



SOLID WASTE MANAGEMENT
MASTER PLAN



2018-2038

This document was produced by the Carver County Environmental Services Department, of the Public Services Division, in accordance with the requirements of Minn. Stat. §473.803, “Metropolitan County Planning”.

The Carver County 2018-2038 Solid Waste Management Master Plan is an update of the 2012-2030 Solid Waste Management Master Plan adopted in March of 2012.

This plan is available in alternative formats upon request, and online at www.co.carver.mn.us.

CARVER COUNTY

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ACRONYMS

AD	Anaerobic Digestion	MSW	Mixed Municipal Solid Waste
ATHC	Adult Training and Habilitation Center	RDF	Refuse Derived Fuel
C&D	Construction and Demolition Waste	SCORE	Select Committee on Recycling and the Environment
DNR	Minnesota Department of Natural Resources	SET	Specialized Environmental Technologies
EPA	United States Environmental Protection Agency	SMM	Sustainable Materials Management
EPP	Environmentally Preferable Purchasing	SMSC	Shakopee Mdewakanton Sioux Community
EPR	Extended Producer Responsibility	SSOM	Source Separated Organic Materials
HERC	Hennepin Energy Resource Company	SWMT	Solid Waste Management Tax
HHW	Household Hazardous Waste	TCMA	Twin Cities Metropolitan Area
LRDG	Local Recycling Development Grant	VSQG	Very Small Quantity Generator
MPCA	Minnesota Pollution Control Agency	WMA	Waste Management Act
MRF	Materials Recovery Facility	WMO	Water Management Organization

INTRODUCTION

Per Minnesota Statute, counties in the Twin Cities Metropolitan Area (TCMA) are required to revise and submit solid waste management master plans to the Minnesota Pollution Control Agency (MPCA) for approval. Solid waste master plans shall align with the goals, policies and objectives outlined in the MPCA's Metropolitan Solid Waste Management Policy Plan (Policy Plan), providing consistency in the TCMA.

PURPOSE OF THE MASTER PLAN

The Carver County Solid Waste Management Master Plan (Master Plan) demonstrates the County's commitment to protect, preserve and improve the environment and the quality of life within the community, while establishing the framework for managing Carver County's solid waste for the next twenty years. Although the Master Plan lays out a structure for waste management over a twenty year period, its primary objective is to guide waste management through the next six years (2018-2023), when the next major plan revision is expected.

The Master Plan focuses on the development of solid waste management services and programs that support the goals of the Waste Management Act (WMA). The goals and strategies contained in the Master Plan reaffirm the commitment of the County to cost-effective, environmentally responsible waste management policies and programs.

In addition to implementing the objectives in the WMA and Policy Plan, the Master Plan also supports Carver County's Strategic Plan, with its goals of good communities, culture, connections, finances, and growth, and its vision of a community in which the future embraces the past in keeping Carver County a great place to live, work, and play for a lifetime.

The Master Plan demonstrates the County's commitment to protect, preserve and improve the environment and quality of life within the community.

PLAN PREPARATION

TCMA counties are required to consult an advisory committee to aid in the preparation of the Master Plan. The advisory committee must consist of citizens and representatives from municipalities and private waste management firms. With the approval of the MPCA, Carver County formed a Solid Waste Management Master Plan Stakeholder Group (Stakeholder Group), and drew upon their comments for the development of this Master Plan. The Stakeholder Group consisted of residents, city staff members, representatives from local businesses and waste management firms, and MPCA staff members.

The Stakeholder Group developed objectives and strategies that provide a framework for how the County will manage its solid waste. Input was also gathered from citizens, public and private entities, nonprofit groups, and the MPCA through the release of a draft plan and public comment period. County staff members also worked with other TCMA counties to ensure consistency within the region.

The Carver County Board of Commissioners adopted a resolution on February 6, 2018 to submit the draft Master Plan to the MPCA for review. The County received final approval from the MPCA on November 29, 2018. The Master Plan was adopted by the County Board on December 18, 2019.

MPCA METROPOLITAN SOLID WASTE POLICY PLAN 2016-2036 SUMMARY

The Metropolitan Solid Waste Policy Plan, prepared by the MPCA and adopted by the Commissioner of the MPCA on April 6, 2017, is a long range solid waste management plan consisting of goals and policies for managing the TCMA's solid waste through 2036. Minnesota Statutes require that the Policy Plan be followed in the TCMA. All stakeholders, including the MPCA, will be accountable for implementing the Policy Plan.

The Metropolitan Solid Waste Policy Plan outlines the challenges and opportunities for waste management in the TCMA over the next 20 years and includes a framework for change, including a system plan which promotes aggressive goals that support the upper end of the waste hierarchy. The Policy Plan also describes the tools that the MPCA and metropolitan counties will use to implement the plan and monitor the progress toward meeting the system objectives.

The overarching message of the current MPCA Metropolitan Solid Waste Policy Plan is that fundamental change, in the form of accountability and effective tools, is necessary among the stakeholders responsible for solid waste management in the TCMA, if the region is to continue to move beyond current trends and meet the goals set forth in the Waste Management Act (WMA). The activities of these stakeholders must be aligned so that overall system goals are achieved in a cost effective manner and reach State goals and objectives. The Policy Plan provides a framework for change to assist State and local leadership and all stakeholders to meet these challenges and advance the TCMA solid waste system.

The MPCA's focus in revising the Metropolitan Solid Waste Policy Plan included six key areas as shown in Figure 1.



Figure 1: The MPCA's focus when revising the Metropolitan Policy Plan.

The MPCA's Metropolitan Solid Waste Policy Plan 2016-2036 contains several key ideas and assertions, including:

Accountability. In the complex TCMA solid waste system, accountability is not necessarily a top-down approach. Many entities, public and private, are responsible for implementing the Policy Plan and must voluntarily hold themselves accountable. This includes, but is not limited to: State and local governments, private waste and recycling businesses, citizens, manufacturers of products, retailers and other businesses, and environmental groups.



MPCA Metropolitan Solid Waste Policy Plan 2016-2036

(MPCA Policy Plan Summary continued)

Solid waste management hierarchy. The waste management hierarchy is a guide for prioritizing waste management practices with the objective of promoting resource conservation and environmental protection. Strategies contained in the Policy Plan emphasize the upper end of the hierarchy by promoting waste reduction, reuse, and recycling while minimizing land disposal.

Generator responsibility. Surveys show that most generators (a person or entity that produces waste) believe that their responsibility ends once the waste is hauled away. Generators have an obligation to make wise purchasing and wise disposal decisions.

Government as a leader. Government should lead the way by managing its waste, generated through services and projects, in accordance with the waste hierarchy.

Product Stewardship. All parties involved in designing, manufacturing, selling, and using a product should take responsibility for environmental impacts at every stage of that product’s life. This practice leads to better product design, less impact on the environment, increased recycling rates, and a reduction in government involvement and subsidies.

Private sector initiative. In the TCMA, there has been a long history of solid waste services provided by private businesses and nonprofits. The private sector has a significant role to play in implementing the Policy Plan and has a major responsibility for meeting the goals of the Waste Management Act.

Environmental benefits. Solid waste management has an important role to play in reducing environmental impacts, such as greenhouse gas emissions, toxicity, and energy and water use. Moving materials up the waste management hierarchy maximizes environmental benefits.

As shown in Table 1, the MPCA has set specific quantifiable objectives to reduce land disposal of waste through 2036. The objectives, broken into five-year intervals, include goals for source reduction, recycling, organics recovery, resource recovery, and land disposal. It is important to note that all metropolitan counties, including Carver County, will be required to meet these objectives.

Management Method	Metropolitan Area MSW Management Objectives				
	2015	2020	2025	2030	2036
Waste Reduction ¹	-	1.5%	3%	4%	5%
Recycling ¹	45-48%	51%	54%	60%	60%
Organics Recovery ¹	3-6%	12%	14%	15%	15%
Resource Recovery ²	32-34%	35%	31%	24%	24%
Maximum Landfill ³	20%	2%	1%	1%	1%

Table 1: The MPCA sets MSW management objectives for the Metropolitan Area.

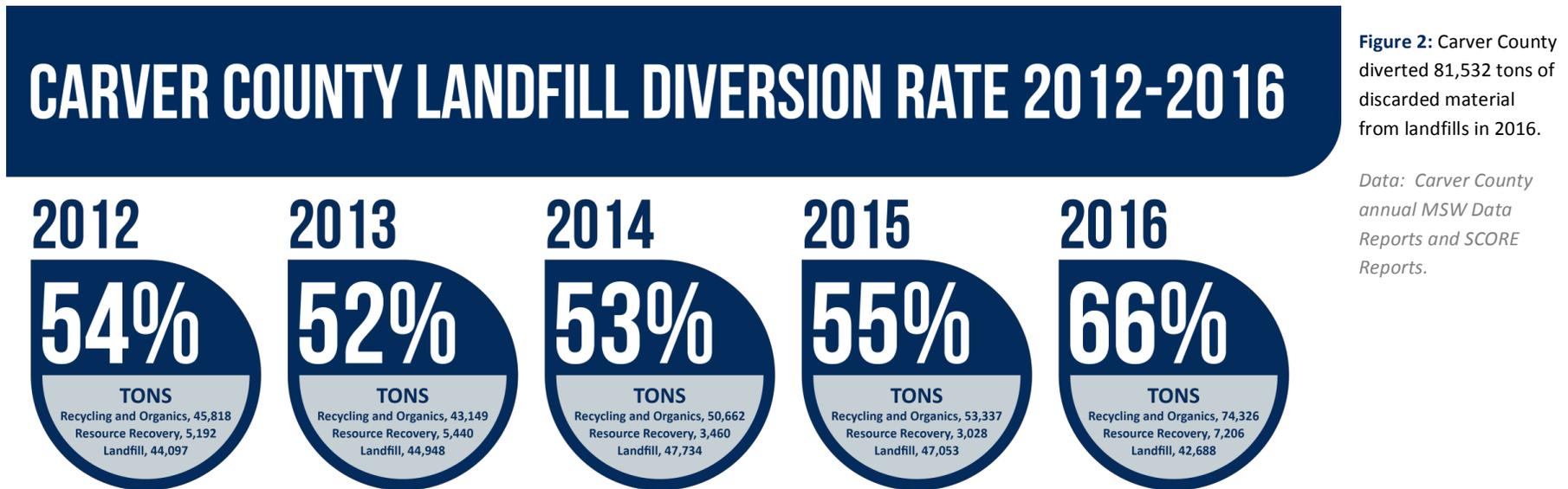
Data: Metropolitan Solid Waste Management Policy Plan 2016-2036.

1. The *minimum* amount of MSW that must be managed by this method.
2. The amount of resource recovery expected to occur after maximizing reduction, recycling and organics recovery.
3. The *maximum* amount of land disposal allowed. Does not include ash or residual from other processes.

LANDFILL DIVERSION RATES

In 2016, when measured by weight, 66 percent of discarded material in Carver County was diverted from landfills through recycling (35%), organics recovery (25%) and resource recovery (6%). Carver County is committed to move materials up the waste hierarchy to be managed in the most environmentally preferable manner. The strategies within this Master Plan identify where Carver County can influence and support waste being used to its highest value.

Figure 2 shows the percentage of Carver County waste diverted from landfill, over the past five years, through recycling, organics recovery, and waste-to-energy.



MOVING FORWARD

The Carver County Solid Waste Master Plan (Master Plan) provides a foundation for new initiatives to advance waste management in Carver County, as well as for consolidating ongoing programs and services. Successful strategies from previous plans are continued, either as is or in an enhanced form, along with new strategies that have been developed to advance programs to the next level.

The overriding focus of the County's work in this revised Master Plan includes the continued commitment to reduce land disposal, prevent pollution, improve public health, and advance programs that align with the upper tier of the waste management hierarchy.

In addition to the County’s commitment to existing objectives, four new areas of emphasis have been included in this revision of the Master Plan.

1. Food Waste Reduction and Food Rescue
2. Source Separated Organic Materials (SSOM) Compost Site Permitting
3. Sustainable Materials Management
4. Environmental Justice

The areas of Sustainable Materials Management and Environmental Justice are new concepts incorporated into the Master Plan, as required by the Policy Plan and MPCA.

Food Waste Reduction and Food Rescue

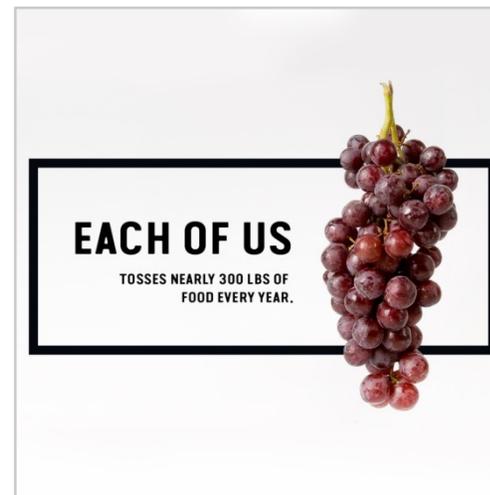
According to the United States Department of Agriculture (USDA), approximately 12.3 percent of U.S. households were food insecure at some point in 2016. That is, at times during the year, those households were uncertain of having, or being unable to acquire, enough food to meet the needs of all their members because they had insufficient money or other resources for food. Despite this, 133 billion pounds (40 percent) of all food produced in the U.S. is wasted annually, with an estimated value of \$161 billion. That figure represents nearly 300 pounds of food being discarded per person each year at a value of over \$1,500 for a family of four.

Carver County will focus on actions and efforts to prevent food from going to waste in the first place and rescuing wholesome foods for people in need, while also keeping food out of landfills. Using the Organics Recovery Hierarchy as a guideline, the County will partner with restaurants, grocery stores, churches and food shelves to examine the amount of food being wasted to identify surplus food that could potentially be directed to people in need. The County will also utilize existing educational campaigns to inform Carver County residents and businesses of the role they have in preventing food waste.

Source Separated Organic Materials (SSOM) Compost Site Permitting

At this time, the MPCA does not permit yard waste compost sites to accept and process food scraps or non-recyclable paper. In order for a yard waste compost site to accept source-separated organics under existing rules, it would have to apply for an SSOM facility permit and change the existing regulatory status from a yard waste compost site to an SSOM composting facility. This adds significant expense and siting issues that few facility operators are able to undertake.

Carver County will work with the MPCA to position the State to better evaluate the design and operational practices needed at SSOM compost facilities. This work will ensure that Minnesota’s regulations governing compost facilities are not overly restrictive while protecting the environment.



Nearly 300 pounds of food is discarded per person each year.

Source: *Natural Resources Defense Council (NRDC), www.savethefood.com.*

Sustainable Materials Management

Sustainable materials management (SMM) is a systemic approach to using and reusing materials more productively over their entire life cycles. It represents a change in how our society thinks about the use of natural resources and environmental protection. By looking at a product's entire life cycle (Figure 3), we can find new opportunities to reduce environmental impacts, conserve resources, and reduce costs.

Carver County, in collaboration with the MPCA and other stakeholders, will begin to offer, when appropriate, an SMM approach focused on minimizing environmental impact and emphasizing the use of life-cycle analysis.



Figure 3: Materials have environmental impacts throughout their lifecycles. The major stages in a material's lifecycle are raw material acquisition, materials manufacture, production, use/reuse/maintenance, and waste management.

Source: United States EPA

Environmental Justice

Environmental justice is defined as the fair treatment and meaningful involvement of all people regardless of race, color, national origin, or income with respect to the development, implementation, and enforcement of environmental laws, regulations, and policies.

All Americans deserve to have clean air to breathe, safe water to drink and healthy communities in which to raise their families. Research indicates that people of color and low-income families are both disproportionately exposed to pollution, and bear disproportionate health impacts from pollution, regardless of other population characteristics. For this reason, Carver County has developed two maps, which can be found in the Appendices, to be used as a preliminary screening tool to identify areas where additional review or action may be needed or desired.

Carver County is committed to the principles of environmental justice and to ensuring that the County's actions, including permitting, program and policy planning, education and outreach, and compliance and enforcement, address the interests of all residents regardless of race, ethnic, or socioeconomic background. Strategies contained in this Master Plan will help establish an environmental justice framework upon which to evaluate and continuously improve.

ENVIRONMENTAL JUSTICE

"The fair treatment and meaningful involvement of all people regardless of race, color, national origin, or income with respect to the development, implementation, and enforcement of environmental laws, regulations, and policies."

- United States Environmental Protection Agency

SOLID WASTE MANAGEMENT SYSTEM DESCRIPTION

This section describes the existing system of solid waste generation, programs to manage this system, and the financial management of these programs. The section begins with an overview of the State’s approach to waste management and then provides a general demographic description as a framework before detailing the specific programs of Carver County’s solid waste management system.

MINNESOTA’S APPROACH TO WASTE MANAGEMENT

The Minnesota Waste Management Act (WMA), adopted in 1980, established criteria for managing solid waste. The goal of the WMA is to protect Minnesota’s land, air and water, along with other natural resources and public health, by improving waste management in order to:

- Reduce the amount and toxicity of waste generated
- Separate and recover materials and energy from waste
- Reduce indiscriminate dependence on disposal of waste
- Coordinate solid waste management among political subdivisions
- Develop waste facilities in an orderly and deliberate way (including disposal facilities) while ensuring their financial security

The WMA, defined in Statute, is designed to abate landfill use and encourage more environmentally favorable waste management methods in a manner appropriate to the characteristics of the waste stream. It prioritizes waste reduction, reuse, recycling, and organics recovery above methods that preclude further management of the materials, including waste-to-energy (burning refuse to recover fuel or energy) and land disposal (Figure 4).

In Minnesota, the responsibility of managing solid waste is primarily delegated to the counties, while the State retains oversight authority and supports local efforts through permitting, planning, financial support, and technical assistance. The TCMA and Greater Minnesota counties have different sets of requirements governing their solid waste planning, with the primary difference being the fact that metropolitan county solid waste master plans must comply with the current Metropolitan Solid Waste Management Policy Plan.

State funding is provided to counties via revenue generated from the State Solid Waste Management Tax (SWMT). People who pay for garbage services in Minnesota pay the SWMT, with different rates applied to waste streams. Counties receive funding from the SWMT, administered by the MPCA in the form of Select Committee on Recycling and the Environment (SCORE) grants. TCMA counties also receive funding from the Metropolitan Landfill Abatement Account (MLAA) in the form of Local Recycling Development Grants (LRDG). Additional resources come from the competitive grant and loan programs and Capital Assistance Program funding, which provides funding to local units of government for projects to promote landfill

Minnesota’s waste hierarchy

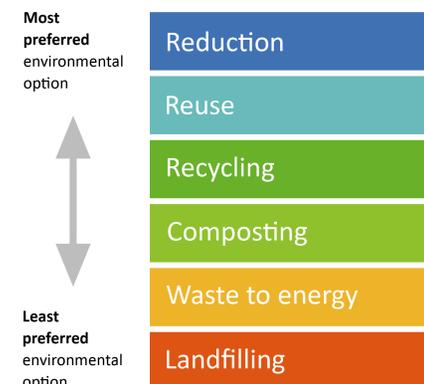


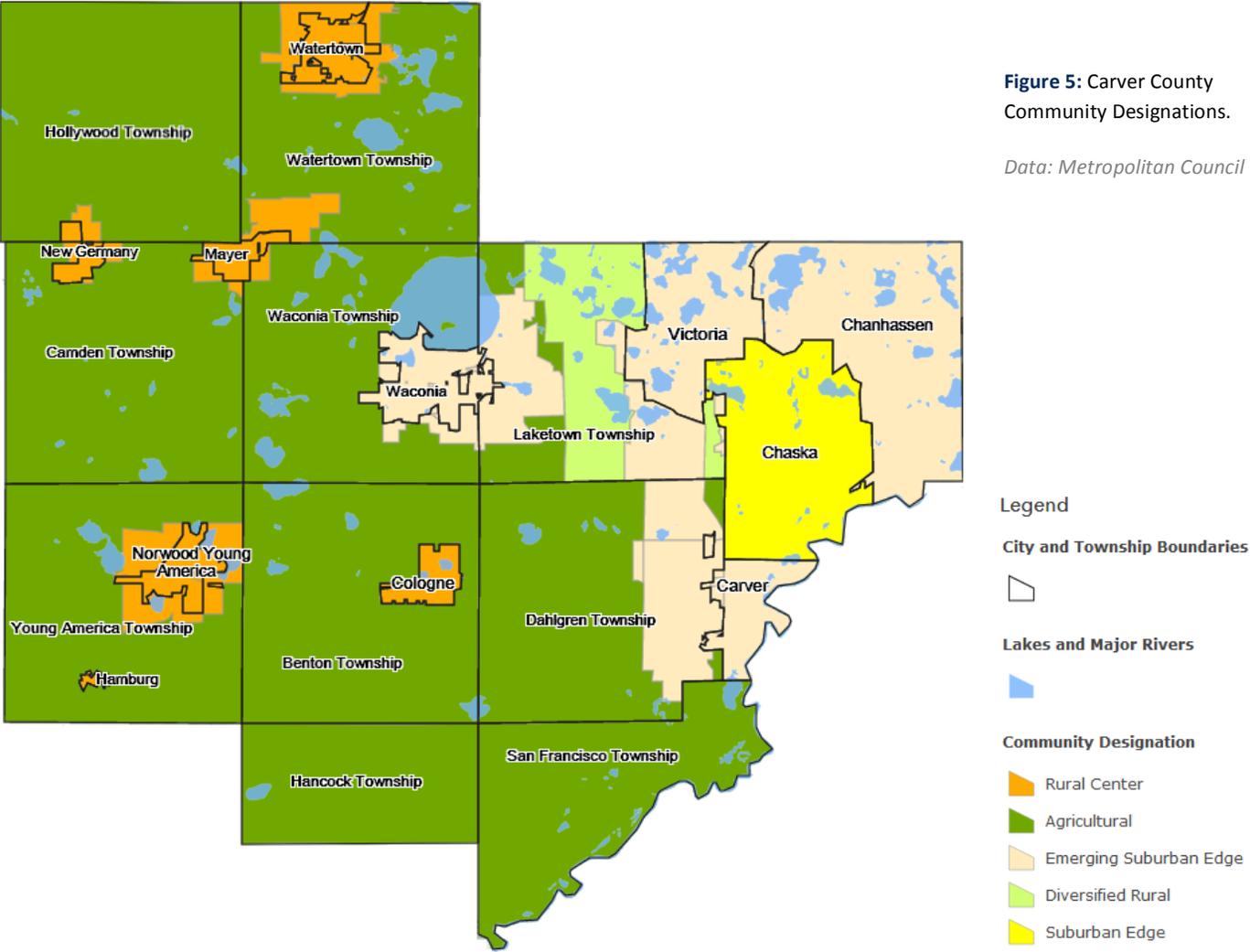
Figure 4: The Minnesota waste hierarchy ranks waste management methods from most to least preferred.

Source: MPCA Policy Plan.

abatement. SCORE grants are distributed to all counties and waste districts with approved Solid Waste Management Master Plans. A minimal base amount is provided for each county and additional dollars are allocated based on population. The minimum payment is established by the Legislature.

GENERAL DESCRIPTION OF CARVER COUNTY

Located at the southwestern edge of the TCMA, Carver County is a mix of rural, suburban, and urban spaces (Figure 5). The cities in Carver County are growing and expanding into surrounding agricultural areas. The townships of Carver County remain rural in character, but they, too, are experiencing the impacts of growth as more and more people and businesses move to Carver County.



Population and Households

Carver County has surpassed a population of 100,000 for the first time, and its cities continue to lead population growth in the region. Forecasts anticipate that Carver County will experience the highest population and household growth rate in the TCMA leading into 2040. Household growth is expected to outpace population growth, resulting in fewer people living together (Figure 6).

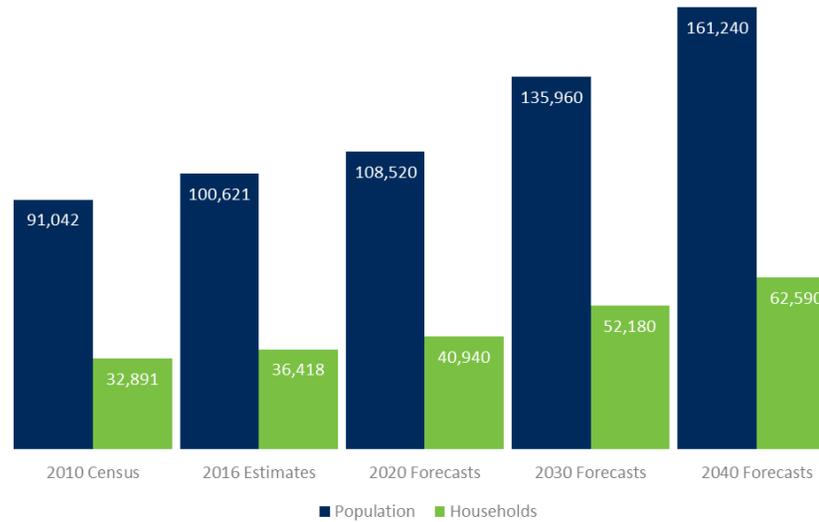


Figure 6: Population and households in Carver County.

