

WASHINGTON COUNTY

WASTE MANAGEMENT MASTER PLAN

2018-2036



Washington
County

Department of Public Health
and Environment

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Acknowledgements

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Prepared by: Washington County Department of Public Health and Environment • www.co.washington.mn.us/publichealth

BOARD OF COUNTY COMMISSIONERS
WASHINGTON COUNTY, MINNESOTARESOLUTION NO. 2017-237DATE November 21, 2017DEPARTMENT Public Health and Environment

MOTION

SECONDED BY

BY COMMISSIONER MironCOMMISSIONER Bigham**Washington County Waste Management Master Plan 2018-2036**

WHEREAS, Washington County is required by Minn. Stat. §115A and §473.803 to revise the county's 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 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 through surveys and interviews; and

WHEREAS, the county established an Ad Hoc Waste Management Planning Committee to provide direction on incorporating the findings from the stakeholder engagement process into the county's plan, per Minn. Stat. §473.803, subd. 4; and

WHEREAS, in order to meet Minn. Stat. §17.135, the county prohibits garbage burning or burying since regularly scheduled pickup of solid waste is reasonably available in the county; and

WHEREAS, the Washington County Department of Public Health and Environment has prepared a revised Washington County Waste Management Master Plan with policies and strategies;

NOW, THEREFORE, BE IT RESOLVED, the Washington County Board of Commissioners adopts the Washington County Waste Management Master Plan 2018-2036 and authorizes the Department of Public Health and Environment to submit the Plan to the Commissioner of the Minnesota Pollution Control Agency for review and approval.

ATTEST:

COUNTY ADMINISTRATOR

COUNTY BOARD CHAIR

YES

NO

MIRON

KRIESEL

WEIK

BIGHAM

KARWOSKI

X
X
X
X
X

Executive Summary

The purpose of the 2018-2036 Washington County Waste Management Master Plan (Plan) is to guide county waste management activities. This revised Plan replaces the 2012-2030 Waste Management Master Plan. The Plan identifies specific opportunities and challenges important to the county and includes strategies to address them.

The Plan was developed with guidance from the Metropolitan Policy Plan 2016-2036 (Policy Plan) adopted by the Minnesota Pollution Control Agency (MPCA) in April 2017. Minnesota statute requires counties in the Twin Cities Metropolitan Area to prepare master plans every six years following the MPCA policy plan. The Policy Plan includes key themes, policies, goals, and strategies with numerical objectives. The seven key themes from the Policy Plan include:

- **Accountability:** Everyone is accountable for meeting waste objectives, not only government.
- **Solid waste management hierarchy:** The hierarchy should guide decision making with emphasis on reduction and recycling.
- **Generator responsibility:** Responsibility for waste management occurs at all levels (personal, corporate, government).
- **Government as a leader:** Government at all levels needs to lead by example.
- **Product Stewardship:** Producers and users of products accept responsibility of design and end-of-life management for products.
- **Private sector initiative:** The private sector has a significant role to play in implementing the waste plans.
- **Environmental benefits:** Solid waste management plays important role in reducing environmental impacts such as greenhouse gas emissions, toxicity, and energy and water use through managing waste higher on the hierarchy.

The Metropolitan Policy Plan also sets new plan requirements which include:

- **Waste Objectives:** The MPCA set revised quantifiable objectives to reduce land disposal of waste through 2036 for Source Reduction & Reuse, Recycling, Organics Recovery, Resource Recovery, and Landfilling. The revised objectives include aggressive targets for source reduction & reuse, recycling, and organics recovery.
- **Sustainable Materials Management (SMM):** The MPCA envisions SMM to inform future planning of waste and materials management in the state and engaged stakeholders.
- **Recyclables and organics capacity:** The Policy Plan proposes the MPCA lead in evaluation of capacity over the duration of the plan, needed to meet revised waste objectives.
- **Resource Recovery/Processing:** The Policy Plan proposes full use of existing resource recovery facility capacity even while waste generation is forecasted to go down if waste objectives for source recycling and recycling are achieved.

This Plan is organized into three chapters.

Chapter I Introduction: Consists of the introduction, plan preparation, and public participation.

Chapter II County Policies: Includes the county's vision, mission, and waste management policies approved by the Washington County Board of Commissioners.

Executive Summary (continued)

Chapter III County Strategies: Describes how the county will assist the region in achieving the regional waste management vision and goals with implementation of the county strategies identified in this Plan. The Plan builds upon a mature waste system where parts of the system are working well and some areas need additional attention.

Specifically, this plan includes strategies to increase recycling and organics recovery in order to achieve the Policy Plan waste objectives and also includes additional opportunities for toxicity reduction. Some of the new areas include:

- Exploring opportunities for residential organics diversion options and yard waste management
- Identifying food waste prevention and donation opportunities
- Sustaining work and assistance to businesses to increase recycling and organics recovery
- Continuing support to cities and townships on residential recycling and organics diversion, waste reduction, and reuse.
- Providing assistance to schools to have strong and sustained reuse, recycling, and organics diversion programs
- Increasing assistance for residential multi-unit housing recycling
- Evaluating service levels for the household hazardous waste program
- Increasing county leadership in waste management for internal operations

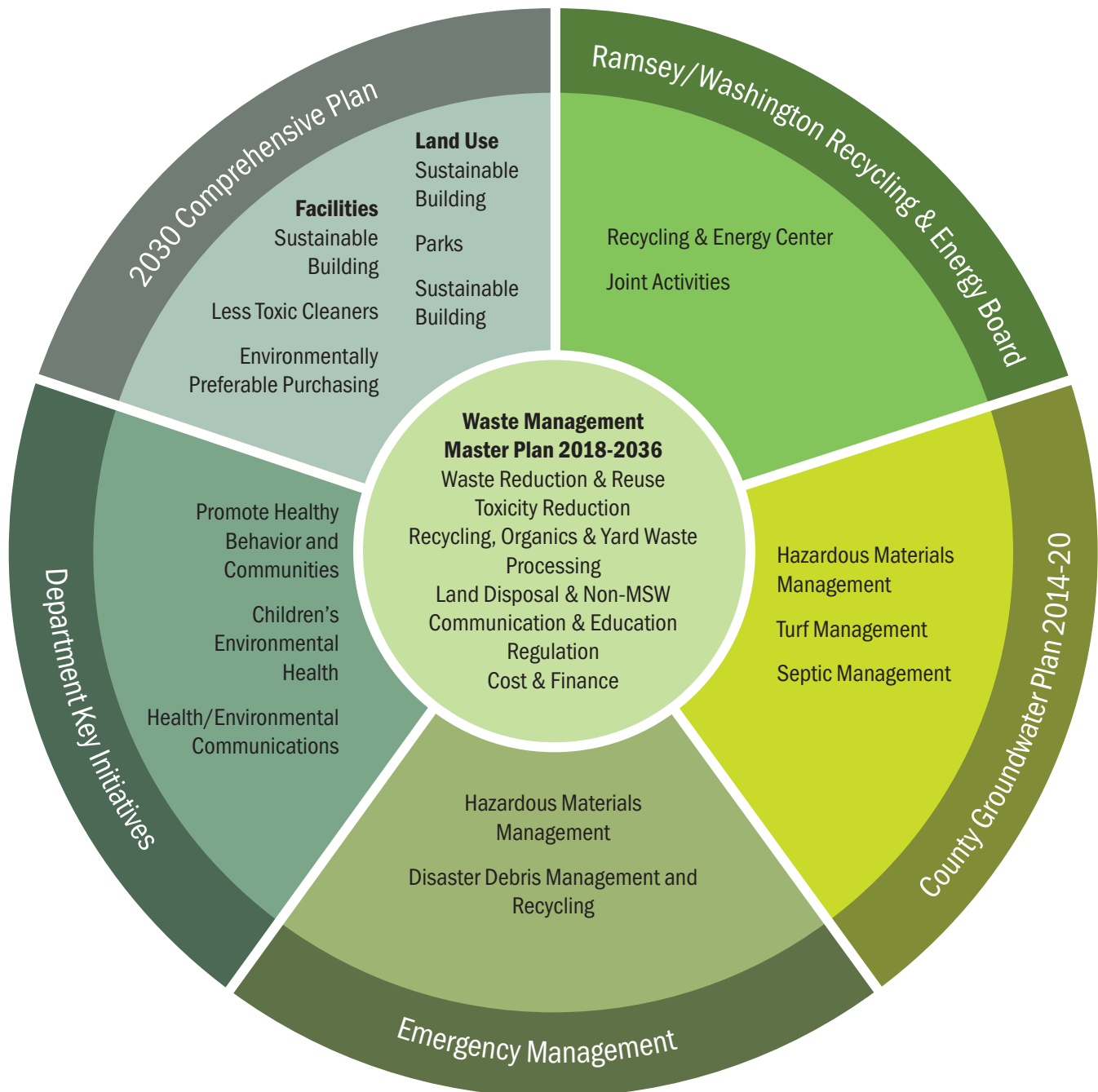
The table below lists the Policy Plan waste objectives in percentages for the MSW management system for 2016-2036. Objectives were not set for Toxicity Reduction or NonMSW.

Management Method	2015 Region Actual	2020	2025	2030	2036
Source Reduction & Reuse	NA	1.5%	3%	4%	5%
Recycling	39%	51%	54%	60%	60%
Organics	10%	12%	14%	15%	15%
Resource Recovery/ Processing	28%	35%	31%	24%	24%
Max Landfill	23%	2%	1%	1%	1%

Chapter 1: Introduction

The metropolitan counties are required by the Minnesota Waste Management Act, Minnesota Statute 473.803, to revise their waste management plans, following the Minnesota Pollution Control Agency's (MPCA) adoption of the Metropolitan Solid Waste Management Policy Plan (Policy Plan). The MPCA adopted the Policy Plan on April 6, 2017. The Washington County Waste Management Master Plan 2018-2036 (Plan) was adopted by the Washington County Board of Commissioner on November 21, 2017 and adopted by the MPCA on June 22, 2018.

Figure 1: Key connections between the Washington County Waste Management Master Plan and other major county plans and efforts



Chapter 1: Introduction

PROTECTING OUR COMMUNITIES

The Washington

County Waste

Management Plan

is an important

tool in protecting

public health and

the environment.

Plan Preparation

The Washington County Waste Management Master Plan 2018-2036 replaces the 2012-2030 Plan adopted by the Washington County Board of Commissioners on March 27, 2012. This new plan guides waste management activities until 2023 while continuously striving to achieve quantifiable objectives to reduce land disposal of waste through 2036. This is the county's sixth waste management master plan since 1980. Plan revisions occur every six years.

The Plan is an important tool in protecting public health and the environment by establishing policies and strategies to reduce both the amount and the toxic character of waste which impacts occupational health risks, environmental risks related to the disposal of waste, and health risks related to environmental emissions.

Development and implementation of the Plan includes continued partnership with Ramsey County through the Ramsey/Washington Recycling & Energy Board (R&E Board). This partnership brings together the two counties with common goals to collaborate, save financial and staff resources, and to focus efforts in achieving the state's waste objectives. The counties have been working together since the early 1980's on solid waste management. This partnership was strengthened through its purchase of the Recycling & Energy Center (R&E Center), a refuse derived fuel (RDF) facility in Newport, MN, and its renewed commitment to waste as a resource. The counties will continue to partner in exploring the potential of emerging technologies to extract additional recyclables from the trash until they can be separated at the source by the generator (helping the counties move closer to state 75% recycling goal). In addition, moving from combustion of RDF to bio-based fuel or chemical production helps the counties move to more financially sustainable solutions. The counties monitor these technologies and evaluate the environmental, economic, and social impacts, and expect to move forward with technology decisions during the implementation of this revised plan.

Chapter 1: Introduction

Public Participation

The Plan was prepared by staff from the Washington County Department of Public Health and Environment, with direct input through a stakeholder engagement process. The engagement effort gathered a significant amount of information from a variety of stakeholders. Over 700 stakeholders participated in the outreach effort. Nearly 550 residential households responded to a survey, and 120 businesses responded to a survey. Fourteen (14) property managers, school districts, and waste haulers, and 22 local government recycling staff were surveyed. An Ad Hoc Waste Management Planning Committee (WMPC) was formed for the purpose of the Plan revision. The WMPC met twice in 2017 to provide input on how the county could use the findings from the community engagement activities. The Ad Hoc WMPC was comprised of representatives from cities, townships, the waste industry, the state, and a resident of Newport, which is home to the R&E Center.

The Plan was developed with guidance from the 2016-2036 Policy Plan adopted by the MPCA in April 2017. The Policy Plan includes key themes, policies, goals, and strategies with numerical objectives. The seven key themes from the Policy Plan include:

- 1. Accountability:** Everyone is accountable for meeting waste objectives, not only government.
- 2. Solid waste management hierarchy:** The hierarchy should guide decision making with emphasis on reduction and recycling.
- 3. Generator responsibility:** Responsibility for waste management occurs at all levels (personal, corporate, government).
- 4. Government as a leader:** Government at all levels needs to lead by example.
- 5. Product Stewardship:** Producers and users of products accept responsibility of design and end-of-life management for products.
- 6. Private sector initiative:** The private sector has a significant role to play in implementing the waste plans.
- 7. Environmental benefits:** Solid waste management plays an important role in reducing environmental impacts such as greenhouse gas emissions, toxicity, and energy and water use through managing waste higher on the hierarchy.

The Policy Plan also sets new plan requirements which include:

- **Waste Objectives:** The MPCA set revised quantifiable objectives to reduce land disposal of waste through 2036 for Source Reduction & Reuse, Recycling, Organics Recovery, Resource Recovery, and Landfilling. The revised objectives include aggressive targets for source reduction & reuse, recycling, and organics recovery.
- **Sustainable Materials Management (SMM):** The MPCA envisions SMM to inform future planning of waste and materials management in the state and engaged stakeholders.
- **Recyclables and organics capacity:** The Policy Plan proposes the MPCA lead an evaluation of capacity over the duration of the plan, which is needed to meet revised waste objectives.
- **Resource Recovery:** The Policy Plan proposes full use of resource recovery facility capacity even while waste generation is forecasted to go down if waste objectives for source recycling and recycling are achieved.

Chapter II: County Policies

Washington County

Vision A great place to live, work and play...today and tomorrow.

Mission Providing quality services through responsible leadership, innovation, and the cooperation of dedicated people.

Goals

- To promote the health, safety, and quality of life of citizens
- To provide accessible, high-quality services in a timely and respectful manner
- To address today's needs while proactively planning for the future
- To maintain public trust through responsible use of public resources, accountability, and openness of government

Values

- Ethical: to ensure public trust through fairness, consistency, and transparency.
- Stewardship: to demonstrate tangible, cost-effective results and protect public resources.
- Quality: to ensure that services delivered to the public are up to the organization's highest standards.
- Responsive: to deliver services that are accessible, timely, respectful, and efficient.
- Respectful: to believe in and support the dignity and value of all members of this community.
- Leadership: to actively advocate for and guide the County toward a higher quality of life.

Department of Public Health and Environment

Mission Protect, promote, and improve the community's health and the environment.

Vision We will be exceptional leaders and partners as we engage and inspire others to achieve healthy communities and a sustainable environment.

Shared Values

- Collaboration: We always seek to work with others.
- Well-informed Decisions: We consider all aspects of the issue before we make decisions.
- Quality: We aim to meet high standards of performance.
- Innovation: We use creativity to make our services better.
- Integrity: We are professionals who are respected, accountable, and trusted.

Goals

- Promote healthy communities and eliminate health disparities.
- Assure the quality and accessibility of health services.
- Prevent the spread of infectious disease.
- Make environments safe and healthy.
- Assure a strong public health system.
- Prepare for, respond to, and assist communities in recovery from disasters.

Chapter II: County Policies

Overarching Waste Management Master Plan Policies



The policies help to ensure that waste management services are available and accessible to all residents, businesses, and institutions and emphasize prevention of future environmental and financial liabilities.

These policies establish the role of the county and primary stakeholders for achieving the objectives in the Policy Plan 2016-2036 and identify the priority of county efforts and funding in the waste management system. Stakeholders to the Policy Plan and County Plan include public entities (cities, townships, and schools), residents, business, and waste service providers. The policies help to ensure that waste management services are available and accessible to all residents, businesses, and institutions and emphasize prevention of future environmental and financial liabilities.

1. The county will provide environmentally responsible leadership through a variety of environmental programs by showing awareness of environmental consequences in its actions and by seeking to protect land, air, water and other natural resources and the public health.
2. The county's waste programs will strive to motivate behavior change by residents, business, and public entities to meet state waste objectives.
3. The county affirms the ongoing need for an integrated solid waste management system following the state's order of preference:
 - a. waste reduction and reuse;
 - b. waste recycling;
 - c. composting of source-separated compostable materials, including, but not limited to yard waste and food waste;
 - d. resource recovery through mixed municipal solid waste composting or incineration; and;
 - e. 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
 - f. land disposal which produces measurable methane 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.
4. The county waste program is part of a comprehensive system which uses strategies of coordination, cooperation, and collaboration, as appropriate with other governmental entities and the private sector.
5. Education about sound environmental practices related to waste management is a key element of developing and maintaining a sustainable community.
6. Preference is given to the private sector undertaking waste management activities to the extent services are meeting the needs of the community.
7. Environmental programs impacting state waste objectives include, but are not limited to solid waste and hazardous waste management, groundwater protection and management, and energy management.

Chapter II: County Policies

Overarching Waste Management Master Plan Policies (continued)

8. The county supports a product stewardship approach that creates effective, flexible, producer-led reduction, reuse, and recycling programs to deal with a product's lifecycle impacts from design through end-of-life product management so that state and local governments do not have primary responsibility for financing such efforts.
9. The county and public entities will consider factors such as health, safety, and the environment when making purchasing decisions and look for opportunities to include these considerations in purchasing decisions.
10. The county recognizes that it is the responsibility of everyone (residents, businesses, and public entities) in the county to achieve state objectives.
11. [N] The county supports moving to a measurement system focused on the goal of waste diversion from land disposal for better alignment with the waste hierarchy in the Waste Management Act and waste system performance.
12. [N] The county supports the MPCA's plans to make timely and consistent policy decisions, especially regarding new technology. Ramsey and Washington Counties are exploring new technologies to improve processing operations at the R&E Center where these new technologies can produce energy, fuels, and compost and/or recover recyclables, in addition to reducing greenhouse gas emissions.
13. [N] The county encourages the MPCA to consider the county's contributions to reaching the goals set out in the MPCA Policy Plan and examine possible incentives for counties exceeding waste objectives for landfill diversion.
14. [N] The county supports the Minnesota Department of Health's Triple Aim of Health Equity and will work to develop waste management programs and services that do not prevent individuals or communities from reaching their full health potential.
15. [N] The county supports the MPCA's Environmental Justice policy and will "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."

The strategies on the following pages describe the actions needed to reach the Municipal Solid Waste (MSW) Management System Objectives identified in the Policy Plan 2016-2036.

Throughout the plan, the following symbols are used to note the strategies that are new initiatives the county will address in the next size years versus strategies that will be continued from the previous plan, and those that will be continued, but will be enhanced.

[N]: New

[E]: Enhanced

[C]: Continued

In addition, where applicable or required by the policy plan, proposed completion dates over the course of the six year plan are noted.

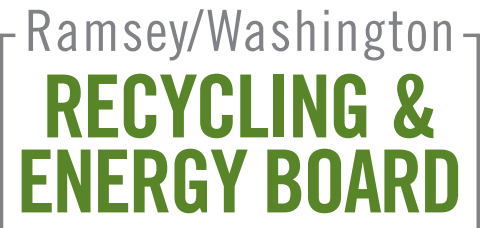
Chapter II: County Policies

[N] Governance

Ramsey and Washington counties have worked together since the early 1980's on solid waste management. The counties envision this relationship continuing and strengthening through their respective waste management master plans. This will include work through the R&E Board, as well as additional coordination between the counties.

Recycling & Energy Board Vision

Ramsey and Washington counties are working together to find new technologies to use in the coming 20 to 30 years to process what is left in trash from homes and businesses and get the most value out of what is disposed even with increasing recycling and reducing waste. Additionally, these new technologies can help increase good jobs locally and protect taxpayers and the environment.



Commissioners in both counties recognize the need to do better and move trash from being a drain to instead a resource with value. The counties want to do this by extracting more recyclables, and use trash to make energy more efficiently and make materials to be used by others to manufacture consumer goods.

Ramsey and Washington Counties Partnership Policies

1. Shared principles for collaboration or joint administration of waste management programs and activities should:

- a. Be designed and communicated in a manner that focuses on seamless services that are not confusing to the public;
- b. Be consistent with both counties' vision, mission, and goals;
- c. Enhance, not diminish, the quality and effectiveness of the individual county programs;
- d. Ensure accountability of the two counties and be consistent with their respective Master Plans;
- e. Provide general efficiencies in the use of county resources;
- f. Be flexible so the program can serve urban, suburban, and rural areas.

2. The counties will continue to seek opportunities to work together on waste management programming through multiple ways:

- a. As joint activities formally delegated to the R&E Board (such as its business assistance program);
- b. Through operational agreements outside the R&E Board (such as joint procurement of products and services);
- c. Through reciprocal use for independently operated programs (such as household hazardous waste); or
- d. Through a purchase of service agreement.

The counties will develop a process for identifying, analyzing, and deciding on program alignment and joint activities.

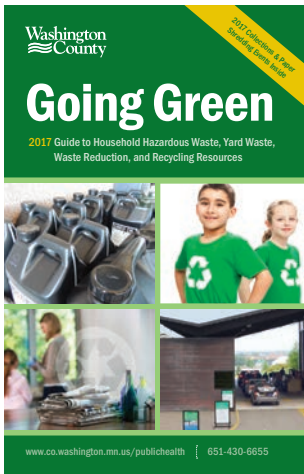
3. The counties will continue to work together through the R&E Board to promote and implement the vision for waste management in the two counties, established during the purchase of the R&E Center.
4. The R&E Board will continue to own, operate, and improve the R&E Center as outlined in the Ramsey and Washington Counties Joint Waste Designation Plan.
5. The R&E Board will continue its shared programming for those programs in place in 2017.
6. The R&E Board will continue to evaluate and assess the governance structure and size of the R&E Board to assure effectiveness.

Regional Focus

The county participated in the Solid Waste Management Coordinating Board (SWMCB) from its inception in the early 1990's to its end in 2017. At the time of the master plan revision, new mechanisms for working together were emerging, and opportunities continue to develop. The county will work with other metropolitan counties on solid waste issues when joint efforts further the county's interests in waste management. Two joint efforts that the county is committed to include:

- A regional hauler licensing program
- Reciprocal use for household hazardous waste facilities. (Regional MPCA requirement)

Chapter III: County Strategies



Washington County
Going Green guide.

