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INTRODUCTION

Dakota County (County) prepares an annual report to describe the County's progress toward achieving the goals laid out in the [Dakota County Solid Waste Master Plan](#) (Master Plan). This 2015 Solid Waste Progress Report provides an overview of the County projects and programs developed and continued in 2015 to meet the Master Plan goals. The Master Plan, adopted by the Dakota County Board of Commissioners in March 2012, provides a framework for the County, residents, businesses, municipalities, and others to properly manage solid waste. Master Plan strategies focus on reducing land disposal through waste reduction and reuse, recycling, organics recycling, and resource recovery (i.e., conversion of waste into energy). The Master Plan is currently in the processes of being revised, with anticipated completion in late 2017.

The Master Plan is developed in accordance with Minn. Stat. §§473.803 and 115A, which govern waste management. In 2012, the Minnesota Pollution Control Agency (MPCA) adopted the Metropolitan Solid Waste Policy Plan (Policy Plan), establishing waste management objectives for the Twin Cities Metropolitan Area (TCMA) counties¹. Since then, there have been several State law changes in the TCMA including: increased recycling rate objectives (from 50% to 75% by 2030), mandatory commercial recycling, a sharps disposal ban, and increased SCORE (Select Committee on Recycling and the Environment) funding with dedicated amounts to be use strictly on organics management.

TCMA Policy Plan Objectives

| MSW Management Method | 2008 System | 2015 | 2030 |
|--|-------------|--------|--------|
| Waste Reduction (cumulative) | - | 1-2% | 4-6% |
| Total Recycling (Recycling + Organics) | 43% | 48-54% | 75% |
| Resource Recovery | 29% | 32-34% | 24-28% |
| Maximum Landfill | 28% | 20% | 9% |

In addition, Minn. Stat. §115A.02 defines the Minnesota Waste Management Hierarchy, the State's preference of how waste should be managed in this order:

- 1) waste reduction and reuse,
- 2) waste recycling,
- 3) composting of yard waste and food waste,
- 4) resource recovery,
- 5) land disposal with methane capture, and finally
- 6) land disposal without methane capture.

¹ TCMA Counties are Anoka, Carver, Dakota, Hennepin, Ramsey, Scott, and Washington.

POLICY PLAN PROGRESS SUMMARY

Progress Summary. To manage our resources in effective and environmentally-sound manners, the County prioritizes managing mixed municipal solid waste (MSW) in accordance with the Waste Management Hierarchy and the County’s programs and initiatives are designed to reflect this. It is important to keep in mind that because many programs are new or continuously adjusted to meet the needs of our community, some of the immediate benefits of the programs have yet to be realized.

PROGRESS TOWARD POLICY PLAN 2015 OBJECTIVES

Overall, Dakota County is making progress to reach the Master Plan and Policy Plan objectives for waste reduction, recycling, organics recovery, resource recovery, and the maximum landfilling.

In 2015, the County diverted 49% of materials (trash, recyclables, and organics). Total waste generation in Dakota County decreased by a significant amount, nearly 18%, from 482,840 tons in 2014 to 397,343 tons in 2015.

PROGRESS-AT-A-GLANCE

| Progress Toward 2015 Policy Plan Objectives | | | |
|---|---------------|-------------------|---------------|
| | Good Progress | Moderate Progress | Slow Progress |
| Waste Reduction (cumulative) | | | |
| Recycling | | | |
| Resource Recovery | | | |
| Maximum Land Disposal | | | |

WASTE REDUCTION AND REUSE

The 2015 Policy Plan objective for the TCMA counties is to reduce waste by 1-2%; however, the MPCA has not defined actual reduction and reuse measures for reporting purposes. As a measure of waste reduction, Dakota County measures waste per capita growth compared to population. Overall waste generation in 2015 was 397,343 tons, down from 482,840 tons in 2014. MSW managed per capita decreased from 1.18 tons in 2014 to 0.96 tons in 2015, a reduction of 19%. The County supported local waste reduction efforts through an ongoing program at The Recycling Zone and increased promotions of reuse outlets in the community.



RECYCLING (TRADITIONAL AND ORGANICS)

The 2015 Policy Plan objective is to recycle 45-48% and the County is meeting this goal. In 2015, 195,086 tons of MSW were recycled for a 49% recycling rate. Of that, 79,628 tons were organics. The overall amount recycled was down by 3% from 2014. The County continued to support local recycling efforts through ongoing programs with cities and townships and through recycling initiatives at The Recycling Zone, community events, parks, internal programs, and schools.

Moderate Progress

RESOURCE RECOVERY

The County fell short of the 2015 Policy Plan objective for TCMA counties to process 32% to 34% of MSW. In 2015, 21,364 tons of County waste was processed for a 5.4% processing rate, down from 43,368 tons (9%) in 2014. The County includes waste processing requirements as part of its Community Funding Program criteria, through a Resource Management contract, and continued to support resource recovery by leasing land in Empire Township for a transfer station to deliver MSW to a processing facility. The continued enforcement of statutory processing laws by the MPCA in 2016 may aid the TCMA in meeting the Policy Plan Objectives, but without significant changes in the waste system the County will continue to be challenged to meet Policy Plan objectives for resource recovery.

Slow Progress

MAXIMUM LAND DISPOSAL

The County has not met the 2015 Policy Plan objective for TCMA counties to landfill a maximum of 20% of MSW. In 2015, 181,757 tons of County MSW waste was landfilled (46%), up from 179,016 tons (37%) in 2014. The County's land disposal rate is affected by the success of reduction, reuse, recycling, organics diversion, and resource recovery efforts. However, as identified in the Master Plan, the County anticipates continued challenges in diverting waste from landfills. Without changes in the TCMA waste system, and given that two MSW landfills that serve the TCMA are located within Dakota County, the County will continue to face substantial barriers.

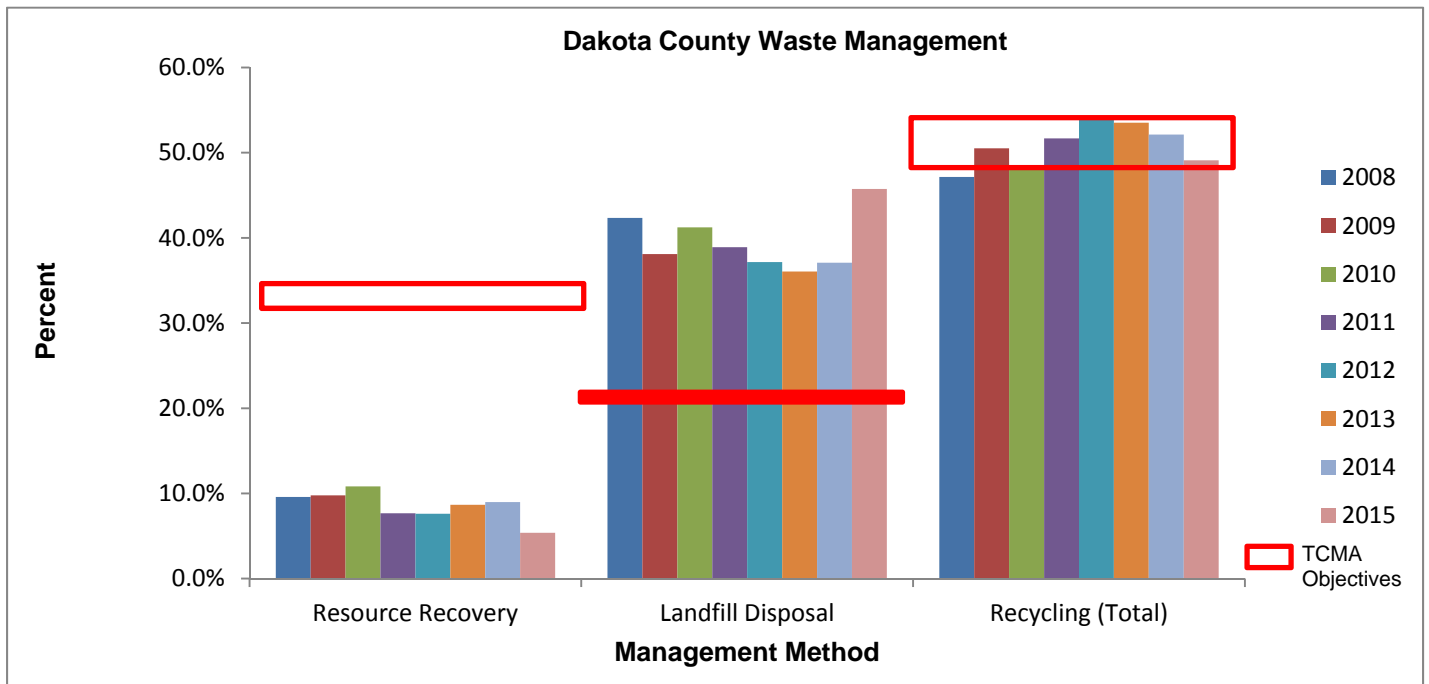
Slow Progress

OUTREACH AND EDUCATION

The Policy Plan does not establish objectives for outreach and education but strategies were included in the Master Plan to address public education requirements in State law (Minn. Stat. §§ 115A.552, subd. 3, 115A.96). In 2015, outreach and education efforts continued to play an essential supportive role in programs and were a primary tool used by the County to influence how waste was managed. The County continued to work cooperatively with cities and partners on a large number of outreach strategies to shift more waste up the waste management hierarchy.