Data: U.S. Census Bureau Decennial Census, Metropolitan Council Annual Estimates and Forecasts.

Cities and Townships

Carver County comprises 11 Cities and 10 townships of varying population density and size (Table 2). According to Metropolitan Council forecasts, by 2040, 95% of the County's population will live in cities, up from 88% in 2010. The cities of Carver, Cologne, Norwood Young America, and Waconia will more than double in population.

Cities and Townships	2016 Population Estimates	2040 Population Forecasts
Benton Township	777	710
Camden Township	976	840
Carver	4,473	15,500
Chanhassen (part)	25,448	37,100
Chaska	26,439	36,600
Cologne	1,703	3,910
Dahlgren Township	1,322	710
Hamburg	502	600
Hancock Township	335	410
Hollywood Township	1,025	1,170
Laketown Township	2,127	640
Mayer	1,995	2,950
New Germany	422	700
Norwood Young America	3,757	9,200
San Francisco Township	835	990
Victoria	8,920	15,400
Waconia	12,166	24,000
Waconia Township	1,219	1,480
Watertown	4,286	7,200
Watertown Township	1,217	1,100
Young America Township	677	670
Carver County Total	100,621	161,880

Table 2: Carver County population by city and township.

Data: Metropolitan Council Annual Estimates and Forecasts.

Housing Types

In 2016, single family detached homes were estimated by the Metropolitan Council to represent 70% of the housing in Carver County. Townhomes (single-family attached) totaled 12%, multifamily units (5 units or more) represented 13% and duplex, triplex, quad, and manufactured homes equaled 5% (Figure 7).

Educational Attainment

Carver County is home to a well-educated population with approximately 47.9% of the population having received a bachelor's degree or higher (Figure 7). This is well above the State of Minnesota average of approximately 34.8%.

Economy by Industry

Carver County's economy is led by a significant concentration of manufacturers. Top industry sectors include: Manufacturing – 8,773 jobs, Healthcare and Social Assistance – 7,349, Retail Trade – 6,004, Professional/Scientific/Technical Services – 4,963, Educational Services – 4,616 (Figure 7)

Household Income

The median household income in Carver County was \$92,455 in 2016 (Figure 7). This is well above the estimated State of Minnesota median household income of \$65,599.

Race and Ethnicity

Though Carver County's racial and ethnic make-up is predominantly white (89%), its population has become more diverse in terms of race, ethnicity, culture, and language over the past few decades (Figure 7). 2014 was the first year that the white population fell below 90%. This trend is likely to continue.

Figure 7: Carver County demographics, 2016.

Data: Metropolitan Council and U.S. Census Bureau, ACS, 2016

CARVER COUNTY DEMOGRAPHICS 2016

HOUSING TYPES



HOUSEHOLD INCOME

\$92,455

MEDIAN HOUSEHOLD INCOME

EDUCATIONAL ATTAINMENT

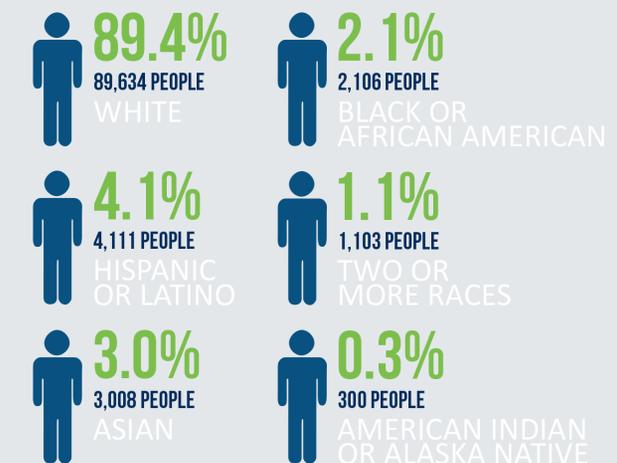
47.9%

POPULATION HAVING RECEIVED A BACHELOR'S DEGREE OR HIGHER

ECONOMY BY INDUSTRY



RACE AND ETHNICITY



WASTE GENERATION

Carver County is required to submit annual solid waste and recycling reports to the MPCA for approval. Solid waste generation figures are obtained from documented data gathered by the County from haulers, businesses, disposal facilities, and neighboring counties.

As shown in Figure 8, Carver County managed a total of 124,220 tons of mixed municipal solid waste (MSW) in 2016. Of the total:

- 74,326 tons (60 percent) was recovered for recycling including traditional recyclables, source separated organic materials (SSOM) and yard waste.
- 7,206 tons (6 percent) was processed at resource recovery facilities to be converted to refuse derived fuel (RDF).
- 42,688 tons (34 percent) was delivered to landfills.



Figure 8: 2016 Carver County waste generation broken down by management method.

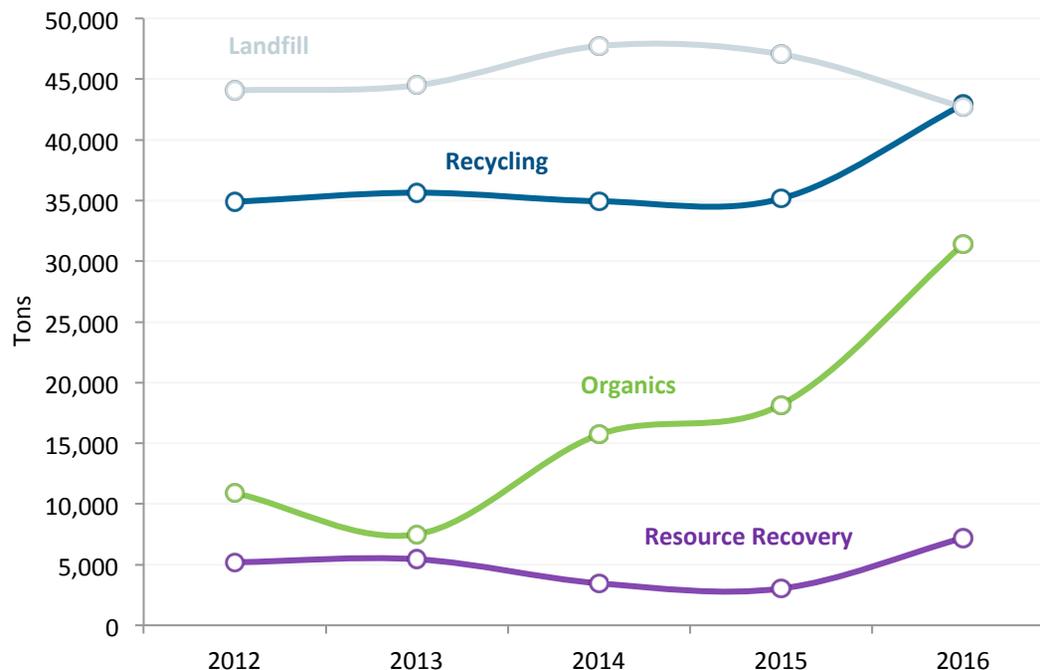
Data: 2016 Metropolitan County Annual MSW Data Report and SCORE Report.

Figure 9 illustrates Carver County waste managed from 2012 to 2016. Overall, Carver County’s waste generation has remained stable. In 2016, the total amount of waste managed increased due to the documentation of additional commercial sector organics recycling. Over the last five years:

- The rate of recycling has remained steady, at around 35 percent.
- Recovery of organic materials continues to be significant. This is due to the efforts of large manufacturing food production facilities located in the cities of Chanhassen and Chaska. In 2016, the County documented additional tons of organics recovery from these facilities. *Note: Yard waste is included in “organics” beginning in 2014.*
- Material delivered for resource recovery increased in 2016 due to the business decisions of private haulers and facilities.
- Waste delivered for land disposal has remained steady around 45,000 tons per year. The amount landfilled has a direct correlation to the amount processed and is based on private hauler business decisions.

Figure 9: Carver County Waste Management, 2012-2016

Data: Annual Metropolitan County MSW Data and SCORE Reports.



WASTE REDUCTION AND REUSE

The most effective way to reduce waste is to avoid creating it in the first place, or to plan to reuse a material or product in a new way.

Waste Reduction

Waste reduction is the most preferred management method in Minnesota’s waste management hierarchy. It refers to practices that eliminate or reduce the volume of waste discarded, rather than manage the material as a waste or recyclable material.

Many of the waste reduction efforts in Carver County involve public education and outreach. Residents are encouraged to purchase and use products that can minimize waste, such as reusable lunch containers, products with reduced packaging, and purchasing products in bulk.

The County also provides on-site waste assessments, grant funding and hands-on technical assistance to businesses, schools and municipalities.

The County leads by example through efforts made to reduce waste and conserve energy in daily operations at County properties. Examples of these practices include:

- Purchasing printers and copiers with duplexing capabilities and programming duplex printing as the default setting.
- Switching from tri-fold paper towels in manual dispensers to single ply recycled paper towels in motion activated dispensers.
- Installing 25 water filtration stations, effectively eliminating over 120,000 single use 16.9 oz. water bottles annually.
- Establishing an Energy Conservation Education Campaign designed to encourage energy conserving habits by Carver County employees. The campaign focused on office paper reduction, recycling and organics composting, and the reduction of energy used for lighting and equipment.

Reuse

Reuse means extending the life of an item by using it more than once. This practice can save time, money, energy and resources. Reuse also helps the local economy by creating jobs and providing goods to people with limited means.

In an effort to divert waste and encourage the reuse of goods and products, Carver County promotes a list of local reuse options available to its residents. The online list is broken down into the following categories:

At School. More than 80% of school supplies have the potential to be reused at the end of the school year.

Buying Used. Rather than buying new, look to buy gently used items from others who no longer need or want these items.

Donation. Consider donating items to a charitable organization so that they may be used rather than thrown in the trash.

Fix and Maintain. Rather than throwing items away, consider repairing, maintaining or repurposing items.

Product Reuse Room. Rather than buying new, find usable paints, automotive products and household cleaners at the Carver County Environmental Center.

Rent and Borrow. Renting or borrowing is a great alternative to buying expensive household tools that are used infrequently.

Resale. Consider reselling items at garage sales, to local consignment shops or through community social media platforms.



Carver County maintains a product reuse room at the Environmental Center where residents can look through hundreds of household products, all of which are free of charge.

RECYCLING

Over the past ten years, the percentage of waste managed as recycling or organics in Carver County has remained fairly consistent ranging from 49 to 52 percent (Figure 10). In 2016, the County was able to document additional commercial sector organics recycling from large manufacturing food production facilities located within the County, increasing the recycling rate to an all-time high of 60 percent.

Prior to 2013, yard waste was not included as a measured portion of the organics stream; rather it was added to the recycling rate by 5% if county programs demonstrated certain activities. In 2013, the MPCA stopped using estimates, and allowed yard waste tonnage, if documented, to count toward organics volumes. Carver County began documenting yard waste recycling tonnages in 2014.

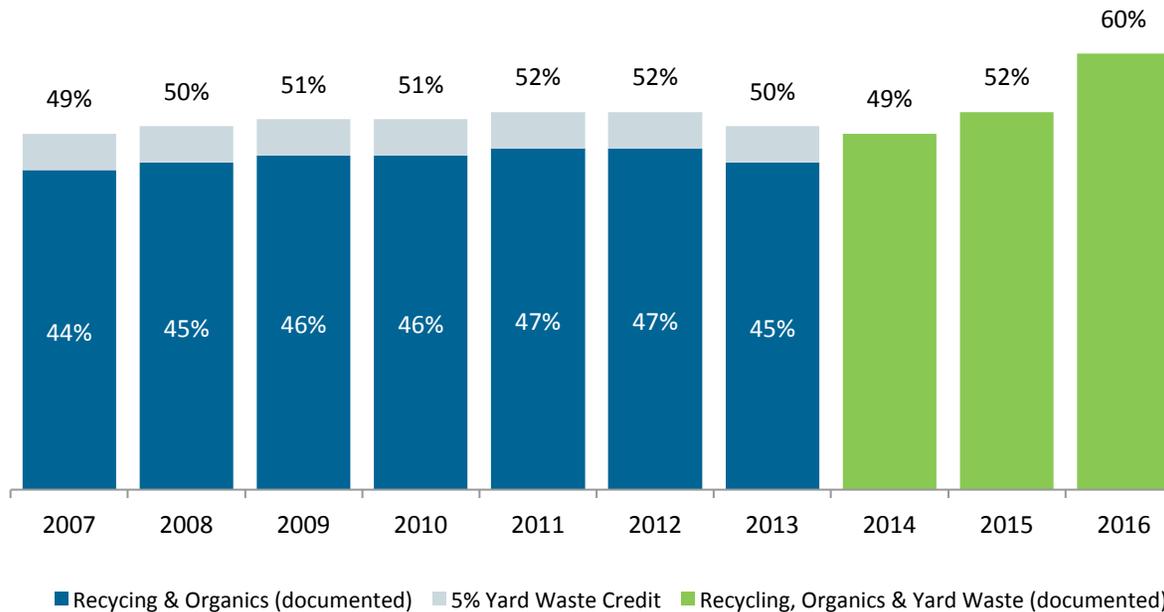


Figure 10: 2016 Carver County recycling and organics percentage, 2007-2016

Data: Annual Metropolitan County MSW Data Reports.

Residential Recycling

In Carver County, all residents have the opportunity to recycle. Residential recycling programs consist of curbside collection and drop-off sites, and include recycling services for both single-family and multi-unit housing.

Curbside recycling programs are provided by haulers through a contract with a municipality or through a subscription service. Approximately 90 percent of all households in Carver County have access to the curbside collection of recyclable materials. The Carver County Solid Waste Ordinance requires all haulers operating in the County to collect, at a minimum, newspaper, glass containers, aluminum beverage cans, tin cans, cardboard, plastics, magazines, and high grade paper in incorporated areas.

In addition to the curbside collection of recyclables, the County operates the Environmental Center, a full service recycling, hazardous and special waste collection facility, and three rural recycling drop-off sites in the cities of Cologne, Mayer, and Norwood Young America. The rural sites provide recycling opportunities for residents without curbside collection of recyclables. They also provide additional recycling opportunities for city residents, and expanded services for materials not collected curbside including scrap metal, waste oil and filters, antifreeze, automotive batteries, plastic bags, and clothing.

Eight Material Recovery Facilities (MRF) manage residential recyclable materials generated in Carver County: Waste Management in Minneapolis, Republic Services in Minneapolis and Inver Grove Heights, Eureka Recycling in Minneapolis, DemCon Companies in Shakopee, Dick's Sanitation (Recycle Minnesota) in Lakeville, Randy's Sanitation in Delano and McLeod County in Hutchinson.

Commercial Recycling

In 2014, the State of Minnesota revised Minn. Stat. §115A.151, "Recycling Requirements" mandating commercial recycling in the TCMA. The law, which went into effect on January 1, 2016, requires commercial buildings that generate four cubic yards or more of garbage per week to recycle at least three materials. Industries exempt from the law include agriculture, construction and manufacturing. In addition, professional and collegiate sports facilities anywhere in the state also have to recycle at least three materials.

Many businesses in Carver County have active recycling programs, and most contract with a hauler to provide commercial recycling services. A small percentage of commercial generators haul their own recyclable materials directly to a recycling market, a recycling broker, or to a MRF. The Environmental Center is also an option for businesses with smaller amounts of recyclable material.

To document the materials being recycled from commercial and industrial sources, Carver County annually surveys businesses. The surveys are used to measure material that has been recycled by generators who self-haul directly to market. They are also used as a tool to obtain data for new businesses and additional volumes of recyclables as businesses expand.

The County provides technical assistance and grant funding to businesses and multi-unit residential properties for the implementation and advancement of recycling programs. Through this program, businesses and property managers lower their trash disposal costs over time while managing their waste higher on the hierarchy.

In 2016, Carver County contracted with Minnesota Waste Wise to provide technical assistance to businesses and multi-unit residential properties located in Carver County. Waste Wise conducted 21 site visits and assisted 13 properties in implementing or expanding recycling programs, diverting an estimated 190,890 pounds of waste from disposal annually.



In 2016, Mackenthun's Fine Foods, located in Waconia, received business grant funding from the County to improve recycling in public spaces. Since implementation, trash has been reduced by 75% through increased recycling and organics composting.

Event Recycling

County staff members work with the organizers of large events, such as the Carver County Fair and sporting events, to divert as much material as possible from land disposal. The County provides grants, containers, signage, technical assistance, direct assistance and training for recycling and organics management at these events.

Through 2017, the County also contracted with the Adult Training and Habilitation Center (ATHC) to provide recycling services at local events. ATHC staff members worked with County staff members to empty and properly sort recycling container contents. This not only ensured clean waste streams and well maintained recycling bins, it allowed the County to educate residents about proper recycling techniques. In 2017, ATHC assisted the County with six events.

In 2016, more than 250,000 people attended the PGA Ryder Cup held at the Hazeltine National Golf Course in Chaska, MN. Carver County awarded the PGA a \$10,000 Grant to purchase recycling and organics containers, bags, signage, and tip fees. Carver County, in partnership with the PGA and Organix Solutions, worked to design labels, purchase bags, and provide volunteer shirts. The goal of this project was to capture as much of the recyclables as possible and dispose of food scraps and compostable food ware as organic waste. An estimated 19.31 tons of source separated organics and 22.03 tons of recyclables were collected.



A volunteer monitors recycling and organics containers during the 2016 PGA Ryder Cup event held at Hazeltine National Golf Course in Chaska.

Public Entity Recycling

Minn. Stat. §115A.151, "Recycling Requirements" requires all public entities to collect at least three types of recyclable materials at facilities and events under their control. Public entities are essential in making recycling work in Carver County. For example, a school recycling program provides a learning experience for everyone involved including students, teachers, staff, administration and parents. Through grants, technical assistance, direct assistance and training, Carver County is committed to helping public entity recycling programs succeed.

Special Waste Collections

Carver County has been hosting Special Waste Collection events throughout the County since 1989. Annually, Carver County conducts two Special Waste Collection days in the City of Norwood Young America providing convenient recycling of problem materials in the western part of the County. Items accepted include: household hazardous waste, electronics, scrap metal, appliances, bicycles, small engine devices, tires, fluorescent bulbs, batteries and automotive products. In addition to providing collection events, the County also assists municipalities with community clean-up days. These collections have been regularly held since 1993.

City and Township Grants

Since 1995, the County has provided annual grants to cities and townships to help implement specific recycling programs that are consistent with the Master Plan. Funding for the program is derived from the County Solid Waste Service Fee and several State Solid Waste grants. Amounts are based on a formula which awards each city and township a base grant, and splits the remaining funds between the eleven cities by population percentages.

ATHC Douglas Kugler Eco-Site

The County has continually looked for opportunities to enhance recycling and special waste collection services in the western part of the County. In 2010, Carver County partnered with non-profit organization, ATHC, to open the Douglas Kugler Eco-Site (Eco-Site), a full service recycling facility in the City of Watertown.

The Eco-Site provided drop-off collection services for the following items: antifreeze, appliances, batteries, bicycles, clothing, electronics, fluorescent bulbs, general recyclables, lawnmowers, mattresses and box springs, motor oil, oil filters, plastic bags, scrap metal, and tires.

Since 2010, Carver County Environmental Services directed recyclable material from the Environmental Center and rural drop-off sites (NYA, Cologne, Mayer) to the Eco-Site for sorting and processing. The site also processed recyclables from other organizations and haulers throughout the metropolitan area.

Economic issues forced ATHC to close the facility on December 30, 2017. As a result, the County will need to budget and plan for additional recycling and special waste collection services in western Carver County.

ORGANICS MANAGEMENT (INCLUDING YARD WASTE)

Organics management, consisting of food waste, non-recyclable paper and yard waste, represents 25 percent of Carver County's waste generation. For the past 30 years, Carver County has been a leader in organics diversion in the TCMA. As illustrated in Figure 11, Carver County documented over 31,400 tons of organic materials recovered in 2016 through food to people, food to animals, anaerobic digestion, and composting programs.



Figure 11: In 2016, 1,400 tons of organic materials were recovered in Carver County.

Data: 2016 Carver County SCORE Report.

Organics Recovery

The reduction of food waste and recycling of organic materials, which include food and compostable paper, represents one of the greatest opportunities to decrease land disposal. Organics currently make up about one-quarter of residential garbage.

The County supports the use of a diverse organics reduction and recovery infrastructure as portrayed in the Organics Recovery Hierarchy (Figure 12). Carver County's Organics Recover Hierarchy is consistent with the Environmental Protection Agency's (EPA) Food Recover Hierarchy. Carver County incorporated additional details, which are consistent with MPCA rules and are specific to diversion programs within the TCMA. To increase diversion rates of organics, Carver County plans to focus its efforts on the upper portion of the hierarchy.

Organics recovery hierarchy

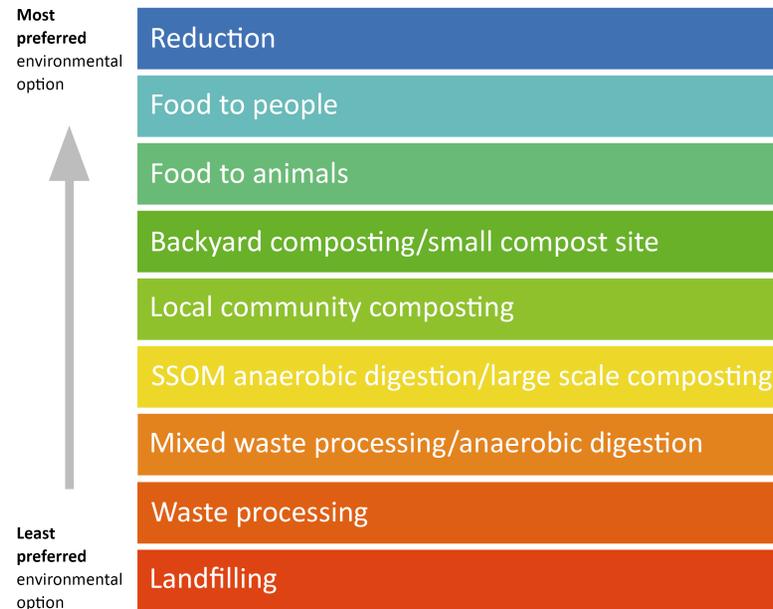


Figure 12: To increase diversion rates of organics, the County will focus its efforts on the upper portion of the Organics recovery hierarchy.

See APPENDIX III: ORGANICS RECOVERY HIERARCHY for a detailed description of the hierarchy.

The hierarchy emphasizes the significance of utilizing locally based composting methods over large-scale, regional solutions. It also includes actions residents and businesses can take to prevent and divert wasted food. Each tier focuses on a distinct management method. The top levels are the most effective means to minimize organic waste since they create the greatest benefits for the environment and the economy.

Food Reduction and Food to People

There are families living in Carver County who have a difficult time getting enough food. Yet in many cases, excess food currently disposed in landfills is still edible.

The County has initiated a program that will connect the following local food shelves to businesses that generate large volumes of prepared food. The goal of the program is to increase access to healthy food for those in need, while reducing food waste within the County.

- Bountiful Basket Food Shelf – Chaska
- Friends for Life Food Shelf – Watertown
- People Reaching Out to People (PROP) – Chanhassen
- Southwest Carver County Food Shelf – Norwood Young America
- Waconia United Food Shelf – Waconia

Food to Animals

Feeding animals is the third tier of the organics recovery hierarchy. With proper handling, businesses can divert food scraps as animal feed while also reducing disposal costs. In 2016, 17,252 tons of Carver County commercial food waste was diverted from land disposal to animals. Food to animals will continue to be an important organics management method as the County continues to develop composting and food donation programs.

The following Food to Animal operations accepted food waste from Carver County businesses in 2016:

- Barthold Farms – St. Francis, MN
- International Ingredients – Lake City, MN
- Local Farmers – Carver County, MN
- ReConserve – Rosemount, MN
- Select Milling – Claremont, MN

Source Separated Organic Materials Composting

Carver County has long been considered a leader in source-separated organics composting efforts in Minnesota. In 2007, the County, in cooperation with the MPCA, launched an innovative approach to collect and compost SSOM. This pilot program allowed for the co-collection of food waste and non-recyclable paper with yard waste. The County was the first public entity in Minnesota to implement this type of program, which demonstrated that commingled collection will improve the overall economics of SSOM management.

The project's success contributed to a change in the statutory definition of organics, which now allows for the co-collection of food waste and non-recyclable paper with yard waste throughout Minnesota. The County's work also helped bring about new regulations such as banning the use of plastic bags in yard waste collection in the TCMA. The intent of the law was to prevent non-biodegradable plastic from entering composting facilities. This change helped lower processing costs and increase quality of finished product at compost facilities serving the TCMA.



Source Separated Organic Materials (SSOM) processing at the Carver County compost demonstration site.

As part of the 2007 organics initiatives, the County has also assisted with the operations of SSOM composting demonstration sites located at the University of Minnesota Landscape Arboretum (Arboretum) in Chanhassen and in the City of Mayer. These sites operated under a research demonstration permit and collected valuable data regarding potential environmental impacts of SSOM composting. This multiyear project, which is planned to continue through 2020, produces data on groundwater impacts that will position Minnesota and other states to better evaluate what design and operational practices are needed at compost facilities. Findings from these projects will allow for greater flexibility in design and operational practices as well as potential revision of current rules that are considered barriers to the expansion of composting by industry leaders.