This community
education resource is
a guide to Household
Hazardous Waste,
Yard Waste,
Waste Reduction,
and Recycling.

Communication & Education

POLICIES

1. The county will develop and provide county-wide communication and outreach on environmental programs, services, and related waste issues.
2. Local units of governments are responsible for the development and distribution of information on their own city/township waste programs and distribution of county-wide messages on county environmental programs and services, and related waste issues.
3. [N] The county, along with Ramsey County, takes a broad environmental view to engage stakeholders about the impact of the solid waste management system on resource conservation, and the quality of air, water, land, and the indoor environment.

STRATEGIES

Washington County will:

1. [N] With Ramsey County, participate with regional messaging forums when appropriate, to ensure messages are compatible and consistent with each county's efforts and R&E Board programs. (MCPA regional requirement) (by 2017)
2. [N] With Ramsey County, through the R&E Board, conduct outreach, technical assistance, consultation, and education for joint programs and services to enhance understanding of the integrated waste system, including waste processing. (ongoing)
3. [N] With Ramsey County, through the R&E Board, communicate and coordinate with local haulers on R&E Center activities. (ongoing)
4. [N] With Ramsey County, explore opportunities to develop partnerships to assist with outreach and education. (by 2020)
5. [N] Support community-based social marketing campaigns as appropriate, including, but not limited to, the Ad Council/Natural Resources Defense Council's Save the Food campaign, to educate residents on ways to reduce the amount of food wasted. (organics MPCA requirement) (by 2020)
6. [E] Develop and deliver communication and education efforts based on best practices and that are appropriately designed, culturally specific, accountable, effective, and evaluated, and include a range of tools, including social media, applicable to each stakeholder audience, and coordinate among department programs. (ongoing)
7. [C] Inform and educate stakeholders (including county employees) about county programs and services, the County Environmental Charge (CEC), increase knowledge and understanding of the integrated waste management system, and motivate behavior change. (ongoing)

Chapter III: County Strategies

Communication & Education (continued)

STRATEGIES (continued)

8. [C] Work with public entities, community groups, other county programs, such as the University of Minnesota Extension Program, and waste haulers to develop, distribute, and evaluate county resources to increase awareness and motivate behavior change in waste management based on best practices. (ongoing)
9. [C] Partner with other entities to conduct education programs to schools and community groups and events to teach about the integrated waste management system and related activities. (ongoing)
10. [C] Develop and promote based on best practices the use of education tools such as learning kits, and use interactive informational displays, peer training and other “train the trainer” opportunities to teach about waste management and related activities. (ongoing)
11. [C] Coordinate with the county’s groundwater plan to provide technical assistance and education on proper storage, and disposal of lawn chemicals, and provide information on less toxic/hazardous alternatives and best practices to minimize or eliminate toxic materials used in turf management, and other related issues. (ongoing)

Chapter III: County Strategies

Cost & Finance

POLICIES



The county will make effective use of public resources and allocate costs equitably to waste generators, while assuring maximum environmental protection.

1. The county will make effective use of public resources and allocate costs equitably to waste generators, while assuring maximum environmental protection.
2. Waste management costs should be visible, based on volume, and be paid directly by the generator.
3. The county will continue to use the CEC as a funding tool for environmental efforts and programs.
4. The county will continue to manage and use state funding as appropriate in programs relating to the integrated waste management system, including Select Committee on Recycling and the Environment (SCORE), and Local Recycling Development Grant (LRDG).
5. The use of the solid waste fund/reserve balances will be pursuant to state law Minn. Stat. § 473.811 subd. 9. The fund balance will be used for one-time start-up costs, not ongoing operational needs, unless the use of the funds provides a significant opportunity for meeting environmental goals. Projects funded shall have a specific and defined transitional period.
6. The county will fund waste regulation programs primarily by licensing fees.
7. Amendments to the Solid Waste Ordinance that change the CEC rates will include a 90-day notice period for generators and haulers before the rate change becomes effective, to provide the opportunity to adjust billing systems.
8. [N] The county will provide approval of Joint Activities Budget and CEC funds for the R&E Board in accordance with R&E Board Joint Powers Agreement, Section VII and Bylaws Article V, Section II.

STRATEGIES

Washington County will:

1. [C] Continue to evaluate the amount of funds generated as a result of the CEC. (ongoing)
2. [E] Allocate county staff time to reach MPCA policy plan goals for reduction and reuse in addition to recycling, including organics. (SMM MPCA requirement) (ongoing)
3. [N] Identify opportunities to incentivize stakeholders (such as but not limited to tax rebates, reduced program fees) in reaching county waste management goals in waste reduction and reuse, recycling, and organics diversion.

Chapter III: County Strategies

Land Disposal & NonMSW Management

POLICIES



The county will conduct waste composition studies to measure the amount of construction, demolition, industrial, and bulky waste, and possible other NonMSW materials not diverted from landfills, and share that information to assist in targeting materials for management higher on the hierarchy.

1. The county will ensure that all MSW generated by county activities is processed, and require all public entities to process MSW generated as a result of their activities or waste arranged for on behalf of residents.
2. The county and public entities will be leaders in NonMSW management activities through continuously improving internal operations to ensure proper management of NonMSW.
3. The private sector is responsible for providing management facilities for NonMSW.
4. The county may provide technical and financial assistance to facilitate additional management opportunities for NonMSW.
5. The county will use the Minnesota Sustainable Building Guidelines, or other industry best practices for green building, in all future county building and major renovation projects in order to reduce energy costs, improve indoor air quality, and reduce or recycle waste created from construction activities. (NonMSW MPCA requirement)
6. [N] The county supports the management of construction and demolition waste according to the waste hierarchy to reduce health, safety and property risks associated with construction and demolition waste. (NonMSW MPCA requirement)

STRATEGIES

Washington County will:

1. [N] With Ramsey County, as part of the R&E Center waste composition studies, measure amount of construction, demolition, industrial, and bulky waste, and possible other NonMSW materials and other materials not diverted from landfills, and share that information to assist in targeting materials for management higher on the hierarchy. (MPCA NonMSW waste comp & measurement requirement) (by 2022)
2. [C] Ensure all MSW collection contracts for waste generated from county operations require haulers to deliver all MSW collected in the county to a processing facility. (ongoing)
3. [C] Based on existing county board resolution, use the Minnesota Sustainable Building guidelines or other green building best practices and identify ways to improve implementation of practices as new construction or remodeling projects are planned, taking into consideration energy efficiency, conservation, and environmental impacts. (NonMSW MPCA requirement) (ongoing)
4. [C] Require public entities to meet Minn. Stat. §115A.471 to ensure MSW is delivered to a processing facility via county contract and grant requirements and regular communication. (ongoing)
5. [C] Assist in the management of NonMSW and related solid waste generated from emergency situations in accordance to the county's emergency operations plan. (ongoing)

Chapter III: County Strategies

Land Disposal & NonMSW Management (continued)

STRATEGIES (continued)

6. [N] Work with other entities to promote proper, convenient, and affordable management, including applicable reuse options of bulky materials in order to reduce illegal dumping and burning and nuisance situations. With regard to bulky waste, the county: (Rec Mgmt MPCA requirement)
 - a. Supports a product stewardship approach in which some bulky items are best managed through shared responsibility by manufacturers, distributors, retailers, and consumers; (ongoing)
 - b. Will process bulky waste items, as delivered by waste haulers, that can be processed by equipment at the R&E Center; (ongoing)
 - c. Will work with cities/townships that provide clean-up events or separate waste collection programs for residents to ensure bulky waste items are separated and managed appropriately and in accordance with the waste management hierarchy if receiving grants funds; (ongoing)
 - d. Will work with cities/townships regarding optimum methods for collection and proper disposal of major appliances, electronics, tires and other bulky waste items and possible reuse opportunities; and (ongoing)
 - e. Partnering with Ramsey County, will work with the mattress industry, including manufacturers, wholesalers and retailers, as well as non-profit entities to foster implementation of a mattress recycling program.
7. [N] In cooperation and partnership with municipalities, assess how construction and demolition materials are managed from community development projects. (NonMSW MPCA requirement) (by 2018)
8. [N] In cooperation and partnership with municipalities, evaluate development of a pre-demolition inspection program based on best practices and work to ensure building materials containing hazardous properties, including asbestos, are properly identified, removed and managed from structures slated for renovation or demolition. (NonMSW MPCA requirement) (by 2018)

Chapter III: County Strategies

Performance Measurement

POLICIES



The county continues to strive towards a 75% recycling goal.

1. The county values performance measurement and program evaluation as essential in developing and providing environmental programs and related activities and also in assessing progress in meeting state waste objectives.
2. The county supports improvements in collecting solid waste data and will work with the region and the MPCA to implement recommendations from the SCORE Implementation Plan, April 2011.
3. The county values continuous improvement and may modify strategies throughout the plan as improvements are needed.
4. [N] The county supports, with Ramsey County, moving from measuring performance of the solid waste system from tonnage-based metrics to landfill diversion measures (also known as waste hierarchy measure) as an indicator of progress in meeting statutory goals and will adopt such measures as the primary means of measuring system progress while still working towards prioritizing management of waste higher on the hierarchy.
5. [N] The county will, with Ramsey County, research and evaluate alternative metrics to measure broader solid waste management policy goals, including but not limited to environmental justice, resource value and toxicity reduction. The counties support the use of performance measurement to make continuous and ongoing improvements in continue systems and programs.

STRATEGIES

Washington County will:

1. [N] With Ramsey County, through (R&E Board), conduct waste composition studies at the R&E Center to inform program improvements. (NonMSW MPCA requirement) (ongoing)
2. [N] With Ramsey County, align elements of their solid waste data collection programs where applicable and identify ways to implement data collection and analysis together. (by 2020)
3. [N] Provide required data to the State of Minnesota for the purpose of measuring progress toward achieving the objectives set forth in the MPCA's Policy Plan and depend on reliable data collected by the MPCA for portions of the reporting. The county will encourage recyclers and haulers to report to the MPCA, and should reliable data not be available from the MPCA, the county will use calculated tonnages in reporting as appropriate.
4. [N] Work with other public entities and the waste and recycling industry to identify better performance measures beyond tonnage-based metrics to indicate recycling and organics management performance. (ongoing)
5. [N] With Ramsey County, work jointly with the MPCA, and other willing metropolitan counties to ensure consistent data collection. (ongoing)
6. [N] Support state law that mandates recycling in businesses (Minnesota Statutes, section 115a.551, subdivision 2a) and will continue to make businesses aware of the law. Should evaluation of private sector recycling show there is not significant progress towards enhancing recycling by 2023, Ramsey County and Washington County will jointly explore the local use of regulatory tools to enhance private sector recycling. (Rec Mgmt MPCA requirement)

Chapter III: County Strategies

Performance Measurement (continued)

7. [N] Evaluate progress in meeting the state's policy plan objectives for residential organic waste management as well as the level of service availability and the status of the market for organic waste by 2025 and consider local use of regulatory tools if significant progress is not made.
8. [N] Research, develop, and implement performance measures for schools to measure results of their waste management changes and improvements. (by 2020)
9. [C] Use the county's municipal residential recycling continuum and their annual work plans for municipalities to measure progress toward achieving recycling objectives.
10. [N] Research and consider alternatives to tonnage metrics to capture all environmental outcomes from changes in the waste management system such as greenhouse gas emissions. (by 2023)
11. [C] Use data from its regulatory compliance programs to assist in regulation of solid and hazardous waste. (ongoing)

The county is committed to integrating performance management and continuous improvement into its waste programs. Performance management provides a framework for regular collection, analysis, and reporting of performance measures to track resources used, work produced, and specific results achieved.

The county will utilize Results Based Accounting (RBA) to determine impacts from implementation strategies and programs generated from the plan. RBA considers both population and performance accountability, and includes specific measureable outcomes. The tool will be used where applicable as strategies are implemented, on a project-by project basis and will be reviewed regularly.

PERFORMANCE MEASUREMENT TOOL

	Quantity	Quality
Effort	How much did we do (#)? What did we do? How much service did we deliver?	How well did we do it (%)? How well did we deliver service?
Effect	Is anyone better off (#)? How much change for the better did we produce? What quality of change for the better did we produce?	
Headline Performance Measures Those measures used to present or explain a program’s performance to policy makers or the public.		
Secondary Measures All other measures for which data exists. These measures will be used to help manage the program.		
Data Development Agenda Measures not available, but desired, listed in priority order.		

The county will also continue to report county report requirements such as the SCORE Report and other various annual reports, and will provide the additional measurements identified below to assess progress on county strategies.

Chapter III: County Strategies

Key Plan Measurements

County Reporting Requirements

By state law, the county is required to submit progress updates to the MPCA through a variety of annual reports. These include:

Select Committee on Recycling and the Environment (SCORE) Report/Survey

The county annually provides data on SCORE revenues and expenditures, amount of solid waste generated and recycled, and information on recycling and waste reduction programs. This report provides trends as well as measures of the county's recycling efforts.

Certification Report

The county is required to annually report the quantity of waste generated in the county that is not processed prior to transfer to a disposal facility, reasons waste not processed, strategy for ensuring processing of waste including a timeline to implement, and progress by the county in reducing amount of unprocessed waste.

Local Recycling Development Grant (LRDG) Report

The county annually must report on expenditures and activities under the program and any proposed changes in its recycling implementation strategy or performance funding systems.

Annual Master Plan Report

A report to support the new objectives in the Policy Plan and the county master plans and ensure consistency in reporting and tracking progress towards the objectives.

Chapter III: County Strategies

Processing



Partnering with Ramsey County through the Recycling & Energy Board, the county is pivoting from viewing trash as a waste to instead a resource with value both to the local economy and the environment.

The Washington County Board of Commissioners approved the following processing policies and strategies on August 16, 2016 in preparation for the Ramsey and Washington Counties Joint Waste Designation Plan. These policies and strategies have been modified only when necessary. The Joint Waste Designation Plan and the 2016 Amendment to the previous Solid Waste Management Master Plan is included as Appendix G.

POLICIES

1. Consistent with the State hierarchy, Washington County affirms processing of waste, for the purpose of recovering energy and recyclable and other beneficially useful materials, as the preferred MSW and non-MSW management method over landfilling for waste that is not reduced, reused, or separately recycled or composted. This policy applies both to waste generated throughout the county and specifically to MSW generated by public entities including contracts for organized collection of solid waste. Pursuant to State law, public entities in Washington County will assure that MSW that they generate or contract for is processed rather than land disposed.
2. Washington County supports the processing of waste in a manner that encourages waste reduction, reuse, or recycling, including the separate management of organic waste.
3. Through the R&E Board, Washington County shall jointly own with Ramsey County the R&E Center in Newport, MN.
4. In making decisions under public ownership of the R&E Center, Washington County will apply the following guiding principles:
 - a. Plan for a 20-30 year horizon;
 - b. Build on the current system and allow changes in processing to emerge over time;
 - c. Assure flexibility;
 - d. Manage risks; and
 - e. Pivot the view from “waste” to “resources” to add value to the local economy and environment.
5. Washington County will implement a waste designation ordinance, to assure delivery of all waste acceptable at the R&E Center that is generated in Washington County.

STRATEGIES

Washington County will:

1. With Ramsey County, coordinate resource recovery activities through the R&E Board.
2. With Ramsey County, continue to work cooperatively on specific waste management issues through a joint powers agreement to enhance the efficiency of waste management services and assist in achieving regional goals in processing in the East Metro area.
3. Inform and work with municipalities, waste generators, and haulers regarding methods to reduce delivery of unacceptable or non-processible materials to the R&E Center.

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Processing

4. Work cooperatively with the MPCA as the State enforces provisions found in Minn. Stat. §473.848, requiring waste to be processed before land disposal. Washington County adopts the MPCA criterion for determining when MSW is unprocessable. That criterion is found in Appendix D of the Policy Plan, and reads, in part: “TCMA mixed MSW is unprocessable when all reasonably available capacity within the TCMA processing system is fully utilized at 100% of its operating capacity.”
5. Continue to identify, evaluate, and explore new processing opportunities, including technologies to enhance recycling.
6. Work with public entities (as defined by Minn. Stat. §115A.471) and the MPCA to ensure MSW is delivered to the Recycling and Energy Center including evaluating the amount of MSW generated by public entities, and the volume delivered for processing.
7. Prepare a Joint Designation Plan with Ramsey County, and follow the process set forth in State law to plan for and implement designation of solid waste.

EMERGING TECHNOLOGIES

The R&E Board has been exploring new technologies to complement processing operations at the R&E Center. These new technologies extract more value out of trash to increase recycling and reduce the amount of trash thrown away. These new technologies can help produce energy and fuels, make compost or harvest materials that then can be used in the creation of consumer products. New technologies can help reduce the amount of carbon and methane gas produced, thereby reducing harmful contributions to climate change.

RAMSEY AND WASHINGTON COUNTY EMERGING TECHNOLOGIES POLICIES

1. Ramsey and Washington Counties will continue work as identified in its Scope for Resource Management, an integrated vision of recycling, organics and processing. The Scope strongly supports the waste hierarchy and the food waste hierarchy in managing waste higher on the hierarchy. As described in the August 2016 MPCA-approved Washington County Amendment Number 1 to the Solid Waste Master Plan, the Scope for Resource Management includes:
 - a. Increased source separation efforts for recycling and organics from residential and non-residential waste generators;
 - b. The use of mixed waste processing to recover some recyclables and organics that remain in mixed municipal solid waste;
 - c. Organic waste being used as a feedstock for anaerobic digestion; and
 - d. A transition from using refuse derived fuel (RDF) for electrical generation to using RDF for gasification to produce transportation fuels and other products.
2. Ramsey and Washington Counties will continue evaluation of various mixed waste processing technology solutions as well as procure and install them at the R&E Center if they deem the projects environmentally and financially feasible.
3. Ramsey and Washington Counties will share information, learnings and research on emerging and alternative technologies with the MPCA and other interested parties to help raise understanding, address concerns, and prevent regulatory roadblocks.
4. Ramsey and Washington Counties support the use of anaerobic digestion (AD) for the processing of organic waste separated at the source and through mixed waste processing and for the MPCA to quickly develop clear regulatory pathways for its implementation. AD implementation in the Twin Cities region will be critical for ensuring sufficient capacity exists for organics processing. (Organics mgmt. & Trad Rec Mar & Emerging Tech MPCA requirement)

Chapter III: County Strategies

Recycling, Organics, & Yard Waste

POLICIES



Sorting table
used in school
cafeterias

Recycling and Organics

1. The county places a priority on maximizing recycling and organics opportunities in all county operations. The county and public entities (cities, townships, and schools) will be leaders in internal recycling and organics activities through continuously improving their own operations.
2. Local units of government are responsible for residential recycling and organics programs including multi-family housing and for assuring the availability of recycling service for all residents.
3. The county supports cities/townships partnering to coordinate or consolidate efforts to provide recycling opportunities and increase recycling and organics participation and quantities collected.
4. The county will provide public education and information, planning and evaluation, regulation, financial incentives, technical assistance, and consultation to businesses, schools, and cities/townships to facilitate recycling and organics opportunities, and will work with public entities to assure these opportunities are maximized.
5. The county will use the Environmental Protection Agency's (EPA) food waste management hierarchy as guidance in making policy decisions about organic waste.
6. [N] The county will work with local partners, private haulers and recyclers, the R&E Board, and other counties to divert organic materials from the residential waste stream using a variety of organics management methods. This will be done in a manner that ensures equity in the provision of service and that all residents paying for service are aware of and have access to the service.
7. [N] The county supports the MPCA leading organics and recycling market development. (Organics Market dev & Recycling/traditional market MPCA requirement)

Yard waste

8. [N] The county will ensure yard waste management options are conveniently available for residents.

STRATEGIES

Washington County will:

1. [N] Develop residential organics drop-off services and based on county board and community support, incorporate and implement as part of the county's current yard waste evaluation or other opportunities, and continue to monitor other residential organics collection methods. (by 2020)
2. [N] With Ramsey County, through the R&E Board, continue to improve food waste management based on best practices such as through food waste prevention, support food-to-people partnerships, and including but not limited to, continued support for local food donation programs. (organics mgmt. MPCA requirement & SR requirement) (by 2022)

Chapter III: County Strategies

Recycling, Organics, & Yard Waste

3. [N] As part of an evaluation of effective ways to collect organics, with Ramsey County, through the R&E Board, and private haulers and transfer stations, evaluate residential collection methods based on best practices, such as the use of durable compostable bags co-collected with MSW as a means to collect source separated organics. (organics MPCA requirement) (by 2020)
4. [N] Work with Ramsey County to develop appropriate engagement strategies and identify resources and assistance needed by multi-unit dwellings (MUD), to include but not limited to:
 - a. Improve recycling based on best practices for residents living in multi-unit dwellings, by working with property managers and building owners, to ensure residents have access to recycling and improved management of other wastes, such as reuse options for bulky waste. (December 31, 2019)
 - b. Identify partnership opportunities and professional organizations to participate in the R&E's business partnership program as a way to ensure all multi-unit dwellings property managers and owners are reached and served. (ongoing)
 - c. Working with cities/townships, develop standards and explore a certification program for multi-unit dwellings based on best management practices for recycling services. (by 2023)
5. [N] With county regulatory compliance programs, engage businesses and institutions, special event planners, and: (by 2023)
 - a. Connect resources (and incentives) on programs and services to aid establishments in waste management, recycling, waste reduction, reuse, and food waste education on reduction and recycling (including food establishments, schools, special event coordinators and food vendors).
 - b. Obtain baseline information on waste management practices and identify barriers to implementing improvements.
 - c. Re-examine incentives and methods for new establishments to encourage establishment of organics recycling and have building designs to include space and enclosures before permit approve or credit for organics recycling.
 - d. Work with event organizers and public entities to encourage implementation of best management practices for recycling and organics management.
 - e. Conduct ongoing assessments to determine sustainability of improvements made such as by surveys or site visits.
 - f. Assist schools in awareness and understanding of rules and regulations pertaining to reuse of uneaten food to reduce food waste.
6. [N] Assess opportunities to partner or share information and resources with the county's community development agency in engaging businesses, senior housing, multi-unit property developers, owners, and managers. (by 2020)
7. [E] Review county department ordinances and potential regulatory impacts such as the county food code ordinance or hazardous waste ordinance to connect waste and recycling goals where applicable when they are revised. (ongoing)
8. [N] Collaborate with the county community health programs, Ramsey County as applicable, and other community partners, such as food shelves to: consider how to promote reduction of wasted, unwanted, or surplus food grown in community gardens or backyard gardens that can be safely collected and shared to meet local hunger and food insecurity needs. (SR MPCA requirement) (by 2023)
9. [N] Work with MPCA, and cities and townships, to facilitate and improve building and zoning codes to ensure they do not inhibit recycling and identify best practices for enclosures. (Regional MPCA requirement)
10. [N] Partner with others to engage the State Building Code Revisions Committee for code enforcement when retrofitting commercial and multi-unit dwelling buildings and encourage the Committee to establish minimum enclosure and signage requirements and space credit for the addition of recycling chutes, for examples, in the next update of the code.