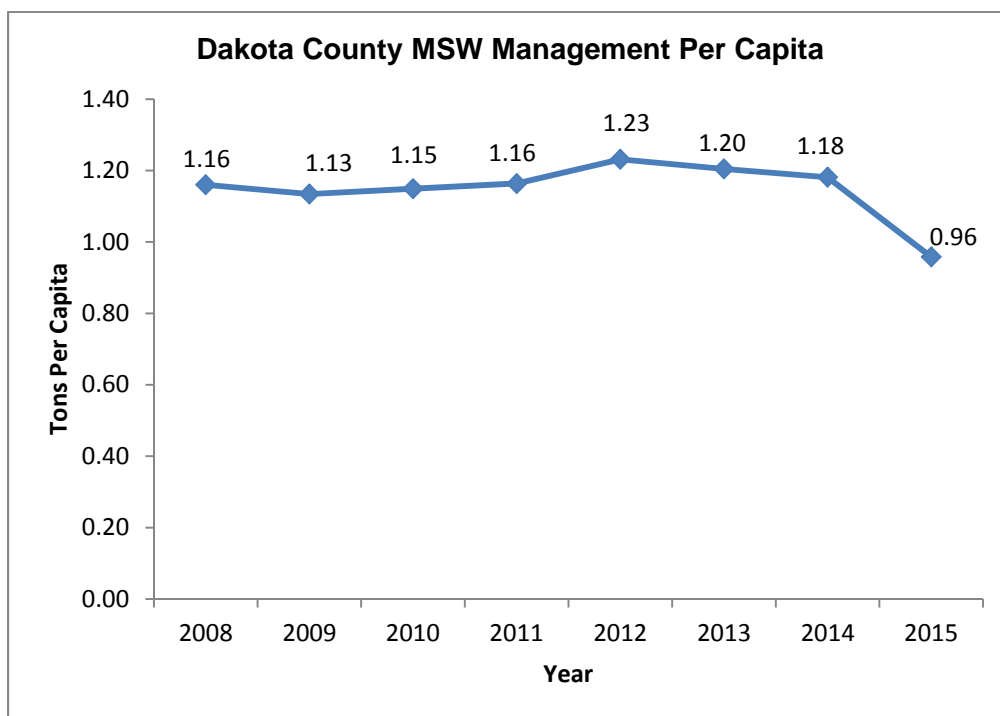
HOUSEHOLD HAZARDOUS WASTE AND PROBLEM MATERIALS

The Policy Plan does not include numeric objectives for household hazardous waste (HHW) and problem materials. However, the County included strategies in the Master Plan to support Policy Plan goals to protect the environment and public health and to address State law requirements (Minn. Stat. § 115A.96) for the County to implement a HHW management plan. The County continues to provide a premier HHW program at The Recycling Zone. In 2015, participation in HHW programs increased 6% from 2014.



WASTE REDUCTION AND REUSE

Waste reduction and reuse efforts are difficult to quantify. Measuring changes in the total amount of MSW managed is not sufficient in tracking progress for source reduction efforts because it does not take into account increases in the County's population or trends in how much money American households spend on goods and services. Therefore, the County measures source reduction as waste per capita. In 2015, the amount of MSW managed per capita decreased to 0.96 tons, down 19% from 2014.



Summary of Waste Reduction and Reuse Strategies Implemented: Waste reduction and reuse initiatives were expanded at the Recycling Zone and new programs were implemented focusing on reuse, environmentally preferable purchasing, and food waste reduction.

1. EXPAND PROMOTION OF REUSE OPPORTUNITIES

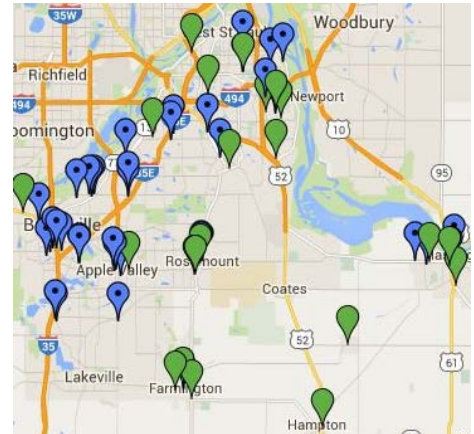
Master Plan Strategy: Develop and provide an education and reuse outreach program.

- **Recycling Zone Reuse.** Reuse at The Recycling Zone was promoted through tours, brochure distribution, and the County website. In 2015, 51 tours of The Recycling Zone educated 758 participants, with reuse promoted as the first waste management option. Over 261,000 pounds of materials were reused through The Recycling Zone's Reuse program in 2015.



The Recycling Zone's reuse area offers residents free items including paint, cleaners, and fertilizers, all of which were dropped off by other Dakota County residents

- **ReUse Guide.** Dakota County identified two new reuse outlets to include in the ReUse Guide. This guide is available on Dakota County’s website for residents to download, print, or access through an online map-based format. The ReUse Guide contains 38 outlets and 68 locations of second-hand businesses. Commercial-sector reuse is promoted on the County website business pages and includes links to Minnesota Materials Exchange and Rethink Recycling for buying, selling, and donating.



The ReUse Guide’s online map makes secondhand shopping convenient

2. ENVIRONMENTALLY PREFERABLE PRACTICES

Master Plan Strategies: Use environmentally preferred practices (EPP) standards specification in County operations and encourage use by public entities and improve waste contracts to reduce waste and increase recycling in County operations.

- **100% Recycled-Content Paper:** Successful recycling programs rely on the use of recycling material in products and purchasing products made from recycled materials. To close the loop on paper recycling, County staff researched the performance and costs of using 100% recycled-content paper for internal print jobs. Results showed a seven percent increase in cost and no quality or performance issues. Therefore, the County adopted a policy requiring the use of 100% recycled-content paper for standard white copy paper. To employ this purchasing practice, when an employee attempts to order paper made from lower recycled content, the purchase is automatically substituted with a paper that meets the new standard. These standards exceed the minimum 30% recycled-content required by state law.
- **Guidelines for Contracted Print Services:** County staff developed model contract language for employees to incorporate into contracts when using an outside printing vendor. The language states:
 - o *“[w]henver practicable, printing shall be on:*
 - o *Paper made from a minimum of 30% recycled-content material (post-consumer)*
 - o *Paper not made of dyes (excluding pastels)*
 - o *Paper made with little or no chlorine bleach or chlorine derivatives*
 - o *Both sides of the paper*
 - o *Uncoated copy paper, office paper and printed paper, and made on a machine in Minnesota*
 - o *Documents that use soy-based inks”*
- **New Multi-Function Devices (copiers/printers):** New multi-function devices were installed in all County buildings, replacing centralized and desktop printers. The multi-function devices have cloud-printing technology which requires employees to scan their ID badge at the copier before printing. From installation in September 2015 through the end of the year, the new equipment reduced over 23,000 sheets of paper that would have been accidentally or unwantedly printed.
- **Green Meeting Kit:** Dakota County’s Physical Development Division (PDD) is comprised of 240 employees conducting a variety of activities both internally and with the public. County staff created a new kit to help PDD staff host low-waste meetings. The kit includes: reusable dishes, mugs, pitchers, serving utensils, silverware and trays; compostable cups, plates, napkins, utensils, and bags; and signs for recycling, trash, and organics collection. There is a smaller version available for staff to check out

with the basic essentials for smaller events. In 2015, the Green Meetings Kit was used for at least five events.

