

Crea una explosión o produce vapores mortales (p.ej., cloro mezclado con limpiadores a base de amoníaco.)

¿Cuáles son ejemplos de desperdicios peligrosos del hogar?

Sorprendentemente, muchos de los productos comunes del hogar son peligrosos. Unos ejemplos son:

El Hogar:

- Pulimentos y limpiadores
- Limpiadores de horno
- Líquidos para desatapar el drenaje
- Combustible para encendedor
- Barniz y acetona para uñas
- Cosméticos

El Jardín:

- Fungicidas
- Insecticidas
- Herbicidas
- Químicos para la alberca

El Garage/Taller:

- Pinturas látex o con base de aceite
- Diluyentes y removedores de pintura
- Preservativos para la madera
- Solventes para la grasa y el moño
- Aceite y filtros usados
- Anticongelante
- Fluidos de transmisión
- Baterías
- Gasolina, aditivos
- Limpiadores de carburador
- Pegamentos, cementos
- Químicos para la fotografía

¿CÓMO PUEDEN LOS DESPERDICIOS PELIGROSOS DEL HOGAR DAÑAR A LA GENTE Y AL MEDIOAMBIENTE?

Además del daño inmediato que los productos pudieran hacerle al usuario, el depósito incorrecto resulta en amenazas adicionales:

Desde el Bote hasta el Basurero:

Cada año, el 3% de los recolectores de basura se lastiman a través del contacto con sustancias nocivas en la basura. También los trabajadores del basurero son amenazados.

Una vez que la basura llegue al basurero, materiales nocivos se pueden percolar por el suelo y contaminar a las fuentes de agua potable.

Por los Drenajes de la Casa:

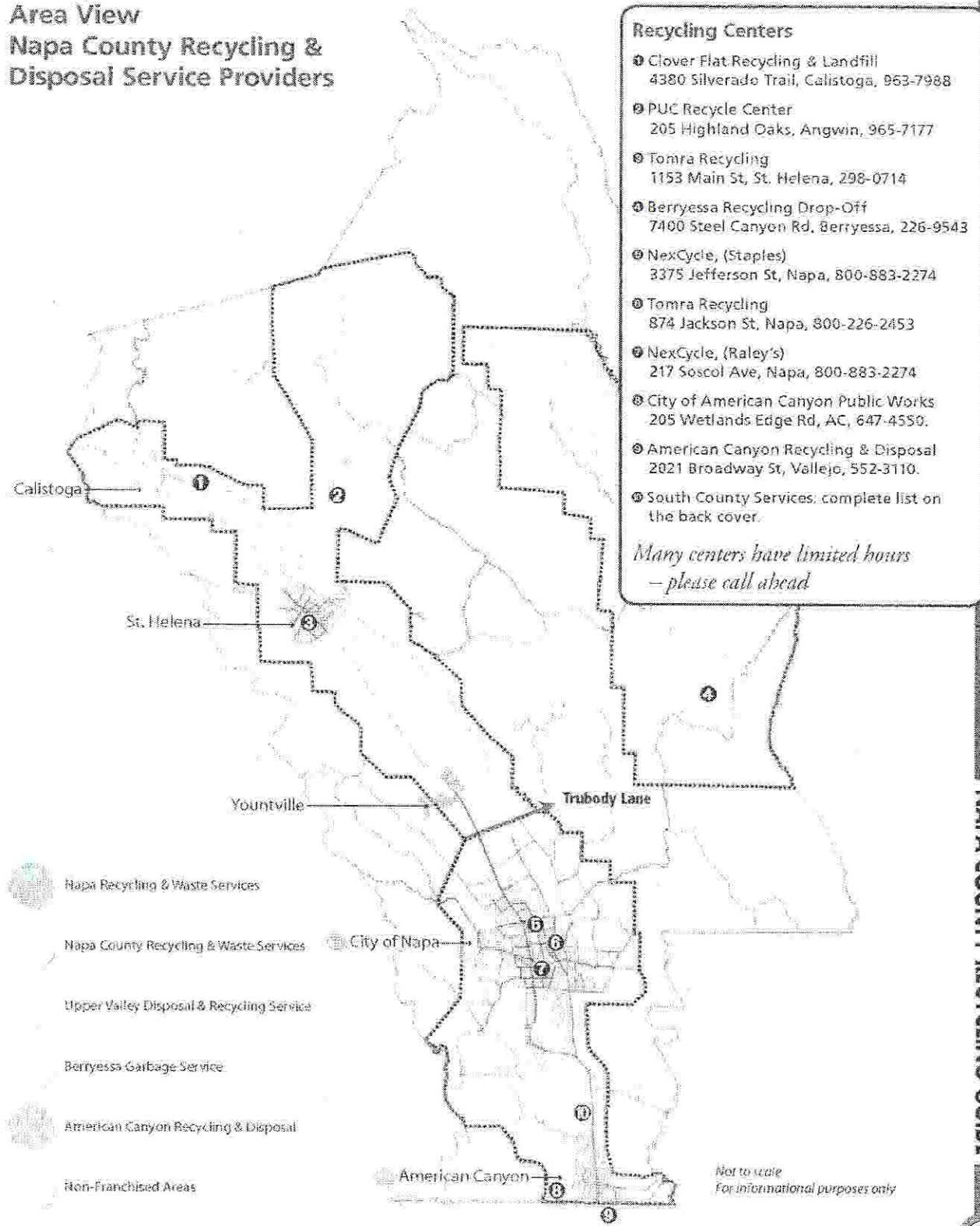
Su drenaje de la casa procede a una planta de tratamiento del agua o a su propio sistema séptico. Aún las mejores plantas de tratamiento no pueden descomponer a ciertas sustancias químicas y metales pesados que existen dentro de los productos peligrosos, así es que se vuelven a escapar al medioambiente. Los productos tóxicos pueden matar a los organismos en su sistema séptico los cuales descomponen a las aguas fecales.