Source Separated Organic Materials Anaerobic Digestion

In 2016, 7,200 tons of SSOM was delivered to the Hometown Bioenergy plant in Le Sueur, MN. This facility uses anaerobic digestion technology to produce biogas from agricultural and food processing wastes. The biogas is then burned to produce electricity. The facility also produces a nutrient-rich by-product known as digestate, which is land applied. This management method is well suited for high moisture content food processing wastes.

Source Separated Organic Materials Compost Capacity

Carver County is working with Specialized Environmental Technologies (SET) to convert the Arboretum demonstration site into a SSOM permitted facility. When permitted, the facility will add 15,000 cubic yards of organic composting capacity for the region.

The County is also working with the Shakopee Mdewakanton Sioux Community (SMSC) Organics Recycling Facility located in Shakopee, MN. This state of the art facility, which is owned and operated by SMSC, can process 200,000 yards annually, and is also capable of processing wood to be used as a renewable energy source.

Composting Education

Carver County, along with the Minnesota Composting Council, launched a new organics composting education program called “Plate to Garden Compost” in the spring of 2015. The program is designed to allow schools and organizations the opportunity to close the loop on organics recycling by returning SSOM (*i.e.*, food scraps, food soiled paper, and compostable plastics) to the place where it was collected as finished compost. Any organization that collects organics in its cafeteria or food service area may receive back a bulk load of high quality compost. Volunteers then bag the compost and distribute it to the community to promote the benefits of compost.

This hands-on experience shows what positive benefits can happen to food scraps once they are collected and delivered to a commercial composting facility. It also provides educational opportunities about the importance of preventing contamination when collecting organics, and increases participation in organics collection by informing and motivating participants.

Educational programs such as this are a critical tool in reaching diversion goals. In 2018, Carver County intends to expand the program and hold fifteen separate Plate to Garden Compost events by working with all interested schools districts.

Yard Waste Management

State law prohibits yard waste from being mixed with trash or being delivered to a landfill or resource recovery facility. Yard waste includes leaves, grass clippings, garden waste, and tree and shrub waste. A combination of public and private systems provides generators of yard waste with several management options.

The County provides grants to municipalities to assist with yard waste programs. In fiscal year 2017, Carver County provided approximately \$80,000 in grants to municipalities. This kind of financial support is expected to increase incrementally over the next five years. County grants to municipalities are funded by a combination of the County Solid Waste Service Fee and State grants such as the ongoing SCORE grant and Local Recycling Development Grant (LRDG). The County staff also supports municipal operations through technical assistance with site operations to ensure that yard waste is removed from collection sites and effectively utilized.



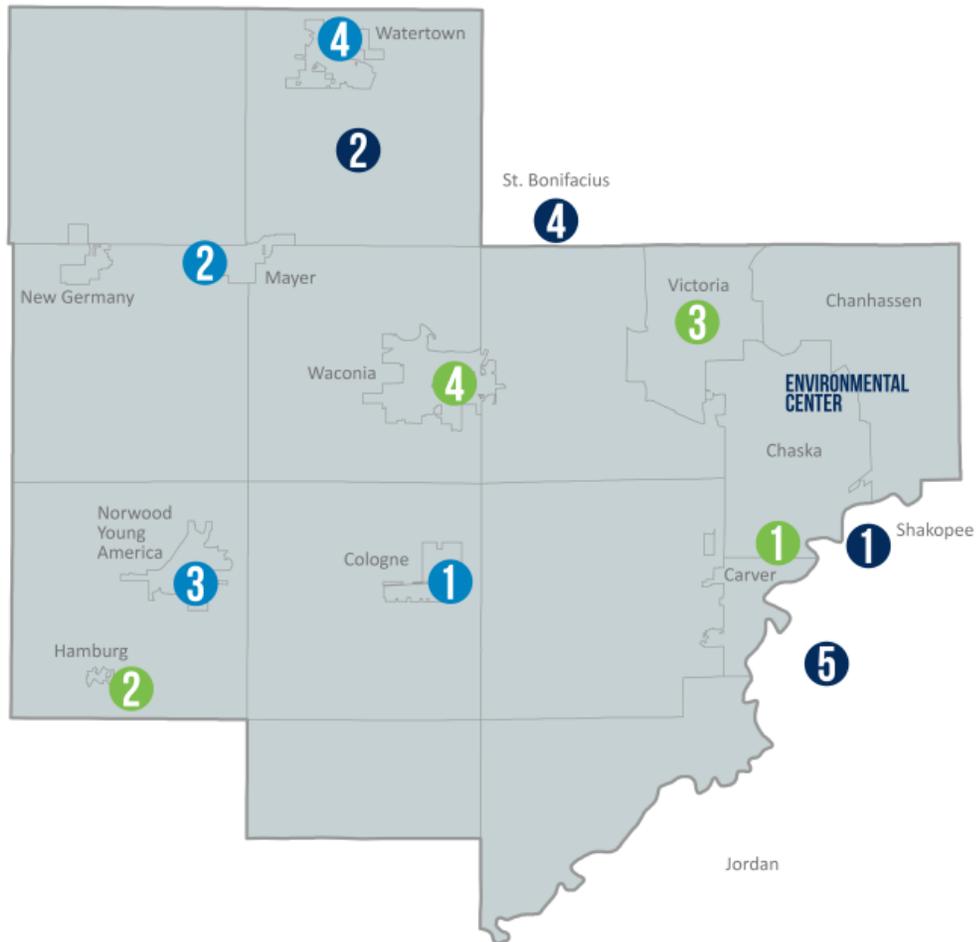
Plate to Garden Compost event held at the University of Minnesota Landscape Arboretum.

Yard Waste Drop-off and Compost Sites

Currently, there is one County operated drop-off brush and yard waste site, four municipal compost sites, four municipal drop-off locations, and five private compost sites which provide yard waste disposal options to the residents of Carver County (Figure 13). The compost sites manage material on-site, while the drop-off locations utilize roll off boxes to transport material to a compost facility. Municipalities and private operators are responsible for operating the sites and marketing the finished product. The County will continue to provide funding for compost site improvements.

YARD WASTE AND BRUSH SITES

Figure 13: Yard waste and brush disposal is provided by the County, municipalities and private firms in and around Carver County.



- MUNICIPAL COMPOST SITE**
- 1 City of Cologne 304 Louis St W, Cologne
- 2 City of Mayer 15300 Co Rd 30, Mayer
- 3 City of NYA 640 Tacoma Ave, NYA
- 4 City of Watertown 700 Lewis Ave N, Watertown

- MUNICIPAL DROP-OFF LOCATION (SEASONAL)**
- 1 City of Chaska 725 1st St W, Chaska
- 2 City of Hamburg 15405 Vera Ave, Hamburg
- 3 City of Victoria 1416 Steiger Lake Ln, Victoria
- 4 City of Waconia 310 10th St E, Waconia

- PRIVATE COMPOST SITE**
- 1 Midwest Recycling Solutionals 2510 Strunks Rd, Shakopee
- 2 Rumpca Companies 4220 Co Rd 10 N, Watertown
- 3 SMSC Organics Recycling Facility 1905 Mystic Lake Dr S, Shakopee
- 4 The Mulch Store Minnetrista (SET) 4275 Creek View Cir, Minnetrista
- 5 The Mulch Store Shakopee (SET) 14800 Johnson Memorial Dr, Shakopee

The amount of brush and yard waste that's being dropped off at the Environmental Center has increased significantly in recent years. During peak times of the year, up to 40 percent of the vehicles visiting the Environmental Center are there for brush and yard waste disposal. When that occurs, it is difficult for the Environmental Center to meet those demands for service in a safe fashion.

In an attempt to resolve space, efficiency and safety concerns at the Environmental Center, the County examined the possibility of creating a new brush and yard waste site at a separate location, including one potential site located on University of Minnesota Landscape Arboretum property. After further discussion, and considering feedback received from residents, the County made the decision to forgo the new site and instead to direct residents to use one of many private and/or municipal yard waste disposal options available in the area. It was also decided that brush and yard waste would no longer be accepted at the Environmental Center beginning January 1, 2019.

Backyard Composting

Carver County annually offers residents the opportunity to purchase backyard composting bins at wholesale prices. Based on the amount of backyard compost bins sold since the program began in 1993, it is estimated that 20 percent of all single-family homes in Carver County practice backyard composting.

Backyard composting has far-reaching benefits. One bin can convert up to 500 pounds of organic matter into compost annually and by using a compost bin, residents save money by eliminating yard waste collection. Haulers also support backyard composting because they can allocate fewer resources toward yard waste collection. An additional benefit includes the use of finished compost in gardens and as a soil amendment.

Residential Curbside Yard Waste Collection

It is estimated that between one-half and three-quarters of all households in municipalities have access to a curbside yard waste collection service. Most rural areas have no curbside collection because those residents prefer to manage waste on site. In 2017, the following haulers offered curbside collection of yard waste: Dick's Sanitation, GarbageMan of Chanhassen, Randy's Environmental Services, Republic Services, Suburban Waste Services and Waste Management. These haulers offered a variety of collection options and rates based on the service provided.

RESOURCE RECOVERY (PROCESSING)

Carver County does not own or contract with a solid waste processing facility nor is there any currently operating within the County. Four MSW resource recovery facilities serve the TCMA:

Hennepin Energy Recovery Center (HERC). The HERC facility in Minneapolis uses a mass-burn technology, producing energy for district heating and electricity. HERC is limited by its State permit to burning 365,000 tons annually.

Elk River Resource Recovery Project (GRE-Elk River). GRE-Elk River is an RDF processing plant owned by Great River Energy. Mixed waste is sorted into processible and non-processible waste on the tipping floor, then processed and separated into three waste streams: RDF, recyclable metal, and residue. The RDF is transported for combustion to GRE's power plant in Elk River. GRE-Elk River's permitted capacity is 547,000 tons per year.

Recycling and Energy Center (R&E Center). The R&E Center is a RDF facility owned by Ramsey and Washington counties. Mixed waste is sorted into processible and non-processible waste on the tipping floor, processed, and separated into three waste streams: RDF, recyclable metal, and residue. The RDF is transported for combustion to Xcel Energy power plants in Red Wing and Mankato, where it is burned to generate electricity. R&E Center’s permitted capacity is 500,000 tons per year.

City of Red Wing. The city of Red Wing (City) operates an RDF processing plant in Red Wing. Mixed waste is sorted into processible and non-processible waste on the tipping floor, processed, and separated into three waste streams: RDF, recyclable metal, and residue. The RDF is transported for combustion to Xcel Energy’s power plant in Red Wing. The facility recovers a variety of recyclable materials including paper, plastics, and ferrous and non-ferrous metals for recycling. The City’s permitted capacity is 30,000 tons per year.

In 2016, 7,840 tons of MSW generated in Carver County was delivered to three resource recovery facilities: the HERC, GRE-Elk River, and the R&E Center (Table 3). Of that total, 7,206 tons were processed and 634 tons were re-directed to landfill as non-processible/bulky residue.

Facility	2016 tons delivered	2016 tons processed
R&E Center Newport	7,434	6,800
HERC	399	399
Great River Energy	7	7
Total	7,840	7,206

Table 3: Carver County MSW Processing, 2016.

Data: 2016 Annual Carver County MSW Report.

In 2016, Ramsey County, in cooperation with Washington County, began the process of implementing waste designation. Waste designation will require that all solid waste generated within Ramsey and Washington Counties be delivered to the R&E Center. Beginning January 1, 2018, Carver County’s MSW will no longer be accepted at the R&E Center due to the facility operating at capacity.

Restriction on Disposal

Minn. Stat. §473.848 “Restriction on Disposal” prohibits the land disposal in Minnesota of processible MSW generated in the TCMA. The Policy Plan contains criteria for determining if MSW is processible or unprocessable. Waste is considered unprocessable if all processing facilities serving the metropolitan area are operating at full capacity.

In 2016, The MPCA implemented Minn. Stat. § 473.848 by amending the permits for Minnesota landfills serving the TCMA. The landfills may accept unprocessed metropolitan area MSW if the resource recovery (processing) facilities have sufficient waste to run at full capacity.

Public Entities Management of Solid Waste

Minn. Stat. §115A.471 “Public Entities: Management of Solid Waste” directs public entities to manage their waste according to their county solid waste master plan. Public entities must specify to their waste hauler that the MSW that they generate be sent to a resource recovery (processing) facility. This practice assures compliance with the law and also reduces the long-term financial risks to land disposal.

LAND DISPOSAL

There are currently no transfer stations or landfills operating in Carver County. In 2016, 34 percent of the MSW generated in Carver County was land disposed. Nearly all of that MSW was delivered to four local landfills, with less than 1 percent delivered out of State for disposal (Table 4). In the past, a greater percentage of waste was delivered out of State to landfills in Iowa and Wisconsin.

Landfill	Location	2016 tons	percent of total
Republic Pine Bend	Inver Grove Heights, MN	17,886	42%
WM Spruce Ridge	Glencoe, MN	14,768	35%
WM Burnsville	Burnsville, MN	9,226	22%
WM Elk River	Elk River, MN	496	1%
Advanced 7-Mile Creek	Eau Claire, WI	312	<1%
Total		42,688	

Table 4: Carver County MSW Delivered for Land Disposal, 2016.

Data: 2016 Annual Carver County MSW Report.

The TCMA has two MSW landfills, both located in Dakota County. The Burnsville Sanitary Landfill is located in Burnsville and is owned by Waste Management Inc. (WMI). The Pine Bend Sanitary Landfill is located in Inver Grove Heights and is owned by Republic Services. Two other Minnesota landfills that receive significant amounts of TCMA MSW are the WMI Spruce Ridge Landfill in McLeod County and the WMI Elk River Landfill in Sherburne County. All four landfills operate methane gas-to-energy systems that capture a portion of methane gas generated by the decaying waste.

NON-MSW MANAGEMENT

Non-MSW includes nonhazardous industrial waste, construction and demolition (C&D) waste, materials banned from disposal with MSW, problem materials, infectious waste, and other waste streams that are not MSW or otherwise defined or regulated as hazardous waste.

The TCMA is served by nine landfills that accept industrial wastes and/or C&D debris, or non-MSW. None of these facilities is located in Carver County. The closest landfill that accepts this material is Dem-Con Companies in Shakopee, MN. It is estimated that the majority of non-MSW waste generated in Carver County is disposed of at the Dem-Con facility.

Materials separated for recycling at some C&D transfer stations and landfills, include concrete, bituminous asphalt, aluminum, copper, steel, brick, mattresses, appliances, and tires. Other materials have the potential to be separated and recycled from the C&D waste. Private businesses own and operate most of the TCMA facilities that manage non-MSW. There is some public sector activity in managing certain non-MSW materials in the TCMA, such as shingle recycling and crushing, and recycling concrete or road base material.

ENVIRONMENTAL CENTER

The Carver County Environmental Center serves as a drop-off facility with the mission of providing a convenient year-round location for residents and business to recycle and/or responsibly manage household hazardous waste, special wastes, and a wide variety of recyclable materials. The facility is open four days per week, totaling 23 hours, from April through November and 3 days per week, totaling 17 hours, from December through March.

Patrons drop off hazardous waste at a covered drive-through receiving area. County and contractor staff members assist residents with off-loading. Vehicles with bulky items, yard waste, and/or scrap metal are directed to the back of the facility and to outside storage containers.

Items accepted at the Environmental Center are as follows. Pricing information can be found in APPENDIX II: ENVIRONMENTAL CENTER BROCHURE.

Items accepted at no charge

- Batteries (automotive and household)
- Cartridges (inkjet and printer)
- Clothing, shoes and useable goods
- Cooking oil
- Household hazardous waste
- Organics (food and non-recyclable paper)
- Recyclables (plastic, metal, glass and paper)
- Residential electronics (excluding TVs and monitors)
- Residential fluorescent bulbs
- Scrap metal
- Used motor oil, filters and antifreeze

Items accepted for a fee

- Appliances
- Bicycles
- Business batteries, electronics and bulbs
- Carpet
- Mattresses and box springs
- Residential electronics (TVs and monitors)
- Small engine devices
- Tires
- Yard waste

The Environmental Center has proven to be a very popular materials and waste management option. In fifteen years of operation, participation has more than tripled. Nearly 12,500 visits were made by residents and businesses in 2003, the first full year of operation. In 2017, participation reached 40,146 (Figure 14).

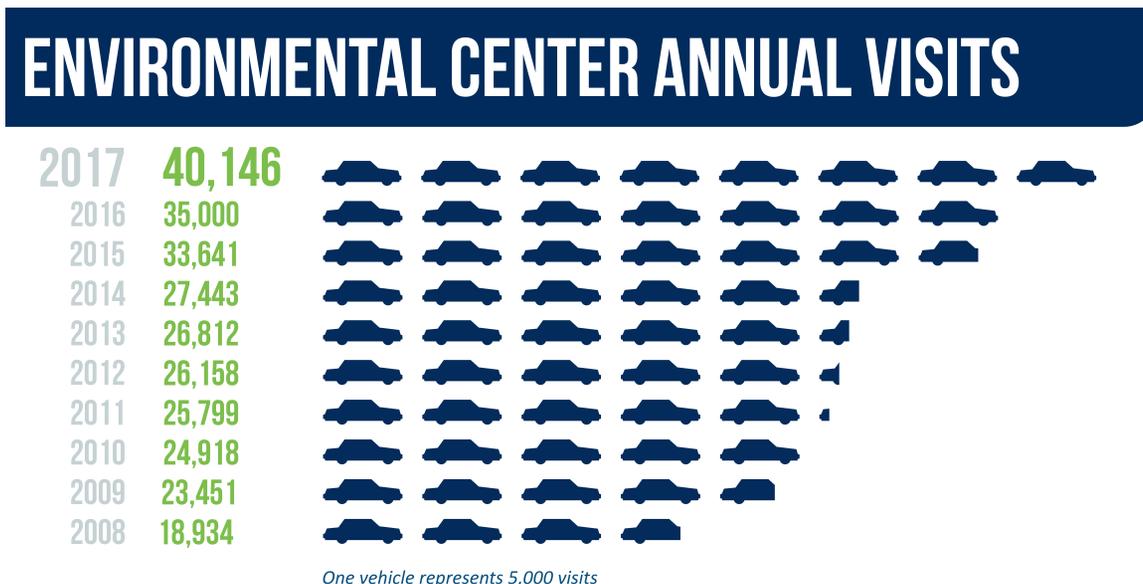


Figure 14: Environmental Center annual visits 2008-2017. The Environmental Center served more than 40,000 vehicles in 2017.

Data: Environmental Center daily register reports.

The consistent growth in participation has resulted in increased volumes of materials being managed at the facility. Table 5 depicts material volumes collected and shipped at the Environmental Center in 2016.

Material	Amount collected in 2016
Aerosol cans	13,600 pounds
Appliances	3,811 units
Carpet	119,518 pounds
Electronics	694,000 pounds
Fluorescent bulbs	47,000 units
Lab packs (acids, bases, and flammables)	105,800 pounds
Mattresses and box springs	1,342 units
Oil paint	50,000 pounds
Pesticides	21,400 pounds
Recyclables (food & beverage containers and paper)	545,000 pounds
Scrap metal	366,000 pounds
Tires	88,000 pounds
Waste oil	10,820 gallons
Yard waste	8,760 cubic yards

Table 5: Environmental Center Material Volumes, 2016.

Data: 2016 Environmental Center vendor reports.

The Environmental Center also serves as an education clearinghouse for information on a number of programs including feedlots, composting, septic systems, toxicity reduction, water quality, waste disposal and indoor air quality. The Center sells items such as compost bins, rain barrels, compostable bags, compost, radon test kits, and other items related to County environmental programs.

Many changes in operations have been made since the facility opened in 2002. Hours of operation have increased, a wider variety of materials are accepted, a yard waste bunker was built to make yard waste drop-off easier, a canopy was constructed over the receiving area for safety, and the reuse room was remodeled providing twice as much space for product placement.

WASTE COLLECTION

Carver County licenses all MSW haulers in the County as part of the Regional MSW Collection and Transportation license program. The County licensed 64 MSW haulers in 2017 to collect and transport waste in Carver County. Recycling and organics recycling haulers are not licensed. All eleven cities in the County also license haulers.

Regularly scheduled pick-up of MSW is available to residents and businesses throughout Carver County. However, some rural households choose not to have garbage collection service. The percentage of households utilizing on-site disposal, estimated to be 4 percent, continues to decrease due to ongoing education efforts and enforcement. All garbage collection in Carver County is billed on a volume-based system.

Recycling service is available to all residential, multi-family residential and commercial customers, within incorporated areas, through the execution of the County Solid Waste Ordinance. Haulers are required to offer the collection of at least four broad categories of recyclable materials and charge the same whether a resident recycles or does not recycle. Currently, haulers are not required to offer recycling services to customers in unincorporated areas.

SSOM and yard waste collection is available as a subscription based service. In Carver County, SSOM is collected utilizing two methods: co-collected with yard waste, and collected in a durable compostable bag with MSW (sorting facilities to remove compostable bags are required with this model). Residents in the cities of Mayer, Norwood Young America, and Watertown currently have access to durable compostable bag SSOM collection programs.

Seven communities allow residents to choose a waste hauler to provide service, referred to as “open collection.” Four Carver County cities, including Hamburg, Mayer, New Germany and Watertown, arrange for the service by contract, referred to as “organized collection.” There are no organized collection arrangements for commercial waste, although some communities allow small businesses access to organized collection services.

Collection Rates

As required by Minn. Stat. §115A.93, “Licensing Solid Waste Collection”, MSW rates shall increase with the volume or weight of the waste collected. Waste management service providers are also required to collect a Minnesota Solid Waste Management (SWM) Tax, which applies to services for MSW and Non-MSW. The tax rate depends on the type of waste and who generated it. Select haulers also include a fuel surcharge, environmental fee, or recycling commodity fee to cover operating expenses. Table 6 shows 2017 curbside collection rates in Carver County’s four organized collection cities.

Municipality	2017 Monthly Rates for Refuse and Recycling Services		
	30 gallon	60 gallon	90 gallon
Hamburg	\$12.13	\$13.25	\$14.72
Mayer	\$11.24	\$12.78	\$14.30
New Germany	\$10.70	\$11.43	\$14.75
Watertown*	\$14.65	\$18.39	\$21.78

Table 6: Carver County Organized Collection Rates by Service Level, 2017. Rates include all fees including the Minnesota SWM Tax.

*Monthly rates include weekly yard waste collection.

Data: Municipal Refuse and Recycling Contracts.

Organized collection programs are often more cost-effective when compared to open collection programs (Table 7). The monthly cost for residential MSW collection varies by container size. Although the cost for a 90-gallon cart is similar in both systems, the cost in organized collection systems is lower on average (12% lower for a 30-gallon container, 16% lower for a 60-gallon container). In addition, the average monthly cost for residential recycling in an organized system is nearly 40% less than the monthly cost in an open system.

System Type	Recycling	MSW		
		30 gallon	60 gallon	90 gallon
Open	\$6.33	\$13.62	\$16.75	\$17.15
Organized	\$3.95	\$11.92	\$14.03	\$17.16

Table 7: Average monthly cost of residential MSW and Recycling Service in the TCMA.

Data: Dept. of Revenue’s solid waste management aggregated tax receipts and bills from the TCMA.

HAZARDOUS WASTE MANAGEMENT

Hazardous wastes can be liquids, solids, gases, or sludges and require special handling, by law. Treatment, storage, and disposal of hazardous waste is regulated under the Resource Conservation and Recovery Act (RCRA) and Minnesota Hazardous Waste Rules.

Household Hazardous Waste

The Carver County Household Hazardous Waste (HHW) program began in 1991 with one event collection which served 3 percent of the population. In 1992, the County purchased a semi-trailer which was retrofitted and used as a mobile HHW facility. Participation and volume of waste collected continued to increase prompting the County to locate a permanent facility. In 2002, the County purchased and retrofitted a 12,500 square foot building in Chaska and opened the current Environmental Center. In addition to accepting HHW year-round at the Environmental Center, the County offers three to four event collections per year in the cities of Norwood Young America and Watertown, providing services to residents in the western part of the County.

Carver County ranks number one out of the seven TCMA counties in pounds dropped off per participant (86 lbs) and second lowest in net cost per participant (\$22.60). The continued growth in program participation and pounds managed, as shown in Figure 15, confirm the effectiveness of the County's HHW collection program.