- Hand Dryers Replaced Paper Towels. Hand dryers replaced paper towels and cloth rolls in 125 of the County's highest-use restrooms. The County made the switch to hand dryers to better align with efforts to reduce waste and save money. When accounting for the cost and disposal of paper towels, hand dryer electrical use and installation, and cloth roll cleaning and management, the new hand dryers will pay for themselves within six years and will save nearly 4.4 million paper towels annually.
- Housekeeping RFP: Dakota County executed new housekeeping contracts for County buildings that incorporated model language developed by the MPCA GREEN Group. The contract requires housekeeping vendors to use recycled-content materials (e.g., paper products, plastic bags) and Green Seal Cleaning Products.
- Office Supply Contract: County staff worked with the County's major office supply vendor to establish a list of items that are commonly-purchased, and gathered those made from recycled materials or which have other environmentally-preferred features. This "favorites" list includes Post-it notes, pens, staples, and compostable products. Lists are promoted to employees and posted on the online ordering site for purchasers to easily reference.

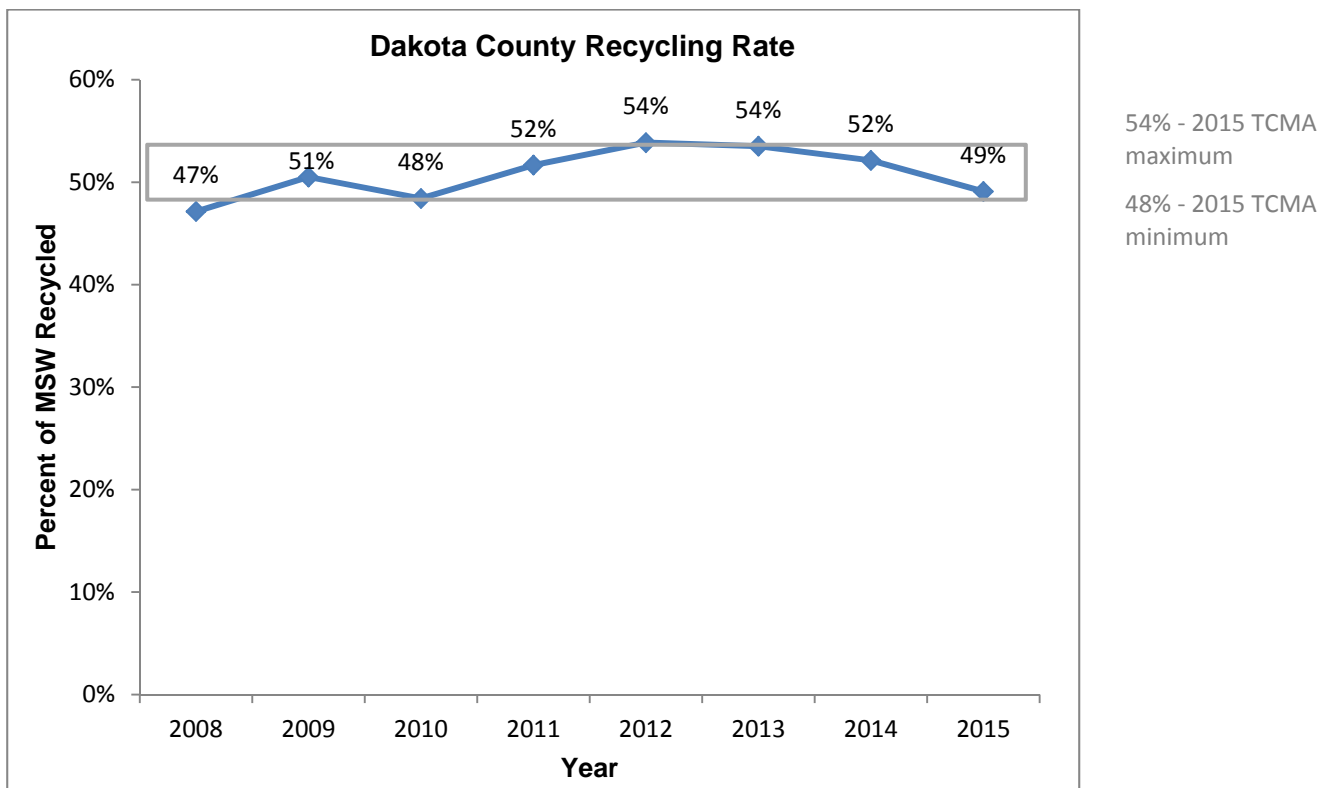
3. DAKOTA COUNTY IS HOSTING A MINNESOTA GREENCORPS MEMBER

Master Plan Strategy: Develop a strategic and comprehensive organics diversion outreach program.

Dakota County was selected as a host site for a MN GreenCorps member. The MN GreenCorps Program is administered by the MPCA to help local governments, educational institutions, and non-profit organizations design and implement environmental projects while training a new generation of environmental professionals. Dakota County's MN GreenCorps member is developing educational resources for residential food waste reduction. This project will be the first countywide food waste reduction program in Minnesota and supports the County's efforts to develop an organics program that fulfills all levels of the waste management hierarchy. The Member started in 2015, conducted research, and developed an implementation plan. The majority of the work will take place in 2016 and includes residential focus groups, a six-week food waste pilot project with households, and general education.

RECYCLING (TRADITIONAL & ORGANICS)

In 2015, 195,086 tons of MSW were recycled for a 49% recycling rate in Dakota County. Of that, 79,628 tons were organics. The overall amount recycled was down by 3% from 2014. Compared to 2014, recycled paper decreased by 20,000 tons, metal lowered by nearly 23,000 tons, glass remained the same (roughly 10,000 tons), and plastics decreased by 4,000 tons. The tons of organics recovered increased from 2014 when approximately 43,833 tons were recovered. Of the organics recovered, about 2,900 tons of food went to food-to-people programs to help people in need, 16,400 tons were recovered for animal feed, 12,800 tons were managed through commercial source-separated organics composting programs, and 47,300 tons of yard waste was composted. Yard waste increased substantially from 2014 (22,340 tons composted) because, unfortunately, the Emerald Ash Borer was detected in Dakota County in early 2015, which now allows yard waste to be transferred into the County.



Summary of Recycling Strategies Implemented: The County continued its work to increase recycling and organics diversion rates by partnering with cities, townships, and schools on a variety of ongoing programs and initiatives at community events. The County continued to lead by example in developing and boosting its internal recycling and organics programs throughout the County's office buildings and parks. The County was also awarded two grants to increase recycling and organics in businesses and public venues.

1. EXPANDED RECYCLING AT COUNTY AND MUNICIPAL PROPERTIES

Master Plan Strategy: Collaborate to improve recycling at public spaces.

- **County Parks:** Continuing on previous progress made in County parks, additional recycling and trash containers were installed in County regional parks (Lebanon Hills, Jensen Lake, Whitetail Woods, Spring Lake, and Thompson County Regional Parks). The new containers follow waste best management practices (BMPs) including: paired recycling and trash containers, color-coded containers (blue for recycling and black or gray for trash), and consistent signs. Operational BMPs include containers that are: fire resistant, durable, weather proof, easily serviceable, mounted, aesthetically pleasing, and roughly 30 gallons.



Paired trash and recycling containers meeting waste and operational BMPs are now found throughout County parks

County staff and a MN GreenCorps member implemented recycling at Whitetail Woods Regional Park and worked to make County park events low-waste, focusing on events that see large numbers of visitors. Some of these events included the grand opening for the new Whitetail Woods Regional Park, the New Year's Eve Celebration, the Wild Ride mountain bike event, and the Trails by Candlelight ski event. A new chapter was added to the Parks Department Standard Operating Procedures to instruct staff on how to keep waste at events minimal and how to work with food vendors to encourage selling only certified compostable and recyclable materials. The following are County park events and attendance (diversion rates were not available):

- Take A Kid Fishing (June 7): 300 attendees
- Rock Island Swing Bridge Grand Opening (June 18): 600 attendees
- Wild Ride Mountain Bike Fest (Oct. 3): 600 attendees
- New Year's Eve Party (Dec. 31): 1,200 attendees

Municipal Parks: To magnify the County park recycling effort, County and city staff focused on municipal parks. The Community Funding Joint Powers Agreement between the County and each city was modified and now requires cities to implement visual practices that are consistent across the County to help park visitors know what to recycle.

City parks were assessed and prioritized based on use. Cities and townships implemented recycling in the priority parks in accordance with waste and operational BMPs. City staff ordered recycling containers from a pre-selected list of approved bins for different park uses (e.g., baseball fields vs. splash pad areas) that met BMPs. Bins are color-coded and have visually-consistent labels. To date, 40 city parks are following waste and operational BMPs.



