"E-rase Your E-waste" 2007 Cross-border, Cooperative Event

Sidney, Montana / Williston, North Dakota

FINAL REPORT •

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September 7, 2007 LEPC, ROI, CERT/RSVP, ARS Sidney, Montana

> September 8, 2007 Upper Missouri Public Health District Williston, North Dakota

I. BACKGROUND

For the third year in a row, Richland County held an "E-rase your E-waste" community ecycling event in Sidney MT after the Richland County Local Emergency Planning Committee (LEPC) again agreed to spearhead the effort through the E-waste Committee it established in 2006 to help coordinate future e-cycling events and activities. This year, the group held a unique back-to-back event with Williston, ND described as our "Cross-border, Cooperative E-rase Your E-waste Event." The Sidney group provided advice and training to the Williston group when needed, with the two communities sharing an e-cycler, a weekend (Sidney collecting on Friday, Sept. 7 and Williston collecting on Saturday, Sept. 8), and publicity materials and TV time on local noon shows. However, each community also did their "own thing" when it came to seeking/administering donations and operating the actual events. Both communities sought donations to help reduce costs for participants and donors could designate which event they wanted their money used for or apply it to both.

The co-chair of the LEPC and the director of Richland Opportunities, Inc., (ROI) served as event co-coordinators for the Sidney collection. ROI, a non-profit organization, does cardboard and aluminum recycling as a community service and to provide work opportunities for its developmentally disabled clientele. The USDA/ARS/NPARL Safety Occupational Health and Safety Specialist and Technical Information Specialist also assisted on the E-rase your E-waste Committee, along with representatives from several other local entities (see Summary). In Williston, representatives with the Upper Missouri Public Health District organized their inaugural event. (Where available, information on that event is also included in the Summary below.)

This was the third computer and electronic components recycling collection event held in Richland County in the past three years. The county's initial 2005 e-cycling effort was used in part as a model for six other e-cycling events conducted across Montana in 2006. This year's joint event was Williston's first public collection, but not its first collection. In 2005 Williston representatives arranged to use our recycler for a private collection from that city's schools.

Our goal every year has been to collect outdated computer and other electronic equipment from local businesses and community residents for recycling, thereby keeping the items and their associated toxins out of the local landfill. This report contains a summary of event planning activities and outcomes.

II. SUMMARY

Event Partners

The following organizations and agencies partnered and assisted in planning, promoting and conducting the joint e-waste collection event in Sidney, MT and Williston, ND:

Richland County

- NPARL (provided space in parking lot for event, promotion materials, etc.)
- LEPC Local Emergency Planning Committee
- ROI Richland Opportunity Inc.
- DES Local Disaster Emergency Service Coordinator
- RSVP Retired Seniors Volunteer Program
- CERT Community Emergency Response Team
- SHC Sidney Health Center (monetary donor that also paid for items their employees wished to e-cycle)
- City of Sidney (monetary donor)
- CIT County IT

- County Commissioners
- Lower Yellowstone Rural Electric Association (monetary donor that also stuffed inserts about the event in their monthly billing)
- Sidney Motor Rewind (monetary donor)
- Mid-Rivers Telephone Inc. (monetary donor that also advertised the event on their cable TV channel)
- Drill Iron consulting (monetary donor)

City of Sidney (monetary donor)

Solid Waste Management Division

City of Williston (monetary donor)

- Upper Missouri Public Health District (sponsors of the Williston event)
- Wal-Mart Supercenter (provided space in parking lot for Williston collection event)
- Drill Iron consulting (monetary donor)
- Casual for Charity Day (monetary donor)
- Kum & Go Convenience Stores (monetary donor)
- Mercy Medical Foundation (monetary donor)
- Montana Dakota Utilities (monetary donor)

Montana Department of Environmental Quality

- Solid Waste Division
- Recycling & Marketing Division of MT DEQ

In Richland County, the e-waste planning committee met four times and had numerous communications via email regarding the Sidney event. The full group also had a teleconference with the Williston, ND group to coordinate joint activities between the two communities. Representatives from the Williston group also helped coordinate publicity materials pertinent to both and helped with the Sidney event on Friday to get an idea of what they would face the following day at their own collection event.