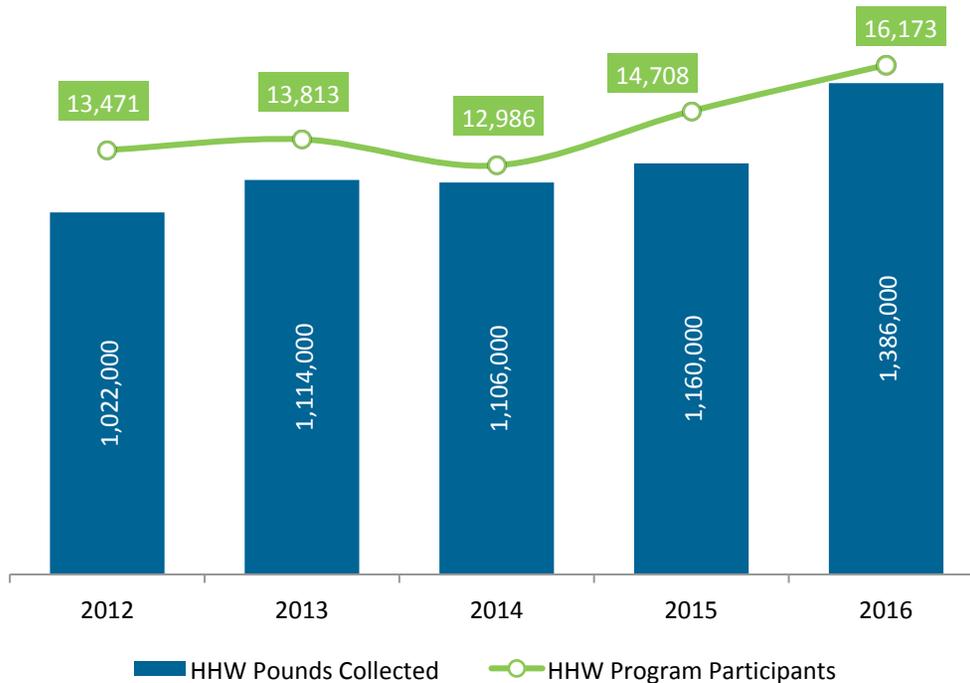


Figure 15: HHW Participants and Pounds Collected, 2012-2016.

Data: Carver County Household Hazardous Waste Program.

Product Reuse

Carver County maintains a product reuse room at the Environmental Center where residents can look through hundreds of household products, all of which are available free of charge. Materials that are dropped off at the facility are screened by staff and placed on shelves for reuse. The most common items include paints, stains and varnish, cleaning supplies, and automotive products.

In 2016, Carver County identified and redistributed 67,000 total pounds of products. Not only does this program provide free products to residents, it also increases environmental awareness of the public and reduces the amount of waste needing costly disposal.

Reciprocal Use

Carver County has a reciprocal use agreement in place with Anoka, Dakota, Hennepin, Ramsey, and Washington counties allowing residents to deliver HHW, free of charge, to any facility or event within the six counties. The agreement also establishes a mechanism for reimbursement for costs incurred by the county receiving HHW from residents of another county.

Product Stewardship

Non-governmental revenue for the management of electronics, florescent bulbs, paints, stains and waste pesticides reduces the amount of County and State funding needed to operate the Environmental Center and HHW collection program.

Product Stewardship through Extended Producer Responsibility (EPR) systems can reduce governmental funding of expensive HHW programs and incentivize more environmentally friendly products. Carver County, through its work with the Minnesota Product Stewardship Council, continues to pursue successful outcomes through the education and promotion of EPR concepts and programs.

Commercial Hazardous Waste

Carver County enforces State and local hazardous waste rules through a commercial hazardous waste regulation program. Commercial entities that produce any amount of hazardous waste are regulated as hazardous waste generators, and must comply with these regulations. The program ensures the safe and legal handling, storage and disposal of hazardous waste, while protecting public health and the environment from exposure to these wastes.

Hazardous waste generators are required to obtain a license from the County, submit annual waste generation reports and management plans for each regulated waste generated. Management plans identify the quantity of waste produced, how the waste is managed, and where the waste will be disposed. Each plan is reviewed by staff to ensure proper waste management. The County ensures compliance through a variety of methods including technical assistance, training, site visits, inspections, and if needed, a notice of violation.

Generators of commercial hazardous waste are classified by the MPCA into one of four categories based on amount of waste generated: Minimal Quantity Generators (MQG), Very Small Quantity Generators (VSQG), Small Quantity Generators (SQG), and Large Quantity Generators (LQG).

In 2016, there were 52 MQGs, 265 VSQGs, 19 SQGs, and 15 LQGs licensed in the County, totaling 351 generators (Table 8). A total of 102 businesses were inspected in 2016.

Generator Size	Maximum Monthly Totals	Licensed in 2016
Minimal Quantity	< 100 lbs/yr and no acute hazardous waste	52
Very Small Quantity	< 220 lbs/mo and < 2.2 lbs/mo of acute hazardous waste	265
Small Quantity	220 to 2,200 lbs/mo and < 2.2 lbs/mo of acute hazardous waste	19
Large Quantity	> 2,200 lbs/mo or > 2.2 lbs/mo of acute hazardous waste	15

Table 8: Generator Sizes and Total Licensed, 2016.

Data: MPCA fact sheet, Carver County Hazardous Waste Generator program.

Small Business Hazardous Waste Collection Program (VSQG Program)

In 2005, Carver County implemented a collection program to help businesses dispose of small amounts of hazardous waste. Materials accepted through the program include paints, solvents, aerosol cans, pesticides, and many other types of hazardous wastes. County staff members work with businesses to complete necessary paper work and advise them on how to safely handle, package and transport their hazardous wastes. The program is funded by a fee charged to the generator bringing waste to the Environmental Center, and covers costs for disposal, labor, and administrative time. In 2016, twenty businesses participated in the VSQG program, and nearly 13,100 pounds of hazardous waste was collected and properly managed.

EDUCATION AND OUTREACH

A dynamic public education and outreach program is essential for successfully managing solid and hazardous waste programs in the County.

Carver County has an active public education and outreach program which supports and promotes all waste management and abatement programs and services offered in the County. These efforts include:

Environmental Center

Tours. The staff provides tours of the Environmental Center facility to schools and civic groups.

Composting. A backyard composting demonstration site is maintained at the facility to show proper composting methods.

Rain gardens. Rain gardens with interpretive signage help visitors learn about storm water run-off.

Product Reuse. The free Product Reuse Room provides a natural opportunity to educate about the benefits of reuse.

Promotion. The staff distributes fact sheets and brochures for a wide range of environmental programs.

Customer service. The staff is trained to answer a wide range of waste management related questions in person and over the phone.



Backyard compost bin demonstration site located at the Environmental Center.

Public Entities

County staff members provide technical assistance and education to school districts and municipalities to improve recycling programs and raise awareness regarding proper waste management and the requirements of Minn. Stat. §115A.151 “Recycling Requirements” and Minn. Stat. §115A.471 “Public Entities; Management of Solid Waste”. Technical assistance includes garbage and recycling infrastructure recommendations, hands-on implementation of infrastructure changes, working directly with haulers and internal staffers, and educating users through presentations and training.

Businesses and Multi-units

Carver County provides direct technical assistance, both on-site and over the telephone, to businesses and multi-unit facilities within the County. The staff recommends and helps implement infrastructure changes, provide one-on-one education and assist with the analysis of hauler proposals and services.

Media

Carver County’s use of web-based media continues to grow and is the primary method of providing information to the public. Traditional outreach methods used include news releases, posters, flyers, and displays for events and public spaces.

Events

Events generate a significant amount of waste within a short timeframe providing a great opportunity for hands-on education with hundreds of otherwise hard to reach constituents. Carver County assists in organizing events and provides useful tips to promote waste reduction initiatives to the general public. County staff members are also present at events to educate and communicate with event staff and attendees.

Carver County Properties

The County has created an on-going internal waste reduction and recycling education program for County departments and new employees. Each County employee receives one-on-one or inter-departmental education on recycling protocol and why waste reduction and recycling is meaningful at work. Employees are encouraged to implement similar programs away from work.

Master Recycler/Composter Program

Carver County partnered with Scott County in 2015 and 2016 to develop a Master Recycler/Composter program. Residents are trained on waste prevention, recycling and composting through an extensive seven week course that featured industry experts from the TCMA. Upon completion of the training, each resident is committed to volunteer hours to inspire action in the community. To date, 33 residents have completed the program and over 200 hours of volunteer outreach has been completed.



Fall 2015 Master Recycler/Composter class on tour at SET The Mulch Store, Shakopee.

REGULATION

Carver County has a well-established solid and hazardous waste compliance program, which includes the regulation of haulers, generators, and waste management facilities in the County. The program relies on a combination of regulatory mechanisms, including County ordinances, licensing, compliance inspections, enforcement, and technical assistance to enforce applicable laws. Municipal ordinances support County ordinances and include requirements for hauler licenses and curbside collection of MSW and recyclables.

The Environmental Services Department succeeds in meeting its regulatory goals through working closely with municipalities and other County departments including Land Management, Planning and Water Management, Public Health, and the offices of the County Sheriff and County Attorney. The County also partners with the MPCA, Minnesota Department of Natural Resources (DNR), United States Environmental Protection Agency (EPA), and other TCMA counties to ensure compliance with State and federal laws pertaining to the management of solid and hazardous waste.

The following chapters have been adopted by the Carver County Board of Commissioners to protect the public's health and prevent nuisance; to protect air and ground water resources; to minimize reliance upon land disposal capacity by promoting waste abatement such as recycling and composting; and to supplement and support the County's and State's controls over solid and hazardous waste management activities. The Carver County Code of Ordinances can be found at www.co.carver.mn.us.

Chapter 50 – Solid Waste Management

Establishes rules, regulations and standards for solid waste disposal in the County and the operation of waste and recycling facilities; requires a license for solid waste and recycling facilities; establishes standards for the regional licensing of municipal solid waste haulers; provides for application and license fees, performance bonds and penalties for lack of compliance with these provisions.

Chapter 51 – Hazardous Waste Management

Establishes rules, regulations and standards for hazardous waste management in the County for the identification, labeling and classification of hazardous wastes; the handling, collection, transportation and storage of hazardous waste; the treatment, processing and/or disposal of hazardous waste; the requirement of licensing of hazardous waste generators and hazardous waste facilities; the payment of license fees; the penalties for failure to comply with the provisions of this chapter; the issuing, denying, modifying, imposing conditions upon, suspending, revoking licenses.

Chapter 53 – Open Burning Ordinance

Establishes rules, regulations and standards for the disposal, by the method of burning, of solid waste materials in the County.

Chapter 55 – Cleanup of Clandestine Drug Lab Sites

Establishes responsibilities and guidelines for involved parties to assure that; people are not exposed to the dangers of contaminated structures or land; and proper steps are taken to remove contaminants and assure appropriate tests are completed to verify that affected structures and land are cleaned for human contact.

All Carver County municipalities have adopted ordinance language addressing solid waste. Ordinances can be obtained by contacting individual municipalities or visiting the websites listed in Table 9.

Municipality	Telephone	Website
Carver	(952) 448-5353	www.cityofcarver.com
Chanhassen	(952) 227-1100	www.ci.chanhassen.mn.us
Chaska	(952) 448-9200	www.chaskamn.com
Cologne	(952) 466-2064	www.colognemn.com
Hamburg	(952) 467-3232	www.cityofhamburgmn.com
Mayer	(952) 657-1502	www.cityofmayer.com
New Germany	(952) 353-2488	www.cityofnewgermany.com
Norwood Young America	(952) 467-1800	www.cityofnya.com
Victoria	(952) 443-4210	www.ci.victoria.mn.us
Waconia	(952) 442-2184	www.waconia.org
Watertown	(952) 955-2681	www.ci.watertown.mn.us

Table 9: Municipality Contact Information.

RESEARCH

To fully understand the opportunities and barriers related to the development and growth of recycling and organics programs, Carver County conducted the following studies, surveys and projects.

National Recognition for Research in Organics Composting

Marcus Zbinden, Environmental Specialist with Carver County, received the U.S. Composting Council’s 2016 Rufus Chaney Award in December 2016.

The Rufus Chaney Award is presented annually to an individual who has displayed excellence in compost research over a period of at least 10 years and whose research findings have significantly impacted the composting industry and/or end users of compost. Zbinden was honored for his research that evaluated the benefits of composting and determining what design standards are required to protect water quality.

Environmental Impacts on Groundwater from Compost Facilities (2016-2020)

Minnesota has approximately 125 yard waste composting facilities and 10 additional composting facilities that process SSOM. While these SSOM facilities must meet permit and rule requirements to manage water that comes in contact with composting operations, no facilities currently have monitoring wells adjacent to their operations. As such, limited data is available to evaluate what impacts these facilities may have on groundwater.

The MPCA awarded Carver County \$110,000 in 2016, to initiate a study utilizing monitoring wells adjacent to both source separated organics and yard waste only compost sites. Through funding and a partnership with the US EPA, Carver County will collect data quantifying any impacts on ground water from these two types of facilities. The EPA is interested in replicating this project elsewhere in the County.

The study also included the funding for the characterization of the site such as evaluating what soil types are present under the compost surface and determining the depth of the water table. The Carver County demonstration/research project site is located at the University of Minnesota Landscape Arboretum in Chanhassen, MN, where previous research was conducted. This site, along with a municipally operated yard waste site in the City of Watertown, MN, will be used in the study.

The multiyear project will continue to produce data on ground water impacts that will inform Minnesota and other states on determining what design and operational practices are needed at compost facilities to achieve desired outcomes. The data findings are intended to support greater flexibility in design, operational practices and potential in revision of current rules that are considered barriers to the expansion of composting by industry leaders.



Monitoring well sampling, University of MN Landscape Arboretum 2017.

Residential Recycling Measurement Study (October 2016)

The purpose of the study was to develop a reliable tool to measure the amount of residential recycling taking place throughout the County and to monitor recycling rate changes in the future. The key elements calculated through the data collection were set-out and participation rates. A total of 13 routes were selected for sampling, including at least one in each of the County's 11 cities. The results were found to be high across all communities and routes, with 80% set-out and 98% participation in the County as a whole.

Haulers also provided total tonnage collected and the number of scheduled stops for eight of the 13 routes. This information was used to estimate the amount of recycling for a single family household over the course of a year. Results for the eight routes ranged from 264 – 855 pounds per household per year, with a weighted average of approximately 520 pounds per household per year. The results of this study demonstrate that the participation in Carver County's residential recycling program is very strong.

Commercial Building Recycling Survey (August 2015)

A survey was mailed to all businesses within the County in preparation of the expansion of Minn. Stat. §115A.151, "Recycling Requirements" to include commercial buildings. A total of 1,490 surveys were distributed and 323 businesses responded. Based on the survey responses, the staff estimated that nearly 95 percent of Carver County businesses were in compliance when the new recycling requirement went into effect on January 1, 2016. The survey also included a section to identify businesses requesting technical assistance to develop or improve recycling programs.

Multi-Unit Residential Recycling Survey (September 2015)

A survey was mailed to all property managers within the County in preparation for the expansion of Minn. Stat. §115A.151 “Recycling Requirements” to include multi-unit buildings. A total of 278 surveys were mailed to property managers of multi-unit facilities throughout Carver County. Based on the 63 survey responses, the staff estimates that 95 percent of Carver County multi-unit residential properties were in compliance with the new recycling requirements as of January 1, 2016. The survey also included a section to identify multi-unit buildings requesting technical assistance to develop or improve recycling programs.

Watertown Organics Recycling Survey (November 2015)

To gauge interest in organics recycling and to gain a better understanding of potential participation barriers, the County mailed 1,250 surveys to households in the City of Watertown. Based on 144 responses, results indicate that 92 percent of households agree that collecting household organics is a good way to recycle more, and 90 percent agree that it improves the environment. 74 percent agree that recycling organics is a cost efficient disposal option, while only 4 percent disagree. When asked what concerns prevented their participation in organics recycling, 35 percent of respondents indicated a lack of knowledge of what can go into organics recycling container.

Based on the results of the survey, the staff recommended the following strategies to increase participation in household organics curbside collection:

- Embed all costs associated with the collection of organics in the cost of garbage service to ensure residents are not subject to additional fees as prohibited in Minn. Stat. §115A.93, “Licensing Solid Waste Collection”.
- Help residents overcome obstacles to household organics collection by offering resources and information.
- Continue educating residents about the environmental benefits of composting organics.
- Expand curbside organics recycling to other cities within the County using information gathered from this project.
- Work with haulers to promote curbside organics collection to residents.

Evaluation of Potential Impacts of Contact Water Generated from Composting Organics (2012-2014)

The MPCA awarded Carver County a \$120,000 grant to gather data on the potential impacts of SSOM composting on the environment. The project goal was to provide support and assistance in the decision-making process in regards to engineering requirements for SSOM compost facilities. With a thorough evaluation of the data collected as part of this study and previous Carver County research, there is now a more comprehensive understanding of the environmental impacts of composting operations. This information has been utilized by the MPCA to inform decisions on setting appropriate permitting requirements for these facilities with a goal of facilitating expansion of SSOM composting.

Complete reports can be found at www.co.carver.mn.us (search for “Studies & Reports”).

COST AND FINANCE

It is the County's intent to sustain an efficient and cost-effective solid waste management system that provides quality service and prevents inappropriate management of solid waste by generators and collectors.

Revenues

Revenue for the County's solid waste programs is derived from the following six sources. A detailed breakdown by revenue source is shown in Figure 16. Carver County also depends on state and federal Environmental Assistance Grants to provide financial assistance for the research and development of environmentally sustainable practices. From 2007 to 2017, the County applied for, and received, four grants totaling \$580,000 for Source Separated Organics Management research.

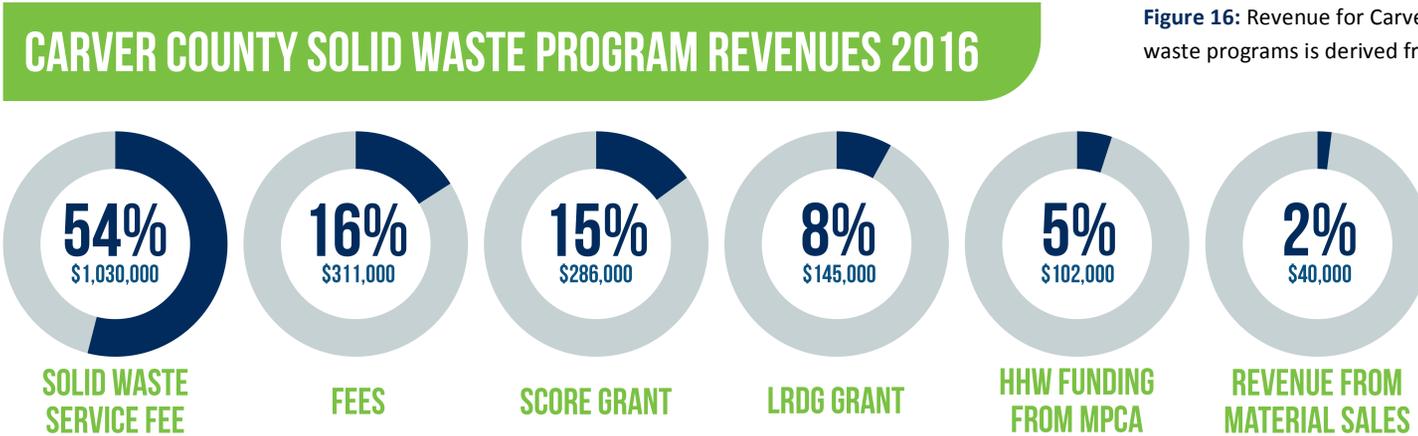


Figure 16: Revenue for Carver County's solid waste programs is derived from six sources.

Solid Waste Service Fee. Derived from a charge placed on developed parcels, the solid waste service fee structure, outlined in Table 10, is used to fund Environmental Services Department programs.

Property type	Fee
Single family residences, including mobile homes, duplexes, and triplexes	One service fee unit of \$30 per parcel
Multi-family housing with more than three dwelling units per parcel	80% of the \$30 service fee per dwelling (\$24 per dwelling unit)
Commercial parcels with an assessed evaluation of \$100,000 or less	Two \$30 service fee units for a total charge of \$60
Commercial parcels with an assessed value of more than \$100,000	Four \$30 service fee units for a total charge of \$120
Industrial parcels with an assessed evaluation of \$100,000 or less	Three \$30 service fee units for a total charge of \$90
Industrial units with an assessed evaluation of more than \$100,000	Six \$30 service fee units for a total charge of \$180

Table 10: 2018 Carver County Solid Waste Service Fee Schedule

Data: Carver County, Minnesota Schedule of County Fees, 2018.

Fees. Fees are collected from a number of sources including MSW hauler license fees, hazardous waste generator license fees, and fees for special waste management such as electronics collected as part of County programs. Fees are set yearly by the County Board as part of the County Fee Schedule.

Select Committee On Recycling and the Environment (SCORE) Grant. SCORE Funds are collected by the State from a 9.75% sales tax on MSW collection. A portion of the funds collected is distributed to Minnesota counties in the form of annual block grants. Grant funding may be used to develop waste reduction, recycling and solid waste management programs. Each county is required to match the funding from the Legislature with a local contribution of at least 25%.

Beginning in fiscal year 2015, 50 percent of any new money distributed, that is greater than the amount allocated in fiscal year 2014, must be expended on organics-related activities.

Local Recycling Development Grant (LRDG). Derived from a metropolitan region-wide surcharge on MSW delivered to landfills, these funds are distributed to counties to help finance recycling programs. All activities funded by LRDG money must be geared toward expanding or improving existing recycling programs or developing new programs. This includes activities associated with waste reduction, recycling and compost of both source separated organics and yard waste. Counties are required to match funds, at a minimum, equal to the grant amount.

HHW Funding from the MPCA. Funds collected by PaintCare Inc. MN through fees on new paint sales. Counties conducting paint management activities report and submit reimbursement requests to the MPCA for those activities.

Revenue from Material Sales. Revenues collected from waste oil, scrap metal, fluorescent bulb and waste pesticide management.

Expenditures

Major expenses for the County's solid waste programs include the following six areas. A breakdown by category is shown in Figure 17.

Household Hazardous Waste (HHW) and Problem Materials. The HHW/Problem Materials program expenses include operating the Environmental Center in Chaska and one-day collection events in western Carver County. Those expenses include County staff, contract labor, recycling/disposal of materials collected, supplies, and capital expenses.

Recycling Services. Expenses include operating costs, public information, staff support, and other activities to provide a variety of waste management services including operational expenses for three rural recycling drop-off sites in central and western Carver County.

Recycling/Yard Waste Grants. Grants to schools, businesses and organizations for recycling and organics programs, as well as payments to municipalities for recycling programs, community waste collection events, and yard waste drop-off sites.

Regulation. The hazardous waste and solid waste regulation programs are largely financed by license fees. Expenditures include staff for licensing, inspections, environmental complaint resolution, and various administrative expenses related to those services.

Solid Waste Planning. Solid waste planning expenditures include County staffing, professional and technical services, advertising, publicity, and associated administrative expenses to operate a variety of waste management programs. regional public information distribution, regional solid waste hauler licensing programs, and other collaborative efforts across the metro area.



Figure 17: Solid Waste Program expenditures by program, 2016.

WASTE MANAGEMENT GOALS AND STRATEGIES

This section of the Master Plan outlines numerous goals and strategies for reducing waste and increasing recycling and organics recovery. To view the accountability plan for the implementation of each strategy, including whether a strategy is new or existing, if it meets a Policy Plan objective, the stakeholders involved, and the timeline for implementation, please see APPENDIX VI: STRATEGY IMPLEMENTATION TABLE.

WASTE REDUCTION AND REUSE

Carver County prefers eliminating waste at the source – and recognizes the challenges inherent in changing an established method or structure. In addition to sustaining its twenty-year leadership in source reduction in State and national extended producer responsibility efforts, the County is committed to developing this same fundamental understanding of waste reduction within the County’s local organizations and entities.

Carver County Waste Reduction and Reuse Goals

1. Model the reduction of waste in County properties and operations.
2. Increase the popularity of Carver County reuse businesses.
3. Increase the number of Carver County businesses that utilize material exchange programs.
4. Increase the reuse of materials and conduct operations using the Minnesota Waste Management Hierarchy across County properties.
5. Increase the awareness, volume and availability of residentially reusable materials and programs.

Carver County Waste Reduction and Reuse Strategies

1. Carver County will conduct an internal waste sort to evaluate the generation of waste and develop waste reduction ideas for three material types by 2020.
2. Carver County will foster local networking and idea generation by inviting County reuse businesses and chambers of commerce representatives to join a County staff member in attending quarterly ReUSE MN meetings.
3. Carver County will work with the County’s businesses to foster business to business connections that conserve and reuse materials through the Minnesota Materials Exchange Program.

4. Carver County will review, update, make changes to strengthen and implement the County's EPP Resolution, incorporating the MPCA's Sustainable Purchasing program and sharing success stories and outcomes on the County's website.
5. Carver County will promote and encourage County employee use of the existing internal extra office and operational supply webpage with success stories and frequent reminders.
6. Carver County will pilot an internal "Treasure Day" event to promote reuse among employees for the donation and exchange of small personal items they no longer want. If successful, the goal will be to hold an annual event and promote this concept to local businesses.
7. Carver County will lead by example to work with cities and schools to establish their own internal extra office and operational supply systems and "Treasure Day" events by sharing examples of their own best practices and success stories.
8. Carver County will focus its event efforts, including funding, on waste reduction at public entity events such as the County Fair and annual city celebrations.
9. Carver County Environmental Services staff members will work with Library staff members to determine the feasibility and benefits of establishing enhanced sharing programs for toys, tools and other household items, along with Little Free Libraries. If the programs are feasible, implementation will be accomplished through work plans, funding, community volunteers, outreach and problem solving.
10. Carver County will continue to operate the Carver County Reuse Room, and increase receiving area staffing and reuse training at the Carver County Environmental Center to maximize the volume of usable products available.
11. Carver County will encourage the patronage of reuse businesses within the County by creating a reuse business promotion coupon book patterned on other successful TCMA county efforts.
12. Carver County will help building managers establish and implement move in/move out reusable goods programs at Crown College and multi-family properties.
13. Carver County will encourage cities and communities to host fix-it clinics for household items such as small engine products, by hosting a workshop to demonstrate and explore other TCMA counties' successful programs.