Lakeville park containers following waste and operational BMPs

- **Expand Internal Single Stream Recycling in County Buildings:** In 2015, the County built upon the success of 2014's pilot project and expanded single stream recycling to the remaining 18 County service centers, staff buildings, and County park rental facilities. Dakota County staff and visitors now can put all recyclables into one container.

- Environmental Assistance Grant- Zero Waste at Public Space Venues: Dakota County was awarded a \$47,198 Environmental Assistance Grant through the MPCA for a Zero Waste in Public Space Venues pilot project. Dakota County partnered with seven venues: four municipally-owned civic arenas (Apple Valley, Burnsville, Eagan, and Hastings) and three high school football stadiums (Burnsville, Lakeville South, and Henry Sibley High Schools). The goal of the pilot was to implement organics recycling, enhance traditional recycling, and engage venue attendees to increase total waste diversion from 10% to 15% up to 60%. Grant funds have supported waste sorts, infrastructure and container purchases, and educational assistance.

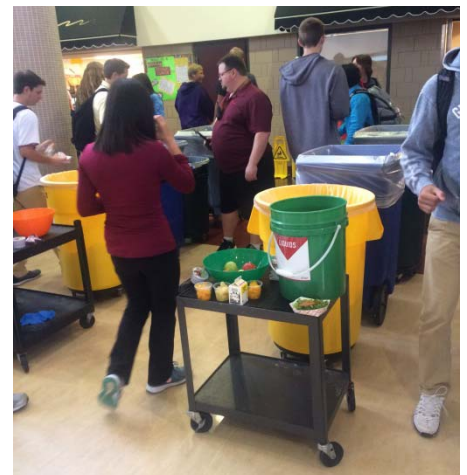


Signs at the Hayes Arena in Apple Valley promoting the arena's new recycling and organics diversion efforts

2. EXPANDED RECYCLING IN PROGRAMS FOR SCHOOLS, CITIES, AND TOWNSHIPS

Master Plan Strategy: Provide support to public entities to improve recycling in their operations.

- Enhanced School Recycling and Organics Program: During the 2014-15 school year, County staff worked with three schools in Independent School Districts (ISD) 194, 196, and 119 and select schools in two school districts (ISD 191 and 197) to improve waste diversion. Two of these schools, Rosemount and Academic Arts High Schools, created new organics recycling programs resulting in an average of 10.5% organics diversion. The other schools focused on enhancing existing organics and recycling programs. After receiving County assistance, Academic Arts High School diverted 52% of their overall waste (33% single stream recycling, 19% organics). Rosemount High School was not recycling. In their first year with new recycling and organics program, the school was able to divert 30% of their waste (28% recycling, 2% organics), approximately 41 tons. To support these schools, the County provided recycling and organics containers, container labels, educational resources, and ongoing technical assistance through training, assessments, and waste and cost analyses. The other schools focused on education and engagement by incorporating the recycling program activities into the culture of each school



Students separating recyclables, organics, liquids, and trash and setting aside food that can be eaten later by another student

- Community Funding Program: The County continued to provide performance-based funding to 13 cities and the Rural Solid Waste Commission (6 rural cities and 13 townships) to ensure recycling services and public education is provided for residents. Activities in 2015 focused on public education for households, improving public space recycling, and expanding recycling infrastructure at community events and festivals.

- Messaging: Recycling messages were delivered to residents through city newsletters, cable access channels, sports arena advertising, employee education, workshops and presentations, social media, and direct mail pieces, resulting in more than 4.5 million impressions.
- City Clean-up Events: Municipalities offered 19 clean-up events throughout the year. The majority of one-day events allowed residents to drop off a variety of items, such as mattresses, construction debris and scrap metal. Six events focused on collecting one item from residents: pumpkins, shoes, and paper shredding. The following items were collected for recycling, composting or reuse:
 - Scrap metal: 23,760 pounds and two 30-cubic yard dumpsters
 - Shredded paper: 33,720 pounds
 - Bicycles: 257 bikes for reuse
 - Pumpkins: 18,620 pounds for composting
 - Mattresses: 91 mattresses (5,510 lbs)
 - Shoes: 11,642 pounds



Local Solid Waste Staff promote recycling services in city newsletters

3. OFFERED BUSINESSES RECYCLING ASSISTANCE

Master Plan Strategy: Help businesses develop recycling programs.

- Environmental Assistance Grant - Commercial Corridor Pilot Project: Dakota County was awarded a \$50,000 Environmental Assistance grant from the MPCA to initiate an enhanced recycling and organics collection pilot project for businesses. Over 100 high-volume generators of food waste, such as restaurants and a grocery store, were recruited in a targeted corridor to develop hauling route density. Eight businesses along Robert Street in West St. Paul participated in the six-month pilot project and were provided with technical assistance, employee education, interior recycling (blue) and organics (green) containers, labels for containers, compostable bags and serviceware, and reimbursement of organics hauling services. Results will be available in the spring of 2016.



Flyer recruiting businesses to participate in the Organics Pilot Project.

- Free Container Labels: Businesses can order printed recycling, organics and trash labels created by the Solid Waste Management Coordinating Board (SWMCB) for free on the County's website. The online order form was launched in November and over 40 businesses ordered labels in December 2015 alone.

4. MODIFIED REPORTING TO IMPROVE RECYCLING DATA

Master Plan Strategy: Work to improve recycling data.

County staff worked with the MPCA, other Metro counties, and other stakeholders to streamline and improve the way recycling and MSW data are collected and reported. The goal is for haulers to submit data into a new electronic reporting system at the state. The new reporting process will fully begin in 2017, for data collected in 2016.

5. EXPAND OPPORTUNITIES FOR RECYCLING NON-TRADITIONAL MATERIALS

Master Plan Strategy: Add recycling for difficult materials.

- **Piloted Agricultural Film Plastic Project:** Dakota County provides funding to communities (cities/townships) to promote and implement recycling projects and programs. In 2015, the Rural Solid Waste Commission (RSWC) requested and received funding for an agricultural film plastic collection project. The project was the first of its kind in the Metro area and provided an environmentally-responsible disposal option of agricultural plastics including silage bags, bunker covers, and bale wraps.

Four centralized collection sites were offered in rural areas. Nearly 22,000 pounds of plastic were collected for recycling in about four months.

- **Tire Recycling:** The RSWC received additional funds from Dakota County for waste tire education and a collection event in the rural area. The tire collection was held in Castle Rock Township and promoted across the thirteen townships and six rural cities that comprise the RSWC area. The collection event was successful with nearly 21 tons of collected tires in a four-hour period. Collected tires were processed into crumb rubber and used for a variety of purposes, including for athletic tracks and a substitute for stone aggregates.



Agricultural film plastic collection container for recycling



Tire recycling event in Castle Rock Township

6. EVENTS & THE DAKOTA COUNTY FAIR

Master Plan Strategies: Ensure and provide opportunities to recycle/ Build on public recycling program infrastructure to introduce organics diversion in County buildings, at County and city events, and in public schools.

- **Municipal Programs:** Cities and townships offered recycling at 27 community events, 18 of which also had organics recycling collection. Recycling, organics, and trash data were not collected at every event, but of the data collected, 2,460 pounds of recycling and 2,585 pounds of organics were diverted at community festivals, including:

- Hampton Community Days - The RSWC coordinated recycling and organics collection at Hampton Community Days in June. Hundreds of people attended the two-day festival, which had an estimated 40% waste diversion rate.
- Celebrate Empire - The RSWC worked with Empire Township to offer recycling and organics collection at the Celebrate Empire festival in July. It was the first time that recycling was offered at the event. Master Recycler/Composter volunteers helped run the waste stations and helped event goers know what belongs in recycling, organics, and trash. Planning for improved waste management, hosting waste stations, and using compostable products allowed the event to reach an 80% diversion rate.
- Randolph's Annual Chicken BBQ - The RSWC worked with Randolph-Hampton Fire Department for the second year to collect recycling and organics at Randolph's 48th annual chicken BBQ fundraiser in August. Ten waste stations served the 3,000 people in attendance and public feedback about waste stations was positive. Estimates show more than 80% of the waste was diverted with one ton of organics diverted for composting. The use of compostable products allowed for minimal sorting by event participants which made organics recycling easier.
- Rosemount Leprechaun Days – Rosemount's Local Solid Waste Staff worked with the event planning team to provide recycling and organics collection at the annual, multi-day Leprechaun Days. The event brings in up to 8,000 people and consists of a parade and a carnival. Recycling is offered along the parade route and recycling and organics is offered in the carnival. Rosemount was able to weigh trash, organics, and recycling by borrowing a newly purchased county industrial scale, and data show a 61% diversion rate (2,060 pounds of recycling, 585 pounds of organics). Waste stations were monitored by volunteers throughout the carnival and all waste was examined the day after the event for contamination by staff and volunteers.