Chapter III: County Strategies

Recycling, Organics, & Yard Waste

City/Townships

11. [N] Work with Ramsey County and cities/townships in both counties to identify how best to reach new businesses earlier in the construction permitting processes to raise awareness of needs for waste and recycling service space. (by 2023) (MPCA regional bld/zoning requirement) (by 2023)
12. [N] Evaluate the county's city/township residential recycling grant funding to assess in meeting waste objectives and program goals and to include waste reduction and reuse, organics and food waste recovery, and prioritize or target funding for city/township event recycling. (SSM MPCA requirement) (by 2018)
13. [C] Provide technical assistance to cities/townships for procurement of recycling and organics services and contracts and ordinance revisions. (ongoing)
14. [N] Provide assistance to help cities and townships ensure by December 31, 2020, recycling service is available to all multi-unit dwellings (more than four units) either by recycling contracts or by enforced ordinances, and failure to ensure this service will result in identifying methods to fix gaps or as a last resort, could be the withholding of grant funds.
15. [N] Provide assistance to help all cities and townships ensure the following minimum levels of service by 2023, as directed by the MPCA.
 - a. Recycling service for traditional curbside recyclables is available to all residents at their place of residence, including multi-unit dwellings (with less than four units and townhome dwellings).
 - b. Contract for residential recycling collection and/or recycling collection on same day as trash, (Collection BP MPCA requirement).
 - c. Collection of the county's standard list of residential curbside recyclable.
 - d. Add materials to their collection streams as markets become available at curbside and multi-unit dwelling properties.
 - e. Make progress along the county's municipal recycling performance continuum for residential recycling based on annual progress monitoring.

Failure to meet goals in good faith will result in identifying methods to fix gaps or as a last resort, withholding of grant funds.
16. [N] Work with cities/townships to:
 - a. Add collection of textiles and other reusable materials where applicable for recycling available to residents through curbside collection, special collection or drop-off. (ongoing)
 - b. Explore, develop, and share best practices with cities/townships to implement organics diversion at public entity facilities in large event venues. (organics mgmt. MPCA requirement) (by 2025)
17. [N] Support cities/townships and other entities, such as the Washington County Fair Board in creating away-from-home recycling opportunities based on best practices at locations, such as fairs, parks, athletic fields, arenas, and recreation centers and at events sponsored by cities/townships. (ongoing)
18. [C] Facilitate partnerships and networking and shared resources among cities/townships and community groups. (ongoing)
19. [E] Periodically review and revise the Washington County municipal recycling performance continuum for residential recycling. (ongoing)

Chapter III: County Strategies

Recycling, Organics, & Yard Waste

20. [E] Explore with other entities such as cities/townships, county conservation district, and watershed districts to promote the availability of products such as backyard composting bins and rain barrels and possible distribution at the Environmental Center if applicable. (Ongoing)

Schools

21. [N] Provide assistance and expect all public schools in the county to have strong and sustained reuse, recycling, and organics programs as defined by a performance continuum by 2023.
22. [N] Develop and implement the use of a continuum based on best practices to evaluate, set standards, and measure progress of school districts in the county in meeting reuse and recycling goals and assess annually on progress. (by 2020)
23. [N] Collaborate with the county community health programs, Ramsey County as applicable, and other community partners such as schools and food shelves to (by 2023):
- a. Identify barriers to food waste reduction and reuse (food to people). (SR MPCA requirement)
 - b. Develop guidelines based on best practices for implementing recovery of wasted food at schools and other locations with surplus food, and establish a pilot program to test methods of wasted food recovery.
 - c. Assist schools in awareness and understanding of rules and regulations pertaining to recovery of wasted food.
24. [N] Work with schools to explore recycling options based on best practices at outdoor areas and large events. (by 2020)
25. [N] Facilitate partnerships and networking opportunities to share resources among schools and assist with obtaining leadership support for efforts. (ongoing)
26. [E] Provide technical assistance as well as grants to increase recycling and organics diversion, support food waste prevention and donation program participation, and reuse opportunities. (ongoing)

Businesses

27. [E] With Ramsey County, use outreach and education, planning and evaluation, regulation, financial incentives, technical assistance and consultation in a strategic manner to ensure businesses and institutions take full advantage of organic waste diversion and recycling opportunities based on best practices, including, but limited to (ongoing):
- a. Continue the business grant program through the R&E Board, including food waste reduction and food donation, and explore new efforts such as but not limited to cooperative purchasing for compostable materials, or establishing a business recognition program.
 - b. Work with business recycling partnership engagement program through the R&E Board and consultants to divert organic materials from business waste streams using a variety of organics management methods.

Chapter III: County Strategies

Recycling, Organics, & Yard Waste

Businesses (continued)

- c. Continue the business recycling partnership engagement program through the R&E Board with continued support for a grants program to engage business organizations and to promote business assistance program resources, including recycling education and business partnerships, such as a local sports team, and partner with organizations that represent cultural, minority and/or traditionally underserved businesses.
- d. Improving recycling opportunities in public areas such as gas stations and strip malls.

Internal County Operations

- 28. [N] Partnering with other departments, teams, and staff, implement best management practices in waste reduction, reuse, recycling, and organics diversion and improve toxicity reduction in county-owned and operated facilities including:
 - a. In county parks, libraries, building entrances and lobbies, the county jail, and all service centers. (by 2018)
 - b. At county hosted events and department activities. (by 2020)
 - c. Incorporating into purchasing policies or procedures reuse considerations such as reusable cleaning cloths and also including compostable products such as dinnerware in county departments, offices, and operations. (2019)
 - d. Developing and incorporating contract specifications pertaining to waste management expectations such as double-sided printing, printing using soy-based ink, and electronic communication versus printing. (by 2023)
 - e. Regular evaluation and measurement of performance of county programs such as by waste audits or employee surveys. (ongoing)
 - f. Ensuring new or remodeled facilities are designed or remodeled to include sufficient space for collection of recycling and organics and waste both indoors and outdoors. (ongoing)
- 29. [N] Explore adoption of county policies or implementation procedures on use of compost in new county construction projects and encourage public entities to do the same. (MPCA organics market)

Yard Waste

- 30. [N] Research and develop yard waste management options to fill service gaps in current yard waste management system. (by 2020)
- 31. [C] Ensure yard waste is not managed in residential MSW and is managed according to state law.

Chapter III: County Strategies

Regulation, Compliance, Assistance, & Outreach

POLICIES



1. [N] The county will regulate and enforce solid and hazardous waste activities under the authorization of Minnesota Statute.
2. [E] The county will assure compliance with applicable laws, and provide information, technical assistance, outreach, and consultation to regulated and affected parties.
3. [C] The county will place a priority on identifying and removing toxic or harmful materials from MSW disposal.

STRATEGIES

Washington County will:

The county will:
License solid waste haulers and facilities and hazardous waste generators and inspect and monitor their operations for compliance with county regulations

1. [N] With Ramsey County explore strategies based on best practices to reduce air and water pollutant emissions, such as volatile organic compounds (VOCs), with the regulated business community as part of its overall business recycling and pollution prevention portfolio of services. (by 2023)
2. [E] Assess training needs of licensed hazardous waste generators, provide targeted training programs, and provide general business assistance and outreach and possible joint training with Ramsey County. (ongoing)
3. [C] License solid waste haulers and facilities and hazardous waste generators and inspect and monitor their operations for compliance with county regulations. (ongoing)
4. [N] Identify lead and lead containing products being disposed as MSW, including electronics and batteries and ensure proper disposal. (by 2023)
5. [N] Work with law enforcement agencies, gun and shooting ranges and firearms dealers to identify and properly manage lead containing waste. (by 2023)
6. [N] Perform an assessment of impacts from the waste management practices of commercial establishments using subsurface sewage treatment systems including restaurants and hazardous waste generators. (by 2023)
7. [N] Use information gained from commercial subsurface sewage treatment systems (SSTS) characterization to develop and implement best management practices with businesses on SSTS. (by 2023)
8. [N] Evaluate its commercial hazardous waste generator program to determine if changes to generator categories are warranted, including consideration of a minimal generator category and operations that generate only used oil and/or used oil filters. (by 2023)
9. [C] Ensure that hazardous and universal wastes generated in county operations are properly managed. (ongoing)
10. [C] Revise the Solid and Hazardous Waste Regulation Ordinances as necessary. (ongoing)
11. [C] Coordinate with the county groundwater program to evaluate and prioritize compliance activities for hazardous waste generators that are located in sensitive geologic areas or well head protection areas. (ongoing)

Chapter III: County Strategies

Toxicity Reduction

POLICIES



The county will provide household hazardous waste (HHW) management services to residents in a cost-effective manner that minimizes risks to public health and the environment.

1. The county will provide household hazardous waste (HHW) management services to residents in a cost-effective manner that minimizes risks to public health and the environment.
2. The county will ensure convenient and regular HHW services as indicated by customer drive time patterns and other program measurement tools available to assist residents in managing toxic materials or problem materials.
3. The county will ensure collection and management of problem materials and recyclables based on community need and other program measurement tools.
4. The county will continue to provide small business hazardous waste collection opportunities through its Very Small Quantity Generator Program.
5. The county will reduce the amount of hazardous materials managed by providing the opportunity for residents to obtain useable products collected through the county's household hazardous waste program for residential reuse.
6. The county and public entities within the county will be leaders in the internal reduction of toxic/hazardous waste through continuously improving their own operations.
7. The county expects the private sector to incorporate toxic/hazardous waste reduction activities within their own operations.
8. The county may provide technical and financial assistance to facilitate opportunities for improvement of management of toxic/hazardous wastes.
9. [N] The county will participate in reciprocal use agreements with other counties to provide a greater level of convenience for residents to dispose of HHW.

STRATEGIES

Washington County will:

1. [N] With Ramsey County work with the MPCA as the agency facilitates development of a product stewardship reporting system and will submit reports as required for materials collected and managed thorough county owned and operated facilities. (PS MPCA requirement) (by 2020)
2. [E] Evaluate, recommend, and implement household hazardous waste collection service in the portions of the county that are underserved by the currently available service at the Environmental Center and remote events, including consideration of possible fixed or mobile facilities, and other potential collection methods, as well as possibly coordinating services with Ramsey County. (by 2023)

Chapter III: County Strategies

Toxicity Reduction

3. [N] Through the county's household hazardous waste program, work closely with the R&E Center on promotion and outreach to prevent HHW, sharps, and propane tanks from being delivered to the R&E Center. (ongoing)
4. [C] Allow for the management of HHW inappropriately dumped or that is recovered during the abatement of nuisance properties or public health nuisances through the county's HHW program. (ongoing)
5. [C] Evaluate additional services and service delivery (i.e. hours) that could be provided at the County Environmental Center or other facilities using criteria established by the Department, including cost, policy, market aspects, operational feasibility, convenience factors, and resident need. (ongoing)
6. [E] Host events and activities such Fix-It Clinics to raise awareness of the County Environmental Center, while encouraging waste reduction, reuse, and recycling opportunities. (ongoing)
7. [N] Through education and outreach, help residents understand how the home environment can affect their health and how to take steps to reduce exposure to potentially harmful substances in or around the home. (ongoing)
8. [N] Support regional efforts for product stewardship advancement and will send a representative, as appropriate, to the regional product stewardship committee when it is formed by the MPCA. (PS MCPA requirement) (by 2018)
9. [N] Implement findings and recommendations from the HHW facilities assessment strategic planning study for the Environmental Center in Woodbury. (by 2023)
10. [C] Coordinate with the Sheriff's Department for the collection of household pharmaceuticals, continue to expand the interdepartmental drug drop-off service, and examine possibilities for public-private cooperation for drug collection. (ongoing)
11. [C] Assist in the management of household/business hazardous waste and related solid waste generated from emergency situations in accordance with the county's emergency operations plan, and expand the role of the Environmental Center as a local distribution node and base for emergency operations. (ongoing)

Chapter III: County Strategies

Waste Reduction & Reuse

POLICIES



Reduce

Reuse

Recycle

1. The county's primary waste reduction and reuse role is providing public education and information and to foster implementation of waste reduction and reuse activities both in county operations and in the community.
2. The county and public entities will be leaders in internal waste reduction activities through continuously improving their operations.
3. (from RC) Recognizing waste reduction results from systemic change, such as product stewardship initiatives, sustainable materials management (SMM) or price signals that favor reduced waste, the county believes the MPCA must lead public sector waste reduction innovations and measurement
4. The county expects the private sector to incorporate waste reduction activities within their operations.
5. The county will provide technical and financial assistance to facilitate waste reduction opportunities.
6. [N] The county will encourage the use of renewable energy, including the recovery of energy and fuels from waste.

STRATEGIES

Washington County will:

1. [N] With Ramsey County through the R&E Board, explore possible joint waste reduction and reuse opportunities and implement if applicable, activities such as Fix-it Clinics. (by 2023)
2. [N] With Ramsey County support the MPCA taking the lead to facilitate and develop a sustainable materials management (SSM) approach to waste management. (SMM & SR MPCA requirement) (ongoing)
3. [N] With Ramsey County, explore reuse opportunities, that could include such examples as incentive grants, development of materials reuse brokerage, promotion of Minnesota Technical Assistance Program materials exchange program or similar business outreach and assistance program, for businesses, schools, institutions and colleges. (SR MPCA requirement) (ongoing)
4. [N] With Ramsey County work with schools to explore and implement reuse opportunities based on best practices such as but not limited to end-of-year seasonal school cleanouts to capture materials for reuse. (SR MPCA requirement) (by 2020)
5. [N] Strive for zero waste approach to waste management as a long term goal by working to remove barriers in the community to recycling and composting as much as possible, and encourage opportunities to prevent generating waste in the first place. (ongoing)

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Waste Reduction & Reuse

6. [N] Working with cities and townships, encourage reuse and waste reduction by sharing opportunities with residents and businesses such as, but not limited to:
 - a. Providing information and technical expertise.
 - b. Exploring opportunities such as incentive programs or equipment libraries and
 - c. Encourage reuse options, such as furniture, and other bulky items, instead of buying new.
 - d. Consider supporting one or more materials exchange programs appropriate to serve communities in the county such as the Minnesota Materials Exchange Program for businesses and ReUseMN for residents and businesses. (MPCA requirement SR) (by 2023)
7. [N] Work with cities and townships and community groups to identify and promote ways to reduce waste based on best practices generated at large community events and opportunities under the Green Gatherings model. (by 2023)
8. [N] Work with cities and townships to encourage and implement reuse opportunities based on best practices, including reuse of bulky items at clean-up events, and provide outreach materials promoting environmental benefits of reuse. (SR MPCA requirement) (by 2020)
9. [C] Operate, promote, and track usage of the Free Product Room at the Environmental Center. (ongoing)
10. [N] Evaluate and explore opportunities for waste reduction and reuse based on best practices in county-owned building and grounds including but limited to:
 - a. Developing purchasing standards or recommendations that may include less toxic products, certified compostable products, reduced packaging, reuse opportunities, etc. (by 2022)
 - b. Evaluating reuse opportunities for large asset items. (by 2019)
 - c. Creating an environmental dashboard/continuum for departments. (by 2021)
 - d. Adding waste reduction and reuse to the county's internal Divert 70 program. (by 2019)
 - e. Utilizing available state contracts for the environmentally preferable purchasing in county operations and support the MPCA in the development of sustainable state contracts and encourage use in the purchase of materials, products, and/or services for county operations. (SR MPCA requirement) (by 2019)

Appendix A: Description of the Waste Management System

A. Introduction

Washington County is required by state law to produce a waste management master plan that details how it will implement the goals, policies, and objectives outlined in the Policy Plan 2016-2026. The following section describes the county's existing waste management system, programs, and activities to manage this system, and the financial management of these programs.

The MPCA has primary responsibility for waste management in Minnesota. Counties are the units of government charged with planning for waste management and being accountable for a number of responsibilities under the guidance of the MPCA. Metropolitan counties are held to a different standard than non-metropolitan counties and are required to develop plans that implement the Policy Plan.

Washington County carries out waste management responsibilities according to the following principles:

- **Developing sound policy** at the state, regional and local level by leading to develop legislation on product stewardship and system funding, developing solid waste management master plans that guide the system, and working with cities and townships;
- **Partnering** with cities and townships, school districts, private and non-profit entities, recognizing that the system is operated by a wide variety of entities;
- **Financing the system** using the CEC, designed to reflect the volume of waste generated by users of the system;
- **Providing grants** to cities, townships, school districts, businesses and institutions;
- **Regulation:** Adopting ordinances to establish standards, licensing of hazardous waste generators, waste haulers, solid waste facilities, ensuring compliance through training and consultation, and taking enforcement action when necessary;
- **Direct services:** Collecting HHW at the county's facilities; providing VSQG hazardous waste collection; and pharmaceutical collections in association with law enforcement;
- **Contracting for services** with other counties for reciprocal use of HHW facilities, providers of services for recycling, hazardous waste management, and organics management and with haulers and transfer stations for delivery of waste;
- **Providing education and outreach** using a wide variety of methods and tools, with emphasis on reaching everyone in the county; and
- **Consulting with and providing technical assistance** to cities, townships, school districts, businesses, regulated entities and institutions, through staff and consultants to emphasize pollution prevention, reduction, recycling and wise waste management.

This comprehensive approach, taken over three decades, has resulted in an effective and accountable system in the county.

General Description of the County

Washington County, located on the eastern edge of Minnesota, is one of seven Twin Cities metropolitan area counties. The county has historically played a diverse role in the region, serving the Twin Cities with its commercial, industrial, natural, and agricultural resources. The city of Stillwater, along the St. Croix River, serves as the county seat. The county is comprised of 423 square miles, and the estimated population for the county was 251,015. This ranked the county as fifth out of the 87 Minnesota counties for population. The county's population is expected to reach 318,053 by the year 2020 and 362,740 by the year 2030.

According to the Washington County, Minnesota 2017 At-A-Glance prepared by the Washington County Office of Administration, the 2017 estimated median household income of county residents was \$87,995, and the median age for both genders in the county was 39 years. In 2017, 133,330 county residents were employed. The average unemployment rate for the county in 2017 was 3.2 percent, below the state average of 3.7 percent, and the U.S. average of 4.3 percent.

Appendix A: Description of the Waste Management System

B. Waste Generation and Collection MSW Generation

Since the R&E Center began operations in 1988, an integrated solid waste and recycling system has developed in the East Metro area, guided by county solid waste master plans, policies and programs in both Ramsey and Washington counties that has helped achieve an increased recycling rate, more recovery of organic waste, increase in waste process and less waste sent to land disposal. Below shows past waste generation in Ramsey and Washington counties.

Historical Waste Generation Chart · Historical Waste Management, Processing, Recycling and Landfill Data*

Total MSW Managed	2007	2008	2009	2010	2011	2012	2013	2014	2015
Ramsey County	710,000	670,000	630,000	630,000	620,000	600,000	620,000	700,000	730,000
Washington County	190,000	190,000	180,000	190,000	190,000	190,000	200,000	220,000	210,000
Total Ramsey/Washington	900,000	860,000	810,000	820,000	810,000	790,000	820,000	920,000	940,000
Percent Recycled	2007	2008	2009	2010	2011	2012	2013	2014	2015
Ramsey County	44%	45%	46%	46%	48%	50%	50%	53%	55%
Washington County	47%	47%	44%	47%	47%	53%	50%	50%	52%
Total Ramsey/Washington	44%	45%	46%	47%	48%	50%	50%	53%	54%
Total MSW Delivered for Processing	2007	2008	2009	2010	2011	2012	2013	2014	2015
Ramsey County	240,000	240,000	230,000	220,000	220,000	220,000	240,000	250,000	250,000
Washington County	90,000	90,000	90,000	80,000	80,000	80,000	90,000	90,000	90,000
Total Ramsey/Washington	330,000	330,000	310,000	300,000	300,000	300,000	330,000	340,000	340,000
Total Unprocessed MSW Landfilled	2007	2008	2009	2010	2011	2012	2013	2014	2015
Ramsey County	150,000	130,000	110,000	110,000	90,000	70,000	60,000	80,000	90,000
Washington County	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000
Total Ramsey/Washington	160,000	140,000	120,000	120,000	100,000	80,000	70,000	90,000	100,000

*Numbers round to 10,000 place · Weight in Tons

Waste Generation Projections

On behalf of Ramsey and Washington counties, R&E Board has conducted extensive analyses of waste generation and recycling. Over the past several years the R&E Board examined the generation rates of MSW in the East Metro and identified a high growth rate of 3.1% per year (this is the average rate for MSW generation increase from 2010 through 2015 – post Great Recession) and a low growth rate of 0.3% per year (this is the average rate for MSW generation increase from 2005 through 2015 – which includes the negative–growth years of the Great Recession). Projections for MSW generation were prepared for those growth rates, as well as an average of the two rates, 1.7% per year. These projections were corroborated by the MPCA, and approved in the Ramsey and Washington County Joint Waste Designation Plan.

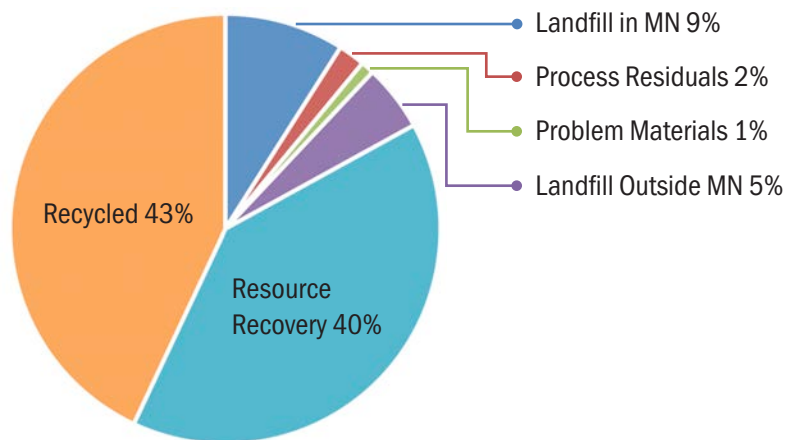
Appendix A: Description of the Waste Management System

B. Waste Generation and Collection MSW Generation

Waste Generation for Washington County

The county reported 212,719 tons of MSW managed in 2016. Figure 1 shows the breakdown of waste managed from both residential and commercial generators in the county in 2016. The figure indicates that 43 percent of the waste was recycled, 40 percent was processed and used for energy and 12 percent was landfilled.