RECYCLING

The Minnesota State Legislature has set an aggressive recycling goal for TCMA counties of a combined recycling and organics rate of 75% by 2030. Achievement of this objective will require the implementation of aggressive strategies, increased education and outreach, and support from all generators and stakeholders in the County.

Carver County is committed to achieving the recycling objectives established by the State, and expects its residents, businesses and public entities to share in this responsibility.

Carver County Recycling Goals

1. By 2025, increase recycling recovery rates by 10% to assist in meeting the goals outlined in the Policy Plan and in State Statute.
2. Ensure that convenient opportunities for recycling exist for both rural and city residents and businesses.
3. Improve recycling set-out rates through more convenient weekly curbside recycling and organics collection.
4. Ensure businesses and schools receive technical assistance and funding to develop or enhance recycling programs.
5. Ensure all generators of waste are aware of their obligation to assist the County in achieving recycling goals through disposal decisions.

Carver County Recycling Strategies

1. Carver County will ensure that recycling service is available to all residential, multi-family residential and commercial customers, within incorporated areas, through the enforcement of the County Solid Waste Ordinance. Service must include the collection of at least four broad categories of recyclable materials. Paper and corrugate cardboard must be collected from commercial, industrial and institutional customers when requested by the customer.
2. Carver County will provide technical and financial assistance in developing and enhancing recycling programs for public entities.
3. Carver County will provide recycling drop-off opportunities at the Environmental Center for residents and businesses.
4. Carver County will budget funding annually to provide financial support to local cities and townships to advance existing recycling programs. The County will allocate additional funding to use as an incentive for entities to implement new programs. These sources of funding will ensure cities and townships provide an opportunity to recycle at all properties and events.

5. By 2019, Carver County will work with the private sector on the implementation of a trial program to offer curbside textile collection in one of the four organized cities of Hamburg, Mayer, New Germany or Watertown. If successful, the County will promote and expand the program to include additional cities.
6. Carver County will support and promote existing plastic agriculture bag recycling programs through education and outreach.
7. Carver County will operate recycling drop-off locations in the cities of Cologne, Mayer and Norwood Young America accepting the following items: single sort recycling, used motor oil, oil filters, antifreeze, scrap metal, textiles, and automotive batteries.
8. Carver County will promote waste prevention and recycling education through website content, social media, print media, newsletters, and face-to-face interaction.
9. Carver County will expand its recycling container loan program through education, outreach and the addition of new receptacles, allowing all local events the opportunity to utilize appropriate recycling containers and consistent messaging.
10. Carver County will lead by example by incorporating recycling throughout daily operations and at sponsored events, ensuring all County-occupied properties offer employees and visitors the opportunity to recycle.
11. Carver County will sponsor, at a minimum, three annual Special Waste collection events in the western part of the County.
12. Carver County will evaluate ordinance changes requiring haulers to offer curbside recycling services within un-incorporated areas throughout the County.
13. Carver County will re-focus commercial recycling assistance by contracting annually with a consultant to offer outreach and education, evaluation, and technical assistance to target materials with the highest environmental impacts.
14. Carver County will provide residents with the opportunity to recycle non-traditional recyclables, such as carpet and mattresses, at the Environmental Center and will consider accepting additional items for recycling as markets become available. The County will promote existing programs through website content, newsletters, and social media.
15. By 2022, Carver County will work with cities and haulers to pair weekly recycling and organics collection with the option for residents to subscribe to bi-weekly trash collection.

16. Carver County will identify generators of large volumes of recyclables and the generators of the most impactful materials to the economy and environment. Technical and financial assistance will be provided to the generators to divert these materials from the waste stream.
17. Haulers operating in Carver County currently offer garbage and recycling collection services on the same day. The County will make ordinance changes to assure that same day services continue for our residents.
18. Carver County, in collaboration with the MPCA and other stakeholders, will work to develop markets and support management capacity for recyclable and compostable materials to ensure adequate infrastructure for the increase in recycling and composting rates.
19. Carver County will identify municipalities not currently participating in the Minnesota GreenStep Cities program and work with those cities to implement best management practices to achieve sustainability and quality-of-life goals.

ORGANICS MANAGEMENT (INCLUDING YARD WASTE)

In 2014, the State established a goal for the TCMA of a combined recycling/organics diversion rate of 75 percent by 2030. To achieve this aggressive goal, the County is committed to maintaining organics diversion as a key component of its waste management system through convenient organics collection, increasing organics composting capacity and expanding food donation opportunities.

The County began focusing on organics management in 2007 with the first of four source separated organics composting demonstration/research projects. The initial project's success contributed to a change in the statutory definition of organics, allowing for the co-collection of organics with yard waste. In 2017 the County partnered with the MPCA and EPA Region 5 to continue research regarding source separated organics composting. The project aim is to position regulators to allow flexibility in design and operating practices that promote expanded composting capacity in Minnesota.

The most cost effective way to reduce organic waste is to prevent food waste from being generated in the first place. With this in mind, the County intends to expand organics diversion efforts to include an emphasis on food waste prevention and food donation for people.

Carver County Organics Management (including Yard Waste) Goals

1. Develop additional organics composting capacity in the TCMA.
2. Increase the amount of food donation from food service businesses to families in need.
3. An effective organics diversion program at all schools in the County by 2020.
4. Continue source separated composting research to assist the State in reducing regulatory barriers to the expansion of organics composting, while being protective of the environment.
5. Ensure that residents have access to convenient opportunities for yard waste composting.

Carver County Organics Management (including Yard Waste) Strategies

1. Carver County will encourage commercial and institutional generators to reduce food waste through food donation to local food shelves such as Bountiful Baskets and People Reaching Out to People. This will be accomplished with on-site technical assistance and grant opportunities.
2. Carver County will work with consultants to increase organics diversion from non-residential waste streams by offering technical assistance as well as grant funding to support food waste prevention and donation programs.

3. Carver County will promote community based social marketing campaigns, including the EPA's *Food: Too Good To Waste* Program, through social media, website content, newsletters, and one-on-one contact, as a way to educate residents on ways to reduce the amount of food that is not consumed and then ultimately thrown out.
4. Carver County will follow its organics recovery hierarchy when developing and implementing organic materials diversion and prevention programs.
5. Carver County will connect food shelves with farmers and local community gardens who have unwanted or surplus food to reduce waste and decrease local hunger and food insecurity needs.
6. Carver County will implement organics diversion at public entity facilities and in large event venues by 2025.
7. Carver County will ensure residents have access to convenient brush and yard waste service by offering municipalities financial assistance to cover site operation costs. The County is also exploring the development of a large scale brush transfer site.
8. Carver County will add organic collection service to the County operated recycling drop-off sites located in the cities of Cologne, Norwood Young America, and Mayer.
9. Carver County will expand source separated organics materials (SSOM) composting capacity by maintaining a partnership with Specialized Environmental Technologies (SET) to permit and operate the SSOM compost site at the Minnesota Landscape Arboretum. In addition, the County will investigate re-permitting municipal yard waste sites throughout the region to allow for the management of source separated organics materials.
10. Carver County will continue its research at both the Watertown municipal yard waste site and the SET SSOM site located at the Minnesota Landscape Arboretum to determine potential environmental impacts of composting. The information collected will position the MPCA to be more flexible in design and operating requirements which in turn, will promote the expansion of composting.
11. Carver County will expand the use of compost in local government transportation and infrastructure projects. This will be accomplished by encouraging city and County public works departments to utilize the new compost specification allowing for the use of compost made from source separated organic materials in broader applications including roadside and landscaping projects.
12. Carver County will work with local watershed districts, including Minnehaha Creek, Lower Minnesota, Riley Purgatory Creek and Buffalo, to adopt the County's Water Management Organization (WMO) policy requiring the use of compost in new construction projects.

13. Carver County will continue to promote backyard composting and offer bins and classes at the Environmental Center as a means to promote sustainable approaches to managing organic materials.

RESOURCE RECOVERY (PROCESSING)

The Policy Plan calls for managing 35 percent of the County's mixed municipal solid waste (MSW) through resource recovery by 2020. It will be difficult for Carver County to increase waste processing from the current 6 percent to meet the Policy Plan goal due to the County's proximity to existing processing facilities with available capacity. As a result, the County will support the development of new resource recovery systems and technologies in the region.

Carver County Resource Recovery (Processing) Goals

1. Maximize the use of the existing resource recovery facility capacity serving the TCMA.
2. Ensure that all public entities in Carver County arrange for MSW disposal at resource recovery facilities in accordance with Minn. Stat. §473.848 "Restriction on Disposal" and Minn. Stat. §115A.471, "Public Entities; Management of Solid Waste".

Carver County Resource Recovery (Processing) Strategies

1. Carver County will work cooperatively with the MPCA as the State enforces provisions found in Minn. Stat. §473.848, "Restriction on Disposal," requiring waste processing facility capacity to be fully utilized before waste is sent to MSW landfills serving the region.
2. Carver County will continue to work to ensure that waste generated from County owned/operated facilities is managed through resource recovery. This will be accomplished through the hauler contracts that increase the viability of waste processing with route densities and authentication of delivery to a waste processing facility.
3. Carver County will provide local governments, schools and other public entities model contract language, and will assist with the development of contracts for managing their MSW in accordance with Minn. Stat. §115A.471, "Public Entities; Management of Solid Waste."
4. Carver County will work with the State to evaluate new or innovative resource recovery systems and technologies: *e.g.*, anaerobic digestion. Carver County will also support state financial assistance for the construction of digestion facilities which could provide the County with additional processing options.

LAND DISPOSAL

Carver County is committed to managing MSW consistent with the waste management hierarchy and affirms waste reduction, recycling, and processing of waste as preferred methods over landfilling. The Policy Plan objective for land disposal is 2 percent by 2020. With a 35 percent land disposal rate in 2016, the County is challenged to meet this goal. Reducing the amount of MSW land disposed is dependent on the success of alternative diversion methods and the creation of additional resource recovery capacity in close proximity to the County.

Given these challenges, Carver County will focus on the upper end of the Minnesota Waste Management hierarchy to reduce land disposal. Strategies outlined in the recycling, organics management, and resource recovery sections will aid in achieving the land disposal goal.

Carver County Land Disposal Goals

1. Reduce the amount of waste that is landfilled by promoting and implementing reduction, reuse, recycling, organics management, and waste processing programs.
2. Ensure that all MSW generated at County facilities is processed and work with other public entities within the County to do the same.

Carver County Land Disposal Strategies

1. Carver County will educate citizens & businesses about alternatives to landfilling through website content, social media, print media, newsletters, and face-to-face interaction.
2. Carver County will provide convenient disposal options at the Environmental Center and Special Waste Collections for bulk material and special wastes in order to reduce illegal dumping and burning.
3. In an effort to better protect future generations from the environmental impacts from land disposal sites, Carver County will work with the State to evaluate the need for enhanced financial assurance to reflect the true cost of long-term care of operating a landfill.

NON-MSW MANAGEMENT

Non-MSW consists of construction, demolition, and industrial wastes. Although a percentage of these wastes are separated for recycling on-site and at local transfer stations, a significant amount of non-MSW is landfilled. Carver County supports the need to establish strategies to increase the reduction and recycling of materials from construction, renovation, and demolition projects, with an emphasis on deconstruction practices.

The Policy Plan does not set specific waste abatement objectives for non-MSW.

Carver County Non-MSW Management Goals

1. Increase the reduction, reuse, recycling and processing of non-MSW materials consistent with the solid waste management hierarchy.
2. Promote the proper disposal of hazardous building materials and special wastes.

Carver County Non-MSW Management Strategies

1. Carver County will enhance existing pre-demolition checklists to aid in the identification and proper disposal of hazardous building materials and special wastes.
2. Carver County will create and distribute educational materials to residents, municipalities, developers, contractors and private inspection firms focusing on the proper disposal of building materials and the opportunities for waste reduction, recycling and deconstruction.
3. Carver County will promote the use of shingle scrap in County transportation and paving projects, and encourage public entities to do the same.
4. Carver County will promote reuse and recycling of non-MSW in public entity building and remodeling projects through bidding and contract language consistent with the waste management hierarchy.
5. Carver County will work with cities to adopt ordinances that require waste plans for construction, renovation, deconstruction and demolition projects. Plans will assist in calculating waste generation while identifying reuse and recycling opportunities.

HAZARDOUS WASTE MANAGEMENT

Toxicity reduction continues to be a priority for Carver County Environmental Services. This is evidenced by the ongoing popularity and high volumes of materials managed in the Carver County Environmental Center’s household hazardous waste (HHW) and very small quantity generator (VSQG) programs.

Carver County Hazardous Waste Management Goals

1. Reduce the amount of hazardous waste generated by Carver County residents, businesses and public entities.
2. Establish and promote more convenient HHW and VSQG collection sites.
3. Actively support extended producer responsibility efforts and programs.

Carver County Hazardous Waste Management Strategies

1. Carver County will increase the use of non-hazardous products and methods among all sectors by promoting alternatives on the County’s website and in literature available at the Environmental Center, through hazardous waste inspector education and modeling successes and lessons learned by public entities.
2. Carver County will sponsor, at a minimum, three household hazardous waste event collections annually in the western part of the County.
3. Carver County will provide VSQGs with direct assistance and convenient disposal options to properly manage hazardous wastes.
4. Carver County will continue to partner with the Carver County Sheriff’s Office to promote the three stationary medicine collection boxes in the County’s larger cities and helping to staff annual medicine “take-back” collection events in western cities.
5. Carver County will participate in the existing reciprocity for HHW programs with TCMA counties and establish separate agreements with Scott and McLeod counties.
6. Carver County will promote existing private collection opportunities for regulated hazardous waste and problem material management such as paint, fluorescent tubes and rechargeable batteries.
7. Carver County will work with the Carver County Public Health Department to establish a needle collection program separate from existing County collection programs such as the Environmental Center, HHW collection events, and the Carver County Sheriff’s Office medicine collection program.

8. Carver County will continue to provide staff expertise to State-wide efforts (HHW Program Managers and the Solid Waste Administrators Association) to achieve consensus on program costs and the benefits of comprehensive reporting.
9. Carver County will continue to offer staff knowledge to the Product Stewardship Statewide Committee stakeholders, to prioritize hazardous products for legislative or voluntary initiatives, and to develop Product Stewardship legislation and program criteria.
10. Carver County will continue to serve in a leadership role with the Minnesota Product Stewardship Council Board of Directors to help clarify the meaning of extended producer responsibility and to develop messages regarding benefits to stakeholders, government's role, and science-based principles.

EDUCATION AND OUTREACH

Carver County believes that the perception of waste as a resource is necessary to achieve key reduction and recycling goals. Education and outreach deliver Carver County's waste reduction and recycling programs to constituents in ways that facilitate goal achievement. This connection also provides feedback for County staff to shape and implement programs to realize the highest success rates possible.

Carver County Education and Outreach Goals

1. County residents, businesses and non-profits begin to visualize MSW as a resource and are aware that they can reduce or eliminate MSW in the course of their daily lives.
2. County residents, businesses and non-profits undertake actions to accomplish the strategies set out in the Carver County Master Plan.

Carver County Education and Outreach Strategies

1. Carver County will utilize website content, social media, print media and most importantly one-on-one opportunities, such as community events, the County Fair booth, schools and community presentations, to mobilize constituents to actions to fulfill waste hierarchy outcomes.
2. Carver County will improve, promote and conduct Environmental Center tours featuring one-on-one education with youth and civic groups. Tours will be promoted through website content and at community events, schools and the County Fair booth.
3. Carver County will collaborate with other departments and organizations to develop annual County Fair booth themes featuring waste reduction and recycling.
4. Carver County will collaborate with other TCMA and greater Minnesota counties and cities to share effective education methods, messaging and delivery ideas for schools, cities, residences, parks and businesses. The County will work with the MPCA and industry stakeholders to implement standardized residential recycling messaging through consistent terminology and education.
5. Carver County will coordinate with the County's Water Management Organization to provide technical assistance and education on the proper use and management of household chemicals and hazardous products, focusing on non-toxic alternatives at the Environmental Center, Children's Water Festival, County Fair, and other public education opportunities.
6. Carver County will build upon existing relationships with schools to improve and increase recycling program volumes and source reduction efforts through grant opportunities, end of school cleanouts, the identification of new recycling opportunities, annual check-ins and the offering of in-house technical expertise.

7. Carver County will educate residents on how to reduce the contamination of recyclables and organics delivered to recovery facilities or compost sites through website content, social media, newsletters, booths at community events, Environmental Center tours and County libraries.
8. Carver County will continue its partnership with Scott, and other counties and/or regions, to offer the Master Recycler/Composter program on a bi-annual basis. The Master Recyclers will work alongside County staff at community events, special collection events and educational workshops to help disseminate program information.
9. Carver County will provide hands-on recycling education, coordination, professional services and staffing with County and vendor worker presence at large community events.
10. Carver County will convene an education stakeholder group in 2018, composed of members within County departments, as well as those external to the County. The group will explore perspectives and provide input regarding MSW, including existing infrastructure, mandated outcomes, County resources, opportunities, possible new issues and areas to collaborate on.
11. Carver County will develop and implement a 3-year education and outreach plan by 2019, based upon stakeholder input and partnerships for implementation. The plan should focus on messages that are consistent with TCMA counties, achievable actions, one-on-one delivery and ongoing relationships with County Environmental Services staff.
12. Carver County will evaluate the development of a business waste reduction and recycling “incentive” and promotion program in partnership with cities, chambers of commerce, business associations, Rotary, Lions, local financial institutions, and implement as recommended, by 2019.

REGULATION

Carver County adopts and maintains regulations, within its Code of Ordinances, to protect valuable natural resources while enhancing the quality of life for its citizens. The Environmental Services Department succeeds in meeting its regulatory goals by working closely with municipalities and other County departments including Land Management, Planning and Water Management, Public Health, and the offices of the County Sheriff and County Attorney. The County also partners with the MPCA, Minnesota Department of Natural Resources, Environmental Protection Agency, and other TCMA counties to ensure compliance with State and federal laws related to the management of solid and hazardous waste.

Carver County Regulation Goals

1. Ensure compliance with applicable laws, rules and ordinances related to the management of solid and hazardous waste.
2. Emphasize the proper management of solid and hazardous wastes through the use of this plan and the Waste Management Hierarchy.

Carver County Regulation Strategies

1. Carver County will regulate generators, facilities and haulers through licensing, inspections, reports and enforcement of County Ordinances ensuring the protection of public health and the environment.
2. Carver County will participate in the Regional MSW Hauler License Program with the objective to expand the program to include all seven TCMA counties.
3. Carver County will assist the MPCA in the enforcement of Minn. Stat. §473.848, “Restriction on Disposal,” through the completion and submittal of quarterly certification reports.
4. Carver County will continue to inform public entities, commercial buildings and sports facilities of their legal obligation to recycle under Minn. Stat. §115A.151, “Recycling Requirements”. Those not complying with the recycling law will be offered technical assistance to gain compliance. If education and assistance is declined, the County will notify the MPCA of any non-compliant entities to take further action.
5. By 2020, Carver County will develop a permitting program for compost sites to include site limitations, conditions for operation and requirements for record-keeping and reporting. A permitting process enables the county to address environmental and nuisance concerns while collecting more accurate data through regular reporting.
6. By 2018, Carver County will allocate funds to initiate a program to decrease the use of burn barrels and other forms of backyard garbage burning. The program will include a combination of education, incentives and continued enforcement of Minn. Stat. 17.135 and 88.171 and County ordinances.

COST AND FINANCE

Carver County utilizes a combination of grant funding, collection fees, and annual solid waste service fee dollars to fund all solid and hazardous waste programs.

Carver County Cost and Finance Goals

1. Establish long-term sustainable revenue sources and funding policies that will support waste management programs and activities designed to meet State objectives.

Carver County Cost and Finance Strategies

1. Carver County will monitor solid waste program budgets and take necessary steps to assure that fees are adjusted as required to cover expenses and needs, as costs and participation rates change over time.
2. Carver County will utilize an appropriate portion of the Carver County Solid Waste Service Fee for solid waste programs.
3. Carver County will manage existing solid waste grants to obtain positive results and research opportunities for new grant funds.
4. Carver County will support State and national Product Stewardship efforts to reduce long-term costs for on-going collection and management of hazardous and problem materials.
5. Carver County will increase grant funding to cities and townships fostering the growth and development of waste reduction, recycling and organics management programs.
6. Carver County will provide grant funding to schools, organizations and businesses for the purpose of starting and/or improving recycling and organics management programs.
7. Carver County will evaluate long-term funding options to assure support for effective programs and activities.

SUSTAINABLE MATERIALS MANAGEMENT

Sustainable materials management (SMM) is a systemic approach to using and reusing materials more productively over their entire life cycles. It represents a change in how our society thinks about the use of natural resources and environmental protection. By looking at a product's entire life cycle, we can find new opportunities to reduce environmental impacts, conserve resources, and reduce costs.

Carver County Sustainable Materials Management Goals

1. Incorporate SMM framework into County environmental programs.
2. County residents and businesses understand SMM and implement SMM practices in the course of their daily activities.
3. Support the State in shaping a SMM vision to guide future planning of waste and materials management.

Carver County Sustainable Materials Management Strategies

1. Carver County will begin to transition to an SMM approach focused on minimizing environmental impact and emphasizing the use of life-cycle analysis. This will be accomplished through strategies listed in this plan and by incorporating a SMM framework into County environmental programs.
2. Carver County will educate residents about the lifecycle impacts of the products and materials that are available to consumers. This will be accomplished through website content, social media, newsletters, and one-on-one contact at schools, the County Fair booth, and other local events.
3. Carver County will incorporate SMM concepts into County grant funding opportunities and prioritize grant allocations based on maximum environmental benefits.
4. Carver County, in collaboration with the MPCA and other stakeholders, will work on the selection and implementation of strategies for priority materials selected for reduction, reuse and recycling based on life cycle analysis and assist in creating quality standard measurements for SMM.

PERFORMANCE MEASUREMENT

Carver County is committed to identifying performance measures to monitor and evaluate goals and strategies identified in the Plan. Performance measurement provides useful information about programs and services and any improvements needed to meet the goals outlined in the Policy Plan.

Carver County Performance Measurement Goals

1. Provide the State with accurate and timely data in order to track progress toward meeting the objectives in the Policy Plan and Master Plan.

Carver County Performance Measurement Strategies

1. Carver County will work with the MPCA and TCMA counties to ensure consistent data collection and reporting.
2. Carver County will establish criteria and utilize performance based grant funding for municipalities to measure progress toward achieving waste management objectives.
3. Carver County will collect documented non-residential recycling data through annual business surveys and hauler reporting. The information will be used to accurately determine recycling performance towards meeting State goals.
4. By 2020, Carver County will conduct a follow-up to the residential curbside recycling set-out and participation rate study completed in 2016. Data will be used to determine progress made and where resources should be directed.
5. Carver County supports an effort to work collaboratively with the TCMA and MPCA to develop a standard non-residential recycling data collection program.
6. Carver County will design a dashboard, containing data and charts, to show progress on waste management activities within the County.
7. Carver County will provide required reports to the MPCA for the purpose of measuring progress toward achieving the objectives identified in the Policy Plan and Master Plan.

ENVIRONMENTAL JUSTICE

In 2012, the State adopted an environmental justice policy directing the MPCA, within its authority, to strive for the fair treatment and meaningful involvement of all people regardless of race, color, national origin, or income with respect to the development, implementation and enforcement of environmental laws, regulations and policies. Carver County is committed to supporting the MPCA's policy and its objectives through the implementation of actions and the integration of environmental justice principles in County solid waste programs and services.

Carver County Environmental Justice Goals

1. Identify areas of concern for environmental justice within Carver County.
2. Ensure that all businesses and residents in areas of concern for environmental justice experience the full benefits of Carver County's programs and services.

Carver County Environmental Justice Strategies

1. Carver County will identify areas of concern using the MPCA's environmental justice review tool and the EPA's EJScreen tool, to be used in program planning and development.
2. Carver County will evaluate existing waste management programs, such as grant funding, opportunities to recycle, and collection events, to identify any inequalities that may exist and will implement changes if inequalities are identified.
3. Carver County will communicate with affected communities when compliance issues (that may have an adverse effect on health and/or the environment) occur, except when prohibited by law, such as during an ongoing enforcement action.

PERFORMANCE MEASUREMENT

Regularly measuring results is essential to the successful implementation of the Carver County Solid Waste Master Plan. Carver County is committed to developing, refining, and using a performance measurement system that details the progress made in achieving the goals and strategies identified in this Plan.