Master Recycler/Composter graduates working in an education tent at the County Fair

- Dakota County Fair: Dakota County partnered with the Dakota County Fair Board to continue recycling and organics collection at the weeklong fair in August. The County expanded to the 4-H building and engaged venue attendees at two education tents. Organics collection was focused on "food row," where the majority of food is eaten. County staff provided information related to the recycling and organics program, answered questions, and supplied compostable bags to food vendors who generated food scraps in their own booth. County staff and volunteers manned waste stations to educate fairgoers about what goes in each bin, picked out materials that didn't belong in bins where people had made mistakes, and distributed educational materials. Over four tons of recyclables and organics were diverted, an increase of 17% from 2014.



Organics recycling, including lemon rinds from the lemonade vendor, diverted over ½ ton of organics at the County Fair

- **Event Trailer:** A new event recycling trailer made event set up and transportation more efficient. The 16' trailer was purchased to store and transport recycling, organics and trash event containers and lids; signs and sign frames for the containers; pop-up tents and weights; hanging and feather banners; litter grabbers; and scales to weigh materials. In addition, the trailer has an educational wrap on all four sides to encourage residents to recycle at community events. In 2015, the trailer and its contents were used four times (Dakota County Fair, Burnsville FireMuster, Rosemount Leprechaun Days, and Eagan Fun Fest).



Dakota County's new event trailer

7. ENHANCED ORGANICS COLLECTION OPPORTUNITIES

Master Plan Strategy: Build on public recycling program infrastructure to introduce organics diversion in County buildings, at County and city events, and in public schools.

- **Expanded County Building Organics Collection:** Dakota County expanded its internal organics recycling program to six additional County buildings, with a total of nine County buildings now diverting organics. In 2015, the County's internal program diverted over six tons.

Prior to the organics recycling expansion, Dakota County completed a waste sort of one day's worth of trash and recycling generated at the Administration Center and Northern Service Center. The results showed 59% of the waste stream at Northern Service Center and 53% of the waste stream at the Administration Center was organics. Dakota County staff plan to complete an additional waste sort in 2016 to evaluate how much of this material is being captured in the new organics recycling program.



Staff conducting a waste sort of material from two County service center buildings

In January of 2015, the County implemented an organics recycling program at the Dakota County Community Development Agency (CDA) main office building. This is the first step in the County building a recycling and organics recycling program in multi-unit facilities. The CDA requested County technical assistance, infrastructure, and education at the CDA main office to learn first-hand about organics recycling before expanding into housing units.

8. COUNTY LEASE SUPPORTED SOURCE-SEPARATED ORGANICS CAPACITY FOR THE TCMA

Master Plan Strategy: Manage the lease on County-owned land in Empire Township to provide organics management capacity.

The County continues to lease County-owned land in Empire Township to a private company that operates both source-separated organics composting and yard waste composting facilities. This is one of three source-separated organics composting facilities that serve the TCMA.

9. SUPPORTED AND DISTRIBUTED BACKYARD COMPOST BINS FOR RESIDENTS

Master Plan Strategy: Evaluate and improve County and city tools for improved organics management by residents, businesses, and public entities.

Environmental Resources Department (ERD) partnered with the Recycling Association of Minnesota (RAM) staff for a compost bin sale and distribution open to all Dakota County residents. RAM coordinated and advertised the springtime sale. Fifty Dakota County residents ordered, purchased, and picked-up their new backyard compost bins at a discounted rate (\$55). Master Recycler/Composter volunteers helped residents load compost bins and answered backyard composting questions.

10. DEVELOPED STANDARDIZED ORGANICS TERMINOLOGY

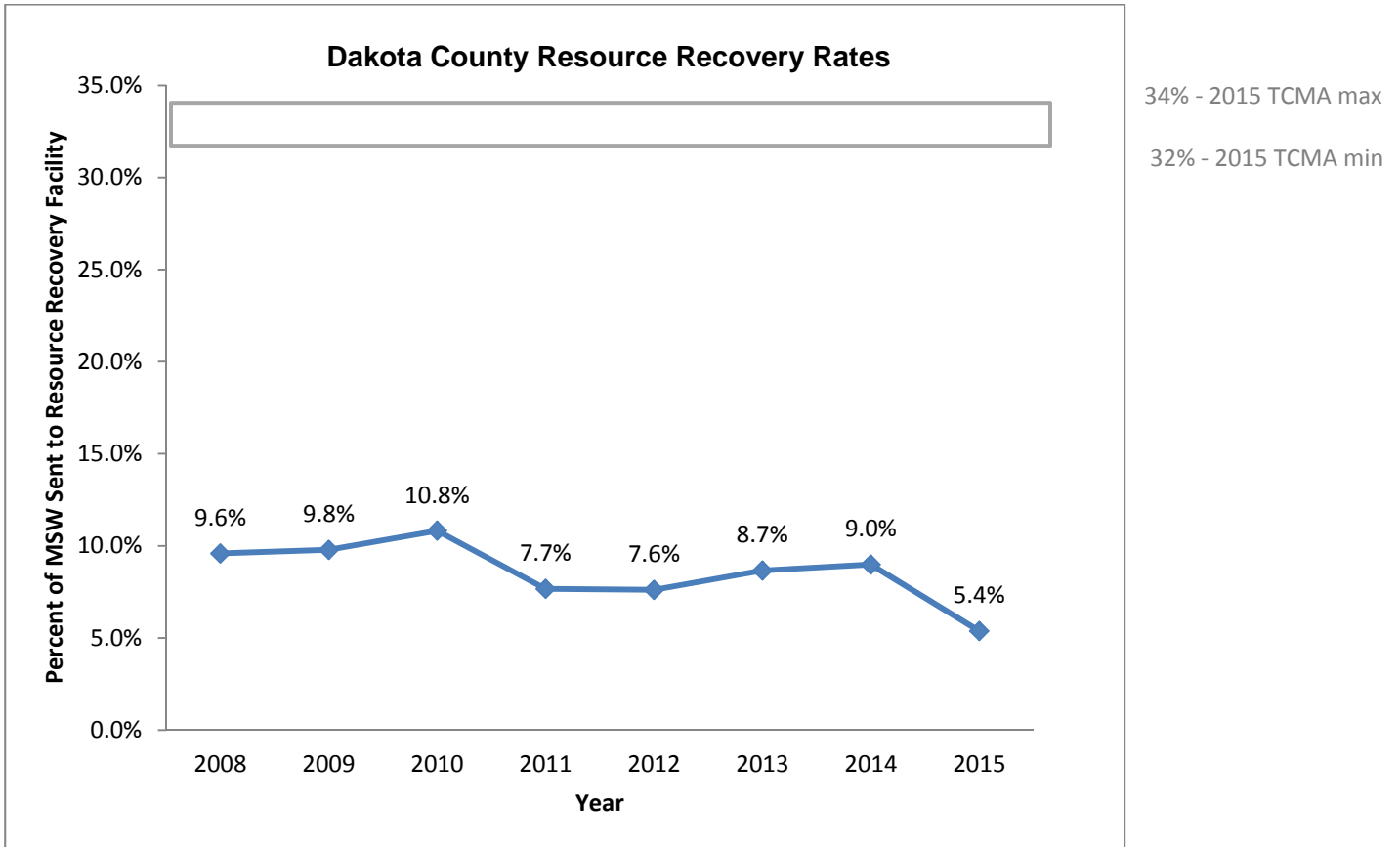
Master Plan Strategy: Develop a strategic and comprehensive organics diversion outreach program.

County staff worked with the Association of Recycling Managers (ARM) to develop common terminology for Metro area and statewide organics recycling programs. Staff met with ARM members including city and County representatives, and compost site operators to create a voluntary style guide with simple terminology for program categories and materials; suggested symbols, logos, and color to use on labels and signage; and an accepted/not accepted listing for backyard composting, large-scale composting, food-to-animals, and food-to-animal-feed. The [Organics Recycling Outreach Guide](#) is meant to keep education and outreach terminology consistent across the state as new programs emerge. ARM members agree to update the guide at least once a year as programs evolve.

RESOURCE RECOVERY (PROCESSING)

In 2015, 21,360 tons (5%) of Dakota County-generated MSW was processed at a resource recovery facility, which is below the 2015 Policy Plan objective of 32% to 34%.