In Sidney, the ARS, ROI, RSVP, CERT, SHC and County IT members of the committee contributed considerable staff time in preparing for and conducting the Sidney event. The CERT, RSVP and ARS staff members were also invaluable in assisting with developing and distributing publicity items and for the collection event itself. Additionally, several members of the event planning committee provided volunteer and in-kind services.

Event Funding

Sidney, MT: This year the Richland County group received monetary aid totaling \$1,950.00 for the event from Sidney Health Center (a two-time donor), the City of Sidney, Lower Yellowstone REA, Sidney Motor Rewind and Drill Iron Consulting to be used to help offset the costs of e-cycling for local participants. Mid-Rivers also donated television airtime to promote event.

With the exception of \$375 used for newspaper and radio advertising, all donations received by the Sidney group were used to offer e-cycling participants a "75% sale" on a first-come, first-served basis, bringing the cost down from 40 cents per pound to 10 cents per pound for the first 5,836 pounds recycled. Businesses could also receive a portion of the matching funds, but with a 200-pound limit. Because of the unexpectedly high turnout – a second truck had to be brought in – the matching funds in Sidney were gone by mid-morning with 54

people missing the discount. While not happy about the situation, none refused to pay. Organizers are now considering whether to lower the discount back to 50% next year.

Williston, ND: Organizers for the North Dakota event collected donations totaling \$1,800.00 and used \$400.00 for advertising. The group used their donations to offer a 50% discount off the price of the first 200 lbs. e-cycled per person up to 7,000 lbs in all. All but 11 people received a discount, but since none of the latter had extremely high dollar amounts, they weren't too upset about it, according to organizers.

Collection Event Focus Area

This year's event targeted residents and local businesses in and around Sidney and Richland County, MT and Williston, ND. While outreach and publicity efforts focused on Richland County and Williston, television programming and media advertising reached a broader audience, with a number of participants in both the Sidney and Williston events coming from other communities and cities in the Mon-Dak region.

And once again, the program had a much broader impact as organizers continue to provide materials and information to nearby and far-flung communities to aid them in setting up their own collection events. Much of that information is shared through the USDA-ARS website where organizing tips and templates of publicity materials have been made available to anyone with an Internet hookup. In Sidney, the LEPC e-waste committee is currently working on setting up its own informational website to make that information even more readily available. (See "Conclusion," for more details.)

Hauler/Recycler Contractor

Once again Tatooine Electronic Systems, Inc. of Cheyenne, WY and Billings, MT was selected to serve as our hauler/recycler contractor for the joint 2007 event. As was the case the previous two years, Tatooine assumed full responsibility for transportation of all the computer/electronic equipment collected. At their Cheyenne, WY, homesite they demanufacture all electronic devices collected, with the pieces then sent on to appropriate recyclers and hazardous waste facilities.

In initially selecting Tattoine as our "e-cycler" in 2005 we followed EPA's Guidelines and used the Federal Electronic Challenge's on-site electronic waste management audit information (in the *Recycler Selection Criteria*) to ensure selection of a reputable contractor that followed environmental guidelines. We felt that it was important that we not export our problem to another country so we looked for a company that would keep the outdated computer equipment within the U.S. and one that would reuse as much of the material as possible. Our goal was to ensure that only 1.5% of inert products from the outdated electronic equipment would go to a landfill.

To further ensure that Tattoine met the guidelines desired by local organizers, we conducted an on-site inspection of the company's Wyoming facilities with representatives from MT DEQ and the ARS office in Cheyenne, WY. Because the company continues to keep up with its bonding and permitting obligations, it was determined that additional onsite inspections in 2006 and 2007 were not needed.

Publicity and Outreach

Publicity for the 2007 event began in July in both communities with the following outreach venues used:

a) Information on the event was distributed to and run in all local newspapers.