The MPCA has set aggressive waste management goals for Carver County and the other TCMA counties as part of developing and approving the Policy Plan. These goals, and the current status of Carver County’s waste management progress, are shown in the table below.

Management Method	Carver County 2016	Metropolitan Area MSW Management Objectives				
		2015	2020	2025	2030	2036
Waste Reduction ¹	-	-	1.5%	3%	4%	5%
Recycling ¹	35%	45-48%	51%	54%	60%	60%
Organics Recovery ¹	26%	3-6%	12%	14%	15%	15%
Resource Recovery ²	6%	32-34%	35%	31%	24%	24%
Maximum Landfill ³	34%	20%	2%	1%	1%	1%

Table 11: Metropolitan Area MSW Management Objectives.

Source: Metropolitan Solid Waste Management Policy Plan 2016-2036

1. The *minimum* amount of MSW that must be managed by this method.
2. The amount of resource recovery expected to occur after maximizing reduction, recycling and organics recovery.
3. The *maximum* amount of land disposal allowed. Does not include ash or residual from other processes.

MPCA ROLE

Carver County understands the need to measure the performance of waste management to meet State and County specific goals. Meeting many of the goals in the Policy Plan will depend on collaboration among the State, TCMA counties, and in many cases, the private waste management industry. The County’s ability to meet the state’s recycling goals will be influenced by the MPCA taking a leading role in the following areas:

Enforcement of Minn. Stat. §115A.93, “Licensing Solid Waste Collection”

Improper billing of curbside organics collection service has become an issue now that cities and haulers have begun implementing organics recycling programs. In many cases, haulers are charging customers who choose to receive organics collection service, while failing to charge those customers who decline service. Not only is this an enormous deterrent to participation, it is also in direct violation of Minn. Stat. §115.93, “Licensing Solid Waste Collection”, which prohibits haulers from imposing a greater fee on residents who recycle than those who do not recycle. This regulation has benefited traditional recyclables collection for years and has led to success in both participation and diversion rates.

MPCA efforts to educate regulating authorities on the intent of Minn. Stat. §115.93, “Licensing Solid Waste Collection” and to take enforcement action when necessary, should be supported.

Increased capacity for organics management

TCMA counties, as well as the composting industry, believe the 2015 MPCA composting rule revision process did not go far enough to have a meaningful impact on increasing SSOM capacity in the State. These entities also believe additional rule revisions are essential to eliminate unnecessary regulatory impediments, allowing for the expansion of SSOM collection programs.

At this time, yard waste compost sites are not permitted to accept and process food scraps or non-recyclable paper. In order for a yard waste compost site to accept source-separated organics under existing rules, it would have to apply for SSOM facility permit and change its existing regulatory status from a yard waste compost site to an SSOM composting facility. This adds significant expense and siting issues that few facility operators are able to undertake.

The County will continue to work with the MPCA to position the State better to evaluate the design and operational practices needed at SSOM compost facilities. This will ensure that Minnesota's regulations governing compost facilities are not overly restrictive, while also adequately protecting the environment.

Enforcement of Minn. Stat. §473.848, "Restriction on Disposal"

The Restriction on Disposal statute prohibits the disposal of processible MSW generated in the seven-county TCMA. Waste is considered unprocessable if all processing facilities servicing the TCMA are operating at full capacity.

Resource recovery capacity continues to be under-utilized by private haulers, which face a strong economic incentive to divert mixed municipal waste (MSW) to landfills. Carver County will work cooperatively with the MPCA as the State provides incentives and enforces provisions found in Minn. Stat. 473.848, "Restriction on Disposal."

Implementation of Commercial Recycling Reporting

Measuring progress toward abatement goals is complex and difficult. Some data is accurately collected, such as waste delivered to facilities where materials are weighed and the county and/or community of origin is recorded and reported. However, other materials, such as recyclables from some residential sources and many commercial and industrial sources, are not measured by a similar system.

Carver County has documented commercial recycling through hauler reporting and annual business recycling surveys since 1990. The County will continue to collect documented commercial recycling data and recommends the MPCA refine the way commercial recycling data is collected, improving performance measurement.

Local Recycling Market Development

Infrastructure and investment is critical for developing and maintaining recycling markets within the TCMA and throughout Minnesota. The County will continue to support the MPCA as it focuses on market development needs in 2018 including infrastructure development (public and private), funding, and developing recommendations on how to effectively advance State-wide priorities.

Emerging Technologies

The solid waste stream is constantly evolving, and the technology to separate and process the materials generated continually improves. Carver County will support the MPCA as it evaluates new technologies and the development of new facilities to process waste such as anaerobic digestion and garbage-to-ethanol processing.

ANNUAL REPORTING

The County will continue to submit the following waste management, financial and progress reports to the MPCA on an annual basis.

Select Committee on Recycling and the Environment (SCORE) Report. Annual summary of recycling, reduction, and other related waste management programs. Includes both qualitative and quantitative data gathered meant to benchmark programs across the State and measure progress towards State and county goals. This report includes limited financial data on programs as it is tied to the SCORE Grant funding.

Certification Report. Annual solid waste disposal report to the MPCA that documents MSW amounts that are processed and landfilled. It assists the MPCA in determining compliance with Minn. Stat. §473.848, “Restriction on Disposal”.

Local Recycling Development Grant (LRDG) Report. Accounts for the expenditure of LRDG funds to the MPCA and any proposed changes to recycling implementation strategies or performance funding systems.

Household Hazardous Waste Report Reports to the MPCA. Provides the MPCA with data on the amount and type of HHW collected during the previous year. Financial data as well as the number of County and out-of-county residents served are also reported.

Master Plan Annual Report. Includes calendar year work and activities completed and a work plan and priorities for the upcoming year. The report is designed to ensure compliance with the requirements of Minn. Stat. §473.803 “Metropolitan County Planning”, subdivision 3, as well as to provide the MPCA with a progress report on the implementation of TCMA Solid Waste Master Plans.

APPENDIX I: DEFINITIONS

- **Anaerobic Digestion:** A technology that uses microorganisms in the absence of oxygen to convert various types of organic wastes into renewable energy and compost or fertilizer.
- **Collection:** The aggregation of waste from the place at which it is generated and includes all activities up to the time the waste is delivered to a waste facility. (Minn. Stat. §115A.03, Subd. 5)
- **Commercial (as in “commercial waste” or “commercial recycling.”):** Refers to non-residential sources, including businesses, government facilities or operations, institutions, schools, non-profit organizations, community activities, etc. Interchangeable with “non-residential.”
- **Composting:** The controlled microbial degradation of organic waste to yield a humus-like product. (Minn. Rules §7035.0300).
- **Construction Debris:** Waste building materials, packaging and rubble resulting from construction, remodeling, repair and demolition of buildings and roads. (Minn. Stat. § 115A.03, Subd. 7)
- **Curbside Collection:** Collection of waste (garbage, recyclables, yard waste, etc.) from residences at the point of generation.
- **Deconstruction:** The process of dismantling buildings in a manner that allows for materials to be reused.
- **Demolition Debris:** Solid waste resulting from the demolition of buildings, roads and other man-made structures including concrete, brick, bituminous concrete, untreated wood, masonry, glass, trees and tree trimmings, rock, plastic building parts and other inert waste materials, but not including asbestos wastes.
- **Environmentally Preferable Purchasing (EPP):** Intentionally choosing products or services that promote pollution prevention, waste reduction or reuse; purchasing products that can be easily recycled; buying recycled-content products; or making other purchasing decisions that are better for the environment when compared to traditionally purchased products or services.
- **Extended Producer Responsibility (EPR):** An essential element of Product Stewardship in which producers design and implement environmentally protective systems to recover and manage the components of their products and packaging, consistent with the Minnesota Waste Management Hierarchy.
- **Generation:** The act or process of producing waste. (Minn. Stat. §115A.03, Subd. 11)
- **Generator:** Any person who generates waste. (Minn. Stat. §115A.03, Subd. 12)
- **Hazardous Waste:** Any refuse, sludge or other waste materials or combinations of refuse, sludge or other waste materials or discarded materials, or a combination of refuse or discarded materials in solid, semisolid, liquid or contained gaseous form which because of the quantity, concentration, or chemical, physical or infectious characteristics may: a) cause or significantly contribute to an increase in mortality or an increase in serious irreversible or incapacitation reversible illness; or b) pose a substantial present or potential hazard to human health or the environment when improperly treated, stored, transported, disposed of, or otherwise managed. Categories of hazardous waste materials include, but are not limited to explosives, flammables, oxidizers, poisons, irritants and corrosives. Hazardous waste does not include source, special nuclear or by-product material as defined by The Atomic Energy Act of 1954, as amended. (Minn. Stat. §116.06, Subd. 11)

- **Household Hazardous Waste (HHW):** Waste generated from household activity that exhibits the characteristics of or that is listed as hazardous waste under Minnesota Pollution Control Agency rules. It does not include waste from commercial activities that is generated, stored or present in a household. (Minn. Stat. §115A.96, Subd. 1)
- **Industrial Waste:** Solid waste resulting from an industrial process, manufacturing, service activity or commercial activity that is managed as a separate waste stream. (Minn. Stat. §115A.03, Subd. 13a)
- **Land Disposal Facility (Landfill):** A waste facility permitted by the Minnesota Pollution Control Agency that is designed or operated for disposing of waste on or in the land. (Defined as “disposal facility” in Minn. Stat. § 115A.03, Subd. 10)
- **Local Recycling Development Grant (LRDG):** Funds administered by the Minnesota Pollution Control Agency and allocated to metropolitan counties for the planning, development and operation of recycling and yard waste composting programs. Local Recycling Development Grant funds are distributed from the Metropolitan Landfill Abatement Account.
- **Materials Recovery Facility (MRF):** Facility designed for centralized sorting, processing and/or grading of collected recyclable materials for marketing.
- **Metropolitan Solid Waste Management Policy Plan:** The Metropolitan Solid Waste Management Policy Plan, a regional policy plan for solid waste management in the Twin Cities metropolitan area, adopted by the Minnesota Pollution Control Agency as required under Minn. Stat. §473.149, “Solid Waste Comprehensive Planning”.
- **Minnesota Pollution Control Agency (MPCA):** State agency responsible for overall environmental quality of the State, primarily through enforcement of State rules, issuing of permits and education for compliance. The Governor appoints MPCA commissioner.
- **Mixed Municipal Solid Waste (MSW):** Garbage, refuse and other solid waste from residential, commercial, industrial and community activities that the generator of the waste aggregates for collection. It does not include auto hulks, street sweepings, ash, construction debris, mining waste, sludges, tree and agricultural wastes, tires, lead acid batteries, motor and vehicle fluids and filters, and other materials collected, processed and disposed of as separate waste streams. (Minn. Stat. §115A.03 Subd. 21)
- **Non-MSW:** Solid waste that is not managed as part of the MSW stream. Typically thought of as those items specifically excluded from MSW in the statutory definition of MSW as well as other wastes, such as non-hazardous industrial waste, C&D waste, infectious waste and other separately managed solid waste streams.
- **Open Collection:** A solid waste collection system in which multiple waste haulers or collectors compete for collection accounts in the same geographical area.
- **Organic Materials:** Organics is an overarching term for wastes that can be reused, processed and recycled and includes yard waste (leaves, grass, tree and shrub waste and other plant waste), household vegetable/kitchen scraps, commercially generated food waste, food manufacturing/production by-products, produce and meat trimmings, plant waste and soiled, non-recyclable paper.
- **Organized Collection:** A system for collecting solid waste in which a specified collector or member of an organization of collectors is authorized to collect from a defined geographic service area or areas some or all of the solid waste that is released by generators for collection. (Minn. Stat. §115A.94, Subd. 1)

- **Processing:** Describes the treatment of waste after collection and before disposal. Processing includes but is not limited to reduction, storage, separation, exchange, resource recovery, physical, chemical or biological modification, and transfer from one waste facility to another. (Minn. Stat. §115A.03, Subd.25)
- **Product Stewardship:** The act of being responsible for the environmental impacts of a product.
- **Public Entities:** Any unit of State or local government, including counties, cities, towns, metropolitan agencies and districts, special districts, school districts or any other general or special purpose unit of government in the State. (Minn. Stat. §115A.471) With regard to certain public entity procurement standards established in Minn. Stat. §16B.122, “public entities” also includes any contractor acting pursuant to a contract with a public entity.
- **Reciprocal Use Agreement:** An agreement among counties to allow residents of one county to use certain services (e.g., household hazardous waste collection) provided by another county that is party to the agreement.
- **Recyclable Materials (Recyclables):** Materials that are separated from mixed municipal solid waste for the purpose of recycling or composting, including paper, glass, plastics, metals, automobile oil, batteries, source-separated compostable materials and sole source food waste streams that are managed through biodegradative processes. Refuse derived fuel or other material that is destroyed by incineration is not a recyclable material. (Minn. Stat. §115A.03, Subd. 25a)
- **Recycling:** The process of collecting and preparing recyclable materials and reusing the materials in their original form or using them in manufacturing processes that do not cause the destruction of recyclable materials in a manner that precludes further use. (Minn. Stat. §115A.03, Subd. 25b)
- **Refuse Derived Fuel (RDF):** The product resulting from techniques or processes used to prepare solid waste by shredding, sorting or compacting for use as an energy source. It consists of lighter weight materials such as paper products with most metals, glass and other non-combustible materials removed.
- **Resource Recovery:** The reclamation for sale, use or reuse of materials, substances, energy or other products contained within or derived from waste. (Minn. Stat. § 115A.03, Subd. 27)
- **Resource Recovery Facility:** A waste facility established and used primarily for resource recovery, including appurtenant facilities, such as transmission facilities and transfer stations primarily serving the resource recovery facility. (Minn. Stat. §115A.03, Subd. 28)
- **Reuse:** The practice of avoiding disposal of material that would become solid waste were it not put to use again in its original form.
- **SCORE:** Acronym for “Select Committee on Recycling and the Environment,” a State task force appointed by the Governor in the 1980’s to recommend strategies for supporting recycling in Minnesota. “SCORE” is commonly used to refer to State grant funding to counties to support local source reduction and recycling programs.
- **Solid Waste:** Refers to garbage, refuse or sludge from a water supply treatment plant or air contaminant treatment facility, and other discarded waste materials and sludges in solid, semisolid, liquid or contained gaseous form, resulting from industrial, commercial, mining and agricultural operations and from community activities. Solid waste does not include hazardous waste; animal waste used as fertilizer; earthen fill, boulders, rock; concrete diamond grinding and saw slurry associated with the construction, improvement, or repair of a road when deposited on the road project site in a manner that is in compliance with best management practices and rules of the agency; sewage sludge; solid or dissolved material

in domestic sewage or other common pollutants in water resources, such as silt, dissolved or suspended solids in industrial wastewater effluents or discharges which are point sources subject to permits under section 402 of the Federal Water Pollution Control Act, as amended, dissolved materials in irrigation return flows; or source, special nuclear or by-product material as defined by the Atomic Energy Act of 1954, as amended. (Minn. Stat. §116.06, Subd. 22)

- **Solid Waste Management Tax:** A percentage tax collected by the State for management services for MSW and non-MSW (specifically construction waste, infectious waste and industrial waste). Services subject to the tax include collection, transportation, processing and disposal. Service providers (such as haulers and landfill operators) who directly bill generators or customers are responsible for collecting and remitting the tax. The current rate, established in 1998, is 9.75% for residential generators and 17% for commercial generators.
- **Source Reduction:** See *waste reduction*.
- **Source Separated Organic Materials (SSOM):** Materials that: 1) are separated at the source by waste generators for the purpose of preparing them for use as compost; 2) are collected separately from mixed municipal solid waste; 3) are comprised of food wastes, fish and animal waste, plant materials, and paper that is not recyclable because it has determined that no other person is willing to accept the paper for recycling; 4) are delivered to a facility to undergo controlled microbial degradation to yield a humus-like product.
- **Source Separation:** Separation of recyclable, compostable or other materials by the waste generator prior to collection.
- **Sustainable Materials Management (SMM):** A systemic approach to use and reuse materials more productively over their entire lifecycles.
- **Toxicity:** Under Minn. R. 7045.0131, toxicity is one of the six characteristics of hazardous waste. Contaminants of concern include heavy metals, such as lead or mercury, volatile organic compounds, such as benzene or chloroform, semi-volatile organic compounds, such as pyridine or nitrobenzene, and pesticides/herbicides, such as endrin or lindane.
- **Toxicity Reduction:** Refers to efforts to reduce the toxic or hazardous character of the waste stream.
- **Transfer Station:** An intermediate waste facility in which waste collected from any source is temporarily deposited to await transportation to another waste facility. (Minn. Stat. §115A.03, Subd. 33)
- **Volume-Based (Weight-Based) Fees:** A graduated pricing system for waste collection services in which the fees increase for larger quantities of waste collected.
- **Waste:** Solid waste, sewage sludge and hazardous waste. (Minn. Stat. §115A.03, Subd. 34)
- **Waste Management:** Activities which are intended to affect or control the generation of waste and activities which provide for or control the collection, processing and disposal of waste. (Minn. Stat. §115A.03, Subd. 36)
- **Waste Management Hierarchy:** A ranking of waste management methods or preference practices in the order in which they are the preferred method or practice. Informally referred to as the “waste management hierarchy.” Minn. Stat. §115A.02 establishes the following order of preference for waste management: 1) waste reduction and reuse; 2) waste recycling; 3) composting of yard waste and food waste; 4) resource recovery through mixed municipal solid waste composting or incineration; 5) land disposal which produces no measurable methane gas or which involves the retrieval of methane gas as a fuel for the production of energy to be used on-site or for sale; and 6) land disposal which produces measurable methane gas and which does not involve the retrieval of methane gas as a fuel for the production of energy to be used on-site or for sale.

- **Waste Management Act (WMA):** Chapter 115A of State Statutes which governs waste management activities in the State of Minnesota. Adopted in 1980 and amended by subsequent legislation. Some other sections of State Statutes also affect solid waste management but are technically not part of the Waste Management Act.
- **Waste Reduction:** An activity that prevents generation of waste or the inclusion of toxic materials in waste, including: (1) reusing a production in its original form; (2) increasing the life span of a product; (3) reducing material or the toxicity of material used in production or packaging; or (4) changing procurement, consumption or waste generation habits in smaller quantities or lower toxicity of waste generated. (Minn. Stat. §115A.03, Subd. 36b)
- **Yard Waste:** Soft-bodied garden wastes such as leaves, lawn cuttings and weeds and other waste, such as shrub and tree waste and pruning clippings. (Minn. Stat. §115A.03, Subd. 38)

APPENDIX II: ENVIRONMENTAL CENTER BROCHURE

Location and hours

**116 Peavey Circle
Chaska, MN 55318**

South on Hwy 41 from Hwy 5:

Go through two signal lights. Take a left on Peavey Road and the next right on Peavey Circle. The Environmental Center will be on your left.

North on Hwy 41 from 212:

Take the first right (Peavey Road) after Hazeltine Blvd. Take another right on Peavey Circle. The Environmental Center will be on your left.



Summer Hours: April through November

Wednesdays: 12:00 p.m. - 7:00 p.m.
Thursdays: 12:00 p.m. - 6:00 p.m.
Fridays: 10:00 a.m. - 4:00 p.m.
Saturdays: 8:00 a.m. - 12:00 p.m.

Winter Hours: December through March

Wednesdays: 12:00 p.m. - 7:00 p.m.
Thursdays: 11:00 a.m. - 5:00 p.m.
Saturdays: 8:00 a.m. - 12:00 p.m.

The Environmental Center will be **CLOSED** on the following dates in **2018**:

Sat. 3/31	Thur. 11/22
Sat. 5/26	Fri. 11/23
Wed. 7/4	Sat. 11/24
Sat. 9/1	

Proof of residency, such as a driver's license, is required.



FREE! Product room

Pick up paint, automotive products, cleaners and other products for FREE.

Payment accepted

Cash, check, debit card & credit card.



Products for sale

Radon kit (short term) - \$8.00
Radon kit (long term) - \$20.00
Compostable bags - \$3.50/box to \$6.50/box
Kraft paper lawn & leaf bags - \$4.00/bundle

Rain barrels and compost bins are sold seasonally. Call for more information.

For more information

www.recyclecarver.org | 952.361.1835 or 952.361.1800

Updated: Dec 2017



Environmental Center

Year round **RECYCLING & HOUSEHOLD**
HAZARDOUS WASTE facility!

Electronics

350 tons of electronic waste was collected at the Environmental Center in 2016!





Product Reuse Room

Residents visiting the FREE product reuse room helped Carver County reuse 34 tons of products in 2016!

Appliances

Over 3,800 appliances were collected at the Environmental Center in 2016!



Look inside for directions to the facility, hours of operation and a complete list of items that are accepted at the Environmental Center.



Find us on facebook.

www.recyclecarver.org | 952.361.1835 or 952.361.1800

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Items collected at NO CHARGE

Batteries (Automotive & All Household)

Cartridges (Inkjet and Printer)

Clothing, Shoes, & Useable Goods

Cooking Oil

 Vegetable, peanut, canola, olive, soybean, corn & sunflower.

Electronics (Residential, excluding TVs & monitors)

- | | |
|---------------------------|------------------------------|
| Computer Equipment | Audio Video Equipment |
| • CPU & laptop | • VCR & DVD Player |
| • Printer & scanner | • CD Player |
| • Keyboard & mouse | • Stereo & speakers |

Fluorescent Bulbs (Residential)

 Maximum of 25 bulbs.

Household Hazardous Waste

- | | |
|--|--|
| Home Improvement & Construction | Household Items |
| • Latex paint | • Aerosol cans |
| • Oil-based paint | • Mercury thermometers & thermostats |
| • Paint remover/stripper/thinner | • Household cleaners |
| • Stain/varnish | Automotive & Recreation |
| Yard & Garden | • Propane tanks |
| • Insect/roach/ant killer | • Rechargeable batteries |
| • Fertilizers/pesticides/weed killer | • Gasoline & other automotive products |

Organics

All food products including meat & bones; coffee grounds; non-recyclable paper such as pizza boxes, paper towels, paper plates, paper napkins & waxed paper containers.

Recyclables

- | | |
|--|---------------------------------------|
| Paper | Food & Beverage Containers |
| • Mail, phone books & office paper | • Steel & aluminum cans, foil & trays |
| • Magazines & catalogs | • Glass bottles & jars |
| • Newspapers & inserts | • Food & beverage plastics # 1-7 |
| • Corrugated Cardboard | • Milk carton & juice boxes |
| • Boxboard (cracker, cereal, pop/beer, etc.) | |

Scrap Metal

 All non metal material must be removed.

Used Motor Oil, Filters & Antifreeze

 5 gal containers or smaller.

Materials generated from businesses may be subject to additional fees or special limitations. Please call ahead if you are interested in dropping off materials produced from a business.

Items collected for a FEE

Appliances \$10.00

- Refrigerator
- Stove & microwave
- Washer & dryer
- Dishwasher
- Water softener & heater
- Dehumidifier
- Air Conditioner
- Treadmill

Appliances (Commercial) \$2.00/cubic ft

Appliances (Gas/Ammonia)

- Ammonia refrigerator <4' - \$150.00
- Ammonia refrigerator >4' - \$300.00
- Ammonia air conditioner - \$800.00

Batteries (Business) \$0.25/pound

Bicycles \$3.00

Carpeting \$10.00

 12' x 12' - Must be clean and dry. Padding is accepted.

Electronics (Business) \$0.50/pound

 More than 10, please call ahead.

Electronics (Residential TVs & monitors)

- TVs and monitors - \$10.00
- Large TVs - \$20.00 (30" or larger screen, measured diagonally, and all console sets)

Fluorescent Bulbs (Business)

 Over 50 bulbs, please call ahead.

- 4 ft and under - \$0.40
- Greater than 4 ft - \$0.75
- Compact (CFLs) - \$0.60
- Irregular shape - \$1.00
- HID - \$2.30
- High Pressure HG - \$12.00
- Broken - \$2.14/lb
- Ballasts - \$0.99/lb

Lawnmowers/small engine devices \$5.00

 Drain all fluids.

Mattress/Box Spring \$30.00/each

 Must be clean, dry and free of bugs.

Tires

- Car, truck, SUV - \$3.00
- Semi - \$15.00
- Farm (small) front - \$4.00
- Farm (large) rear - \$50.00

Yard Waste \$1.00/bag or \$8.00/cubic yard

 Plastic bags must be emptied.

The Environmental Center does NOT accept the following items:

- Furniture
- Trash/Garbage
- Toilets
- Construction & Demolition debris
- Business Hazardous Waste (by appointment only)
- Wood (other than tree debris)

APPENDIX III: ORGANICS RECOVERY HIERARCHY

System Descriptions

Reduction. Do not generate food waste in the first place. Reduce portions, buy what you need, and organize your refrigerator for optimal food usage.

Food to people. Feed hungry people.

Food to animals. Divert food not suitable for people to animals.

Backyard composting. Composting in residential backyards.

Small compost site. As defined under Minnesota Rule 7035.0300 Subp 99a, a small compost site allows for more material without having to get an MPCA solid waste permit. Additionally, materials from multiple households, community places, or businesses can be composted in the same location and more material types can be composted, including: food scraps, yard waste, non-recyclables papers, compostable plastics, and poultry litter (only if the compost is used on-site).