Minn. Statute §473.848 and the Policy Plan require that if there is capacity at a resource recovery facility, waste must be processed instead of landfilled. As documented in the Master Plan, for the County to reach its resource recovery goals it needs support by the State and private-sector waste management through the enforcement of these statutory requirements. In addition, to meet processing goals, Dakota County requires infrastructure expansions to increase access and capacity of resource recovery facilities.



Summary of Resource Recovery Strategies Implemented: In 2015, the continued Resource Management contract required MSW generated in County facilities to be sent to a processing facility. The County included waste processing as part of its Community Funding Program, and continued to support resource recovery by leasing land in Empire Township for a transfer station to deliver MSW to a processing facility.

1. SUPPORTED STATUTORY REQUIREMENTS

Master Plan Strategy: Support statutory requirements that MSW from public entity operations is delivered to a resource recovery facility.

- Required Waste Be Processed from County Buildings: All MSW generated in the 28 County locations was reused, recycled, composted, or delivered to a resource recovery facility. The County's internal Resource Management contract requires the waste hauler to comply with State statute requirements for recycling and waste processing (Minn. Stat. §115A.471 and §473.848).
- Notified Public Entities of Processing Requirements: The County notified 45 public entities and 102 schools of their obligation to comply with State statutory requirements for waste processing (Minn. Stat. §115A.471 and §473.848). These public entities also received notification about statutory requirements that public entities must recycle at least three broad materials (Minn. Stat. §115A.151).
- Community Funding Program Notification for Cities and Townships: The Community Funding Program annual funding application requires cities and townships to identify whether waste generated from their operations that is not reused or recycled is delivered to a resource recovery facility.
- Support MPCA's intent to enforce Minn. Stat. §473.848, Restriction on Disposal: To abate landfill disposal, Minn. Stat. §473.848 requires that MSW first be sent to a processing facility. Only if processing facilities are at capacity or the MSW meets certain criteria (i.e., has been certified as unprocessable or the waste is being transferred from a processing facility), can the MSW be disposed of at a landfill. However, the MPCA has been unable to enforce Minn. Stat. 473.848 until recently. In 2015, the MPCA implemented a framework for enforcing this statute. To aid in the MPCA's enforcement, County staff worked with the MPCA to understand the MPCA's process to enforce the Restriction on Disposal (ROD) at Dakota County landfills. County staff provided guidance to the two landfills relating to how the County host fees interact with the ROD.

2. COUNTY LEASE SUPPORTED RESOURCE RECOVERY CAPACITY FOR THE TCMA

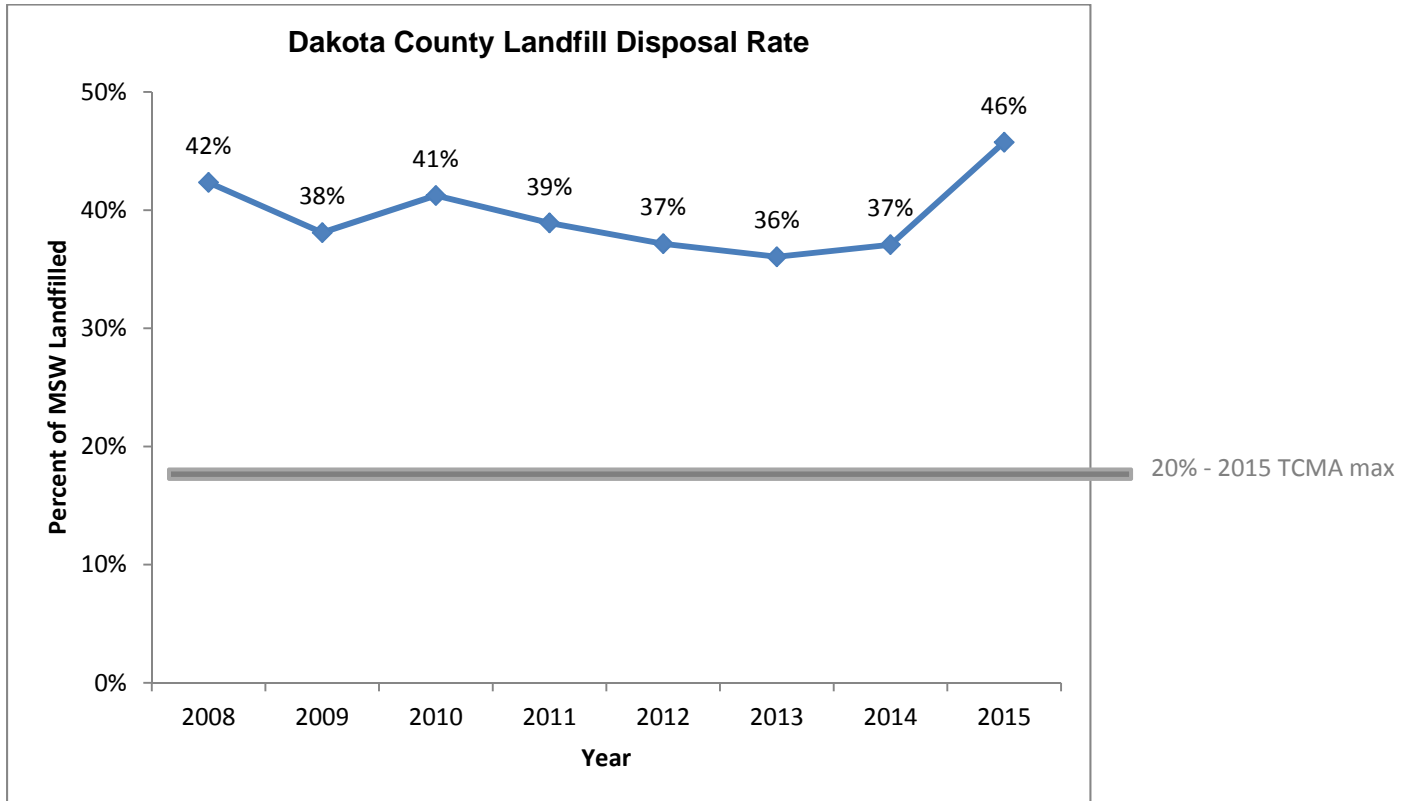
Master Plan Strategy: Manage the lease for County land in Empire Township to provide transfer to a resource recovery facility.

The County continued to lease land in Empire Township used as the Empire Transfer Station, a privately-owned and operated facility. This is the only transfer station in Dakota County that directly hauls MSW to the resource recovery facility in Newport, Minnesota.

LAND DISPOSAL

The County continues to face obstacles for meeting the 2015 Policy objective for TCMA counties to landfill a maximum of 20% of MSW. In 2015, 46% of County MSW was landfilled, a total of 181,157 tons.

Dakota County has two MSW landfills and no resource recovery facilities, making it less expensive for haulers to transport waste to the landfill. To decrease landfill disposal rates, the County needs to have successful reduction, recycling, organics diversion, and resource recovery efforts. The MPCA's strategy to enforce the ROD (which requires waste to be sent to a processor if capacity exists) will facilitate the transportation of waste to proper facilities and assist the County's efforts to reduce landfill rates.



SUMMARY OF MASTER PLAN STRATEGIES IMPLEMENTED: The County continued regulatory approaches to ensure proper management of solid waste and explored new efforts to divert waste from landfills.

1. REGULATED FACILITIES THAT MANAGE SOLID WASTE

Master Plan Strategy: Regulate land disposal facilities to ensure compliance with Ord. 110 and license conditions.

County staff continued to further proper management of solid and hazardous wastes by regularly inspecting landfills, materials recovery facilities, and transfer stations to ensure compliance with Federal, State and local requirements, including regulating material bans and prohibitions. In 2015, the County completed 106 compliance inspections of solid waste facilities – all observed compliance issues have been corrected.

OUTREACH & EDUCATION

Outreach and education do not have specific measurement goals in the Policy Plan, but strategies were included in the Master Plan to address public education requirements in State law (Minn. §Stat. 115A.552, subd.3 and 115A.96).

Summary of Outreach and Education Strategies Implemented: In 2015, outreach and education continued to be a primary tool used by the County to influence how waste is managed. The County continued to work with cities and partners on a large number of outreach strategies to shift waste up the waste management hierarchy by targeting audiences of greatest need with specific information. Outreach efforts included the development of new workshops and online and print resources, expansion of existing resources, targeted outreach through work with cities and townships, and collaborative education through the SWMCB regional education and grant programs.

1. PROVIDED OUTREACH TOOLS AND EDUCATIONAL MATERIAL TO CITIES AND TOWNSHIPS

Master Plan Strategy: Strengthen partnerships with cities and townships to provide outreach and education to the community.