Figure 1: 2016 Washington County Waste Managed



Waste Collection

Washington County Solid Waste Ordinance #200 requires that all commercial solid waste haulers operating in the county be licensed by the county. Licensing is accomplished through a joint regional licensing program.

The Regional Hauler Licensing Program operates in order to simplify the licensing process and eliminate duplicate applications to each county. To obtain an operating license, a hauler submits one application to the county in which the hauler is based. In 2016, the county licensed 17 base solid waste haulers, and 46 additional operating licenses to haulers, based in other counties, to collect solid waste. The county does not require a license for the collection and transportation of non-MSW, recyclable materials, or source separated organic waste.

For MSW collection, residents in 9 of the 33 communities in the county are served by one hauler where the city or township contracts or arranges for the service on behalf of the residents. The remaining 24 communities have open MSW collection, in which waste generators choose their own hauler for service. See Appendix B for a map identifying each city and township's MSW collection system.

For recycling collection, 19 communities have contracted service, while the rest have open recycling collection. All haulers offer single-sort recycling, which has become the dominant collection method since the last waste management master plan. Commercial recycling collection services throughout the county are open, and businesses select their own hauler for recycling or MSW collection service. See Appendices B & C for a map identifying each city/town's MSW or recycling collection system.

MSW collected in the county is hauled to the R&E Center, to a solid waste transfer station, or to a land disposal facility. The county does not have any operational land disposal facilities.

Appendix A: Description of the Waste Management System

B. Waste Generation and Collection MSW Generation

Facilities and Hauler Rates

The R&E Center in Newport, is currently the only waste facility operating in the county. The R&E Center accepts wastes from a variety of private haulers. The 2017 public tipping fee is \$70 per ton. Citizens can also haul their own waste to the facility.

The R&E Board provides rebates, in the amount of \$12.00 per ton, to haulers that deliver waste from Ramsey and Washington counties to the R&E Center in 2016 and 2017. This means that the net cost to haulers under a Ramsey and Washington Waste Delivery Agreement is \$58.00 per ton for 2016-2017. Out-of-county waste is accepted at \$70 per ton, but is not eligible for the rebate. Transload agreements are also in place with eight (8) transfer stations and they are available to haulers for same tip rate as the R&E Center (\$70 per ton).

The county does not collect data on rates and charges for licensed waste haulers that serve residential and commercial waste generators. A non-scientific review found a range of published service rates that exist for monthly residential MSW and recycling services (excluding County Environmental Charge, state taxes and fees).

35 gallon: \$11 - \$19

65 gallon: \$14 - \$20

95 gallon: \$16 - \$23

The estimated costs per month for residential recycling in the table below (Policy Plan Table 5: Monthly cost of residential recycling in the TCMA) shows the cost in an organized system (contract for recycling) is on average less (nearly 40%) than the monthly cost of recycling in a subscription system (or open without a contract).

Monthly cost of residential recycling in the TCMA		
Subscription average	\$6.33	
Organized average	\$3.95	

The estimated costs per month for residential MSW service in the table below (Policy Plan Table 6: Monthly cost of residential MMSW service in the TCMA) shows the cost by various container size in an organized system (contract for MMSW) is similar in cost for a 90 gallon container in a subscription system (or open without a contract), but lower in cost for both a 30 gallon or 60 gallon container in an organized system.

Container size	30 gallon	60 gallon	90 gallon	
Subscription average	\$13.62	\$16.75	\$17.15	
Organized average	\$11.92	\$14.03	\$17.16	

Appendix A: Description of the Waste Management System

1. Toxicity Reduction

Reduction in the toxic/hazardous character of waste refers to efforts which have the ultimate goal of reducing potential impacts to public health and the environment. This section describes both reduction of and proper management of hazardous waste from both residential and commercial sources.

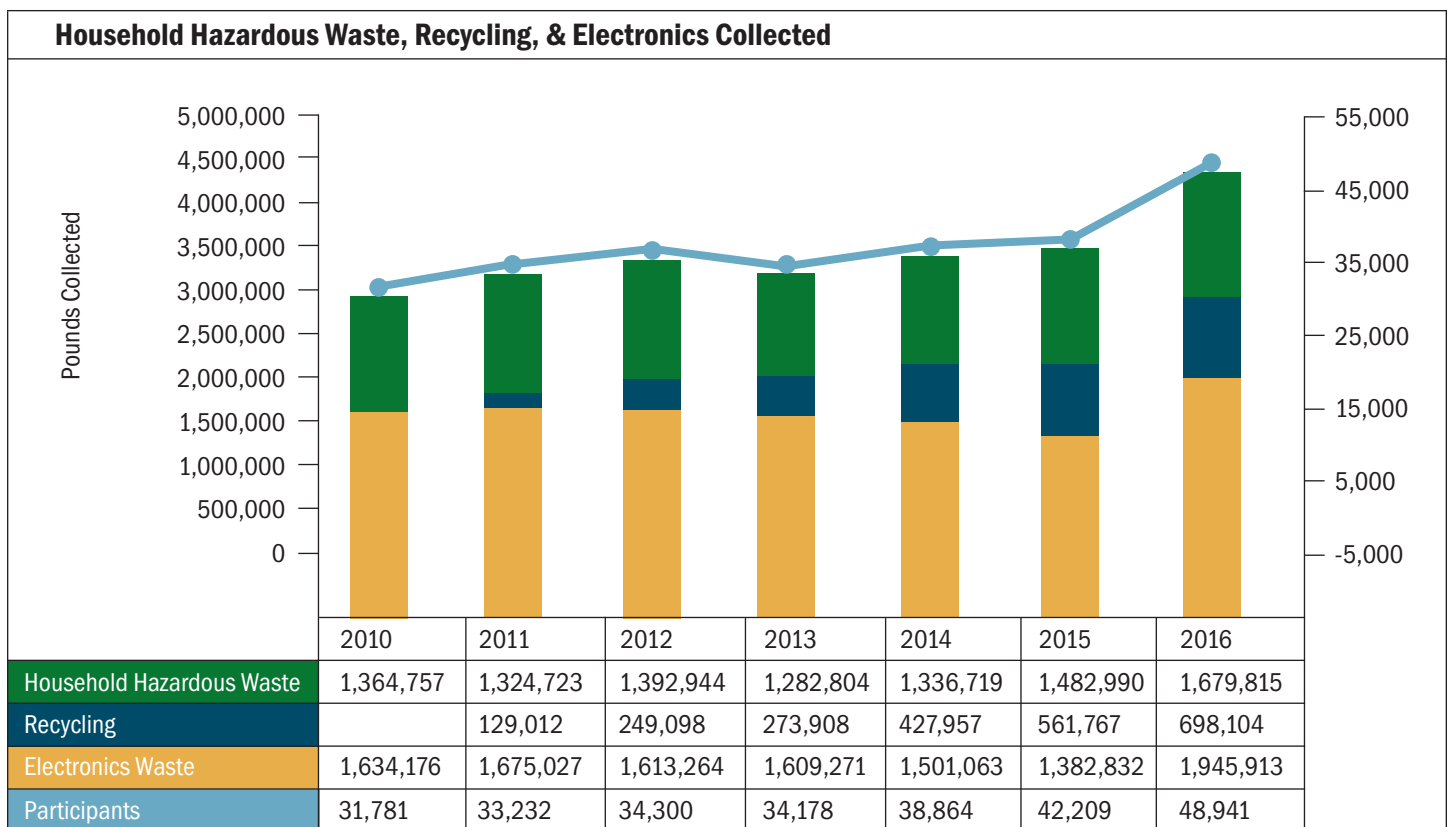
Household Hazardous Waste (HHW) Program

Washington County has operated an HHW facility since 1994, starting with a small facility in 1994 in Oakdale and expanding to the current Environmental Center in the fall of 2009. The program also holds 7-8 one-day collection events in remote locations of the county to provide convenient service for those not living close to the Environmental Center. In addition, the program has reciprocal use agreements with Anoka, Carver, Chisago, Dakota, Hennepin, and Ramsey counties which allow residents to deliver HHW to any facility or event in those counties free of charge.

The number of residents using the Household Hazardous Waste Program as shown in Figure 2 has increased since the opening of the Environmental Center. From 2015 to 2016, the Environmental Center experienced the following level of growth:

- Total number of participants increased by 16% to 48,941 visits.
- Total amount of waste collected increased by 15% to 3,625,728 pounds.
- Total amount of electronics collected increased by 36% to 1,945,913 pounds.

Figure 2. Household Hazardous Waste, Recycling & Electronics Collected 2010-2016



Weight in lbs. · Source: Washington County Department of Public Health and Environment

Appendix A: Description of the Waste Management System

1. Toxicity Reduction

Residents in the county have other options available to them for proper disposal of hazardous/toxic materials. They include:

1) recycling consumer electronics, such as televisions and computers, at several privately- operated recovery operations, 2) drop-off programs at retail locations for Ni-cad and button batteries, 3) lead-acid motor vehicle battery take-back programs at any lead-acid battery retail location, 4) motor oil collection at dozens of service stations and other privately- operated vehicle service establishments, 5) drop-off programs for fluorescent lamps at local retail stores, 6) recycling of major appliances, such as dishwashers, refrigerators and air conditioners, at several privately-operated recovery operations, and 7) taking small amounts of paint to a paint retailer that is a participant in PaintCare take back program.

County Environmental Center

The county currently contracts with Clean Harbors for the operation of the Environmental Center in Woodbury and the one-day collection events. The HHW program also has agreements with a number of companies for the direct management of various wastes.

The Environmental Center collects HHW, electronics, and common recyclables. Other materials recycled include plastic bags and holiday lights scrap metal, wire, and the Environmental Center also holds special events such as the shredding and recycling of confidential paper. The Environmental Center has a large Free Product Room where usable household products are free to residents. In 2016, the Free Product Room gave away nearly \$900,000 worth of useable product to residents and diverted nearly 200,000 pounds from disposal.

Small Business Hazardous Waste Collection Program

The county provides a collection program to help businesses dispose of small amounts of hazardous waste. The program was implemented in 1997 through the county's HHW agreement with the state, and approved by the County Board of Commissioners. The hazardous waste is commingled with HHW and manifested for disposal. The cost of the program is funded by a fee charged to the generator bringing waste to the Environmental Center, and covers disposal costs, labor, and administrative time. In 2016, 143 businesses participated, and nearly 20,000 pounds of hazardous waste was collected through the program.

Abandoned Waste

The Environmental Center also takes abandoned waste from city and township public works departments. If a city or township finds HHW or electronics abandoned on the roadside, they can arrange to bring it to the Environmental Center at no charge.

Community Cleanups

Municipalities provide a variety of clean-up events to collect problem materials from residents, with most held on an annual basis. The county assists in promotion of these events, and provides technical assistance in the management of these events.

2. Waste Reduction & Reuse

Waste reduction is the most preferred waste management method in the waste management hierarchy. Public education and information are the county's primary waste reduction activities, targeting households, businesses, and institutions with waste reduction messages.

Reuse Opportunities

Information on reuse opportunities is available on the county's online Disposal Directory. This includes options such as donation opportunities and resale stores.

Appendix A: Description of the Waste Management System

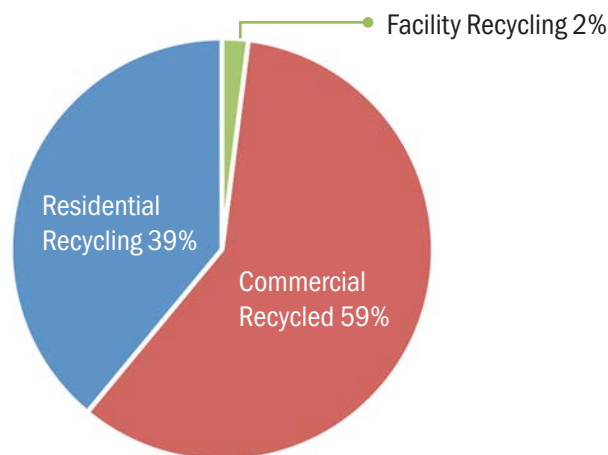
3. Recycling, Organics Management & Yard Waste

The county supports recycling for both residential and commercial generators. This support includes grants and technical assistance to municipalities for operation of residential recycling programs and providing information and technical assistance to businesses and institutions on recycling through the R&E Boards' BizRecycling program. Opportunities to recycle paper, glass, metals, plastic bottles, and other materials, are available to all residents, businesses, and institutions in the county. Food waste recycling is an option available to commercial generators in most of the county. Recyclables may be self-hauled or collected, transported, and marketed by waste haulers or specialized recyclables collectors.

Residential Recycling

Municipalities are responsible for establishing and maintaining residential recycling programs. The county provides educational, financial, and technical assistance to local governments to aid these programs. Curbside recycling is available in all communities in the county. Curbside recycling service is provided by private waste haulers either as a condition of receiving a waste hauling license, or by contract with the local government where one recycler provides collection service to all residents. In 2016, approximately 43 percent of total waste generated in the county was recycled. Figure 3 shows the types of recycling in 2016.

Figure 3. Types of Recycling 2016



The county manages a municipal residential curbside recycling grant program to assist communities with recycling program expenses. Grant funding levels are dependent on recycling program activities and include a base amount to cover administrative and basic recycling program expenses. A second level is targeted to specific projects that are related to broad and general recycling goals. A third level, incentive funding, is available and tied to county targeted projects such as multi-family recycling and business assistance.

The county created a residential recycling best practices continuum with basic, improved and advanced recycling and waste reduction program categories. In order to receive recycling grant funding, cities and townships must meet or be making progress towards meeting the program elements under the “basic” category. The continuum also serves as a guide to help municipalities generate project ideas and encourage movement along the continuum.

In order to receive funding from the county, community recycling programs collect several categories of materials including newspaper, corrugated cardboard, and magazines, metal cans, and glass containers in their curbside collection and multi-family recycling programs. All programs also accept #1, #2 plastic bottles, junk mail, boxboard, and telephone books as part of the collection. Some programs collect textiles, motor oil, and automobile batteries.

Appendix A: Description of the Waste Management System

3. Recycling, Organics Management & Yard Waste

Drop-off Reuse and Additional Recycling Opportunities

In addition to curbside recycling opportunities, eight drop-off sites exist within the county: Stone Soup Thrift Store (St. Paul Park), Goodwill Retail Stores (Cottage Grove, Forest Lake, Oak Park Heights, Woodbury) Savers (Woodbury), and Community Helping Hand and Family Pathways Thrift Store (Forest Lake). These stores accept donated clothing and household items, and resell them. There are also organizations such as veterans groups, Lupus Foundation, Courage Center, and others that provide collection of clothing and small household items from households several times per year.

An additional drop-off site located at the Environmental Center accepts the materials typically collected in curbside recycling programs, but does not accept clothing or household items. Items collected includes mixed paper and loose cardboard, bottles/cans, cartons, film plastic and scrap metal.

Curbside recycling of textiles and small household items exists in 5 municipalities within the county: Lakeland, Lakeland Shores, Stillwater, Stillwater Township, and Woodbury. Simple Recycling provides curbside collection on the same day as regular recycling collection and pays the city or township one penny per pound of material collected. Curbside textiles are also collected in Forest Lake and Scandia by Forest Lake Sanitation.

Organics Management in Schools

The counties provide technical assistance and grant funding to the schools for the implementation of food waste recovery and recycling systems. Food waste recycling can result in cost savings when coupled with “right-sizing” of garbage collection to reduce pickup frequency and/or container size.

The organic waste recycling work is notable in the public and private schools in Washington County. In Washington County 25 public and private schools have food waste recycling programs which diverted over 400 tons of food waste during 2016.

Schools provide a multi-purpose approach to county waste programs as they provide a great opportunity to educate young community members on waste diversion and recycling while providing hands-on experience, and visible and measurable results of waste diversion and recycling efforts.

Commercial Recycling & Organics

In the commercial sector, recyclables are collected by private entities and delivered to private material recovery facilities for processing and marketing.

Most large retail businesses, such as grocery and discount stores recycle cardboard, which is shown to be the largest volume material in the commercial waste stream. Many businesses, such as restaurants and bars, also recycle glass and metal containers. A growing number of schools and commercial establishments have begun recycling food and other organic wastes.

Appendix A: Description of the Waste Management System

3. Recycling, Organics Management & Yard Waste

Joint Activities with Ramsey County

Ramsey and Washington counties started BizRecycling to help businesses become more efficient and promoting job growth through protecting the environment. The BizRecycling program is an initiative of the R&E Board. Prior to 2013, both counties had been working jointly on separate management of organic waste. Beginning in 2013, they launched BizRecycling, a two-county program to promote businesses and institutions starting or enhancing recycling and separate organic waste management programs. The program has evolved since 2013 to meet the unique needs of the business community in the two counties. The BizRecycling program provides free resources and assistance to businesses that want to start or enhance programs for reducing waste, recycling items such as paper, bottles, and cans, and/or diverting food and other organic waste. Many grantees have decreased their waste volumes by initiating or improving recycling and organics programs.

BizRecycling program goals are to:

- Provide valuable technical assistance to businesses and institutions in Ramsey and Washington Counties to help them lower their trash disposal costs over time and manage waste higher on the hierarchy;
- Promote its website, BizRecycling.com, as the portal for businesses and institutions to learn how they can reduce their costs, better manage waste, and access needed resources;
- Provide grants to businesses and institutions that are committed to starting an organics collection program and/or enhancing a traditional recycling program;
- Perform strong data analysis and performance evaluation to target business outreach efforts to increase tons of recycling and organics collected; and
- Directly contract for food rescue.

The BizRecycling program expanded in 2015 to offer partner grants to Ramsey and Washington County business associations (like chambers of commerce, business leagues, economic development commissions/authorities and non-profit development corporations) to conduct outreach to member businesses and business audiences about the importance of recycling, including the free services provided by BizRecycling.

For nearly 10 years, the R&E Board contracted with Second Harvest Heartland to provide food rescue services to Ramsey and Washington County businesses including grocery stores, retail stores and restaurants. Second Harvest Heartland is the upper Midwest's largest hunger relief organization. This partnership aligned with the organization's mission to end hunger through community partnerships and provide food to hungry people through food rescue and its food bank network.

Research

To more fully understand the opportunities and barriers related to the development of an organics management system, the R&E Board commissioned a number of studies of organic waste generators:

- An Integrated Organic Waste Management System: From the Perspective of Commercial Waste Generators (May 10, 2010), analyzes anaerobic digestion as a new organic waste management concept from the perspective of commercial waste generators located in the Ramsey and Washington Counties by exploring logistics of daily operations, types of upfront costs, and changes in the configuration of waste management services.
- Organic Materials from Commercial Establishments: A Supply Assessment (June 2010), contains preliminary estimates of quantities of commercial organic materials not currently recovered by other programs that may be available as feedstock for an anaerobic digestion facility. It also characterizes the types of commercial establishments that may be sources of targeted organic materials such as food scraps and non-recyclable paper.

Appendix A: Description of the Waste Management System

3. Recycling, Organics Management & Yard Waste

Research (continued)

- Preliminary Resource Recovery Feasibility Report (January 2014) address the technologies selected for continued evaluation as part of the future of waste processing.
- Waste Composition Study (September 2014) determined the composition of waste from residential and commercial generators in order to inform the planning efforts for future options for processing and disposal of waste.

A full list of relevant reports can be found at morevaluelesstrash.com/designation-research (click on “Designation,” then “Relevant Research and Findings”).

R&E Center – recycling

The R&E Board has long provided financial support to ensure Ramsey and Washington Counties’ MSW is delivered to the R&E Center where processing recovers significant amounts of metal for recycling. In 2016, over 15,466 tons of metal, including ferrous and non-ferrous metals, were recovered at the R&E Center for recycling. Single stream recycling was added to the R&E Center for employees and visitors in 2016, after the R&E Board took ownership.

Yard Waste

State law prohibits yard waste from being placed with municipal solid waste or being disposed of in landfills or resource recovery facilities except for the purpose of reuse, composting, or co-composting.

In the county, yard waste is currently managed by one or more of the following methods: backyard composting or mulching, private or community compost sites, and hiring private haulers to collect and manage yard waste.

The county offers technical assistance on yard waste management to residents and municipalities. Currently, five communities and three private companies operate compost sites in the county. The private sites and some communities have implemented fee systems to help cover site costs. Sites are located in Cottage Grove, Denmark Township, Forest Lake, Hugo, Marine on St Croix, Newport, St Paul Park, and Woodbury.

The County is developing additional opportunities for yard waste management in the North and central areas of the county where yard waste management services are limited or non-existent. Additionally, the county is looking to make residential yard waste management more available by partnering with the public and private operators to accept a uniform list of materials, have hours that are convenient, and ensure sites are within fifteen minutes or less of drive time of most residents.

4. Processing/Waste-to-Energy

Consistent with Minnesota’s Waste Management Hierarchy, the county processes waste for the purpose of recovering energy, recyclables and other beneficially useful materials at the R&E Center. Waste processing is the preferred management method over landfilling for waste that is not reduced, reused, or separately recycled or composted. Pursuant to state law, public entities in the county ensure MSW generated in the county or that the county contracts for is processed rather than landfilled. The county supports the processing of waste in a manner that encourages waste reduction, reuse or recycling, including the separate management of organic waste.

Landfill pollution and groundwater contamination are the central reasons why Ramsey County and Washington County has been working together since 1987 on waste processing and recovering energy from trash. More of this history is available in the Ramsey/Washington County Joint Waste Designation Plan (See Appendix G).

In late 2015, the R&E Board purchased the waste processing facility now called the R&E Center. Following an extensive evaluation, the counties determined that ownership of the facility and the use of waste designation will provide greater stability to the solid waste management system in the counties, enabling the significant progress in recycling, reduced landfilling of waste and increased recovery of resources from waste.

Appendix A: Description of the Waste Management System

4. Processing/Waste-to-Energy

The R&E Center processes MSW into refuse-derived fuel (RDF). The R&E Center receives approximately 1,500 tons of MSW per day, predominantly from Ramsey and Washington counties. The R&E Center uses shredding, magnetic separation and density separation to convert waste received into approximately 350,000 tons of RDF per year. Ferrous metals and aluminum are also separated and recovered for recycling. After being processed, the RDF is transported to two facilities owned by Xcel Energy, Inc. (in Red Wing and Mankato, MN) that use the RDF to generate electricity. These two plants provide enough electricity to power the equivalent of 20,000 homes annually. Through the processing of waste at the R&E Center since 1988, the R&E Board has prevented the need for landfill space equal to 100 acres with a depth of 40 feet.