- b) Posters on the program were developed by ARS, and placed at local businesses. Electronic versions were also included on the ARS web page, the Safety ARS Web page and the MT DEQ recycling web page.
- c) Brochures containing information on hazardous materials found in computers, impacts to resources, recycling options, benefits of computer recycling, and tips for donating computers were developed by ARS and distributed by event partners. An electronic version was also placed on the ARS and other websites.
- d) Poster displays and educational brochures were placed at the ARS front desk area, and with Sidney, MT and Williston, ND merchants. A fair booth display with "E-rase your E-waste" information was also set up at county fairs held in both communities in July and August.
- e) E-mail announcements about the event were distributed to all member organization/business employees and other interested parties as identified by committee members.
- f) Public service announcements (PSAs) were placed on local radio and TV stations.
- g) Paid ads for the Sidney and Williston events were placed in three local newspapers, one regional newspaper and on two local radio stations. The Sidney ads highlighted, in part, the "75% off sale" resulting from all the received to offset some of the e-cycling costs for individuals and businesses participating in the event. The Sidney Health Center donation was also the subject of a news story leading up to the event. The Williston group also used newspaper advertising and news stories to promote both events.
- *h*) Television coverage included two 5-minute, noon show interviews during which local ARS Safety Specialist, CERT/RSVP and Missouri Upper Health Unit representatives.discussed the upcoming event.
- *I)* Regional television (Minot ND) coverage was also received this year, originating from interest growing out of past local television coverage (KUMV).
- j) In addition to directional signs, organizers this year again had a large e-cycling "trivia" poster on display at the Sidney drop-off site providing statistical information on the growing problem of e-waste and the benefits of e-cycling. Both sites in Sidney and Williston also had a list of their monetary donors prominently displayed during their respective collection events.
- k) ARS Safety Specialist and Information Specialist were invited to give presentations on the "E-rase your E-waste" program at two regional recycling conferences: Yellowstone Greening Conference at Big Sky, Montana and North Dakota Recycling Association Symposium at Mandan, ND.

Volunteer Recruitment

Volunteers and in-kind contributors were provided through several of the sponsoring agencies in both communities. Their participation was acknowledged and thanks extended through personalized letters from event organizers, through newspaper articles, and through a letters to the editor sent to local newspapers. In addition to the many committee members helping to set up and promote the event, the Williston Event coordinators spent two hours assisting at the Sidney collection event to see how "it all worked" so that they would be better prepared for their own event the next day. A Sidney representative also went to Williston the following day to help that group with their event.

Participant Recognition

Again in 2007, every effort was made to recognize all those participating in the Sidney event with small tokens of appreciation, including a button featuring the event's slogan and artwork and reading "I e-rased my e-waste!" However, because of the unexpectedly high turnout not everyone received a button, but all received a follow-up thank you postcard that included collection statistics from the event. All participating businesses also received certificates

acknowledging their participation. The idea was not only to provide recognition, but also to have a tangible item for participants to post in their business or home to promote e-cycling efforts in general and the local campaign in particular. Certificates were also awarded at the Williston event.

In addition, because of their pivotal role in promoting this year's event through their \$1950.00 in matching donations, Sidney Health Center, the City of Sidney, Lower Yellowstone, Drill Iron Consulting, Sidney Motor Rewind and Mid-Rivers were recognized with a formal presentation of their certificates, which included a picture published in the two local Sidney papers. The Sidney medical facility was also recognized for allowing their employees to recycle their personal electronic items free through the hospital.

III. EVENT EVALUATION, SURVEY AND STATISTICS

Overall comments from the public about the back-to-back events were again very positive and the level of participation and volume of obsolete computer and other electronic equipment collected far exceeded our expectations at both sites. Detailed results from the events are presented below. Once again participants reiterated their interest in having an ecycling event held at least annually.

Statistics

Table 1 itemizes event statistics including participant numbers, and numbers of monitors, CPUs, printers, periphery and other equipment collected for both the Sidney and Williston Events. The statistics come from information provided by **Tatooine Electronic Systems** when unloading at their Wyoming facility, because the large loads brought by some participants made it difficult for newer volunteers to catalog during the event itself. Table 2, also below, compares the contributions of selected businesses and individuals from the past two "E-rase your E-waste" events held in 2005 and 2006.