The County developed resources to assist cities and townships in implementing Community Funding Program outreach requirements. Resources included pre-written articles, social media posts, and images to provide a consistent message to residents throughout the County and provide uniform messaging on topics not covered in SWMCB outreach toolkits. Cities and townships used County and SWMCB outreach resources on their websites, newsletters, and other communication channels, resulting in residents and businesses seeing recycling and waste reduction messages 4.5 million times in 2015.

Cities and townships additionally tried new outreach tactics. Dakota Valley Recycling started presentations directed at seniors to educate about waste reduction and recycling and hosted a Climate Resiliency Workshop for Dakota County residents. Lakeville created 3.3 million impressions by using the local public access channel for event announcements and recycling information. South St. Paul partnered with the local Farmer's Market to teach attendees how to make their own tote bags out of t-shirts which were then used to buy produce. The RSWC launched a new website to connect rural residents to recycling and waste information and has had more than 630 views.

2. ASSISTED EDUCATORS DEVELOP STRATEGIES FOR WASTE REDUCTION

Master Plan Strategy: Identify sectors and recyclable materials most needing improvement and address findings.



Resources for schools identified at the 2015 school workshop

Dakota County hosted its first annual School Waste and Recycling Workshop to provide an opportunity for school personnel to gather and hear from others who have implemented school recycling programs and to exchange lessons learned. The workshop drew nearly 30 participants, including school principals, buildings and grounds personnel, and teachers. Participants expressed appreciation for the County's Enhanced School Recycling and

Organics Program for infrastructure support (containers, signage) and technical assistance (implementation practices and cost analyses), particularly to generate support from across all levels of their school district. Success stories shared included achieving high waste diversion (nearly 80% in some cases), cost savings, and engaged staff and students through building competitions, rewards, and student green teams. Challenges facing school staff include changing historical purchasing practices and the need for staff cafeteria monitors. The County's efforts to research compostable products and increase volunteers through the Master Recycler/Composter Program continue to be part of the solution.

3. PROVIDED RECURRING AND EXPANDED LANDFILL ABATEMENT EDUCATION

Master Plan Strategy: Provide recurring and consistent education... using a variety of communication methods.

- **Continued Master Recycler/Composter Program:** County staff again offered Master Recycler/Composter (MRC) classes to educate adult residents on waste and recycling. Over six weeks, participants learn about solid waste reduction, reuse, and recycling; organics composting; and proper hazardous waste management. At the end of the course each participant is required to complete 30 hours of community service related to waste diversion in Dakota County. In 2015, 61 residents graduated from the spring and fall classes bringing the total MRCs to 107 since 2014. MRC volunteered 637 hours in 2015, a 30% increase over the previous year, and reported talking to 10,451 residents.
-
- Fall 2015 MRC graduates
- **Educational Displays, Kits, and Activities:** County staff provides education resources on a check out basis for residents, community organizations, and schools. Materials include visual displays and self-guided instructions that were used in 13 presentations focused on toxicity and waste reduction and recycling at local elementary schools, community safety events, Scout groups, local churches, 4-H groups, city roadside clean-up events, and business recognition events.
 - **Tours at The Recycling Zone:** Fifty-one groups (758 people total) toured The Recycling Zone in 2015, and were educated on reuse, recycling, and household hazardous waste. Tour groups included schools, Scout troops, and MRC classes. Post-tour surveys show that the tour gave the participants a better understanding of why recycling is important and what items are accepted at The Recycling Zone.
 - **Educational Resources for Residents:** The County uses diverse communication to reach residents. News articles, press releases, e-news, handouts, reuse and recycling guides, and expanded information on the County website provided information for residents and businesses about waste reduction and what, where, when, why, and how to recycle and compost organics. In 2015, 946 people subscribed to the residential environmental e-newsletter. The most read e-news topics were: materials not accepted at recycling facilities, RAM compost bin sale, educational resources available, and recycling at summer events.

- **Educational Resources for Businesses:** A new Minnesota law requires that most businesses and sports facilities contract for recycling of at least three materials. The County’s website was updated to include the new state recycling requirement and information for how to implement a program. There is one sports facility in the County that falls within the new mandate and the County verified that it has recycling. Information about the 2016 commercial recycling requirement was distributed in the County’s quarterly e-news to over 330 businesses and in a letter mailed to over 10,000 businesses with NAICS codes 42 to 81. The letter resulted in over 100 inquiries from businesses to County staff on compliance-related issues and about how to begin recycling.
- **Tour de Trash:** Dakota County offered the first-ever “Tour de Trash” for residents, a behind-the-scenes look at trash and recycling facilities. Tour de Trash educated 18 residents on what happens to their waste once it is delivered to a landfill, compost site, and recycling center. One comment: “I’ll never look at my waste the same!”



Residents at Tour de Trash observing a compost pile contaminated with plastic.

4. EVALUATED CURRENT RECYCLING MESSAGING GAPS: REGIONAL WISHCYCLING COMMITTEE

Master Plan Strategy: Strengthen partnerships with waste service providers to provide outreach and education to the community.

County staff participated in a “wishcycling” committee, a regional Association of Recycling Managers sub-committee. Wishcycling is a term used when items are thrown into the recycling container wishing they will be recycled, regardless of whether or not they are known to be recyclable. This oftentimes contaminates clean recyclables and can cause problems at the sorting facility. The committee worked with staff from seven Metro area sorting facilities and initial information learned was presented at an ARM meeting in 2016.

5. PROVIDED GRANTS FOR EDUCATION TO UNDERSERVED GROUPS

Master Plan Strategy: Identify sectors and recyclable materials most needing improvement and address findings.

Dakota County continued to provide financial and technical assistance to non-profit, underserved organizations through the SWMCB’s Community Partners on Waste Education and Reduction (POWER) Program. The Community POWER grant program has been offered in the Metro area annually since 2001 to support projects that educate and engage residents to reduce and better manage waste.

One organization completed the 2014-2015 grant round:

- Eagan YMCA teen leaders researched backyard composting, built compost bins, and educated staff, kids and community members on the importance of composting. Thirty teens were actively engaged in learning and educating another 150 community members. Compost bins will continue to be used at the YMCA and at Y Camp.

Two organizations in the County were awarded funds for 2015-2016 activities:

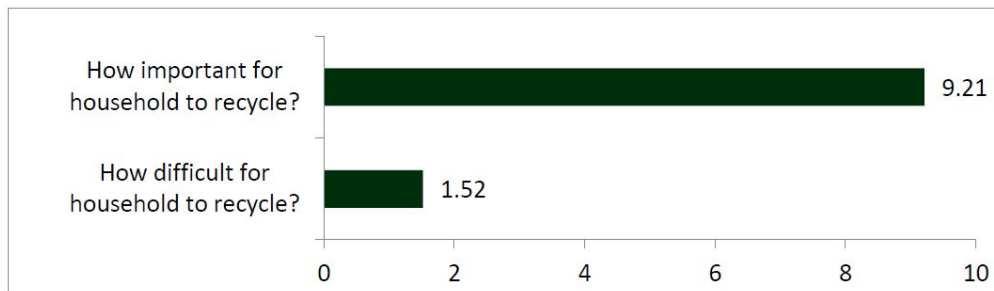
- The Minnesota Zoo to educate and collect cellphones from zoo visitors through the Recycle for Rainforests Program. Funding allows creation of outreach materials to engage school children.
- Dakota County Master Recycler/Composter volunteers partnered with Neighbors, Inc. to conduct Fix-It Clinics for residents. These clinics are designed to teach valuable skills of repair while also keeping items out of landfills. The grant includes purchasing tools for repair, developing educational materials and establishing a protocol for replication. All materials will be given to Dakota County for other groups to check out and host a Fix-It Clinic.



6. EVALUATED CURRENT UNDERSTANDING AND PERCEPTUAL BARRIERS TO WASTE DIVERSION

Master Plan Strategy: Target outreach materials to audiences with the greatest need for education.

- **SWMCB Communications: Market Research Study:** Dakota County, in conjunction with the SWMCB, contracted with Action Research to survey Metro county residents to gather county-specific and regional information about residential recycling practices. For Dakota County respondents, residents considered recycling “very important” and “not very difficult.” Without any prompts given to respondents, the environment was the number one reason for recycling for county residents and the “good/right/moral thing to do” as a far second.