Overall, the R&E Board's ownership and control over the Facility allows it to:

- Consider new technologies to increase energy produced, create fuels, make compost, or provide recyclable materials for manufacturing;
- Continue to ensure waste is managed to protect the environment and public health;
- Meet Minnesota's 75 percent recycling goal;
- Support local jobs; and
- Work towards a more stable, predictable waste processing system that controls costs and saves taxpayers money.

Waste Designation

In 2016, Washington County, in cooperation with Ramsey 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. By implementing waste designation, the counties ensure all waste will now be processed, with metals being removed and recycled, and the remaining waste processed into RDF for production of renewable energy. The two counties anticipate the use of waste designation as a critical strategy to achieve state waste management goals. Designation is outlined in the Processing chapter of this plan, as well as the Ramsey/Washington County Joint Waste Designation Plan (See Appendix G).

5. Landfilling & NonMSW Management

There are no operating MSW land disposal facilities in the county. In 2016, 42,918 tons of MSW from the county was delivered to landfills by private haulers. Haulers transported the waste to a variety of landfills in Inver Grove Heights, Elk River, Burnsville, and Blue Earth County, Minnesota, and Eau Claire, Wisconsin. These landfills are owned by private companies, and individual solid waste haulers choose to transport the collected waste to a landfill.

NonMSW is the term used to refer to types of waste that are not included in MSW or hazardous waste. Examples of NonMSW include construction/demolition debris, industrial waste, tree waste, street sweepings, and water treatment lime sludge. NonMSW is primarily managed by the private sector services. The county is exploring methods and opportunities used to encourage, promote and expand the separation, reuse and recycling of NonMSW materials from deconstruction, building demolition, and remodeling projects. The county currently license facilities that collect, store, or process concrete and asphalt, tree waste, and other non-MSW or industrial byproducts for beneficial reuse, recycling, processing, or disposal.

NonMSW Materials

Construction debris - The majority of construction debris generated in the county is hauled to construction and demolition landfills. Generators of demolition debris are often referred to the SKB Rich Valley Landfill in Inver Grove Heights as the nearest facility, geographically, to dispose of construction and demolition debris. Demolition debris is not managed at the R&E Center.

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6. Regulation

Commercial Hazardous Waste

The county has operated a commercial hazardous waste regulation program since 1985 and is mandated by state statute §473.811 subd.5 to regulate and enforce state and local hazardous waste rules. Washington County Ordinance #195 adopted in 2014 describes the county regulations related to hazardous waste management. Any business or non-household entity that generates hazardous waste is defined as a Hazardous Waste Generator, and must comply with these regulations. The regulations are designed to be protective of public health and the environment, and focus on preventing hazardous waste releases to the environment or exposure to people.

Generators of commercial hazardous waste are classified in one of three categories, based on amount of waste generated:

- Large Quantity Generators (LQG), produce more than 2,650 gallons of hazardous waste per year,
- Small Quantity Generators (SQG), which produce between 265 and 2,650 gallons of hazardous waste per year, and
- Very Small Quantity Generators (VSQG), produce less than 265 gallons of waste per year.

In 2016, there were 11 LQGs, 23 SQGs, and 584 VSQGs in the county, totaling 618 generators.

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 citing violations as needed. Violations are typically written orders, letter of warning (LOW), or a notice of violation (NOV). In 2016, 59 enforcement actions were necessary to gain compliance. Fourteen complaints from the community were investigated and resolved to protect public health and environment. Outreach and education are the primary tools for maintaining compliance. In 2016, nine targeted trainings were delivered to over 300 Hazardous Waste Generator staff; six electronic HazWaste E-Clips newsletters were sent to more than 700 subscribers; and eighty-three Generators received one-on-one in-person training and technical assistance.

Solid and Hazardous Waste Facilities

The county also regulates hazardous waste facilities that treat, store, or dispose of hazardous waste. There is one such facility in the county, the 3M Cottage Grove hazardous waste incinerator. Such facilities are subject to additional regulations beyond those for generators, based on the types of waste handled, and the size and nature of their operation. Facilities are also required to have a permit from the MPCA and the EPA.

The county regulates a variety of solid waste facilities, including solid waste transfer stations, recycling facilities, and waste storage, processing and disposal facilities. The county derives its regulatory authority for solid waste management and protection of public health, safety, and the environment from Minnesota Statutes §115A, §145A, §375, §400, and §473. The MPCA Solid Waste Management Rules adopted November 21, 1988, encourage the cooperation of local units of government in enforcing the rules (Minnesota Rules Chap. 7035.0400.) MPCA Solid Waste Rules have been adopted by reference in the Washington County Solid Waste Management Ordinance No.114.

In addition to ensuring compliance with state rules, the county implements and ensures compliance with its own Solid Waste Management Ordinances #114 and #194. Ordinance #114 establishes county specific requirements for the management of solid waste and Ordinance #194 establishes the processes and procedures and application of the County Environmental Charge (CEC). For example, Ordinance #114 sets standards for tree waste management facilities, land application sites, solid waste facilities, waste haulers, and Ordinance #194 establishes what services the CEC applies to and the rate of the CEC.

Appendix A: Description of the Waste Management System

7. County Leadership in Waste Management

Washington County 2030 Comprehensive Plan and 2017 revision

The county incorporated sustainability and specific waste management strategies with the goal of preserving, managing and utilizing natural resources to promote a healthy environment for present and future generations. Areas included: expanding sustainable building policy to include developing sustainability principles, encourage public entities to incorporate sustainability principles into planning efforts, develop opportunities for community participation, lead by example in county operations to conserve energy and reduce greenhouse gas emissions, manage waste in an integrated system in accordance to the state hierarchy, and lead by example in county operation to develop and implement innovative waste management solutions and encourage public entities to do the same.

The county is currently updating the 2030 Comprehensive Plan and expects to continue aligning waste management goals and strategies with the new Comprehensive Plan.

Toxicity Reduction

The county strives to lead by example and demonstrate ways to reduce the toxicity of waste generated in county operations and encourages others to do the same. For example, through the county's previous waste management master plan:

- All county electronics, beyond computer equipment, are recycled through the county's electronics vendor, and
- The implementation of the county's internal waste reduction program, Divert 70, led to an evaluation of cleaning chemicals, eliminating 95% of chemicals previously used.

Waste Reduction

The county has made significant efforts to lead by example and demonstrate methods to reduce waste in county operations in order to encourage others to reduce waste generated. Examples of these efforts include:

- The county's Information Technology Department purchasing standards that encourage the purchase of printers with duplexing capabilities,
- Installing water bottle filling stations, eliminating over 150,000, 16 oz. water bottles since 2013,
- A county-wide paper reduction campaign education employees on ways to reduce paper and obtaining authorization to send annual benefits disclosures electronically, saving over 34,000 sheets of paper annually, and
- Implementation of reusable spoons, trays, and microfiber clothes in the inmate area of the county jail.

Office Recycling/Divert 70 Program

The county has had an in-house office recycling program since 1989. In 2012, the county introduced a new internal waste diversion program called Divert 70. Since implementation, waste diversion in employee areas is diverting an average of 80% of materials away from the trash to recycling and compost.

Highlights of this program include:

- Removal of desk side trash cans and replaced with small "mini bin" and desk side recycling box,
- Centralized sorting stations located within 40 steps from most employee areas, and
- Sorting stations comprised of three hands-free, color-coded bins, providing employees with the opportunity to recycling via single sort recycling or commercial composting stream

Appendix A: Description of the Waste Management System

7. County Leadership in Waste Management

Office Recycling/Divert 70 Program (continued)

The success of Divert 70 in employee areas has allowed for expansion into areas outside of employee workspace. Additional Divert 70 efforts to increase recycling include:

- Divert 70 sorting stations in large conference & training rooms, Government Center Cafeteria, and building entryways,
- Paper towel compost collection pilot in designated bathrooms,
- Purchasing change in Government Center cafeteria, eliminating all non-recyclable plates, bowls, cups, silverware, and serving containers, and
- Divert 70 presence at county sponsored events

NonMSW

The county has taken steps to better manage NonMSW generated from county operations. These include:

- County Board passed a resolution giving preference to recycled manufactured scrap shingles in hot-mix asphalt when bid requests are issued for county highway projects, and
- County Board resolution adopting the Minnesota Sustainable Building Design Guidelines for use in county buildings and remodeling projects. The guidelines were used in the design and construction of the Service Center in Cottage Grove and the Service Center and Library in Forest Lake and the construction of the Environmental Center. The county through contract with the University of Minnesota's Center for Sustainable Building Research also conducted post-occupancy evaluations (POEs) on the service center and library in Forest Lake and the service center in Cottage Grove.

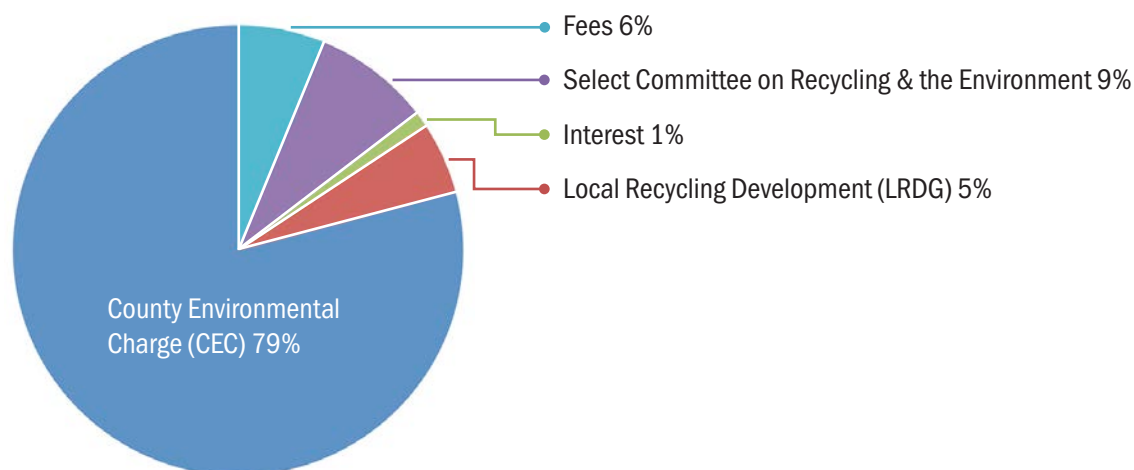
8. Cost and Finance

This Plan addresses the revenues and expenditures of the county's waste management service programs.

Revenue

The primary sources of revenue for the county's solid waste programs are the County Environmental Charge (CEC), state grants, and license fees from hazardous and solid waste regulation. Figure 4 shows the breakdown of program budgeted revenue.

Figure 4: Waste Program Budgeted Revenue



Appendix A: Description of the Waste Management System

8. Cost and Finance

Since 1989, the County has collected a waste management service charge for solid waste management programs such as household hazardous waste, recycling, and resource recovery. The charge was originally collected on the property tax statement. In April 2003, the county implemented the County Environmental Charge which is collected by haulers as a percentage of the garbage bill. The CEC is a more visible charge to generators, and provides an incentive to reduce waste and recycle. In 2003, the County Environmental Charge was 34.2 percent of the amount of the waste bill, 39.5 percent in 2004, reduced to 37.5% in 2009 and reduced again to 35% in 2013. The rate is evaluated on a periodic basis, and adjusted as needed. A \$3.00 per parcel charge remains on the property tax statement.

SCORE and LRDG State Grants

The county receives two grants: the SCORE (Select Committee on Recycling and the Environment) derived from the state solid waste management tax on waste management activities and the LRDG (Local Recycling Development Grant) funded by a surcharge on waste landfilled in the Metropolitan Area.

License Fees

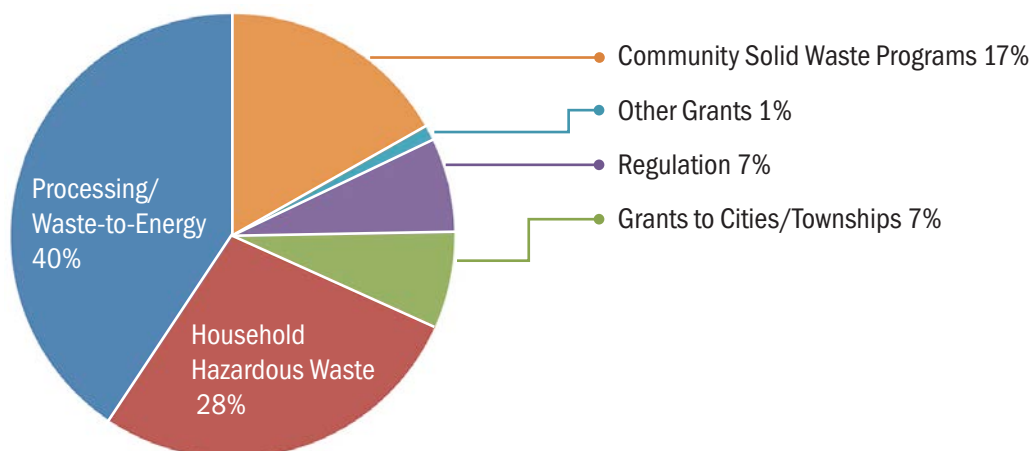
Costs associated with the solid and hazardous waste regulation programs, including licensing and inspections, enforcement of the regulations, ordinance amendments and rule changes, are covered by license fees that are paid by the solid waste haulers and the regulated companies and the CEC is a fee paid on the price of waste management services.

The county is reimbursed for the cost of collecting fluorescent bulbs through the county's HHW program. The HHW program also receives payment for some of the materials managed including used oil, batteries, propane tanks, etc. The county participates in the metropolitan region's Reciprocal Use Agreement, which entitles the county to be reimbursed by another county for costs associated with serving a resident of that county. The cost of the Small Business Hazardous Waste Collection Program for businesses that generate small amounts of hazardous waste is covered by the fees charged to the participating businesses.

Expenses

The county's primary expenses for waste management programs are resource recovery, household hazardous waste, and community solid waste including recycling grants to municipalities and regulation. Figure 5 shows the break out of program budgeted expenses.

Figure 5: 2016 Waste Program Budgeted Expenses



Appendix A: Description of the Waste Management System

8. Cost and Finance

Resource Recovery

Ramsey and Washington counties own and operate the R&E Center in Newport.

The R&E Board has two main budgets, a facility budget and a joint activities budget. The facility budget is an enterprise budget with the tipping fee charge funding all facility costs. The joint activities budget is used to administer and carry out joint waste management activities, and includes non-facility related activities. The joint activities budget includes the hauler rebate. Each of the counties approve and fund their portion of the joint activities with CEC. The Washington County portion was just over \$2.8 million total budgeted in 2016. The Hauler Rebate payment was \$12/ton in 2016 and 2017.

Household Hazardous Waste

The HHW program expenses include operating the Environmental Center in Woodbury, and the one-day collection events. The majority of funds are for disposal and contract labor.

Community Solid Waste

Staff support, operating expenses, and other support to provide a variety of waste management services.

Recycling Grants

These are payments to municipalities for recycling programs.

Regulation

The commercial hazardous waste and solid waste regulation programs are financed primarily through fees charged to the regulated entities. Expenditures are primarily for staff who conduct the licensing and inspection activities, environmental complaints, and for associated administrative expenses to operate the program.

Other Grants

Other recycling grants include funding to schools, contracted services, etc. Since 2007, Washington County has been providing grants to schools to assist in establishing food recycling programs. Grant funds have been used for constructing food waste sorting tables and for purchasing equipment such as carts and containers needed for food waste collection.

9. Ordinances

Local ordinances pertaining to garbage, recycling and other solid waste issues are found in numerous city and county codes and ordinances. A listing of local ordinances relevant to this master plan can be found in Appendix D.

10. Strategic Communication and Education

Minnesota Statute §115A.552, Subd.3 requires that counties “provide information on how, when and where materials may be recycled, including a promotional program that publishes notices at least once every three months and encourages source separation of residential, commercial, industrial and institutional materials.” Furthermore, the county is required to have a broad based public education component in its household hazardous waste management plan according to Minnesota Statute §115A.96. Public education, including both informational and promotional activities, is an important component of the county’s waste management program.

Household hazardous waste communications plan. Each year, staff develops a communications work plan for the promotion of the year-round hazardous waste facility (Environmental Center) and seasonal collection events. The purpose of the plan is to establish strategic communication efforts to achieve stated goals and objectives for the household hazardous waste program.

Appendix A: Description of the Waste Management System

10. Strategic Communication and Education

A variety of techniques have been used to promote the Environmental Center and collection events including the Going Green Guide, Environmental eUpdate, Environmental Update insert, direct mail postcards, rack cards, drive lane signs, Facebook, Twitter, and paid advertisements.

Going Green Guide: This is a comprehensive guide, mailed to all households, that provides information on waste management programs in the county including yard waste composting, household hazardous waste reduction and disposal, waste reduction, and recycling. The guide also includes information on Recycled Products Kits, Composting Education Kits, and Trash Trunks which are available for teachers and community group leaders to borrow to help teach others about these issues. The Green Guide is distributed in spring.

Environmental Update – Since 1994, the Environmental Update has been published annually and mailed to all addresses in Washington County. The Update contains information regarding the county’s waste management programs, including yard waste composting, household hazardous waste reduction and disposal, hazardous waste management, waste reduction, and recycling. The Update was originally a stand-alone publication and is now inserted into the Staying in Touch newsletter published by the Office of Administration and is usually distributed in late summer/early fall.

Printed information – Waste management messages are also distributed through other publications such as the Drop It Off brochure which is given out at events and through partners such as cities and townships.

Rack cards have been developed to provide information on specific topics such as unused medication disposal, sharps disposal, and bulky waste. Rack cards are distributed from the Environmental Center as well as Cities, Townships, Washington County offices, and other public buildings such as libraries.

Articles – Articles and advertisements are submitted for city and township newsletters on the HHW collection schedule, the backyard compost bin distribution program and waste reduction and recycling.

Online Disposal Directory – The County maintains and annually updates its online disposal directory, which lists disposal options for many household wastes for residents. The directory is used to respond to demand from community inquiries on waste management issues and provides specific county waste management information.

Social Media – The use of Facebook and Twitter has grown in use with the county adding a department Facebook page and a twitter account “WashCoRecycles” to inform stakeholders about waste programs, services, and to increase knowledge about waste management issues and engage behavior change.

Presentations – The County has developed three programs addressing the areas of product label reading and household hazardous waste, packaging reduction, and recycling/recycled products and continues to provide these educational opportunities to schools, community groups, grantees, and other organizations.

Recycled Products Kit – The County developed award winning recycled products kits that have been distributed in the community to meet growing demands for information on recycling. The kits are hands-on learning stations for schools, businesses or community groups, and contain fourteen examples of products made from commonly recycled materials such as plastic lumber made from milk bottles, a notebook made from recycled office paper, and a doormat made from recycled tires. Due to requests from kit users for additional resources, composting education kits were developed and are now loaned to community groups.

Banned materials – The County provides information on materials banned from the MSW stream such as yard waste, tires, and appliances.

Appendix A: Description of the Waste Management System

10. Strategic Communication and Education

Community Inquires – The County responds to a variety of requests for information and technical assistance for specific disposal issues such as HHW collection, composting, recycling, and hauler licensing information.

Business Assistance Communication

The R&E Board began working on source separated organics management in 2003, hiring consultants to work with institutions and businesses that were high-volume generators of food waste and quickly found that engagement with businesses needed to include all waste management from food rescue, traditional recycling, organics management and trash. Business engagement is jointly conducted by Ramsey and Washington County through the R&E Board's BizRecycling program.

Communications to the approximately 40,000 businesses and institutions in Ramsey and Washington Counties are designed as business-to-business communications and are carried out in several ways. The BizRecycling website (BizRecycling.com) is specifically aimed at educating businesses in the two counties on the opportunities for and benefits of better waste management. The website includes a large volume of information, including Minnesota's commercial recycling legislation, technical assistance available for businesses; grant guidelines and application materials, and container and label ordering forms.

The R&E Board supplements the website with a blog and Twitter feed in order to engage with the community on social media. The R&E Board updates the blog once a week throughout the year with posts and videos on various commercial recycling issues. The R&E Board aims to publish two social media posts per day that highlight the resources available through the BizRecycling, general recycling education, information on the R&E Board and to acknowledge the successful work of both current and past BizRecycling grantees.

In 2015, the R&E Board entered into a two-year partnership with the St. Paul Saints to increase the visibility of recycling opportunities and ensure state of the art recycling at CHS Field. The partnership package included an on-field recycling game between innings that engaged fans, radio commercials during the Saints games, ad space in the team's annual pocket schedule distributed at all partner locations, and a rotating banner ad on the Saints' website. BizRecycling also provided the Saints with technical assistance via the project consultant, MN Waste Wise, to help implement a robust recycling and organics program at their new ballpark, CHS Field. BizRecycling branded trash, recycling and organics labels are affixed to all bins throughout the ballpark. The first season the Saints achieved nearly a 50% recycling rate. With up to 7,000 fans attending every game the educational reach of the Saints' programs goes far beyond the walls of CHS Field.

Internal county intranet – the county relies on the county employee intranet, Wash Net, to communicate applicable information on waste management. Information includes what to recycle through the county's office recycling program, what happens to recyclables, waste reduction tips and examples from county operations, green purchasing, green building, household hazardous waste remote event collections, and the Environmental Center.

E-News – The Environmental eUpdate was first issued by the Department in 2010. The eUpdate is a semi-annual electronic newsletter to inform residents about environmental news, services, and events happening at the Environmental Center and in their community. Topics in 2016 included the remote hazardous waste collections, Compost Bins and Rain Barrel sales, and car seat recycling options.