Table 1. Electronics & Computer Recycling Collection Event Statistics for September 7, 2007.

DESCRIPTION: Total #'s

Volunteers: 4 (2 Williston event coordinators helped 2 hours)

Vehicles/Participants: 101

CPUs: 152 Monitors: 204 Printers: 91 Fax machines: 3

TV: 29

Microwaves: 4 Copiers: 12 Scanners: 5 VCR: 12 Typewriters: 2 Phones: 7

Batteries: 351 lbs estimated

Total tonnage (excluding pallet/gaylord weights) 9.2 Tons (18,460 lbs)

Pounds collected per capita (Richland Co. population census of 2000 = 9,667)* 1.91 lbs.

*Source: www.ceic.commerce.state.mt.us

TOTAL = 101 participants

Table 2. Collection Totals, by businesses and individuals, for 2005 and 2006.

2005:

USDA recycled 4,587 pounds Businesses, other (7): 2,309 pounds Community individuals (16) 1,489 pounds

2005 Total: 8,385 Pounds

2006:

USDA recycled: 1,019 pounds
Sidney Health Center: 2,668 pounds
(this includes employees home devices, too)
Businesses, other (11) 2,325 pounds
Community individuals (49) 3,324 pounds

2006 Total: 9,336 Pounds

2007:

USDA recycled 600 pounds Sidney Health Center 2,645 pounds

(this includes employees home devices)

Businesses, other (22) 8,803 pounds Community individuals (77) 6,412 pounds

2007 Total: 18,460 Pounds

2007 Williston Event

Volunteers: 6

Vehicles/Participants: 102

PCs: 115 TVs: 42 Printers: 63 Monitors: 109 Microwaves: 19

2007 Total: 11,552 Pounds

Statistics Summary

Total tonnage for equipment collected at the Sidney event was **9.2 tons**, which represents a nearly 9,000 pound increase from the previous year! In addition, participation numbers increased significantly. Altogether, the number of individuals participating in this year's event doubled when compared to 2006 (77 vs. 49), and the number of businesses jumped 50% (25 vs 13)!

The organizing committee attributes this year's unexpected increases to a variety of factors. First and foremost is the \$1950.00 in matching funds provided by Sidney Health Center, City of Sidney, Lower Yellowstone REA, Drill Iron Consulting, Sidney Motor Rewind, Mid-Rivers to which cut costs by 75% for many of the 2006 participants. Ongoing and new education efforts in the media, electrical billing inserts, grocery store inserts, etc., are also thought to have contributed to the increased Sidney turnout in 2007.

At the Williston event, 102 individuals and businesses recycled 11,522 lbs., or **5.76 tons**, of outdated electronics. Organizers were pleased with the response to their event, although they did note that some participants were confused about the event itself, thinking it was a fundraiser for the Health District. Improved signage and other measures were cited by organizers as possible means for more fully explaining event details in the future. All in all, the Williston event ran "very smoothly," organizers said, adding that much of the credit for that goes to their volunteers and to the Sidney group for sharing so much of their experiences with them.

IV. CONCLUSION & EXTENDED IMPACT

As demonstrated by the statistics cited above, this year's "E-rase your E-waste" event was another success, and public participation and acknowledgement continues to be very positive. Event partner involvement was extensive and continues to build a foundation for future collaborations. In addition, public participation saw significant increases this year among businesses and individuals choosing to e-cycle their outdated electronics. In fact, the Sidney event, while reduced to a single day to accommodate the partnership with Williston, still attracted nearly doubled the number of participants and businesses, requiring the addition of a second truck to haul all the stuff away.

And what did they bring?

Sidney Event: 204 computer monitors, 43 laptops, 91 printers, 152 CPUs, 12 VCRs, 2 electric typewriters, 4 microwaves, 30 televisions, 5 scanners, 741 lbs of lead batteries and 12 copiers....just to list the major items. That adds up to nearly 1,720 pounds of lead and 0.44 lbs of mercury kept out of our local landfill (or any landfill), along with varying amounts of other lesser-known, hazardous substances. (The lead and mercury totals are based on industry estimates of .062988% lead and .000022% mercury contained in a computer and an estimate of 60% lead for batteries.) Equally significant is the amount of non-hazardous materials kept out of any landfill since as much as 98% of recycled electronic waste is reused. That means a longer landfill life, in addition to a healthier environment; definitely a win-win situation!