Dakota County residents rated recycling as 9.21 on a scale of 0 to 10 - 10 being very important

- **National Association of Counties Achievement Award:** Dakota County was highlighted in the National Association of Counties (NACo) News for its successful efforts promoting The Recycling Zone. County staff developed a campaign in 2014 to remind residents about the importance of recycling and the convenience of dropping off items for free at The Recycling Zone. The goal was to achieve a 10% increase in participation, which was surpassed as the Recycling Zone saw a 20 percent increase. The effort earned a 2015 NACo Achievement Award and the details of the project and its success were described in the September 21, 2015, NACo News.
- **Dakota County Mini Survey:** In the fall of 2014, Environmental Resources and the Office of Planning and Analysis staff worked on a residential survey that asked multiple questions related to recycling and residents’ recycling practices. The survey was sent to 4,000 randomly selected addresses county-wide.

Highlights of the results include: 65% of respondents reported that having recyclables picked up weekly would make them more likely to recycle more materials, 55% of residents support curbside collection of food waste in a separate cart, and 90% feel that saving money is important when considering one or fewer haulers to provide recycling and garbage services.

HOUSEHOLD HAZARDOUS WASTE AND PROBLEM MATERIALS

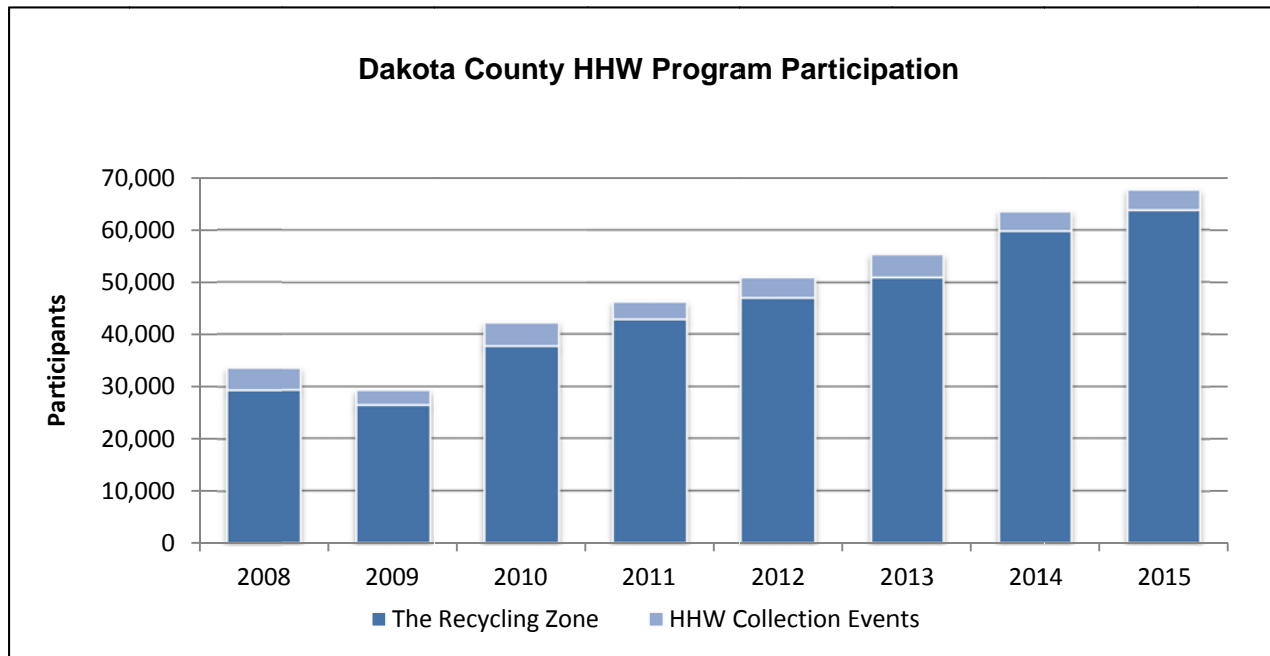
The County implements a Household Hazardous Waste (HHW) management plan, as required by State law (Minn. Stat §115A.96). The County's strategies to address HHW and problem materials are detailed in the Master Plan and further protect the environment and public health.

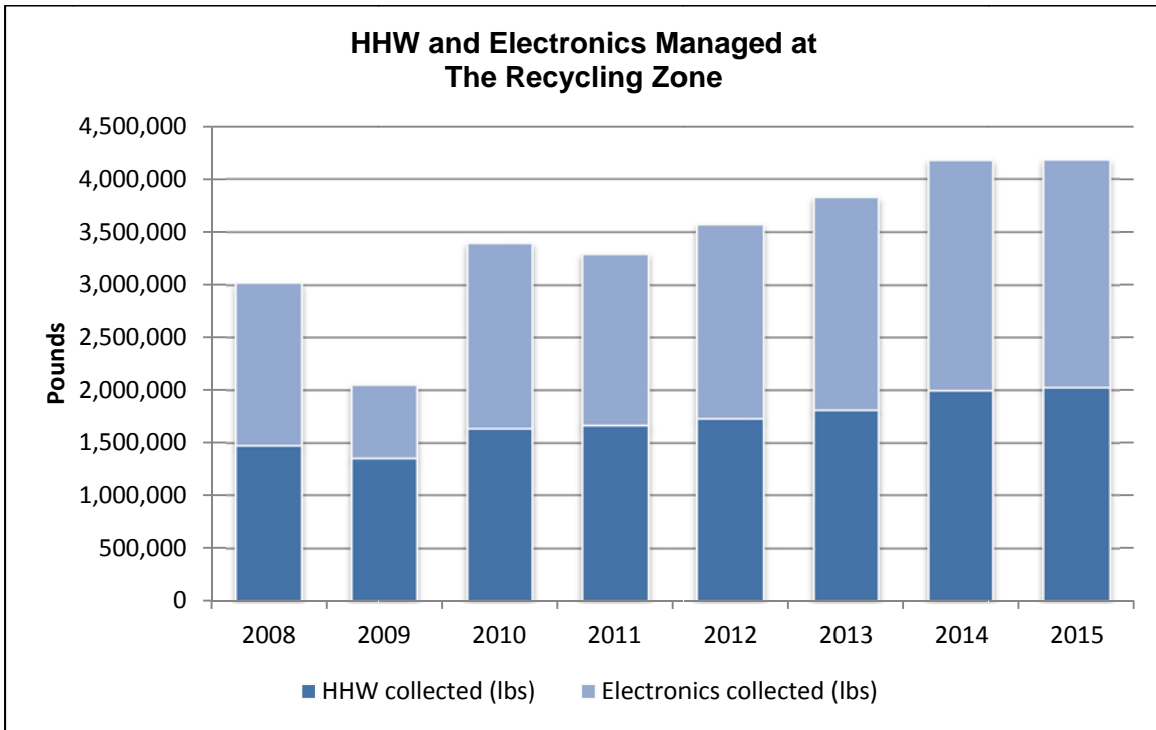
Summary of HHW and Problem Materials Strategies Implemented: The County provides collection, storage, and proper management of HHW and problem materials through collection services at The Recycling Zone, community collection events, and drop-off locations.

1. THE RECYCLING ZONE

Master Plan Strategies: Provide for consistent and cost-effective services; increase opportunities to manage problem materials and HHW.

The Recycling Zone had a record year for attendance in 2015. Over 63,700 residents dropped off HHW at the Recycling Zone, a 6% increase from 2014. Continued increasing participation rates support the success of the 2014 media campaign the County used to increase awareness of the Recycling Zone and proper management of household hazardous waste. In 2015, over 4.1 million pounds of HHW and electronics was managed.





2. HOUSEHOLD HAZARDOUS WASTE COLLECTION EVENTS

Master Plan Strategy: Provide convenient opportunities to manage problem material and HHW.

HHW Collection Events: Four HHW collection events were held in 2015 in Dakota County: Hastings, Lakeville, Farmington, and Burnsville. Nearly 3,900 residents participated in these events, collecting 456,000 pounds of hazardous waste.



Residents arriving at Lakeville's household hazardous waste event

3. PAINTCARE

Master Plan Strategy: Support Product Stewardship Legislation

In November 2014, PaintCare, a non-profit organization that manages paint in states that have paint product stewardship laws, began collecting a fee on each can of architectural paint² sold in Minnesota. The fee is used to pay for the costs of managing paint collected by retailers and HHW facilities across Minnesota, including at The Recycling Zone. In 2015, approximately 82,400 gallons of latex paint and 15,000 gallons of oil-based architectural paint was collected, a 9% increase from 2014. In 2015, Dakota County was reimbursed \$187,205 from PaintCare funds.

² Interior and exterior architectural coatings sold in containers of five gallons or less