Appendix B: County Municipalities by MSW Collection Type



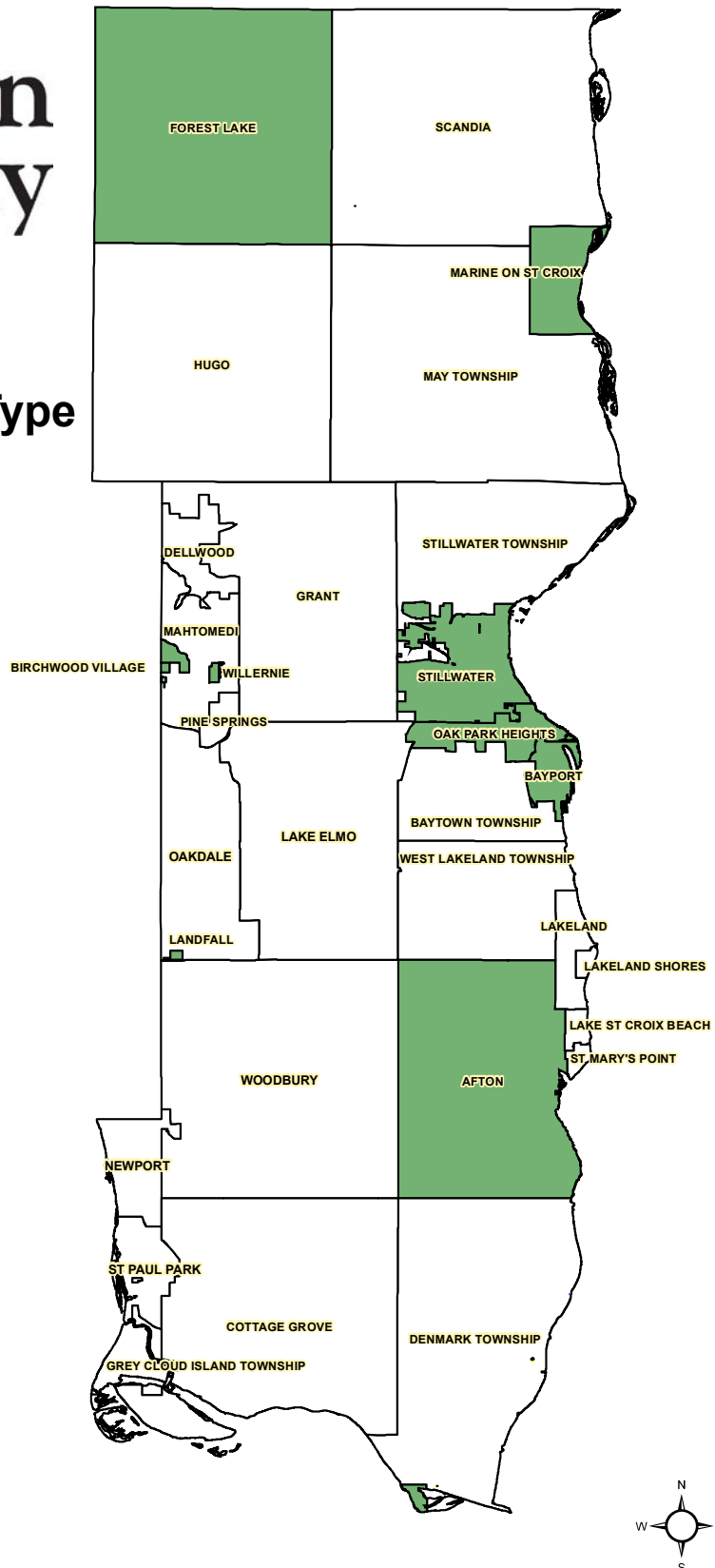
City & Township 2017 MSW Collection Type

MSW



Contracted

Open

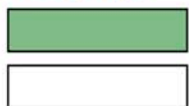


Appendix C: County Municipalities by Recycling Collection Type



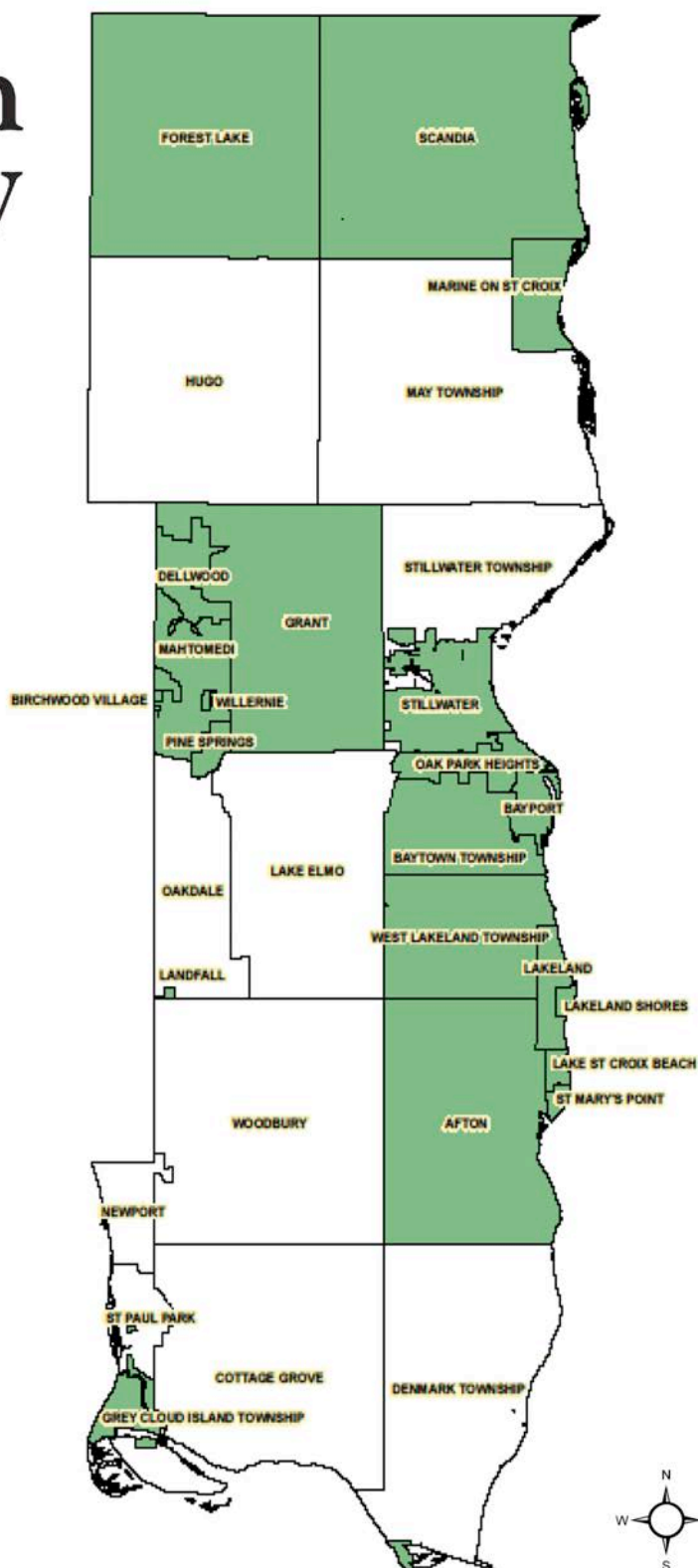
City & Township 2017 Recycling Collection Type

Recycling



Contracted

Open



Appendix D: Ordinances

Washington County ordinances related to the plan:

- Solid Waste Ordinance No. 200 - www.co.washington.mn.us/DocumentCenter/View/18637
- Solid Waste Service Charge Ordinance No. 194 - www.co.washington.mn.us/DocumentCenter/View/5959
- Hazardous Waste Management Ordinance No. 195 - www.co.washington.mn.us/DocumentCenter/View/5155
- Public Health Nuisance Ordinance No. - www.co.washington.mn.us/_asset/xm421z/ORD-0165.pdf
- Food Protection Ordinance No. 145 - www.co.washington.mn.us/DocumentCenter/View/62

Municipal ordinances related to solid waste include:

- Afton: Chapter 18 Solid Waste Management
www.ci.afton.mn.us/vertical/sites/%7B255148F5-88B9-45F6-9726-DD95D24AA11D%7D/uploads/CH_18_updated_10-10-13.pdf
- Bayport: Chapter 46 Solid Waste
www.municode.com/library/mn/bayport/codes/code_of_ordinances?nodeId=MUCO_CH46SOWA
- Birchwood: Public Health and Welfare Section 4XX Solid and Hazardous Waste Management
birchwood.govoffice.com/index.asp?Type=B_BASIC&SEC={00E88059-D7B0-4930-996E-A89BA4089A25}&DE={5D3676B7-233D-4903-8FA2-366D7C8D9452}
- Cottage Grove: Title 4 Public Health and Safety Chapter 2, 4-2-1 through 4-2-21 Mixed Solid Waste and Recycling
www.sterlingcodifiers.com/codebook/index.php?book_id=500
- Dellwood: Title 4 Public Works, Garbage, Septic and Storm Sewer Regulations, Chapter 50 Garbage and Rubbish
dellwood.us/Ordinances/Title%20V%202015.pdf
- Denmark Township: Ordinance No. 1997-1
www.denmarktownship.org/index.asp?SEC=37040756-F83B-4817-A6BD-22EFE6E8C30A&Type=B_BASIC
- Forest Lake: Chapter 50: Collection of Garbage and Waste Materials
[library.amlegal.com/nxt/gateway.dll/Minnesota/forestlake_mn/cityofforestlakeminnesotacodeofordinance?f=templates\\$fn=default.htm\\$3.0\\$vid=amlegal:forestlake_mn](http://library.amlegal.com/nxt/gateway.dll/Minnesota/forestlake_mn/cityofforestlakeminnesotacodeofordinance?f=templates$fn=default.htm$3.0$vid=amlegal:forestlake_mn)
- Grant: Chapter 26 Solid Waste
cityofgrant.com/doc/cityCode.html
- Grey Cloud Island Township:
www.neighborhoodlink.com/Grey_Cloud_Island/pages/357248
- Hastings: Title 5 Public Works 50.06-50.07
www.hastingsmn.gov/home/showdocument?id=454
- Hugo: Chapter 62 Solid Waste
www.municode.com/library/mn/hugo/codes/code_of_ordinances?nodeId=COOR_CH62SOWA
- Lake Elmo: Chapter 52 Solid Waste
[library.amlegal.com/nxt/gateway.dll/Minnesota/lakeelmo_mn/lakeelmominnesotacodeofordinances?f=templates\\$fn=default.htm\\$3.0\\$vid=amlegal:lakeelmo_mn](http://library.amlegal.com/nxt/gateway.dll/Minnesota/lakeelmo_mn/lakeelmominnesotacodeofordinances?f=templates$fn=default.htm$3.0$vid=amlegal:lakeelmo_mn)
- Lakeland: Chapter 50 Garbage and Solid Waste
[library.amlegal.com/nxt/gateway.dll/Minnesota/lakeland_mn/cityoflakelandminnesotacodeofordinances?f=templates\\$fn=default.htm\\$3.0\\$vid=amlegal:lakeland_mn](http://library.amlegal.com/nxt/gateway.dll/Minnesota/lakeland_mn/cityoflakelandminnesotacodeofordinances?f=templates$fn=default.htm$3.0$vid=amlegal:lakeland_mn)

Appendix D: Ordinances

Municipal ordinances related to solid waste include: (continued)

- Lakeland Shores: Title 5 Public Works Chapter 51 Solid Waste Disposal
www.lakelandshores.govoffice.com/vertical/sites/%7BA9F2A22B-D974-45AE-B10B-77FF147E25BE%7D/uploads/TITLE_V_-_PUBLIC_WORKS-CHAPTER50.pdf
- Landfall: Chapter 6 Nuisances and Offenses, Section 630 Disposal of Garbage, Rubbish Refuse, Waste Materials
landfall-admin.azurewebsites.net/FileUpload/Codes%2FLandfall-City-Code-of-Ordinances-pt1.pdf
- Mahtomedi: Chapter 12 Public Health, Safety, and Welfare
www.ci.mahtomedi.mn.us/vertical/sites/%7BB983F313-8CF2-4BB7-8CFD-8AC05AAF37F6%7D/uploads/Adopted_Version_of_Chapter_12-Public_Health_Safety_and_Welfare.pdf
- May Township: Chapter 5 Article 507, 508
www.townofmay.org/vertical/sites/%7B28473C76-23EA-4214-B95E-E14504D5AF70%7D/uploads/May_Twp_Town_Code_Dec_2016.pdf
- Newport: Chapter 24 Solid Waste
https://www.municode.com/library/mn/newport/codes/code_of_ordinances?nodeId=COOR_CH24SOWA
- Oak Park Heights: Chapter 500 Garbage and Rubbish
www.cityofoakparkheights.com/vertical/sites/%7B22E6E0E6-5B6F-460C-B43E-F48433F4DDAB%7D/uploads/%7BBEB094A31-F670-4FEC-84D3-B131D25D948F%7D.PDF
- Oakdale: Chapter 6 Solid Waste and Environment
www.ci.oakdale.mn.us/vertical/Sites/%7B9D2ABE6F-4847-480E-9780-B9885C59543F%7D/uploads/Code6.pdf
- Scandia: Ordinance Number 8 Garbage and Rubbish www.ci.scandia.mn.us/vertical/sites/%7B2F1D9A41-1D4D-4195-A3E4-159328E3F399%7D/uploads/%7BB1EAE7B6-717F-4BB7-B769-605AF606AAF7%7D.PDF
- St. Paul Park Chapter 54 Solid Waste Management
library.municode.com/index.aspx?clientId=12857&stateID=23&statename=Minnesota
- Stillwater: Chapter 30 Garbage and Rubbish
https://www.municode.com/library/mn/stillwater/codes/code_of_ordinances?nodeId=CH30GARU
- Stillwater Township: Ordinance No. 12, No. 15, No. 111, No. 122
stillwatertownship.com/index.asp?SEC=7E4881F7-200A-4C2E-8FB8-37BFBDCE2DB2&DE=B3011BBE-1A1F-4FBA-8B12-FF47A5840E8D&Type=B_BASIC
- West Lakeland Township: Section 13 Environmental Regulations
www.westlakeland.govoffice2.com/vertical/sites/%7B4302F8BA-2E20-46AE-A97A-E6644431668F%7D/uploads/Section_13_-_Environmental_Regulations.pdf
- White Bear Lake: Article 5, Public Health, Welfare and Sanitation
www.whitebearlake.org/index.asp?Type=B_BASIC&SEC={CE21D74E-7000-4434-85E8-B1B83389DF5F}&DE={B8DF7252-69DF-4EDE-9484-BC5876E63757}
- Willernie:
willernie.org/ordinances/City_Ordinances/ADOPTION_OF_CODE_OF_ORDINANCE.pdf
- Woodbury: Chapter 19 Solid Waste
https://www.municode.com/library/mn/woodbury/codes/code_of_ordinances?nodeId=CICO_CH19SOWA

Appendix E: Acronyms

AD	Anaerobic Digestion
C&D	Construction and Demolition Waste
CEC	County Environmental Charge
CII	Commercial/Industrial/Institutional
EPP	Environmentally Preferable Purchasing
HHW	Household Hazardous Waste
ISWM	Integrated Solid Waste Management
LRDG	Local Recycling Development Grant
MNTAP	Minnesota Technical Assistance Program
MPCA	Minnesota Pollution Control Agency
MSW	Mixed Municipal Solid Waste
MUD	Multi-Unit Dwelling
RCRA	Resource Conservation and Recovery Act
RDF	Refuse Derived Fuel
R&E Board	Ramsey/Washington Recycling & Energy Board
R&E Center	Recycling & Energy Center
SMM	Sustainable Materials Management
SCORE	Select Committee on Recycling and the Environment
SWMCB	Solid Waste Management Coordinating Board
VOCs	Volatile Organic Compounds
VSQG	Very Small Quantity Generator
WMA	Waste Management Act

Appendix F: Definitions

Acceptable Waste: Waste that is acceptable at the Ramsey/Washington Recycling & Energy Center in Newport, Minnesota. It includes any type of solid waste that has been designated by county ordinance and which is not otherwise unacceptable waste.

Anaerobic Digestion (AD): A technology that uses microorganisms in the absence of oxygen to convert various types of organic wastes into renewable energy and compost or fertilizer.

Banned Materials: Wastes that are statutorily banned from disposal with MSW – yard waste, e-waste, HHW, appliances, tires, used motor oil, etc.

BizAWARE “Advocates for Waste and Recycling Education”: A program of the Recycling & Energy Board for Ramsey and Washington County business associations to develop outreach programs to member businesses about the importance of recycling.

BizRecycling: A program of the Recycling & Energy Board to promote businesses and institutions starting or enhancing recycling and organic waste management programs.

Bulky Waste: A subset of MSW; Household items and other discarded materials that, due to their dimension and weight, are typically not collected as part of the regular trash and recycling or for which there is a separate fee, such as furniture, carpeting and mattress. Excludes major appliances and e-waste.

Business: Engages in commercial activity as means of livelihood.

Cities/townships: Washington County cities and townships.

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)

Construction and Demolition Debris Waste C&D: Term referring to construction waste and demolition debris.

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.”

Commingled Recycling: Placing two or more source-separated recyclable materials in the same container for recycling.

Composting: The controlled microbial degradation of organic waste to yield a humus-like product. (Minn. Rules §7035.0300).

Conservation: Conserving energy and natural resources through waste recycling and recovery.

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)

County Environmental Charge (CEC): The CEC is a percentage of the cost of service and must appear as a separate line item on a bill. Washington County’s CEC rate is 35% (2017) for residential customers and non-residential customers. It applies to trash collection and disposal service, fuel surcharges, account start-up or cancellation fees and any other administrative fees. It does not apply to construction and demolition waste, recyclables, medical and infectious waste, organic materials collected for composting and certain types of industrial waste. The CEC also does not apply to other taxes or government fees.

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.

Appendix F: Definitions

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.

Designation: See Waste Flow Designation.

Disposal: The discharge, deposit, injection, dumping, spilling, leaking or placing of any waste into or on any land or water so that the waste or any other constituent thereof may enter the environment or be emitted into the air or discharged into any waters, including ground waters. (Minn. Stat. 115A.03, Subd. 9)

Disposal Facility: A waste facility permitted by the MPCA that is designed or operated for the purpose of disposing of waste on or in the land, together with any appurtenant facilities needed to process waste for disposal or transfer to another waste facility. (Minn. Stat. § 115A.03, subd.10)

East Metro: Includes Ramsey and Washington counties.

Electronic Waste (or “e- waste”): E-waste or electronic waste includes the following items:

- Cathode-ray tubes - “Cathode-ray tube” or “CRT” means a vacuum tube or picture tube used to convert an electronic signal into a visual image; commonly used in televisions and computer monitors.
- Computers - “Computer” means an electronic, magnetic, optical, electrochemical or other high-speed data processing device performing logical, arithmetic or storage functions but does not include an automated typewriter or typesetter, a portable handheld calculator or device or other similar device.
- Computer monitors - “Computer monitor” means an electronic device that is a cathode-ray tube or flat panel display primarily intended to display information from a central processing unit or the Internet. Computer monitor includes a laptop computer.
- Covered electronic devices - “Covered electronic device” means computers, peripherals, facsimile machines, DVD players, video cassette recorders and video display devices that are sold to a household by means of retail, wholesale or electronic commerce.
- Peripherals - “Peripheral” means a keyboard, printer or any other device sold exclusively for external use with a computer that provides input or output into or from a computer.
- Video display devices - “Video display device” means a television or computer monitor, including a laptop computer, that contains a cathode-ray tube or a flat panel screen with a screen size that is greater than nine inches measured diagonally and that is marketed by manufacturers for household use. Video display device does not include any of the following:
 - A video display device that is part of a motor vehicle or any component part of a motor vehicle assembled by, or for, a vehicle manufacturer or franchised dealer, including replacement parts for use in a motor vehicle;
 - A video display device, including a touch-screen display, that is functionally or physically part of a larger piece of equipment or is designed and intended for use in the following settings: industrial; commercial, including retail; library checkout; traffic control; kiosk; security other than household security; border control; medical, including diagnostic, monitoring or control equipment;
 - A video display device that is contained within a clothes washer, clothes dryer, refrigerator, refrigerator and freezer, microwave oven, conventional oven or range, dishwasher, room air conditioner, dehumidifier or air purifier; or
 - A telephone of any type unless it contains a video display area greater than nine inches measured diagonally.

Appendix F: Definitions

Environmental Justice (EJ): 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.

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.

Flow Control: See Waste Flow Designation.

Food Recovery Hierarchy: Prioritizes actions organizations can take to prevent and divert wasted food. Each tier of the Food Recovery Hierarchy focuses on different management strategies for wasted food with the top tier being the most preferential strategy.

Gasification: An emerging technology for converting shredded trash into a synthetic gas using intense heat.

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)

Governance: Governance is the process by which materials are managed for the public good with an emphasis on highest and best use of materials and overall system sustainability. Governance includes the goals and activities of government entities, businesses, nonprofits, communities, and individual citizens.

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)

Hierarchy: See Waste Management Hierarchy or Food Recovery Hierarchy.

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 (Solid) Waste: All solid waste generated from an industrial or manufacturing process and solid waste generated from nonmanufacturing activities such as service and commercial establishments. Industrial solid waste does not include office materials, restaurant and food preparation waste, discarded machinery, demolition debris, municipal solid waste combustor ash, or household refuse. It does not include wastes regulated as hazardous wastes. (Minn. Stat. §115A.03, Subd. 13a)

Infectious Waste: Laboratory waste, blood, regulated body fluids, sharps and research- animal wastes that have not been decontaminated. (Minn. Stat. § 116.76, Subd. 12)

Integrated Solid Waste Management (ISWM): A solid waste management system in which various waste management methods are used to manage waste (e.g., waste reduction, reuse, recycling, composting, resource recovery, landfilling, etc.), depending upon the characteristics of the waste and often according to a waste management hierarchy.

Joint Powers Agreement: A legally binding agreement between two or more governmental entities. It is a tool for intergovernmental action on, for example, solid waste management activities.

Appendix F: Definitions

Landfill (Land Disposal Facility): 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)

Landfill Abatement: Actions that avoid landfilling of waste, such as waste reduction, recycling or resource recovery.

Landfill Surcharge: A surcharge applied to waste tipped at landfills; can include State, county and local surcharges.

Leachate: Liquid that has percolated through solid waste, thus extracting, dissolving or suspending materials from the solid waste. (Minn. Rules §7035.0330, Subd. 56)

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.

Major Appliances: Also commonly referred to as “white goods.” Includes items banned by State law from disposal with solid waste (clothes washers and dryers, dishwashers, hot water heaters, heat pumps, furnaces, garbage disposals, trash compactors, conventional and microwave ovens, ranges and stoves, air conditioners, dehumidifiers, refrigerators and freezers). (Minn. Stat. §115A.03, Subd. 17a)

Materials Recovery Facility (MRF): Facility designed for centralized sorting, processing and/or grading of collected recyclable materials for marketing.

Medical Waste: Commonly used term referring to infectious waste from medical facilities or procedures.