Small compost sites are limited to no more than 120 cubic yards of material. This includes all food scraps, yard waste, other feedstock brought to the site, and any active or finished compost.

Local community composting. These systems handle typically between 10 and 100 tons per week and serve small geographic areas. Material remains within the community in which it is generated.

Organics recovery hierarchy



Source Separated Organic Materials (SSOM) anaerobic digestion. Facilities utilizing anaerobic digestion of source separated organic materials including food waste, yard trimmings and agricultural wastes to produce renewable electricity, heat, and nutrient-rich byproducts. Examples include:

(Hometown BioEnergy located in Le Sueur, MN supports the local community by collecting and processing local wastes to create a renewable source of electricity that flows directly into the city.)

(UW Oshkosh Foundation-Witzel, LLC is a renewable energy facility producing approximately 8 percent of the University's electrical needs and is converting 10,000 tons of yard and SSOM per year to produce up to 3,300 MegaWatts of electrical energy per year.)

Large scale composting. Centralized facilities serving large geographic areas that typically handle more than 100 tons per week. Material generally leaves the community in which it is generated.

Mixed waste processing. Mixed waste processing is the upfront processing of waste to recover recyclables prior to, or at, resource recovery facilities and landfills.

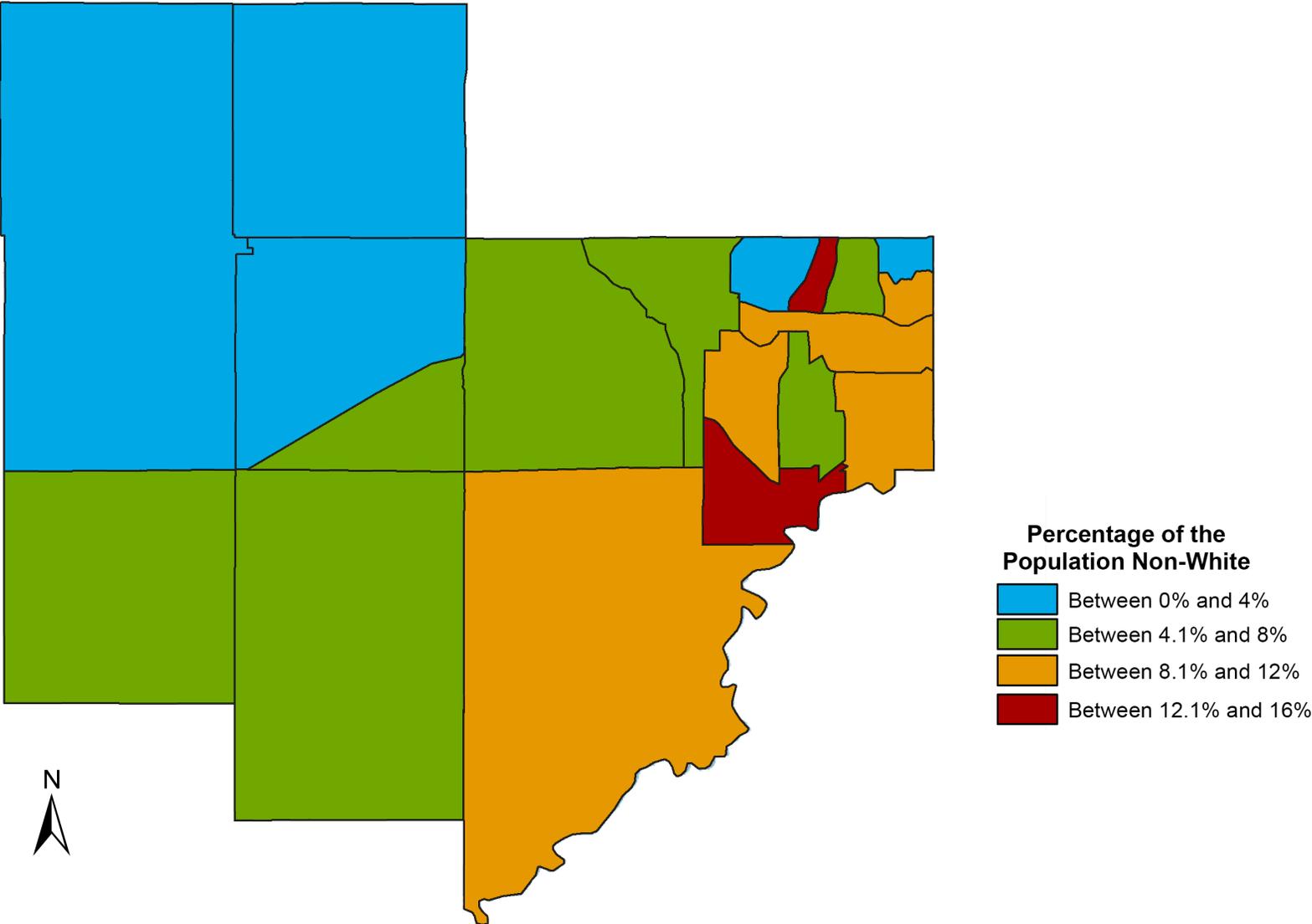
Anaerobic digestion. Anaerobic digestion of the organic fraction of MMSW provides an engineered and highly controlled process of capturing methane, especially when compared to landfill gas capture of methane generated by putrescible waste.

Waste processing. Waste processing uses MSW as a fuel for generating power, just as other power plants use coal, oil, or natural gas. The burning fuel heats water into steam that drives a turbine to create electricity.

Landfilling. Food waste should be banned from landfills and trash incinerators due to their high capital costs, pollution, and contribution to greenhouse gas emissions.

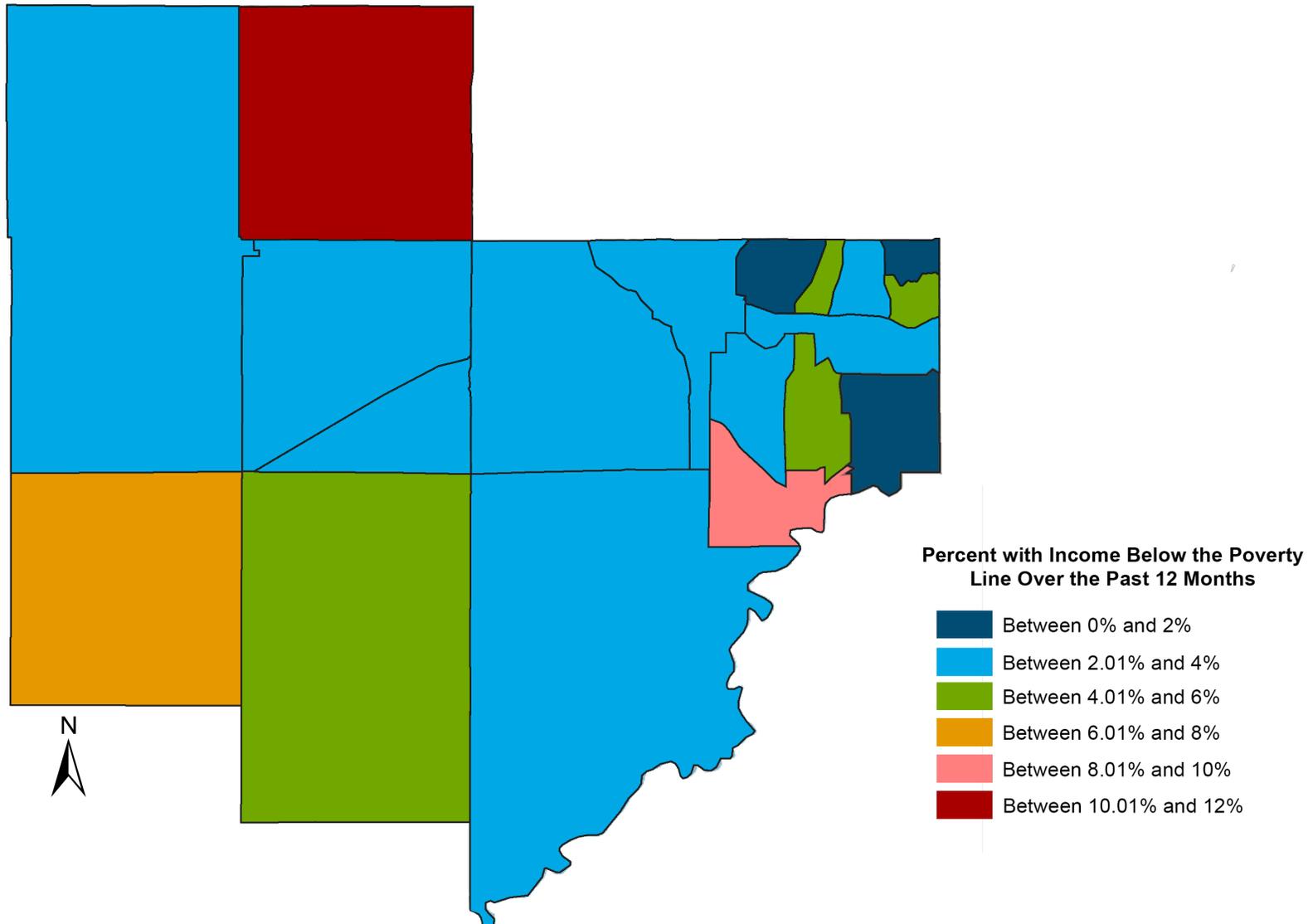
APPENDIX IV: ENVIRONMENTAL JUSTICE MAP I

Non-White Population in Carver County by Census Tract



APPENDIX V: ENVIRONMENTAL JUSTICE MAP II

Percentage of Those with Incomes Below the Federal Poverty Line in Carver County by Census Tract



APPENDIX VI: STRATEGY IMPLEMENTATION TABLE

The Carver County Solid Waste Management Master Plan outlines numerous strategies for reducing waste and increasing recycling and organics recovery. The following table lists each strategy and identifies whether it’s a new or existing strategy, if it meets a Policy Plan objective, the stakeholders involved, and the timeline for implementation.

Topic	Strategy	Existing/New Strategy	Policy Plan Initiative	Stakeholders	Timing
WASTE REDUCTION AND REUSE	Carver County will conduct an internal waste sort to evaluate the generation of waste and develop waste reduction ideas for three material types by 2020.	New	No	Carver County	2020
	Carver County will foster local networking and idea generation by inviting County reuse businesses and chambers of commerce representatives to join a County staff member in attending quarterly ReUSE MN meetings.	New	No	Carver County Businesses Chambers	2018/2019
	Carver County will work with the County’s businesses to foster business to business connections that conserve and reuse materials through the Minnesota Materials Exchange Program.	New	Yes	Carver County Businesses	2018
	Carver County will review, update, make changes to strengthen and implement the County’s EPP Resolution, incorporating the MPCA’s Sustainable Purchasing program and sharing success stories and outcomes on the County’s website.	New	No	Carver County MPCA	2019
	Carver County will promote and encourage County employee use of the existing internal extra office and operational supply webpage with success stories and frequent reminders.	New	No	Carver County	2019
	Carver County will pilot an internal “Treasure Day” event to promote reuse among employees for the donation and exchange of small personal items they no longer want. If successful, the goal will be to hold an annual event and promote this concept to local businesses.	New	No	Carver County	2019
	Carver County will lead by example to work with cities and schools to establish their own internal extra office and operational supply systems and “Treasure Day” events by sharing examples of their own best practices and success stories.	New	No	Carver County Cities Schools	2020
	Carver County will focus its event efforts, including funding, on waste reduction at public entity events such as the County Fair and annual city celebrations.	New	No	Carver County Public Entities	2018
	Carver County Environmental Services staff members will work with Library staff members to determine the feasibility and benefits of establishing enhanced sharing programs for toys, tools and other household items, along with Little Free Libraries. If the programs are feasible, implementation will be accomplished through work plans, funding, community volunteers, outreach and problem solving.	New	No	Carver County Libraries	2020
	Carver County will continue to operate the Carver County Reuse Room, and increase receiving area staffing and reuse training at the Carver County Environmental Center to maximize the volume of usable products available.	Existing	No	Carver County	Ongoing
	Carver County will encourage the patronage of reuse businesses within the County by creating a reuse business promotion coupon book patterned on other successful TCMA county efforts.	New	Yes	Carver County	2019
	Carver County will help building managers establish and implement move in/move out reusable goods programs at Crown College and multi-family properties.	New	Yes	Carver County Multi-Units Crown College	2020
Carver County will encourage cities and communities to host fix-it clinics for household items such as small engine products, by hosting a workshop to demonstrate and explore other TCMA counties’ successful programs.	New	Yes	Carver County Cities	2019	

RECYCLING

Topic	Strategy	Existing/New Strategy	Policy Plan Initiative	Stakeholders	Timing
	Carver County will ensure that recycling service is available to all residential, multi-family residential and commercial customers, within incorporated areas, through the enforcement of the County Solid Waste Ordinance. Service must include the collection of at least four broad categories of recyclable materials. Paper and corrugate cardboard must be collected from commercial, industrial and institutional customers when requested by the customer.	Existing	No	Carver County Haulers	Ongoing
	Carver County will provide technical and financial assistance in developing and enhancing recycling programs for public entities.	Existing	No	Carver County Cities Schools	Ongoing
	Carver County will provide recycling drop-off opportunities at the Environmental Center for residents and businesses.	Existing	No	Carver County	Ongoing
	Carver County will budget funding annually to provide financial support to local cities and townships to advance existing recycling programs. The County will allocate additional funding to use as an incentive for entities to implement new programs. These sources of funding will ensure cities and townships provide an opportunity to recycle at all properties and events.	New	Yes	Carver County Cities	2018 Ongoing
	By 2019, Carver County will work with the private sector on the implementation of a trial program to offer curbside textile collection in one of the four organized cities of Hamburg, Mayer, New Germany or Watertown. If successful, the County will promote and expand the program to include additional cities.	New	No	Carver County Cities Haulers	2019
	Carver County will support and promote existing plastic agriculture bag recycling programs through education and outreach.	New	No	Carver County Farmers Farm Suppliers	2018
	Carver County will operate recycling drop-off locations in the cities of Cologne, Mayer and Norwood Young America accepting the following items: single sort recycling, used motor oil, oil filters, antifreeze, scrap metal, textiles, and automotive batteries.	Existing	No	Carver County Cities	Ongoing
	Carver County will promote waste prevention and recycling education through website content, social media, print media, newsletters, and face-to-face interaction.	Existing	No	Carver County	Ongoing
	Carver County will expand its recycling container loan program through education, outreach and the addition of new receptacles, allowing all local events the opportunity to utilize appropriate recycling containers and consistent messaging.	Existing	No	Carver County	2019
	Carver County will lead by example by incorporating recycling throughout daily operations and at sponsored events, ensuring all County-occupied properties offer employees and visitors the opportunity to recycle.	Existing	No	Carver County	Ongoing
	Carver County will sponsor, at a minimum, three annual Special Waste collection events in the western part of the County.	Existing	No	Carver County Cities	Ongoing
	Carver County will evaluate ordinance changes requiring haulers to offer curbside recycling services within un-incorporated areas throughout the County.	New	No	Carver County Haulers	2021
	Carver County will re-focus commercial recycling assistance by contracting annually with a consultant to offer outreach and education, evaluation, and technical assistance to target materials with the highest environmental impacts.	New	Yes	Carver County Businesses	2018
	Carver County will provide residents with the opportunity to recycle non-traditional recyclables, such as carpet and mattresses, at the Environmental Center and will consider accepting additional items for recycling as markets become available. The County will promote existing programs through website content, newsletters, and social media.	Existing	Yes	Carver County	Ongoing

Topic	Strategy	Existing/New Strategy	Policy Plan Initiative	Stakeholders	Timing
RECYCLING	By 2022, Carver County will work with cities and haulers to pair weekly recycling and organics collection with the option for residents to subscribe to bi-weekly trash collection.	New	Yes	Carver County Cities Haulers	2022
	Carver County will identify generators of large volumes of recyclables and the generators of the most impactful materials to the economy and environment. Technical and financial assistance will be provided to the generators to divert these materials from the waste stream.	New	Yes	Carver County Businesses	2020
	Haulers operating in Carver County currently offer garbage and recycling collection services on the same day. The County will make ordinance changes to assure that same day services continue for our residents.	New	Yes	Carver County Haulers	2020
	Carver County, in collaboration with the MPCA and other stakeholders, will work to develop markets and support management capacity for recyclable and compostable materials to ensure adequate infrastructure for the increase in recycling and composting rates.	New	Yes	MPCA Carver County TCMA Counties Industry	Ongoing
	Carver County will identify municipalities not currently participating in the Minnesota GreenStep Cities program and work with those cities to implement best management practices to achieve sustainability and quality-of-life goals.	New	No	MPCA Cities	2019
ORGANICS (INCLUDING YARD WASTE)	Carver County will encourage commercial and institutional generators to reduce food waste through food donation to local food shelves such as Bountiful Baskets and People Reaching Out to People. This will be accomplished with on-site technical assistance and grant opportunities.	New	Yes	Carver County MPCA Food Shelves Generators	2018
	Carver County will work with consultants to increase organics diversion from non-residential waste streams by offering technical assistance as well as grant funding to support food waste prevention and donation programs.	New	Yes	Carver County MPCA Food Shelves Generators	2018
	Carver County will promote community based social marketing campaigns, including the EPA's <i>Food: Too Good To Waste</i> Program, through social media, website content, newsletters, and one-on-one contact, as a way to educate residents on ways to reduce the amount of food that is not consumed and then ultimately thrown out.	New	Yes	Carver County Cities MPCA EPA	2018
	Carver County will follow its organics recovery hierarchy when developing and implementing organic materials diversion and prevention programs.	New	No	Carver County	2018
	Carver County will connect food shelves with farmers and local community gardens who have unwanted or surplus food to reduce waste and decrease local hunger and food insecurity needs.	New	No	Carver County Cities Farms	2020
	Carver County will implement organics diversion at public entity facilities and in large event venues by 2025.	New	Yes	Carver County Cities Fair Board	2025
	Carver County will ensure residents have access to convenient brush and yard waste service by offering municipalities financial assistance to cover site operation costs. The County is also exploring the development of a large scale brush transfer site.	New	No	Carver County Cities	2018
	Carver County will add organic collection service to the County operated recycling drop-off sites located in the cities of Cologne, Norwood Young America, and Mayer.	Existing	Yes	Carver County	2019

Topic	Strategy	Existing/New Strategy	Policy Plan Initiative	Stakeholders	Timing
ORGANICS (INCLUDING YARD WASTE)	Carver County will expand source separated organics materials (SSOM) composting capacity by maintaining a partnership with Specialized Environmental Technologies (SET) to permit and operate the SSOM compost site at the Minnesota Landscape Arboretum. In addition, the County will investigate re-permitting municipal yard waste sites throughout the region to allow for the management of source separated organics materials.	New	No	Carver County SET U of M MPCA Cities	2019
	Carver County will continue its research at both the Watertown municipal yard waste site and the SET SSOM site located at the Minnesota Landscape Arboretum to determine potential environmental impacts of composting. The information collected will position the MPCA to be more flexible in design and operating requirements which in turn, will promote the expansion of composting.	Existing	No	Carver County SET U of M MPCA EPA	Ongoing
	Carver County will expand the use of compost in local government transportation and infrastructure projects. This will be accomplished by encouraging city and County public works departments to utilize the new compost specification allowing for the use of compost made from source separated organic materials in broader applications including roadside and landscaping projects.	New	Yes	Carver County	2019
	Carver County will work with local watershed districts, including Minnehaha Creek, Lower Minnesota, Riley Purgatory Creek and Buffalo, to adopt the County's Water Management Organization (WMO) policy requiring the use of compost in new construction projects.	New	Yes	Carver County WMO Watersheds	
	Carver County will continue to promote backyard composting and offer bins and classes at the Environmental Center as a means to promote sustainable approaches to managing organic materials.	Existing	No	Carver County	Ongoing
RESOURCE RECOVERY (PROCESSING)	Carver County will work cooperatively with the MPCA as the State enforces provisions found in Minn. Stat. §473.848, "Restriction on Disposal," requiring waste processing facility capacity to be fully utilized before waste is sent to MSW landfills serving the region.	Existing	No	MPCA Carver County	Ongoing
	Carver County will continue to work to ensure that waste generated from County owned/operated facilities is managed through resource recovery. This will be accomplished through the hauler contracts that increase the viability of waste processing with route densities and authentication of delivery to a waste processing facility.	Existing	No	Carver County	2018
	Carver County will provide local governments, schools and other public entities model contract language, and will assist with the development of contracts for managing their MSW in accordance with Minn. Stat. §115A.471, "Public Entities; Management of Solid Waste."	Existing	No	Carver County Cities Schools	2018
	Carver County will work with the State to evaluate new or innovative resource recovery systems and technologies: i.e. anaerobic digestion. Carver County will also support state financial assistance for the construction of digestion facilities which could provide the County with additional processing options.	Existing	No	MPCA Carver County	Ongoing
LAND DISPOSAL	Carver County will educate citizens & businesses about alternatives to landfilling through website content, social media, print media, newsletters, and face-to-face interaction.	Existing	No	Carver County	Ongoing
	Carver County will provide convenient disposal options at the Environmental Center and Special Waste Collections for bulk material and special wastes in order to reduce illegal dumping and burning.	New	No	Carver County Cities Haulers	Ongoing
	In an effort to better protect future generations from the environmental impacts from land disposal sites, Carver County will work with the State to evaluate the need for enhanced financial assurance to reflect the true cost of long-term care of operating a landfill.	New	No	MPCA Carver County Landfills	Ongoing

Topic	Strategy	Existing/New Strategy	Policy Plan Initiative	Stakeholders	Timing
NON-MSW MANAGEMENT	Carver County will enhance existing pre-demolition checklists to aide in the identification and proper disposal of hazardous building materials and special wastes.	New	Yes	Carver County Cities Inspectors	2020
	Carver County will create and distribute educational materials to residents, municipalities, developers, contractors and private inspection firms focusing on the proper disposal of building materials and the opportunities for waste reduction, recycling and deconstruction.	New	No	Carver County Cities	2019
	Carver County will promote the use of shingle scrap in County transportation and paving projects, and encourage public entities to do the same.	Existing	No	Carver County Cities	Ongoing
	Carver County will promote reuse and recycling of non-MSW in public entity building and remodeling projects through bidding and contract language consistent with the waste management hierarchy.	Existing	No	Carver County Haulers Contractors	Ongoing
	Carver County will work with cities to adopt ordinances that require waste plans for construction, renovation, deconstruction and demolition projects. Plans will assist in calculating waste generation while identifying reuse and recycling opportunities.	New	Yes	Carver County Cities	2022
HAZARDOUS WASTE MANAGEMENT	Carver County will increase the use of non-hazardous products and methods among all sectors by promoting alternatives on the County’s website and in literature available at the Environmental Center, through hazardous waste inspector education and modeling successes and lessons learned by public entities.	New	No	Carver County	Ongoing
	Carver County will sponsor, at a minimum, three household hazardous waste event collections annually in the western part of the County.	Existing	No	Carver County	Ongoing
	Carver County will provide VSQGs with direct assistance and convenient disposal options to properly manage hazardous wastes.	Existing	No	Carver County	Ongoing
	Carver County will continue to partner with the Carver County Sheriff’s Office to promote the three stationary medicine collection boxes in the County’s larger cities and helping to staff annual medicine “take-back” collection events in western cities.	Existing	No	Carver County Sheriff’s Office	Ongoing
	Carver County will participate in the existing reciprocity for HHW programs with TCMA counties and establish separate agreements with Scott and McLeod counties.	New	Yes	Carver County MN Counties	Ongoing
	Carver County will promote existing private collection opportunities for regulated hazardous waste and problem material management such as paint, fluorescent tubes and rechargeable batteries.	New	No	Carver County	2019
	Carver County will work with the Carver County Public Health Department to establish a needle collection program separate from existing County collection programs such as the Environmental Center, HHW collection events, and the Carver County Sheriff’s Office medicine collection program.	New	No	Carver County Public Health	2018
	Carver County will continue to provide staff expertise to State-wide efforts (HHW Program Managers and the Solid Waste Administrators Association) to achieve consensus on program costs and the benefits of comprehensive reporting.	New	Yes	Carver County	Ongoing
	Carver County will continue to offer staff knowledge to the Product Stewardship Statewide Committee stakeholders, to prioritize hazardous products for legislative or voluntary initiatives, and to develop Product Stewardship legislation and program criteria.	New	Yes	Carver County MN Counties	Ongoing
	Carver County will continue to serve in a leadership role with the Minnesota Product Stewardship Council Board of Directors to help clarify the meaning of extended producer responsibility and to develop messages regarding benefits to stakeholders, government’s role, and science-based principles.	New	Yes	Carver County MN PSC	Ongoing