Al Suelo o las Alcantarillas:

Los desperdicios nocivos que se tiran al suelo o a la calle contaminan a la tierra y al agua - todos los recursos de agua están conectados - ésta es su agua de beber de usted.



Area View Napa County Recycling & Disposal Service Providers



- ### Recycling Centers
- 1 Clover Flat Recycling & Landfill
4380 Silverado Trail, Calistoga, 953-7988
 - 2 PUC Recycle Center
205 Highland Oaks, Angwin, 965-7177
 - 3 Tomra Recycling
1153 Main St, St. Helena, 298-0714
 - 4 Berryessa Recycling Drop-Off
7400 Steel Canyon Rd, Berryessa, 226-9543
 - 5 NexCycle, (Staples)
3375 Jefferson St, Napa, 800-883-2274
 - 6 Tomra Recycling
874 Jackson St, Napa, 800-226-2453
 - 7 NexCycle, (Raley's)
217 Soscol Ave, Napa, 800-883-2274
 - 8 City of American Canyon Public Works
205 Wetlands Edge Rd, AC, 647-4550.
 - 9 American Canyon Recycling & Disposal
2021 Broadway St, Vallejo, 552-3110.
 - 10 South County Services: complete list on the back cover.
- Many centers have limited hours
— please call ahead*

- 1 Napa Recycling & Waste Services
- 11 Napa County Recycling & Waste Services
- 11 Upper Valley Disposal & Recycling Service
- 11 Berryessa Garbage Service
- 11 American Canyon Recycling & Disposal
- 11 Non-Franchised Areas

Not to scale
For informational purposes only

**Household Hazardous Waste Grant Cycle 15
Countywide U-waste Coordination Grant
Final Report Form**

Instructions: Please complete all sections of this report form to qualify your jurisdiction for the coordination grant reimbursement. If multiple choices are appropriate, check all that apply. Attach additional sheets of explanation if necessary.

Please also attach copies of any work products (plans, brochures, agreements, program descriptions, best practices, stakeholder lists, etc.) that would be useful examples for other jurisdictions operating a u-waste management program.

Be sure to sign the report before returning it to your CIWMB grant manager.