Metropolitan Landfill Abatement Account: Established under Minn. Stat. Sec. 473.844, an account created to fund projects that result in landfill abatement in the metropolitan area. Part of the proceeds from a State landfill surcharge on waste tipped at metropolitan area landfills is deposited into this account.

Metropolitan Solid Waste Management Policy Plan (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 Office of Environmental Assistance as required under Minn. Stat. Sec. 473.149. The Solid Waste Management Coordinating Board and Office of Environmental Assistance jointly developed the current Policy Plan, adopted in October 1997.

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)

Multi-Unit Dwelling (MUD): A classification of housing where multiple separate units for residential living are contained within one building.

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.

Non-Processible Waste: Waste brought to a resource recovery facility but cannot be mechanically processed due to its physical characteristics or potential harmful effects.

Appendix F: Definitions

Non-Putrescible Waste: Solid wastes which are not capable of being decomposed by micro-organisms with sufficient rapidity as to cause odors, gases, attraction of vectors or other offensive conditions. (By contrast, putrescible wastes are a subset of organic wastes that tend to biodegrade very rapidly, such as food scraps.)

Non-Residential: Refers to places other than where people live, such as businesses, government facilities or operations, institutions, schools, non-profit organizations, community activities, etc. Interchangeable with “commercial.”

Open Collection: A solid waste collection system in which multiple waste haulers or collectors compete for collection accounts in the same geographical area.

Organic Waste: 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. Organic waste typically includes food waste, non-recyclable paper products, yard waste, and other materials that readily degrade. According to EPA, “Organic matter in landfills breaks down and releases methane, a potent greenhouse gas, and contributes to landfill leachate that can pollute waterways.”

Organics Recycling: The process of breaking down organic waste into a nutrient-dense compost.

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)

Pollution Prevention: Eliminating or reducing at the source the use, generation or release of toxic pollutants, hazardous substances and hazardous wastes. (Minn. Stat. §115D.03, Subd. 8.)

Post-consumer material: A finished material that would normally be discarded as a solid waste having completed its life cycle as a consumer item. (MN Stat. § 115A.03, subd. 24b)

Private sector: Part of the economy not controlled or owned by the government.

Problem Material: Material that, when it is processed or disposed of with mixed municipal solid waste, contributes to one of the following results: 1) the release of a hazardous substance, pollutant or contaminant, as defined in section 115B.02, subdivisions 8, 13 and 15; 2) pollution of water, as defined in section 115.01, subdivision 5; 3) air pollution, as defined in section 116.06, subdivision 3; or 4) a significant threat to the safe or efficient operation of a solid waste processing facility. The four conditions are further defined in Minn. Stat. §115A.03, Subd. 24a.

Processible Waste: Acceptable waste brought to a resource recovery facility that may be mechanically processed using the existing technology at the facility.

Processing: 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) For purposes of certification of unprocessed waste, per Minn. Stat. §473.848, “storage,” “exchange,” and “transfer” are excluded.

Product Stewardship: The concept that all parties who have a role in producing, selling or using a product, including material suppliers, manufacturers, retailers and consumers, assume responsibility for the environmental impacts of a product throughout its lifecycle. These include impacts from the selection of raw materials, the design and production processes, and the use and disposal of the product.

Appendix F: Definitions

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.

Ramsey/Washington Recycling & Energy Board (R&E Board): A joint powers agreement between Ramsey and Washington Counties to protect and ensure the public health, safety, welfare and environment of each county’s residents and businesses through sound management of solid and hazardous waste generated in each county and collaboration on many waste management activities.

Ramsey/Washington County Resource Recovery Project (RRP): See Ramsey/Washington Recycling & Energy Board.

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)

Recycled-Content: Used to describe a product that contains recycled materials. Often further clarified as “post-consumer” recycled content and/or “pre-consumer” or “post-industrial” content. “Post-consumer” refers to a finished material that would normally have been discarded as solid waste, having completed its life cycle as a consumer item (Minn. Stat. §16B.122, Subd. 1c; and Minn. Stat. §115A.03, Subd. 24b). Instead, it was used to manufacture a recycled-content product. “Post-consumer” is typically thought of as recyclable materials collected from residents and businesses in recycling programs. “Pre-consumer” or “post-industrial” typically refer to recyclable materials that come from manufacturers and product converters, including damaged or obsolete products, overruns and trimmings. These materials have not yet completed a life cycle as a consumer item.

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)

Recycling & Energy Center (R&E Center): A processing facility in Newport, MN owned by the Ramsey/Washington Recycling & Energy Board.

Recycling Facility – A facility at which materials are prepared for reuse in their original form or for use in manufacturing processes that do not cause the destruction of the materials in a manner that precludes further use. (Minn. Stat. § 115A.03, subd.25c)

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. A product resulting from the processing of MMSW in a manner that reduces the quantity of noncombustible material present in the waste, reduces the size of waste components through shredding or other mechanical means, and produces a fuel suitable for combustion in existing or new solid fuel-fired boilers (Minn. Stat. § 115A.03, subd. 25d)

Residuals, Residue: Waste materials remaining after processing waste for the separation and recovery of materials or energy.

Resource Conservation: Preserving raw materials, energy, water or other materials for future use.

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 typically refers to the recovery of energy and usable materials during the processing of mixed municipal solid waste.

Appendix F: Definitions

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.

Separately Managed Wastes: Waste materials that are managed as discrete waste streams, such as lead-acid batteries, recyclables or infectious wastes.

Service Charge: Under the authority granted in Minn. Stat. §400.08 and §473.811, subd. 8a, a fee collected for services rendered by a county or by extension through joint powers agreements by municipalities of the county.

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 Coordinating Board (SWMCB): A board formed under a joint powers agreement, consisting of two Commissioners from each of the six metropolitan counties plus two ex-officio members: the Director of the Minnesota Office of Environmental Assistance and the Commissioner of the Minnesota Pollution Control Agency. SWMCB is established to coordinate solid waste planning and programming on a regional basis.

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 Separation: Separation of recyclable, compostable or other materials by the waste generator prior to collection.

Source-Separated Compostable Materials: Refers to 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 and are governed by the licensing provisions of section 115A.93; (3) are comprised of food wastes, fish and animal waste, plant materials, diapers, sanitary products and paper that is not recyclable because the commissioner 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 meeting the Minnesota Pollution Control Agency’s class I or class II, or equivalent, compost standards and where process residues do not exceed 15% by weight of the total material delivered to the facility; and (5) may be delivered to a transfer station, mixed municipal solid waste processing facility or recycling facility only for the purposes of composting or transferring to a composting facility, unless the commissioner determines that no other person is willing to accept the materials. (Subd. 32b.MS 1994 [Renumbered subd 32d])

Appendix F: Definitions

Source-Separated Recyclable Materials: Recyclable materials, including commingled recyclable materials that are separated by the generator.

Special Wastes: Nonhazardous wastes that have been prohibited from disposal with mixed municipal solid waste or have had other specific management requirements prescribed by statute. They include, but may not be limited to, tires, lead acid batteries, major appliances, used oil and yard waste.

Sustainable Building: Refers to a building that is healthy and comfortable for its occupants and is economical to operate. It conserves resources (including energy, water, raw materials and land) and minimizes the generation of toxic materials and waste in its design, construction, landscaping and operation. A sustainable building also considers historic preservation and access to public infrastructure systems as well as the entire lifecycle of the building and its components.

Sustainable Materials Management (SMM): Describes an approach to serving human needs by using/reusing resources most productively and sustainably throughout their life cycles, generally minimizing the amount of materials involved and all the associated environmental impacts (source: EPA). Sustainable Materials Management (SMM) focuses on the best use and management of materials based on how they impact the environment throughout their life cycle. SMM considers the impacts of extracting raw materials, scarcity of materials, product design, product use, and reuse.

Tipping Fee: The fee charged by solid waste facilities to waste haulers, collectors or other parties for the privilege of depositing or “tipping” waste.

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)

Unprocessed mixed municipal solid waste (Unprocessed MMSW) – For the purpose of Minn. Stat. § 473.848, waste is “unprocessed” if it has not, after collection and before disposal, undergone separation of materials for resource recovery through recycling, incineration for energy production, production and use of refuse-derived fuel, composting, or any combination of these processes so that the weight of the waste remaining that must be disposed of in a mixed municipal solid waste disposal facility is not more than 35% of the weight before processing, on an annual average.

Unacceptable Waste: Waste that is not acceptable at a resource recovery facility under the terms of the service agreement. Unacceptable Waste includes wastes which would likely pose a threat to health or safety or which may cause damage to or materially adversely affect the operation of the facility.

Unprocessed mixed municipal solid waste (Unprocessed MSW) – For the purpose of Minn. Stat. § 473.848, waste is “unprocessed” if it has not, after collection and before disposal, undergone separation of materials for resource recovery through recycling, incineration for energy production, production and use of refuse-derived fuel, composting, or any combination of these processes so that the weight of the waste remaining that must be disposed of in a mixed municipal solid waste disposal facility is not more than 35% of the weight before processing, on an annual average.

Volatile Organic Compounds (VOCs): Includes a variety of chemicals that evaporate easily from the solid or liquid state and are found in a variety of products. Some VOCs can have short- or long-term adverse health effects. Many VOCs are found in higher concentrations indoors versus outdoors.

Appendix F: Definitions

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 Flow Designation: A requirement by a county or waste management district that all or any portion of the solid waste that is generated within its boundaries or any service area thereof be delivered to a processing or disposal facility identified by the district or county. (Minn. Stat. §115A.81, Subd. 2)

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 (Order of Preference): 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 (See also source 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: Garden wastes, leaves, lawn cuttings, weeds, shrubs and tree waste, and prunings. (Minn. Stat. §115A.03, Subd. 38) 115A.91

Appendix G: Ramsey and Washington Counties Joint Waste Designation Plan

Ramsey and Washington Counties purchased the Ramsey/Washington Recycling & Energy Center in Newport, Minnesota (R&E Center) and plan to use the waste processing facility as a key component in managing waste and resources in the two counties. During a three-year planning and evaluation period, the counties anticipated the use of waste designation as a critical policy choice to achieve state waste management goals. A Joint Waste Designation Plan was approved by the MPCA in August 2016 on behalf of both counties as the necessary next step in achieving the vision for waste and resource management in the two counties.

The Ramsey/Washington Joint Waste Designation Plan can be found at the following link:

www.morevaluelesstrash.com/designation-and-master-plans/

Hard copies can also be requested via phone at 651-430-6655.

Appendix H: Amendment to the 2012-2030 Solid Waste Management Master Plan

Washington County amended the processing chapter of its 2012-2030 Solid Waste Management Master Plan to reflect the purchase of the R&E Center, to provide more detail about the R&E Center's operations and to clarify policies and strategies on waste processing and implementation of a Ramsey/Washington County Joint Waste Designation Plan. The amendment was approved by the MPCA in August 2016.

The amendment to the 2012-2030 Solid Waste Management Master Plan can found at the following link:

www.morevaluelesstrash.com/designation-and-master-plans/.

Hard copies can also be requested via phone at 651-430-6655.

Appendix I: Major Milestones, Events & Activities in Washington County Waste Management History

1967 Landfill: Counties are given the authority to establish and operate sanitary landfills by the state legislature.

1969 Ordinances: County enacts first solid waste ordinance to regulate solid waste activities including open dumping, waste collection, and transportation, disposal at waste facilities, and termination of waste facility operations.

Landfill: County has one permitted landfill, Lake Jane in the City of Lake Elmo, which is operated in partnership with Ramsey County. First to be permitted by the MPCA, is designated as SW-1, and is hailed as a model for solid waste disposal. One solid waste transfer station is also permitted, in Grant Township. The county, working with Ramsey County, attempts to locate additional landfills within the county during the 1970's.

1975 Landfill: Lake Jane Landfill closed. Monitoring wells are installed in Lake Jane Landfill.

Processing: Saint Paul receives EPA grant to explore waste-to-energy as an energy conservation tool and identifies 3M campus as a market for steam for a waste-to-energy plant; Ramsey County became involved. Best sites for waste to-energy plant serving 3M were in the City of Lake Elmo. Washington County becomes involved.

1979 Solid Waste Advisory Committee is created in the county to assist in solid waste management tasks.

1980 Minnesota Legislature passes the Waste Management Act. In addition to other requirements, it requires each metropolitan area county to locate five potential landfill sites, to prepare a waste abatement proposal, and to prepare a solid waste management master plan. The law made counties responsible for waste management planning and meeting mandates, therefore Saint Paul drops out of waste-to-energy process.

Appendix I: Major Milestones, Events & Activities in Washington Co. Waste Management History

- 1980** Toxicity Reduction, Ordinances: County Board adopts Hazardous Waste Management Ordinance establishing standards relating to 1) identification of hazardous waste, 2) the labeling and classification of hazardous waste 3) the collection, storage, transportation, processing, and disposal of hazardous waste, and 4) other matters necessary for the public health, welfare and safety.
- 1981** **Landfill:** Groundwater pollution problems first detected in the monitoring wells at Lake Jane Landfill, and the pollution soon spread to adjacent residential wells.
- Groundwater contaminants of most concern included several solvents, classified as volatile organic compounds. In order to remove the volatile organics, and to control the growing plume of groundwater contamination, a well and spray irrigation system was constructed.
- 1982** Responsibility for solid waste management is transferred from the County Public Works Department to the Planning Department.
- Landfill:** The county starts the landfill siting process which was required by the 1980 Waste Management Act.
- Recycling:** Multi-material recycling center (LARC) is formed to serve residents in Forest Lake, Hugo and Forest Lake Township.
- Processing:** Resource Recovery Project Board (RRPB) is established with commissioners from Ramsey and Washington Counties and a representative from Newport as part of Joint Power Agreement between Ramsey and Washington Counties.
- 1982-84** **Processing:** Counties decide to pursue refused-derived-fuel (RDF) technology before mass-burn technology. Counties examine procurement, ownership, financing and waste assurance issues, before embarking on a staged procurement process. RFQ's issued and two vendors qualified to submit proposals – NSP and Aenco Cargill. Competitive negotiations result in two final proposals; NSP is selected when Aenco cannot guarantee a market for the RDF.
- 1983** Responsibility for solid waste management is transferred from the county's Planning Department to the Public Health Department.
- Landfill:** The county concludes the landfill siting process which results in one potential landfill location in Lake Elmo, known as Site G.
- 1984** County Board adopts the first solid waste management master plan.
- Processing:** Washington and Ramsey Counties and NSP sign Design and Construction Agreement, and a Service Agreement (Counties are required to assure a supply of waste and payment for processing; NSP would assure that the waste would be processed into RDF and be used).
- Yard Waste:** County Board approves program to encourage the composting of yard wastes. The county operates 2 sites, one in Forest Lake and Woodbury.
- Recycling:** Scandia Recycling Center is established to serve New Scandia Township, Marine on St Croix, and May Township.

Appendix I: Major Milestones, Events & Activities in Washington Co. Waste Management History

1985 Ordinances: County Solid Waste Management Ordinance amended and called the “Designation Ordinance” (Ordinance 47) which establishes powers, duties, regulations, and standards for the designation of a facility to receive all solid waste from residential and nonresidential sources in Washington County which are disposed of within the borders of Minnesota. A second county ordinance (Ordinance 49) is amended which enables the county to impose a service charge for solid waste management services. This second ordinance was not implemented until the Resource Recovery Facility is in operation.

Recycling: No residential curbside recycling programs; four multiple material drop-off recycling centers; and less than 2% residential recycling.

Toxicity Reduction: No HHW collections in the county. MPCA funds 9 HHW collections in the state in late 1985. County implements hazardous waste regulation program.

Processing: No MSW processing; 100 percent land disposal of MSW.

Yard Waste: County operates 4 compost sites, Forest Lake, Woodbury, Lake Elmo and Cottage Grove.

1985-86 Recycling: County implements a grant program for cities and towns interested in developing recycling programs. Two drop-off recycling programs were funded in Forest Lake and in New Scandia Township.

Processing: Ramsey, Washington, and Dakota Counties negotiate a draft joint powers agreement for a three-way project to build a refuse derived fuel facility, but later in the year Dakota County withdraws from the Project.

1985-87 Processing: Construction of the RDF Facility occurs. Counties attempt to negotiate contracts with waste haulers for voluntary waste delivery; negotiations result in five contracts with small hauling firms.

1987 Processing:

- RDF Facility is accepted by Washington/Ramsey Counties and begins operation July 13, 1987. The twenty year term of the Service Agreement begins. Counties implement Designation Ordinance #47, putting flow control into effect. Counties agree to subsidize tipping fee at facility to phase in over several years the higher cost of processing.
- Both counties developed and adopted a waste management service charge (WMSC) ordinance. The charge, collected on property tax statements. Collection of the WMSC became effective in 1989.

Waste Reduction & Recycling:

Goodwill starts operating 3 drop-off stations for recycling in addition to collecting household items.

Adoption of county recycling implementation strategy for residential and commercial recycling.

1988 First residential curbside recycling collection implemented in city of Lake Elmo.

1989 In-house: County implements its in-house office recycling program.

Processing: County’s Waste Management Service Charge (WMSC) is \$23.70 per parcel. Residential and non-residential fee charged on improved parcels in the county.

Toxicity Reduction: County conducts first HHW collection in Cottage Grove. County conducts 5 HHW events with participation of more than 2,400 households.

Solid Waste Management Coordinating Board (SWMCB) taskforce is established.

Appendix I: Major Milestones, Events & Activities in Washington Co. Waste Management History

- 1989** Select Committee on Recycling and the Environment (SCORE) legislation is enacted, which now provides funds for recycling and HHW programs.
- Waste Reduction & Recycling:** Additional curbside recycling programs begin in the county.
- Processing:** Counties phase out use of WMSCs for resource recovery. The WMSC is still used for recycling and waste reduction programs and HHW programs. Waste generators are paying the full cost of waste processing, around \$67.00/ton to the hauler, through the hauler bill.
- 1990** **Waste Reduction & Recycling:** 7,181 tons of recyclables collected curbside, 98 lbs. /person
- 1991** **Waste Reduction & Recycling:** 97 percent of county cities/towns have curbside recycling programs; 6 multiple material drop-off recycling centers; and approximately 31 percent of total MSW is recycled.
- Yard Waste:** There are seven yard waste compost sites in operation.
- Processing:** Eight-one percent of delivered MSW processed into RDF.
- Toxicity Reduction:** Waste Management Act requires counties to develop a HHW plan. County plan for permanent HHW collection is developed.
- Landfill:** Public water supply is installed to serve residential area near Lake Jane Landfill.
- 1992** **Yard Waste:** Operation of county compost sites passed onto cities/towns. County provides only technical assistance.
- 1993** **Processing:** A lawsuit, Waste Systems v. Faribault and Martin Counties, is decided in federal court, and strikes down those counties' flow control ordinances. Several haulers threaten to take Ramsey/Washington County waste to landfills outside of Minnesota. In response, the Project Board and county boards decide to reduce the tipping fee at the facility, but to collect the difference through a hauler-collected service charge, called the Resource Recovery Service Charge (RRSC). In April, the RRSC is implemented. The tipping fee reduced from \$66.79/ton to \$50.00/ton on Jan 1. Counties use reserve funds to pay part of the cost of processing.
- In May, the U.S. Supreme Court rules in *Carbone v. Clarkstown* that local flow control ordinances are unconstitutional.
- Toxicity Reduction:** Construction begins on permanent HHW facility in Oakdale.
- SWMCB becomes a joint powers board with membership from seven metropolitan counties.
- 1994** **Processing:** Counties decide to discontinue using RRSC, and shift to WMSCs collected on tax statements. Beginning in 1995, generators would pay full cost of the waste processing with part of the cost on their hauler bill and part of the cost through the WMSC, collected on property tax statements.
- Toxicity Reduction:** Permanent HHW facility opens.
- Waste Reduction & Recycling:** First issue of Environmental Update newsletter is published, coinciding with opening of year-round household hazardous waste facility.

Appendix I: Major Milestones, Events & Activities in Washington Co. Waste Management History

- 1995** **Processing:** Counties and NRG attempt to negotiate changes to the Service Agreement, and counties meet with haulers. Project Board terminates negotiations with NRG, after parties are unable to reach an agreement.
- County Board approves amendment to the SWMCB joint powers agreement to establish a regional hauler license program.
- Waste Reduction & Recycling:** 12,716 tons of recyclables collected curbside, 145 lbs. /person.
- 1996** **Processing:** Waste haulers warn of sending much of the waste to out-of-state landfills. The counties negotiate contracts with haulers for waste delivery at \$38 per ton through 1996, with option to renew under the same terms. Each county board hold workshops to review options financial issues, issues related to the tipping fee, general solid waste policy matters, and long term waste assurance. Direction from Board includes negotiating contracts with haulers, and seeking a dollar-for-dollar match from NRG
- Waste Reduction & Recycling:** Trash Trunks are developed through resource recovery project office for loan to schools and community groups.
- 1997** **Waste Reduction & Recycling:** America Recycles Day comes to Minnesota. A “Recycled Product Hunt” is implemented at Target Greatland in Woodbury. Activities are held in 8 communities reaching 1,900 people.
- Processing:** Ramsey/Washington RRP begins publishing the Trash Today newsletter
- Toxicity Reduction:** Very Small Quantity Generator (VSQG) pilot program begins through the county’s HHW agreement with the state.
- 1997-98** **Processing:** Waste haulers in Ramsey and Washington Counties are under contract for delivery of waste to the RRF at \$38 per ton.
- 1998** **Processing:** Negotiations with NRG Energy, Inc. continue, with agreement reached in principle to reduce several costs in the Service Agreement. This will save about \$1.2 million per year. Both parties agree in concept to consider longer term changes and cost reductions, beginning in 1999.
- Toxicity Reduction:** VSQG program is implemented.
- 1999** **Processing:** The Project funded purchase of a refrigerated truck for the Second Harvest Food Bank for its people-to-people food program.
- The Project and counties negotiate waste delivery agreements with waste haulers for delivery in 2000, 2001 and 2002. Consolidation in the waste industry resulted in diversion of waste to landfills by haulers.
- Waste Reduction & Recycling:** Recycled Products Kits are developed for county and presented to America Recycles Day Education Committee as a possible state-wide project. Nineteen kits are assembled.
- 2000** **Processing:** Counties agree to keep the tipping fee at \$38 per ton, after exploring an increase in the tipping fee. Trend in tipping fees is downward, and haulers could transport and landfill waste from the counties at \$18-\$22 per ton.
- Waste Reduction & Recycling:** Seventy Recycled Products Kits are assembled for distribution statewide.
- 18,501 tons of recyclables collected curbside, 177 lbs. /person

Appendix I: Major Milestones, Events & Activities in Washington Co. Waste Management History

2001 Processing: In January, BFI is in breach of its landfill contract and waste delivery agreement by diverting about 200 tons per day of waste to its Pine Bend landfill.