Williston Event: Williston, too, saw an outpouring of support despite rainy whether with 102 individuals and businesses participating in their inaugural event, and bringing with them 109

computer monitors, 63 printers, 115 PCs, 42 TVs and 19 microwaves for recycling, again just listing the major items.

The 2007 collections again demonstrated that individuals and local business can and are taking the initiative to show their commitment to the environment and human health through e-cycling. Particularly impressive was the fact that individuals participated in the event even though there was a fee to do so. While some of that cost was offset by the matching donations collected in both communities, it still represented a significant level of financial commitment by all participants, whether individuals or businesses.

Extended Impact: In 2007, the "E-rase your E-waste" effort continued to attract attention beyond its intended audience. Since its inception in 2005, news stories on the event attracted the interest of Montana DEQ officials, as well as inquiries from other Montana and North Dakota communities interested in hosting similar events. Montana DEQ officials have since promoted the event on their website and used it, in part, as a model for three new pilot programs it was organizing in 2006 in three other larger Montana communities. Montana DEQ has also adopted the "E-rase your E-waste" promotional slogan and artwork for use in its e-cycling education program. Those materials were provided free of charge on the USDA-ARS website for anyone to use, along with brochure and poster templates and tips on organizing a similar event.

In 2007 information from the Sidney event was also supplied to Upper Missouri Public Health District officials in neighboring Williston, ND, who, as previously noted, have used them in their own e-waste outreach effort. Also in 2007, information on this latest e-waste event has been provided to individuals in nearby Glendive, MT and Belcourt, ND who are also considering starting an event.

The program also attracted interest from other organizations and agencies, with ARS Safety Specialist and Information Specialist invited to give presentations on the "E-rase your E-waste" program at two regional recycling conferences in mid-September: 1) the Yellowstone Greening Conference at Big Sky, Montana put on by the National Park Service and numerous other federal and state agencies and organizations and 2) the North Dakota Solid Waste and Recycling Symposium at Mandan, ND.

Since posting its promotional materials on the USDA-ARS website in 2005, communities as far away as Antioch and Elk Grove, California have used those materials to promote their own e-cycling events. In the latter instance, city officials in Elk Grove requested use of the materials for an insert to be sent to about 48,000 households, encouraging people to recycle electronic waste.

Please see attached appendices for additional information and samples of publicity and promotional pieces and for pictures and comments regarding the 2007 "E-rase your E-waste" event.

PUBLICITY - New in 2007!

-rase your -waste!



In addition to promoting the 2007 event through posters, brochures and press releases for local broadcast and print media, event organizers this year were again able to place paid ads in local newspapers and radio stations thanks to generous donations from community businesses that also allowed us to offer a "75% off" sale for "E-rase Your E-waste" participants in Sidney, MT.

Our Williston, ND partners also collected donations and were able to offer discounts to participants at their first public "E-rase Your E-waste" event held in cooperation with Sidney's.

In addition to the paid advertising, another e-waste partner, Lower Yellowstone REA, allowed the committee to stuff inserts about the event in their monthly bills (#1), while the local health department and grocery stores allowed advertising on their grocery checkout dividers (#2).

The event was also featured in information at county fairs in both Sidney and Williston The booth at right was at the Richland County Fair & Rodeo in Sidney and with some members from the local organizing committee pictured (#3).