1. Grant number: **HD 15C-06-28**
2. Grantee (lead coordinator agency): **Upper Valley Waste Management Agency for Napa County and the Napa-Vallejo Waste Management Authority**
3. Person preparing this report: **Evan W.R. Edgar**
4. Title: **Principal Engineer & President**
5. Contact phone number: **916-739-1700**
6. Countywide area: **All County of Napa and the City of Vallejo**

The Grantee is the Upper Valley Waste Management Agency (UVWMA) for Napa County, and the Napa-Vallejo Waste Management Authority (NVWMA). This is a unique situation where the UVWMA is an AB 939 Regional Agency, and where NVWMA is a Waste Management Authority, but not an AB 939 Regional Agency, which also includes the City of Vallejo located in Solano County. Napa County staff participated with the UVWMA and NVWMA, which covers the entire County. There have been many successful programs covering the entire Napa County, and the purpose of this Countywide Coordination Grant is to review and analyze universal waste and household hazardous waste practices in upper Napa Valley and southern Napa County, and coordinate on current and future activities in a common and collaborative process.

The focus of the Countywide Coordination Grant was on used household batteries that exist in both the UVWMA and NVWMA waste stream. The Work Plan and Budget was to identify methods for on-going financing of the proposed Battery Collection Program and to prepare models for efficient battery collection.

Upper Valley Waste Management Agency (UVWMA): UVWMA provides support services for the joint powers agency between Calistoga, St. Helena, Yountville and upper Napa County, for uniform and economical waste management in the Upper Valley areas,

- Regulatory/enforcement (CUPA, police, fire, toxic spill, etc.)
- ✓ Waste industry (haulers, recyclers, HHW facility operators, etc.)
- Non-profit/interested public (environmental, environmental justice, etc.)
- Business community (major commercial u-waste generators and retailers)
- Alternative product vendors (non-toxic, long life, reusable, recyclable, etc.)

The following meetings were held as part of the stakeholder outreach

- March 29, 2007 Kick-off meeting with UVWMA staff and the city of Napa. Interview Napa Recycling Services and Upper Valley Recycling on regional needs.*
- May 21, 2007 Presentation to the UVWMA Board on the scope of the regional study and pending legislation.*
- June 12, 2007 Collected tonnage information and site visit to Clover Flat Landfill.*
- July 14, 2007 Meeting at Upper Valley Disposal Service and Clover Flat Landfill on u-waste collection, drop-off amounts, budgets, and service gaps.*
- July 20, 2007 Meeting at Napa Recycling & Waste Services and the City of Napa on u-waste collection drop-off amounts, budgets, and service gaps.*
- July 24, 2007 Interviewed the County of Napa, the County LEA, and attended the AB 939 Local Task Force meeting on the regional study.*
- Dec. 13, 2007 Review of the draft Survey by County Staff and local haulers*

8. Were there any significant stakeholder groups or individual agencies that declined to participate? If so, list them and briefly explain why they did not participate.

No. All who were asked provided time for an interview and provided program and budgetary information. Both the City of Vallejo and the Sonoma County Waste Management Authority were also interviewed outside of Napa County.

9. Check or list the significant activities that were undertaken and completed under the grant reporting period. (Please address all the categories shown in your application work plan. Be sure to check or list any additional activities not in the original plan, but approved later by your CIWMB grant manager.)

- ✓ Workshops (# held / total # of participants) - *Agenda Item on the AB 939 Local Task Force on July 24, 2007, and agenda item at the UVWMA Board meeting on May 21, 2007*
- Surveys (# households or businesses participating in the survey) - *None*
- ✓ Studies – *Extrapolated from CIWMB studies on batteries waste generation amounts and possible recovery rates and budget needs.*
- ✓ Plans – *Clover Flat Landfill drop-off was expanded to collect compact fluorescent lamps (“CFL’s at CFL”) and used batteries.*

WORK PLAN RESULTS

12. U-waste material generation estimates:

The focus of the Countywide Coordination Grant was on used household batteries that exist in both the UIVWMA and NVWMA waste stream. The Work Plan and Budget was to identify methods for on-going financing of the proposed used Battery Collection Program and to prepare models for efficient battery collection.

- Amount of u-waste **generated** in countywide area per year
 - √ N/A: Lamps
 - √ N/A: Electronic devices (non SB 20, e.g., do not include televisions, monitors)
 - √ N/A: Other material
 - √ Batteries – *The focus of the regional study was on used batteries.*

In the report entitled Household Universal Waste Generation in California, August 2002, there were 507,259,000 batteries sold in California in the year 2001. It is estimated that one pound of waste batteries are generated per person per year in California. Most of these batteries today, regardless of type, are collected at either drop off locations, such as recycling centers, big box home improvement centers for rechargeable “tool” batteries, or in some cases fire stations, or via the regular waste stream collection system for subsequent sorting in a mixed solid waste or material recovery facility.