EDUCATION AND OUTREACH

Topic	Strategy	Existing/New Strategy	Policy Plan Initiative	Stakeholders	Timing
	Carver County will utilize website content, social media, print media and most importantly one-on-one opportunities, such as community events, the County Fair booth, schools and community presentations, to mobilize constituents to actions to fulfill waste hierarchy outcomes.	Existing	No	Carver County	Ongoing
	Carver County will improve, promote and conduct Environmental Center tours featuring one-on-one education with youth and civic groups. Tours will be promoted through website content and at community events, schools and the County Fair booth.	Existing	No	Carver County	Ongoing
	Carver County will collaborate with other departments and organizations to develop annual County Fair booth themes featuring waste reduction and recycling.	New	No	Carver County	Ongoing
	Carver County will collaborate with other TCMA and greater Minnesota counties and cities to share effective education methods, messaging and delivery ideas for schools, cities, residences, parks and businesses. The County will work with the MPCA and industry stakeholders to implement standardized residential recycling messaging through consistent terminology and education.	New	Yes	Carver County TCMA Counties MN Counties MPCA Industry	Ongoing
	Carver County will coordinate with the County’s Water Management Organization to provide technical assistance and education on the proper use and management of household chemicals and hazardous products, focusing on non-toxic alternatives at the Environmental Center, Children’s Water Festival, County Fair, and other public education opportunities.	Existing	No	Carver County Carver WMO	Ongoing
	Carver County will build upon existing relationships with schools to improve and increase recycling program volumes and source reduction efforts through grant opportunities, end of school cleanouts, the identification of new recycling opportunities, annual check-ins and the offering of in-house technical expertise.	New	No	Carver County Schools	Ongoing
	Carver County will educate residents on how to reduce the contamination of recyclables and organics delivered to recovery facilities or compost sites through website content, social media, newsletters, booths at community events, Environmental Center tours and County libraries.	Existing	No	Carver County	Ongoing
	Carver County will continue its partnership with Scott, and other counties and/or regions, to offer the Master Recycler/Composter program on a bi-annual basis. The Master Recyclers will work alongside County staff at community events, special collection events and educational workshops to help disseminate program information.	New	No	Carver County Scott County	Ongoing
	Carver County will provide hands-on recycling education, coordination, professional services and staffing with County and vendor worker presence at large community events.	Existing	No	Carver County Cities	Ongoing
	Carver County will convene an education stakeholder group in 2018, composed of members within County departments, as well as those external to the County. The group will explore perspectives and provide input regarding MSW, including existing infrastructure, mandated outcomes, County resources, opportunities, possible new issues and areas to collaborate on.	New	No	Carver County Industry Cities Schools	2018
	Carver County will develop and implement a 3-year education and outreach plan by 2019, based upon stakeholder input and partnerships for implementation. The plan should focus on messages that are consistent with TCMA counties, achievable actions, one-on-one delivery and ongoing relationships with County Environmental Services staff.	New	No	Carver County TCMA Counties	2019
	Carver County will evaluate the development of a business waste reduction and recycling “incentive” and promotion program in partnership with cities, chambers of commerce, business associations, Rotary, Lions, local financial institutions, and implement as recommended, by 2019.	New	No	Carver County Cities Community	2019

Topic	Strategy	Existing/New Strategy	Policy Plan Initiative	Stakeholders	Timing
REGULATION	Carver County will regulate generators, facilities and haulers through licensing, inspections, reports and enforcement of County Ordinances ensuring the protection of public health and the environment.	Existing	No	Carver County Haulers Businesses	Ongoing
	Carver County will participate in the Regional MSW Hauler License Program with the objective to expand the program to include all seven TCMA counties.	New	Yes	TCMA counties Carver County	2018
	Carver County will assist the MPCA in the enforcement of Minn. Stat. §473.848, "Restriction on Disposal," through the completion and submittal of quarterly certification reports.	Existing	No	MPCA Carver County	Ongoing
	Carver County will continue to inform public entities, commercial buildings and sports facilities of their legal obligation to recycle under Minn. Stat. §115A.151, "Recycling Requirements". Those not complying with the recycling law will be offered technical assistance to gain compliance. If education and assistance is declined, the County will notify the MPCA of any non-compliant entities to take further action.	Existing	No	Carver County MPCA	Ongoing
	By 2020, Carver County will develop a permitting program for compost sites to include site limitations, conditions for operation and requirements for record-keeping and reporting. A permitting process enables the county to address environmental and nuisance concerns while collecting more accurate data through regular reporting.	Existing	No	Carver County Cities Compost Sites	2020
	By 2018, Carver County will allocate funds to initiate a program to decrease the use of burn barrels and other forms of backyard garbage burning. The program will include a combination of education, incentives and continued enforcement of Minn. Stat. 17.135 and 88.171 and County ordinances.	Existing	No	Carver County MPCA DNR Fire Chiefs Fire Wardens	2018
COST AND FINANCE	Carver County will monitor solid waste program budgets and take necessary steps to assure that fees are adjusted as required to cover expenses and needs, as costs and participation rates change over time.	New	No	Carver County	Ongoing
	Carver County will utilize an appropriate portion of the Carver County Solid Waste Service Fee for solid waste programs.	Existing	No	Carver County	Ongoing
	Carver County will manage existing solid waste grants to obtain positive results and research opportunities for new grant funds.	Existing	No	Carver County	Ongoing
	Carver County will support State and national Product Stewardship efforts to reduce long-term costs for on-going collection and management of hazardous and problem materials.	Existing	No	Carver County	Ongoing
	Carver County will increase grant funding to cities and townships fostering the growth and development of waste reduction, recycling and organics management programs.	Existing	No	Carver County Cities Townships	Ongoing
	Carver County will provide grant funding to schools, organizations and businesses for the purpose of starting and/or improving recycling and organics management programs.	New	No	Carver County Schools Organizations Businesses	Ongoing
	Carver County will evaluate long-term funding options to assure support for effective programs and activities.	Existing	No	Carver County	Ongoing

Topic	Strategy	Existing/New Strategy	Policy Plan Initiative	Stakeholders	Timing
SUSTAINABLE MATERIALS MANAGEMENT	Carver County will begin to transition to an SMM approach focused on minimizing environmental impact and emphasizing the use of life-cycle analysis. This will be accomplished through strategies listed in this plan and by incorporating a SMM framework into County environmental programs.	New	Yes	MPCA	2018
	Carver County will educate residents about the lifecycle impacts of the products and materials that are available to consumers. This will be accomplished through website content, social media, newsletters, and one-on-one contact at schools, the County Fair booth, and other local events.	New	Yes	MPCA TCMA Counties Carver County	2018
	Carver County will incorporate SMM concepts into County grant funding opportunities and prioritize grant allocations based on maximum environmental benefits.	New	Yes	Carver County	2018
	Carver County, in collaboration with the MPCA and other stakeholders, will work on the selection and implementation of strategies for priority materials selected for reduction, reuse and recycling based on life cycle analysis and assist in creating quality standard measurements for SMM.	New	Yes	MPCA TCMA Counties Carver County	2020
PERFORMANCE MEASUREMENT	Carver County will work with the MPCA and TCMA counties to ensure consistent data collection and reporting.	New	No	Carver County MPCA TCMA Counties	Ongoing
	Carver County will establish criteria and utilize performance based grant funding for municipalities to measure progress toward achieving waste management objectives.	New	No	Carver County Cities	2019
	Carver County will collect documented non-residential recycling data through annual business surveys and hauler reporting. The information will be used to accurately determine recycling performance towards meeting State goals.	Existing	No	Carver County Haulers Businesses	Ongoing
	By 2020, Carver County will conduct a follow-up to the residential curbside recycling set-out and participation rate study completed in 2016. Data will be used to determine progress made and where resources should be directed.	New	No	Carver County Haulers Cities	2020
	Carver County supports an effort to work collaboratively with the TCMA and MPCA to develop a standard non-residential recycling data collection program.	New	No	Carver County MPCA TCMA counties	Ongoing
	Carver County will design a dashboard, containing data and charts, to show progress on waste management activities within the County.	New	No	Carver County	2020
	Carver County will provide required reports to the MPCA for the purpose of measuring progress toward achieving the objectives identified in the Policy Plan and Master Plan.	Existing	No	Carver County MPCA	Ongoing
ENVIRONMENTAL JUSTICE	Carver County will identify areas of concern using the MPCA's environmental justice review tool and the EPA's EJScreen tool, to be used in program planning and development.	New	No	Carver County MPCA EPA	2018
	Carver County will evaluate existing waste management programs, such as grant funding, opportunities to recycle and collection events, to identify any inequalities that may exist and will implement changes if inequalities are identified.	New	No	Carver County	2018
	Carver County will communicate with affected communities when compliance issues (that may have an adverse effect on health and/or the environment) occur, except when prohibited by law, such as during an ongoing enforcement action.	New	No	Carver County	Ongoing

APPENDIX VII: CARVER COUNTY BOARD RESOLUTION TO SUBMIT THE DRAFT PLAN TO THE MPCA FOR REVIEW AND APPROVAL

**BOARD OF COUNTY COMMISSIONERS
CARVER COUNTY, MINNESOTA**

**Resolution Authorizing the Carver County Department of Environmental Services
to Submit the Carver County 2018-2036 Solid Waste Master Plan to the
Minnesota Pollution Control Agency for Review and Approval**

DATE February 6, 2018 RESOLUTION NO. 12-18
MOTION BY COMMISSIONER Ische SECONDED BY COMMISSIONER Maluehnik

WHEREAS, Carver County is required by Minn. Stat. §115A and §473.803 to revise the county's Solid Waste Management Master Plan; and

WHEREAS, the Metropolitan Solid Waste Management Policy Plan 2016-2036, adopted by the Minnesota Pollution Control Agency on April 6, 2017 provides the framework for county waste management planning in the metropolitan region; and

WHEREAS, in preparing the county's Solid Waste Management Master Plan, a stakeholder engagement process was implemented to gather information from a variety of stakeholders, including residents, businesses, schools, waste haulers, and local government; and

WHEREAS, the Carver County Stakeholder Group met multiple times, and provided direction on updating the County's Solid Waste Master Plan, per Minn. Stat. §473.803, subd. 4; and

WHEREAS, the Carver County Department of Environmental Services has prepared a revised Carver County Solid Waste Master Plan, with policies and strategies.

NOW, THEREFORE, BE IT RESOLVED, that the Carver County Board of Commissioners hereby authorizes the Carver County Department Environmental Services to submit the Plan to the Commissioner of the Minnesota Pollution Control Agency (MPCA) for review and approval.

BE IT FURTHER RESOLVED, that the Carver County Board will further review the Solid Waste Master Plan, after review and approval by the MPCA, for further consideration and adoption at a duly called meeting of the Carver County Board of Commissioners.

YES	ABSENT	NO
Degler	_____	_____
Ische	_____	_____
Lynch	_____	_____
Maluehnik	_____	_____
Workman	_____	_____

STATE OF MINNESOTA
COUNTY OF CARVER

I, David Hemze, duly appointed and qualified County Administrator of the County of Carver, State of Minnesota, do hereby certify that I have compared the foregoing copy of this resolution with the original minutes of the proceedings of the Board of County Commissioners, Carver County, Minnesota, at its session held on the 6th day of February, 2018, now on file in the Administration office, and have found the same to be a true and correct copy thereof.

Dated this 6th day of February, 2018


 David Hemze, Carver County Administrator

APPENDIX VIII: MPCA LETTER OF PLAN APPROVAL



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July 30, 2018

Commissioner Gayle Degler, Chair
Carver County Board of Commissioners
600 East 4th Street
Chaska, Minnesota 55318

Dear Commissioner Degler:

I am pleased to inform you that Carver County's Solid Waste Master Plan (Plan), submitted to the Minnesota Pollution Control Agency (MPCA) February 14, 2018, has been approved. MPCA staff reviewed the Plan and determined that it meets the requirements outlined in Minn. Stat. §473.803 and supports achieving the objectives of the 2016-2036 Metropolitan Solid Waste Policy Plan. The Findings of Fact, conclusion of Law, and Order approving the Plan are enclosed. Carver County has developed a Plan that includes some strong elements, such as:

- A strong commitment to organics management;
- Additional emphasis on waste reduction and reuse education strategies;
- Identification of high impact materials for commercial recycling; and
- Building on the residential recycling survey and study conducted by the County.

The MPCA appreciates Carver County's commitment to implementing comprehensive and effective solid waste management programs. We commend Brad Hansel, Leslie Wilson, Marcus Zbinden, and Greg Boe for their hard work throughout the planning process. Should you be interested, MPCA would like to request the opportunity to speak to the County Board at an upcoming meeting. Please reach out to Anna Kerr of my staff at (651) 757-2488 or anna.kerr@state.mn.us to discuss options.

Sincerely,

David J. Benke
Division Director
Resource Management & Assistance Division

KK:cbg

Enclosure

cc: Greg Boe, Carver County
Brad Hansel, Carver County
David Benke, MPCA
Steve Giddings, MPCA
Mark Rust, MPCA
Anna Kerr, MPCA

MINNESOTA POLLUTION CONTROL AGENCY

In the Matter of the Approval of the
Carver County Solid Waste Master Plan

FINDINGS OF FACT,
CONCLUSIONS OF LAW
AND ORDER

Carver County submitted a Solid Waste Master Plan to the Commissioner of the Minnesota Pollution Control Agency (MPCA) for review and approval pursuant to Minn. Stat. § 473.803. After reviewing the Solid Waste Master Plan, the MPCA makes the following Findings of Fact, Conclusion of Law and Order.

FINDINGS OF FACT

A. Authority, Procedure, Requirements, and Background

1. Minn. Stat. § 115A.42 provides that the Commissioner of the Minnesota Pollution Control Agency (MPCA) establish and administer a program to encourage and improve regional and local solid waste management planning activities and to further the state policies and purposes expressed in Minn. Stat. § 115A.02. The program under sections 115A.42 to 115A.46 is administered by the MPCA pursuant to rules promulgated under chapter 14, except in the metropolitan area where the program is administered by the MPCA pursuant to Minn. Stat. § 473.149.
2. Minn. Stat. § 473.149 required the MPCA to revise the metropolitan long range policy plan for solid waste management ("Policy Plan") by December 31, 2016, and every sixth year thereafter.
3. Minn. Stat. § 473.803, subd. 1 provides that "each metropolitan county, following adoption or revision of the Policy Plan and in accordance with the dates specified therein, and after consultation with all affected local government units, shall prepare and submit to the MPCA for approval, a county solid waste master plan to implement the policy plan."
4. Minn. Stat. § 473.803, subd. 2 provides that the "commissioner shall review each master plan or revision thereof to determine whether it is consistent with the metropolitan policy plan. If it is not consistent, the commissioner shall disapprove and return the plan with its comments to the county for revision and resubmittal."
5. Minn. Stat. § 473.803 and the Policy Plan pages D-10 through D-15 ("Appendix D"), describe the procedure and requirements for MPCA review and approval of the Master Plan. The Master Plan must be consistent with and implement the Plan, and include:
 - a. **473.803, subd. 1 Contents.** The Master Plan includes the required general contents (see Minn. Stat. § 473.803, subd. 1 and Appendix D, bullet 9 under "Standard");
 - b. **Land Disposal Abatement.** The Master Plan includes a land disposal abatement element to implement the metropolitan land disposal abatement plan (see Minn. Stat. § 473.083, Subd. 1c., Appendix D, bullets 1-5 under "Standard," and Policy Plan Part 3);
 - c. **Oversight.** The Master Plan provides oversight over entities delegated by the county to implement the plan and the private sector (see Minn. Stat. § 473.803, Subd. 5; Appendix D, bullets 6-8 under "standard"; and Appendix D, "Role of private sector; county oversight");

- d. **Designation to Resource Recovery Facility.** The Master Plan proposes designation of a resource recovery facility and evaluates the benefit of the proposal (see Minn. Stat. § 473.803, subd. 1d);
- e. **Advisory Committee.** The Master Plan was prepared with the aid of a solid waste management advisory committee (see Minn. Stat. § 473.803, subd. 4).

- 6. On April 6, 2017, the MPCA adopted a revised Metropolitan Solid Waste Management Policy Plan, 2016-2036, pursuant to Minn. Stat. § 473.149.
- 7. On February 14, 2018, Carver County submitted its Solid Waste Management Master Plan, 2018-2038 (“Master Plan”), for MPCA review.

B. Master Plan

1. 473.803, Subd 1 Contents

a. The Master Plan includes the general contents required under Minn. Stat. 473.803, subd. 1 and Appendix D.

b. The Master Plan includes:

- county solid waste activities, functions, and facilities; (pp. 7-36)
- the existing system of solid waste generation, collection, and processing, and disposal within the county; (pp. 9-12)
- proposed mechanisms for complying with the recycling requirements of section 115A.551, and the household hazardous waste management requirements of section 115A.96, subdivision 6; (pp. 41-43; 50-51)
- existing and proposed county and municipal ordinances and license and permit requirements relating to solid waste facilities and solid waste generation, collection, and processing, and disposal; (pp. 14; 32-33)
- existing or proposed municipal, county, or private solid waste facilities and collection services within the county together with schedules of existing rates and charges to users and statements as to the extent to which such facilities and services will or may be used to implement the policy plan; (p. 27)
- encouragement of ownership and operation of solid waste facilities by private industry; (NA)
- for solid waste facilities owned or operated by public agencies or supported primarily by public funds or obligations issued by a public agency, the master plan contains criteria and standards to protect comparable private and public facilities already existing in the area from displacement unless the displacement is required in order to achieve the waste management objectives identified in the plan. (NA)

2. Land Disposal Abatement

a. The Master Plan includes a land disposal abatement element to implement the metropolitan land disposal abatement plan adopted under section 473.149, subdivision 2d (“Metropolitan System Plan”).

b. The Master Plan implements the local abatement objectives for the county and cities within the county by incorporating strategies identified in Part Three of the Policy Plan:

- The Master Plan must include two regional solutions as provided in the Policy Plan. Carver County included three of the recommended strategies from the Policy Plan and therefore meets this criterion;
- The Master Plan must include two source reduction strategies as provided in the Policy Plan. Carver County included four of the recommended strategies from the Policy Plan and therefore meets this criterion;
- The Master Plan must include one collection strategy as provided in the Policy Plan. Carver County included one of the recommended strategies from the Policy Plan and therefore meets this criterion;
- The Master Plan must include one traditional recycling strategy as provided in the Policy Plan. Carver County included two of the recommended strategies from the Policy Plan and therefore meets this criterion;
- The Master Plan must include one traditional recycling strategy as provided in the Policy Plan. Carver County included two of the recommended strategies from the Policy Plan and therefore meets this criterion;
- The Master Plan must include three organics management strategies as provided in the Policy Plan. Carver County included five of the recommended strategies from the Policy Plan and therefore meets this criterion;
- The Master Plan must include one Non-MSW management strategy as provided in the Policy Plan. Carver County included three of the recommended strategies from the Policy Plan and therefore meets this criterion;
- The Master Plan must include one organics market development strategy as provided in the Policy Plan. Carver County included one of the recommended strategies from the Policy Plan and therefore meets this criterion;
- The Master Plan must include two product stewardship strategies as provided in the Policy Plan. Carver County included two of the recommended strategies from the Policy Plan and therefore meets this criterion.

c. The Master Plan includes specific and quantifiable county landfill abatement objectives, based on the objectives in the metropolitan landfill abatement plan, for abating to the greatest feasible and prudent extent the need for and practice of land disposal of mixed municipal solid waste and of specific components of the solid waste stream generated in the county, stated in six-year increments for a period of at least 20 years from the date of the Policy Plan revisions. (p. 3)

d. The Master Plan includes measurable performance standards for local abatement of solid waste through resource recovery and waste reduction and separation programs and activities for the county as a whole and for statutory or home rule charter cities of the first, second, and third class, respectively, in the county, stated in six-year increments for a period of at least 20 years from the date of the Policy Plan revisions.

e. The performance standards in the Master Plan implement the metropolitan and county abatement objectives.

f. The Master Plan includes standards and procedures to be used by the county in determining annually under Minn. Stat. § 473.803, subd. 3 whether a city within the county has implemented the plan and has satisfied the performance standards for local abatement.

g. The above land disposal abatement criteria included in the Master Plan are consistent with the Policy Plan.

3. Oversight.

a. The Master Plan provides oversight over entities delegated by the county to implement the plan and the private sector:

- Retains active oversight over the efforts of the private sector and monitors performance to ensure compliance with the law and the goals and standards in the Policy Plan and the master plan through implementation and enforcement of the County Solid Waste ordinances.
- Continues to meet its responsibilities under the law for ensuring proper waste management, including, at a minimum, enforcing waste management law, providing waste education, promoting waste reduction, and providing its residents the opportunity to recycle waste materials.
- Continues to provide all required reports on the county's progress in meeting the waste management goals and standards of Minn. Stat. chs. 473 and 115A. This includes reporting annually to the MPCA on implementation of the Master Plan, as well as quarterly waste certification reports.
- Carver County does not officially delegate implementation of activities associated with this Master Plan to any other entity. The County uses enforcement of County solid waste ordinances to ensure compliance with related laws.
- Whether the plan outlines accountability measures for solid waste programs delegated to the private sector.

4. Advisory Committee.

a. The Master Plan was prepared with the aid of an advisory and stakeholder committee.

b. Carver County formed a Solid Waste Management Master Plan Stakeholder Group and convened two meetings in the summer and fall of 2017 to obtain input on proposed objectives and strategies. The Stakeholder Group was comprised of city, county, and state representation as well as non-profit organizations, private sector businesses, and citizens. The draft plan was provided to the stakeholder group and they County solicited comments.

CONCLUSIONS OF LAW

- A. The MPCA Commissioner has the authority under Minn. Stat. § 473.803, subd. 1 and 2, to review and to approve the Carver County Solid Waste Master Plan.
- B. Carver County's Solid Waste Master Plan meets the requirements of Minn. Stat. §§ 473.803 and the Policy Plan.
- C. Carver County's Solid Waste Master Plan is consistent with and implements the Policy Plan, 2018-2038, as required under Minn. Stat. § 473.803, subd. 1.
- D. Any findings that might properly be termed conclusions and any conclusions that might properly be termed findings are hereby adopted as such.

ORDER

NOW THEREFORE, pursuant to the authority vested in me by Minn. Stat. §§ 115A.42, 473.149 and 473.803, the Carver County Master Plan is APPROVED.

Dated: 7/30/18


John Linc Stine
MPCA Commissioner

APPENDIX IX: CARVER COUNTY PLAN AMENDMENT REQUEST TO MPCA



Public Services Division
Environmental Services Department
600 E. 4th Street
Chaska, MN 55318-2102

CARVER
COUNTY

October 9, 2018

Minnesota Pollution Control Agency
Attn: Mark Rust
520 Lafayette Road North
St. Paul, MN 55155-4194

Dear Mr. Rust:

Thank you for providing Carver County with the opportunity to discuss proposed revisions to our 2018-2038 Carver County Solid Waste Management Master Plan. We believe the small changes we talked about will assure that our plan is accurate and up to date, reflecting our current strategies and abilities.

To summarize the need for this slight change in our Master Plan: on February 6, 2018, the Carver County Board of Commissioners passed a resolution to submit the draft Plan to the MPCA for approval. That draft Plan included a reference to a brush and yard waste transfer site the County was planning to develop. During the period when the Plan was at the MPCA for review, Carver County continued to study the possibility of creating a new brush and yard waste site in eastern Carver County. However, after further discussion, and while considering feedback received from residents, the County Board made the decision to forgo the construction of a new site and instead chose to direct residents to use one of many private and/or municipal yard waste disposal options that are available in our area. At the same time, it was also determined that brush and yard waste would no longer be accepted at the Carver County Environmental Center after January 1, 2019.

Carver County is pleased to submit a revised Plan to the MPCA for approval that reflects these decisions made by the Carver County Board of Commissioners with respect to the collection and management of brush and yard waste.

The revised language can be found on page 22 in the Existing System chapter of the Plan. No strategies will change based on these slight proposed revisions.

Thank you for the opportunity to revise our 2018-2038 Solid Waste Management Master Plan. It is our belief that the Plan, with the proposed changes, will be a document that better represents a complete vision of the Carver County Board of Commissioners.

Sincerely,

Greg Boe, REHS/MPA
Environmental Services Manager

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APPENDIX X: MPCA LETTER OF PLAN AMENDMENT APPROVAL



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November 29, 2018

Commissioner Gayle Degler, Chair
Carver County Board of Commissioners
600 East 4th Street
Chaska, Minnesota 55318

Dear Commissioner Degler:

Minnesota Pollution Control Agency (MPCA) staff has reviewed the proposed revisions to the 2018-2038 Carver County Solid Waste Management Master Plan. After reviewing the changes to the document, per Minn Stat. 473.803, subd 2, the commissioner approves the amendment to the Carver County Solid Waste Management Master Plan.

The MPCA appreciates Carver County's communication on this issue. We value the relationship with Carver County and look forward to implementation of this plan. Please reach out to Peter Sandhei of my staff at (651) 757-2688 or peter.sandhei@state.mn.us to discuss concerns or questions.

Sincerely,

A handwritten signature in blue ink, appearing to read 'Kirk Koudelka', is written over a light blue horizontal line.

Kirk Koudelka
Assistant Commissioner

Enclosure

KK:PS:cbg

cc: Greg Boe, Carver County
Brad Hansel, Carver County
David Benke, MPCA
Steve Giddings, MPCA
Mark Rust, MPCA
Peder Sandhei, MPCA