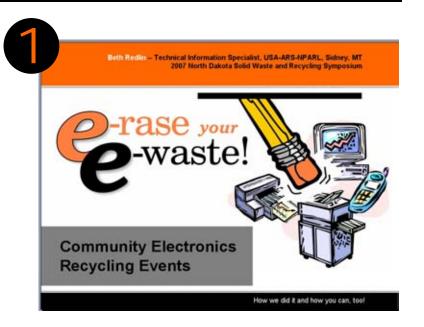
EXTENDED IMPACT - 2007

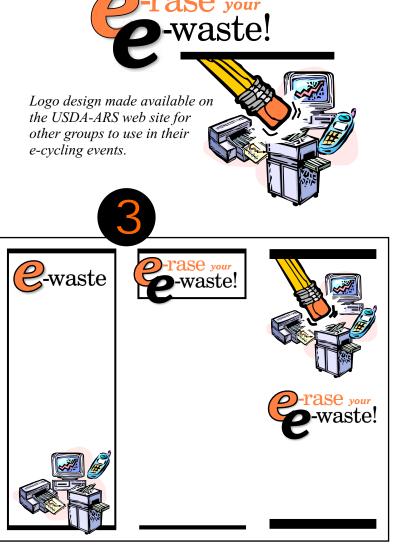
The "E-rase Your E-waste" program continues to attract notice for its successful effort at e-cycling in a rural community. As word of the program has spread, organizers have been asked to share insights into the program with other communities. In 2007, organizers spoke by invitation at two regional conferences: the 2007 North Dakota Solid Waste and Recycling Symposium (#1) and the "Greening the Yellowstone" National Park Service conference at Big Sky, Montana.

Several communities within and outside of Montana have also made use of the templates of promotional materials (posters, brochures, press releases and other informational pieces) developed by ARS personnel for their own event, but provided on its website for all to use. In 2007, Daniels Academy, a Texas Elementary School used the logos and other materials in promotional materials for its E-cycling Event in both English and Spanish (#2).

Item "3" includes a sample brochure page template. The Richland County E-rase your E-waste committee is also setting up a new website that will make their e-cycling information and materials easier to find for anyone interested in using them.







PHOTOS FROM 07 "E-RASE YOUR E-WASTE"



Sidney, MT

At left, Sidney e-cyclers lined up to dispose of their outdated electronics. The turnout and amount collected doubled from the previous two years to 18,460 pounds!





It all added up to more than 18,000 pounds and required a second truck!

LIHAUL BY THE RESTRICTION OF THE

Williston, ND

Despite the rainy weather, the Williston "E-rase you E-waste" event still managed to collect 11,552 pounds during its first public recycling event.





PARTICIPANT RECOGNITION

In 2007 Sidney continued its participant recognition efforts, which included certificates for all donors and participating businesses, along with buttons and "Thank You" postcards for everyone recycling items at the event. The certificates were also used by the Williston group for their event.

This certificate is awarded to:

**Montana Department of Environmental Quality*

In appreciation of your outstanding support of the 2006 **C-rase your *C-waste* campaign in Richland County, Montana.

**E-waste Your E-waste* Representative*

Certificate of **Discount County

**E-rase your E-waste* Committee • Richland County, Montana





Above, a sample business certificate and, at left, the "Thank you" postcard sent to everyone participating in Sidney's 2007 E-rase your E-waste collection event.

COMMENTS & COMMUNICATIONS

My school (in Grand Prairie, Texas) is sponsoring an eWaste event in Mid April and we're working on a flier that will be sent home with our students. We LOVE the Erase your eWaste name and logo and we're wondering if we could use it on our fliers? We found some information on this web page and read that you let other communities use it, so we were hoping we could too. If this is ok, please let me know. If you have a pdf file that you could send that would be wonderful. We'd also be interested in the other templates that you have, if they're available for use. Thanks for your time!

· Brenda Townsend, Instructional Specialist, Daniels Elementary Academy, Grand Prairie, Texas

In the world of e-waste, Idaho has some great programs, but we seem to be lagging in the rural areas. I think a number of Idaho communities would be inspired by Sidney's e-waste progress. I think you're dedication has made a huge difference considering some of the challenges Sidney has faced with e-waste recycling.

I am hoping to organize some trainings around the state on community hazardous (including e-waste) events. I would love to use some of your Erase the Ewaste materials as examples and maybe list you as a reference? More details need to be worked out, but I think Idaho could learn a lot from Sidney's e-waste journey!

• Loni Fine Hanka, Idaho Department of Environmental Quality, Boise, Idaho