The following amounts of batteries could be generated within the County of Napa:

Unincorporated County:	31,000 pounds/year
Napa	71,000 pounds. year
American Canyon	9,400 pounds/year
St. Helena	6,000 pound/year
Calistoga	5,200 pounds/year
<u>Yountville</u>	<u>3,250 pounds/year</u>
Countywide Napa	125,850 pounds/year or 63 tons/year
<u>Vallejo</u>	<u>116,760 pounds/year</u>
UIVWMA & NVWMA	242,610 pounds/year or 121 tons/year

- Amount or percent of u-waste **currently collected**
 - √ Batteries – 4,100 pounds in 2006 - *The focus of the regional study was on used batteries.*

Recycling rates have been poor at best. According to the Household Universal Waste Generation in California report of August 2002, survey results published shows, only 0.55% of these batteries were recycled. Anecdotal evidence from

- Amount or percent of u-waste **service gap** (generated minus collected)
 - √ Batteries – 98.3% *service gap. The focus of the regional study was on used batteries.*
 - √ N/A Lamps. *Whereas not analyzed with metrics, there is a huge gap in service. Just recently, the Clover Flat Landfill begin to collect CFLs.*
 - √ N/A Electronic devices (non SB 20, e.g., do not include televisions, monitors)
 - √ N/A Other material

13. U-waste **household materials** collection coverage/capacity **estimate**:

- Percent of households currently served by curbside, permanent facility, or mobile temporary event collection for u-waste.

There are no curbside services of universal wastes. The entire community has access to the Devlin Road Transfer Station Permanent HHW Facility and the Drop-off location at the Clover Flat Landfill for all types of HHW. There are 22 locations around the County accepting used batteries that are conveniently located for drop-off. The percentage of households currently served cannot be determined as the source of each battery at drop-off locations is not tracked. Therefore, the percentage of households that utilize these drop-off services was not determined.

14. Is additional coverage or capacity needed for **household materials**? If yes, what form should it take?

Yes, additional coverage/capacity for household materials is needed. Funding coverage is not adequate enough for an increase in recovery rates.

√ Upgrades to existing permanent facilities (capacity/hours/days)?

Yes – Funding. Upgrades to existing facilities in terms of funding are needed across the County. The more successful a battery and lamp collection is, the more funding the program needs to properly handle the materials. Clover Flat Landfill was upgraded in 2007 to collect and recycle used lamps.

√ New permanent facilities in new locations?

No. Devlin Road Transfer Station HHW's Facility and the Napa Recycling & Waste Services E-waste Free drop-off location serve the south Napa County, and the Clover Flat Landfill services the upper Napa Valley. The permanent facilities are adequate in terms of location and access, but without adequate funding, a substantial increase in collection rates is unfeasible.

√ Satellite drop off centers?

Yes, with funding. Currently there are 22 satellite drop-off centers countywide. Additional free and convenient drop-off locations for batteries and lamps are always welcome with additional funding.

Yes, with free and convenient service not funded by local government. Retail partners that take back the materials at no cost are the service gap that needs to be filled. These costs should not be placed on local government or the hauler, but need to be provided at the point of retail.

- √ Mail back materials to collector or manufacturer?

Yes, for smaller types of u-waste, sharps, and pharmaceuticals.

- √ Other public/private partner collection?

No. A private collection proposal to collect batteries and cell phone as part of the single-stream system was proposed as a pilot program, but was not pursued due to lack of regional compatibility and potential MRF processing problems.

Yes. Private partners offering free take back services for u-waste is needed.

- √ Interagency agreements between jurisdictions for shared HHW Facility usage?

No. The agreement already exists.

15. U-waste **small quantity business generator (CESQG)** collection coverage/capacity estimate:

- Percent of CESQGs currently served by curbside, permanent facility, or mobile temporary event collection for u-waste. *Not determined.*

The Devlin Road Transfer Station HHW Collection Facility offer appointments to CESQG. Napa County is part of the Bay Area Green Business Program which verifies that businesses meet higher standards of environmental performance. The partnership of government agencies and utilities helps local businesses comply with all environmental regulations and take actions to conserve resources, prevent pollution, and minimize waste. The Napa County Green Business Program motivates businesses and agencies an easy-to-use framework for improving environmental performance, and to utilize the CESQG program.

16. Is additional CESQGs coverage or capacity needed for household materials? If yes, what form should it take?

- √ None needed, existing coverage and capacity are adequate?

No. Existing funding is inadequate, and cannot support an increase in recovery rates.

- √ Upgrades to existing permanent facilities (capacity/hours/days)?

Yes – Funding. Upgrades to existing facilities in terms of funding are needed at the Devlin Road Transfer Station HHW Collection Facility. A facility needs the funding stability to support a successful recovery program.

18. Does your county wide area have a “best practices” standard for convenient available **open times** for u-waste drop off facilities?

√ No standard

The highest and best standard would be to offer “free and convenient” services to the general public during normal operating hours with adequate funding. The Clover Flat Landfill drop-off is open during the same hours the facility is open and is free to the public. The Devlin Road HHW Facility is open on Friday and Saturday from 9 am to 4 pm and without an appointment; the CESQG drop-off does require an appointment. The Napa Recycling & Waste Services facility is open 7 days per week, 8 am to 4 pm, free of charge, because of the SB20/SB50 program. The drop-off location is open during their normal business hours. The standard is to have adequate funding to be “free and convenient” following the EPR principle found in SB20/SB50 for all types of u-waste.

19. Proposed strategy for **reducing** the amount of u-waste **generation**

√ Education campaign (buy less, non-toxic, longer life, etc) – *Public education is always a welcome strategy to decrease u-waste generation. Napa County has extensive local public education efforts within the customers bills, an extensive recycling guide in the phone book, and for CESQG with the Green Business Program.*

√ Alternative product exchange events – *The Devlin Road HHW Facility has a HHW Waste Exchange program.*

√ Other method (list) – *EPR and Green Chemistry legislation to provide reduced toxicity, design for recycling, and funding needs to occur at the state and federal levels, as local efforts to ban materials are fragmented and isolated and are not always effective.*

20. Proposed strategy for illegal u-waste disposal **enforcement**

√ General population awareness/education – *The message is incorporated in public service announces and information material*

√ Load checks – *Yes. Load checking programs at the Clover Flat Landfill and the Devlin Road Transfer Station are routine, though the likelihood of finding batteries inside of packed garbage bags is very low.*

√ Administrative fines – *Yes for gross violators*

√ Legal action – *Yes, where needed.*

21. Proposed methods of u-waste **education/awareness**

√ Mass media (radio, TV, etc.) - *Yes*

√ Mass media (newspapers) - *Yes*

√ Mass media (internet web sites) - *Yes*

with stronger enforcement and mandates, the funding shortfall would be insurmountable.

24. Proposed local funding sources/strategies for needed additional u-waste prevention and collection efforts:
- √ General fund – *Not anticipated*
 - √ Waste account or other existing special fund - *Not anticipated*
 - √ Revise franchise agreement - *Not anticipated*
 - √ Revise disposal fees on households or CESQGS – *Possible funding on CESQGS*
 - √ Revise disposal gate fees at landfills or transfer stations – *Not for u-waste. Free and convenient drop-off*
 - √ Revise disposal special fees at HHW collection centers - *Not for u-waste. Free and convenient drop-off*

 - √ Enforcement fines – *For gross violators*
 - √ State block grants (for ongoing operations) – *HHW 17th Grant Cycle*
 - √ State competitive grants (for facility and new program development) - *HHW 17th Grant Cycle*
 - √ Permit or license fees for waste generators - *Not anticipated*
 - √ Other method (list) – *EPR on manufacturers with collection at the point of retail*

25. Based on your coordination plans, what is your best estimate of the total percent of all county-wide u-waste that will be collected annually at the end of 5 years (2012)?

With current funding levels and current regulations and legislation, the collection rate will remain basically flat over time for u-waste such as batteries and lamps. The more successful the program, the more expensive the program where there is not adequate funding to reach new metrics and goals beyond the current “free and convenient” with consistent public education in place for those willing and wanting to participant.

The collection rate will increase commensurately with funding such as the successful e-waste program has proven with SB20/SB50 legislation where e-waste is “free and convenient” whereby the recovery rate is incrementally increasing.

GRANTEE FEEDBACK:

26. Do you feel that this grant funded coordination effort has improved your countywide systems ability to decrease u-waste generation and/or increase u-waste collection?

Little or no difference