Project appears to be close to falling short of 280,800 tons per year commitment to NRG, with projected deliveries of 255,000 tons.

Waste Reduction & Recycling: Free Market and Take It Back Programs become available in county. County receives a RAM Public Service Award for the Recycled Products Kit (over 200 distributed statewide).

County implements in-house waste reduction program called Cut the Waste!

Toxicity Reduction: HHW participation increased 17 percent from 2000 to 2001, with 4,561 households using a collection site in 2001.

2002 Processing: Public Collection is studied. County Board gives direction to implement a more volume-based County Environmental Charge (CEC), implement long term waste delivery contracts, and not implement public collection at this time if system moves towards goals using other methods. County Board approves 2003-2007 all waste and specific tonnage waste delivery agreements. 2003 CEC rate is established at 34.2%, beginning in April 2003, and to maintain a \$3 parcel charge.

Environmental Update merged with Staying in Touch newsletter.

Waste Reduction & Recycling: Get Caught recycling! is covered by television and newspaper.

2003 Waste Reduction & Recycling: Residential Recycling Funds prioritize funding and program type, reduce direct subsidy of recycling program costs, redirect funding to enhance performance, refocus county staff assistance to cities, increase county coordination and facilitation of information, increase focus on all residential programs including multifamily.

Processing: The 2004 CEC rate is established at 39.5%.

Toxicity Reduction: The county establishes a reuse incentive program with its HHW vendor to increase amount of reusable products getting out to residents through its Reuse Room. In 2003, the amount put out for reuse went up 286%.

First communities in the county, including Birchwood, Mahtomedi, Dellwood, and Willernie, implements single-stream recycling.

2004 Toxicity Reduction: County pilots front step collection of household hazardous waste and begins discussion on a new environmental center that will include a new HHW facility.

Planning: County completes the third county waste management master plan.

2005 Processing:

- Volume of waste to the Facility is below expectations. Reducing tipping fee is an effort to stabilize the market and should effectively compete with landfills. Tipping fee reduced to \$34/ton.
- NRG issued Notice of Default Claim to Counties related to Counties action on specific tonnage agreements. Counties rejected notice.

Appendix I: Major Milestones, Events & Activities in Washington Co. Waste Management History

2005 **Waste Reduction & Recycling:** 1,562 items were given away by county residents using the Twins Cities Free Market.

Pilot Food Waste Recycling (food to hogs) through the Ramsey/Washington RRP begins at Maxfield Elementary in St. Paul with all cafeteria waste streams measured.

23,146 tons of recyclables collected curbside, 206 lbs. /person

Toxicity Reduction: Conducted workshops on planning for a new HHW facility/environmental center. Front Step Collection Report completed.

In-house: County Board approves resolution adopting the Minnesota Sustainable Building Design Guidelines for use in county building and remodeling projects.

2006 **Processing:** Significant changes were made to move towards a merchant system.

Existing agreement between Counties and NRG is terminated and a new vendor, RRT, purchases the Facility. RRT will be securing waste for the Facility with hauler contracts. As part of new processing agreement, counties will pay for processing services in a different way; a flat per ton rate to the vendor and a hauler rebate program.

Waste Reduction & Recycling:

- An incentive grant was awarded to the City of Woodbury to work with a multifamily housing complex to identify barriers to recycling and test educational materials to increase recycling.
- Food recycling (food to hogs) began with a pilot project at Woodbury Elementary in February, followed by implementation in May. Lily Lake and Stonebridge Elementary Schools followed in fall of 2006.

In-house:

- An energy conservation baseline was developed by the Center for Energy & Environment (CEE) for the Facilities Department. Based on CEE estimated savings, energy efficient T-8 light bulbs were installed at the county's North and South Shops.
- County uses Minnesota Sustainable Building Design Guidelines in the design and construction of the Service Center in Cottage Grove and Service Center & Library in Forest Lake.

Toxicity Reduction: HHW resident participation increased 3.5% in 2006 from the previous year. The increase is primarily due to coordinating collection events with city clean up events.

2007 **Processing:**

- The Ramsey/Washington County RRP and Saint Paul Public Schools received a Governor's Partnership Award in February 2008 for implementing a large-scale food waste recycling program.
- RRT entered into contracts with haulers through the duration of the agreement, and over 325,000 tons of waste from Ramsey and Washington counties was delivered for processing.

Both Counties have implemented a hauler rebate program for MSW delivered to the facility, issued monthly. The rebate is for \$12 per ton through 2010 and \$14 per ton for 2011-2012.

Appendix I: Major Milestones, Events & Activities in Washington Co. Waste Management History

2007 **Waste Reduction & Recycling:** Improved Recycled Products Kits: Kits were borrowed by over 50 groups, reaching over 10,000 people in 2007.

- Green Purchasing Workshop: The County hosted Greening Your Organization Workshop for public entities to learn more about the benefits and availability of environmentally preferable products and services.

In-house:

- Redesigned Environmental Initiatives on county employee Intranet that lists in-house waste reduction and recycling activities.
- County has incorporated the Minnesota Sustainable Building Design Guidelines in the design and construction of the expansion of Courts and Law Enforcement Center at the Government Center in Stillwater.
- An energy plan was developed for the Courts and Law Enforcement Center expansion at the Government Center in Stillwater through the Weidt Group with funding provided by Xcel Energy.
- Facilities Department conducted energy use/cost analysis of North Shop bulb switch-out comparing 2006 and 2007 data. Study showed 6% decrease in electrical use and 2% cost reduction in one year.

Toxicity Reduction:

- Communications Plan: County developed a communications plan for the promotion of the year-round hazardous waste facility, seasonal collection events, and toxicity reduction.

2008 **Toxicity Reduction:** County has incorporated the Minnesota Sustainable Building Design Guidelines in the design and construction of the county's new household hazardous waste facility due to open in 2009. Sustainable features include a rainwater recycling system, rain gardens, recycled-content building materials, low VOC paint, Energy Star appliances, and energy efficient lighting.

- E-waste Collection at HHW facility
The county responded to the 2007 CRT residential disposal ban by accepting electronics at its household hazardous waste facility (HHW) in Oakdale. 2008 was the county's first full year collecting electronics from residents at the HHW facility. Over 947,000 pounds of e-waste was collected and recycled.

Waste Reduction, Reuse, and Recycling:

- Youth Environmental Survey
A youth environmental survey was conducted as part of the county's Community Health Assessment. The survey was completed by over 590 students in grades 7 and 8 to gauge their perspective on environmental issues and concerns within the county. Students indicated the most serious environmental problems in their community were air pollution, excessive garbage, the need for more recycling participation and recycling programs, and littering.

Planning: The county incorporated sustainability and specific strategies from the county's current waste management master plan with the goal of preserving, managing, and utilizing natural resources to promote a healthy environment for present and future generations.

Appendix I: Major Milestones, Events & Activities in Washington Co. Waste Management History

2010 Waste Reduction, Reuse, and Recycling

- **E-News**
The Environmental eUpdate, a bi-monthly electronic newsletter, was first issued by the Department. Over 179 residents signed up to receive the new eUpdate in 2010.
- **Compost Bin and Rain Barrel Distribution**
The county partnered with the Recycling Association of Minnesota (RAM) to offer compost bins and rain barrels. Over 600 people participated in the program and purchased 300 compost bins, 45 kitchen food waste collection pails, and 595 rain barrels.
- **Compost Kits Completed**
A new tool to help teach about composting was developed for educators and community group leaders to borrow. Four composting kits were completed and were loaned to six groups.
- **Food Waste Recycling**
Two additional schools implemented food waste recycling, resulting in 14 schools total in the county participating in this activity.

23,643 tons of recyclables collected curbside, 198 lbs. /person

Processing:

- **Resource Recovery Project**
The Trash Today newsletters were discontinued and substituted with Going Green guides printed and mailed to all residents in the county. The Green Guides are a comprehensive booklet covering HHW, recycling, waste reduction, yard waste, and other waste-related topics.
- **Energy Efficiency and Conservation Block Grant (EECBG)**
As part of the funding, a scope of the county energy plan was drafted and through an RFQ process, an energy plan consultant was selected to assist the county in developing this plan and help in the coordination of an energy plan committee.
- **Central Energy Database**
With the assistance of a Minnesota GreenCorps member, the county updated energy data in order to track and benchmark energy use from county buildings using the State of Minnesota's B3 system.
- **Employee Energy Campaign**
The Department surveyed baseline employee electricity use related to lighting and personal electronics in offices. Fifty-three percent of county employees completed the survey. The information collected from the survey was used to develop a county employee energy campaign to identify information and resources that would be helpful in reducing energy use in offices and identify the primary barriers to participating in various energy reducing activities. As part of the campaign, five employees participated in the Volunteer Energy Meter Activity to kick-off the loaning of energy meters to the over 200 county staff that signed up to use an energy meter, after completing the survey. The volunteers measured energy used from equipment used at home or work and recorded the cost of yearly operation.
- **Vending Machine Misers in Parks**
The county's Minnesota GreenCorps member worked with the Parks Department to save energy and cut electricity costs through the use of a Vending Miser installed on select vending machines.

Appendix I: Major Milestones, Events & Activities in Washington Co. Waste Management History

2011 **Communication and Events:** 324 residents subscribed to the Environmental eUpdate an electronic newsletter issued 4 times/year covering remote HHW collections and other timely events. This was an increase of 145 subscribers from 2010.

School Projects: Technical and financial assistance was provided to establish food waste recycling at 5 additional schools for a county-wide total of 17

2012 **Planning:** Washington County Waste Management Master Plan 2012-2030 approved

Communication and Events: 600 subscribers to the Environmental eUpdate

New disposal opportunities

- Sharps added to acceptable items at WCEC

- Collection of unused medications begins at the Washington County Law Enforcement Center

Office Recycling: 101 tons of office recycling

County implements daytime cleaning, reducing energy consumption and also providing opportunities to reduce the toxicity and variety of cleaners and switch to reusable cloths rather than paper towels for cleaning. Building services interested in improving waste collection system as part of daytime cleaning.

School Projects: Technical and financial assistance was provided to establish food waste recycling at 5 additional schools for a county-wide total of 22.

Business Recycling: Business/Institution outreach begins through contracts between the Ramsey/Washington County Resource Recovery Project and MnTAP, Waste Wise, and JL Taitt. The primary focus of the consultants was to gather information about businesses with a focus on generators producing a large amount of organics.

2013 **Planning/Policy:** CEC analysis recommends a reduction in the CEC from 37.5% to 35%. The County Board adopted the change to take effect in 2014.

Communication and Events: 1,100 subscribers to Environmental eUpdate

New disposal opportunities: Unused medication disposal expanded to two additional locations: South Service Center in Cottage Grove Service Center and Headwaters Service Center in Forest Lake.

Office Recycling: Divert 70, an office recycling and organics pilot project, begins at the Government Center in the Departments of Administration, Building Services, and Public Health & Environment as well as the Public Works North Shop. Features of the project included single-sort recycling and organics composting in color-coded bins. Trash cans were removed from employee desk areas and replaced with mini containers for collecting waste with employees expected to self-haul to sorting stations.

Assessments after the pilot showed that 84% of the recyclables and compostables at these locations were being diverted from the trash.

School Projects: Stillwater Area Public Schools was provided consultant assistance to develop an RFP and contract for waste and recycling services. The new contract resulted in a \$2,000 savings per month and provided greater flexibility and financial incentives for the district to recycle more material.

Appendix I: Major Milestones, Events & Activities in Washington Co. Waste Management History

2013 **Municipal Funding and Assistance:** A work group including county, city, and township staff met to develop components of a recycling program scorecard. The scorecard features a continuum of best practices for cities and townships to implement and will align with the residential recycling grant program.

2014 **Communication and Events:** 1300 subscribers to Environmental eUpdate newsletter

Assisted Carpenter Nature Center with applying zero waste principles to their Apple Blossom running races. Thoughtful planning and attention to overseeing the recycling, organics, and trash containers resulted in 91% of the waste produced at the event being recycled or composted.

Going Green Guide users surveyed about usefulness, content, and what time of year they would like to receive the guide

Office Recycling: The Divert 70 office recycling and organics program expanding to all remaining locations in the Government Center, Courthouse, Law Enforcement Center, North Shop, Forest Lake Service Center, Woodbury License Center, and the Cottage Grove Service Center. Divert 70 now serves 1,230 county employees. A waste sort conducted in July indicated that 83% of material produced by employees is now being diverted from the trash to recycling and composting

Business Recycling: BizRecycling grant program begins with 19 grants provided to Washington County businesses in Hugo, White Bear Lake, Woodbury, Oakdale, Stillwater, Oak Park Heights, and Baytown Twp. for a total of \$74,192. Ten of these grants were awarded to Crossroads Properties for their buildings in Woodbury and Oakdale, which house 42 businesses. In order to serve these businesses effectively, Washington County partnered with the City of Woodbury and provided funding for a temporary staff technician to assist with recycling program implementation and education.

2015 **Planning/Policy:** Ramsey/Washington County Resource Recovery Project Board, now the Recycling & Energy Board, (Board) recommended the respective county boards approve purchase of the Recycling & Energy Center in Newport (formally called the Resource Recovery Facility). The county boards confirmed the Board's decision. The purchase will enable the counties to develop a system that maximizes the use of trash as a resource, to the benefit of taxpayers, households, and businesses.

Communication and Events: 1423 subscribers to the Environmental eUpdate

Going Green guide was printed and mailed in March to all 96,500 residential addresses in the county. This was the first time the guide was distributed in spring and a survey included with the guide showed that 89% of residents preferred to receive it in the spring.

Staff helped establish recycling best practices and organics collection at three events: the Carpenter Nature Center Apple Blossom Races, the 4-H day camp, and the Sneakers and S'mores run/walk sponsored by the county's wellness committee. These events were able to recycle and compost between 80% and 91% of the waste produced!

Office Recycling: Waste assessments were provided to Washington County Parks, Government Center cafeteria and the LEC kitchen and jail and later incorporated into county's internal Divert 70 program.

Waste Reduction, Reuse, & Recycling: Twenty-six schools participate in organics recycling, with over 18,100 students participating and 400 tons per school year being recycled as hog feed or composted.

Carton recycling begins in six schools in the South Washington County district resulting in over thirty-four tons of milk diverted from trash and over 600,000 cartons recycled per school year. These schools also implemented recycling best practices in the classroom and office areas.

23,695 tons of recyclables collected curbside, 181 lbs. /person

Appendix I: Major Milestones, Events & Activities in Washington Co. Waste Management History

2015 Business Recycling: BizRecycling grants were awarded to 34 businesses for a total of \$229,764. Businesses were located in Cottage Grove, Denmark Twp., Hugo, Lake Elmo, Mahtomedi, Newport, Oak Park Heights, Oakdale, St. Paul Park, Stillwater, and Woodbury.

A BizAware grant was awarded to the Stillwater Independent Business Alliance to promote the BizRecycling program to businesses in the Stillwater area through events and other business contacts. The grant is for \$15,000/year and can be renewed 4 times to provide continuity for the program.

Municipal Funding and Assistance: Worked with cities and townships on waste and recycling services procurement and/or drafting ordinance provisions to lead also to templates for other communities to utilize.

The department developed an online system to improve the current residential recycling data management system, financial information related to county's municipal recycling grant funding program, and the grant application process that will both reduce county staff resources and city/township staff. The system enables the county to collect, manage and report on residential recycling and grant information collected at various times of the year beginning in 2016. Residential haulers providing service in the county report waste and recycling data in 2016 until move to MPCA statewide online data collection of hauler data.

2016 Planning/Policy: The R&E Board takes possession of the Resource Recovery Facility in Newport and renames it the Recycling & Energy Center.

Communication and Events: The Going Green guide was printed and mailed in March to all 97,000 residential addresses in the county.

Staff helped continue recycling best practices and organics collection at three events: the Carpenter Nature Center Apple Blossom Races, the Employee Health, Safety, and Wellness event, and the Children's Water Festival. These events were able to recycle and compost between 74% and 89% of the waste produced!

Toxicity Reduction: First full year of expanded Washington County Environmental Center hours. The Environmental Center is now open 31 hours per week compared to 17 hours before the change was made in November 2015. The Center had a record year in 2016 serving 47,747 customers and recycling over 1.9 million pounds of electronics. The WCEC Free Product Room gave away 432,291 pounds of paint, cleaners and other items with a retail value of almost \$900,000. WCEC confidential paper shredding events served 2,500 cars and destroyed 145,895 pounds of personal documents in 2016. In response, WCEC has expanded to four paper shredding events in 2017.

Office Recycling: Divert 70 expands into the remaining areas of the Jail and LEC and public areas of the government center, including conference rooms and the cafeteria. A waste sort was conducted and results showed that 79% of waste is being diverted from the trash to recycling and compost in participating employee Divert 70 locations. Overall, the capture rate was 92%, signifying that an estimated 8% of recyclable (recycling and compost) material is still being managed as trash.

Appendix J: County Oversight of the Private Sector/Waste Industry

Minnesota Statutes § 473.805 Subd. 5 states:

Role of private sector; county oversight.

A county may include in its solid waste management master plan and in its plan for county land disposal abatement a determination that the private sector will achieve, either in part or in whole, the goals and requirements of sections 473.149 and 473.803, as long as the county:

- (1) 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 metropolitan policy plan and the county master plan;
- (2) 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; and
- (3) continues to provide all required reports on the county's progress in meeting the waste management goals and standards of this chapter and chapter 115A.

In accordance with Appendix D of the Regional Solid Waste Policy Plan, this appendix explains Washington County's conformance with this law. The solid waste management system serving the county, and the East Metro area in general, is comprised of a combination of services provided by public and private entities. Over the course of 37 years, since the Waste Management Act was enacted, the system has evolved to a condition in which the private sector provides a number of services. Therefore, the private sector, both public and not-for-profit organization, play a critical role in carrying out solid waste functions in the county.

The tools Washington County uses to hold the private sector accountable include:

1. Regulation – through assuring compliance with county ordinances and, where applicable, state laws that relate to solid waste management,
2. Contracts – through assuring compliance with voluntary agreements entered into between a unit of government and a private entity
3. Monitoring and reporting – gathering information from private parties to monitor actions related to the solid waste system.

Appendix J: County Oversight of the Private Sector/Waste Industry

The private sector, in partnership with the public sector, is responsible for portions of the solid waste system, with oversight by the county as shown:

Function	Provided By	Oversight Method
Collection of waste, recyclables, organics, yard waste	Private for-profit and non-profit companies, including specialty companies	<ul style="list-style-type: none"> • Licensing of haulers of mixed municipal solid waste • Licensing and inspection of transfer stations for MSW and non-MSW • Reporting by collectors of MSW, recyclables
Collection and delivery of Acceptable Waste to the R&E Center	Private waste hauling companies	<ul style="list-style-type: none"> • Enforcement of Waste Designation provisions of solid waste ordinance • Monitoring and enforcement of waste delivery agreements
Processing and marketing of recyclables	Private for-profit and non-profit companies	<ul style="list-style-type: none"> • Monitoring of regulation by MPCA • Response to complaints • Review of reporting required by contract or MPCA
Land disposal	Private landfills in Minnesota and Wisconsin	<ul style="list-style-type: none"> • Assuring compliance with contracts between the R&E Board and landfills for disposal
Portions of services provided to residents, such household hazardous waste services	Private companies under contract to Washington County	<ul style="list-style-type: none"> • Assuring compliance with contracts
Collection of residential recyclable	Services provided to municipalities under contract or via ordinance	<ul style="list-style-type: none"> • Assuring compliance with county municipal recycling grant agreements between county and cities/townships that outline residential recycling requirements; • Technical assistance to cities to assure recycling service agreements are enforceable • Reviewing reporting to cities townships by service providers if by contracts, ordinances • Reviewing reporting to the MPCA by recyclers
Collection of non-residential recyclables, including organics	Services provided to non-residential waste generators	<ul style="list-style-type: none"> • Monitoring compliance with state law requiring recycling by certain businesses • Monitoring service levels and quality through BizRecycling program

Appendix K: MPCA Policy Plan Strategy Implementation table

The Policy Plan outlines numerous strategies for reducing waste and increasing recycling and organics recovery. All stakeholders in the system have roles and responsibilities to ensure successful implementation of these strategies. This table serves as an accountability plan for the implementation of strategies included in Part 3 of the Plan.				Addressed in Washington County Plan
Topic	Strategy	Accountable party	Timing	Chapter, number, page
Sustainable Materials Management	Select priority solid waste materials to focus on for reduction, reuse, and recycling based on life cycle analysis	MPCA	By 2018	Waste Reduction & Reuse strategy #2
	Implement strategies for the priority materials	Counties, MPCA	By 2020	Waste Reduction & Reuse strategy #2
	Create quality standard measurements for SMM and quantify the environmental impacts from the materials/ products that are targeted	MPCA and counties	By 2020	Waste Reduction & Reuse strategy #2
	Allocate staff time on reaching the goals in the Plan for reduction and reuse and ensure that grant funding eligibility should include reduction, reuse, and recycling (including organics)	Counties	By 2018	Cost & Finance strategy #2, Recycling, Organics & YW strategy #12, #26, & #27a
	Increase the partners involved in working on SMM	MPCA, counties	By 2020	
Regional solutions (incorporate at least 2)	Standardize recycling messaging	MPCA Stakeholder group (MPCA, counties, cities, industry, ARM, RAM, etc.)	By 2017	Communication & Ed strategy #1
	Building and zoning codes/ ordinances should not inhibit recycling	MPCA, counties, cities, MN AIA, MN USGBC, DLI	By 2018	Recycling, Organics & YW strategy #9
		SWMCB stakeholder group (counties, cities, architects, MPCA)	By 2022	Recycling, Organics & YW strategy #10
		Cities – modify zoning codes/ ordinances for recycling and waste enclosures		Recycling, Organics & YW strategy #11

Appendix K: MPCA Policy Plan Strategy Implementation table

Topic	Strategy	Accountable party	Timing	Chapter, number, page
Regional solutions (incorporate at least 2)	Standardize ordinances	Counties - HHW	By 2022	Regional focus under County Policies - Governance
		Counties – Licensed haulers	By 2022	Regional focus under County Policies - Governance
		MPCA, Counties – standard hauler reporting requirements	Ongoing	Performance Measurement strategy #3
Source reduction and reuse (incorporate at least 2)	Support financially and promote material exchange programs	MPCA, Counties	Ongoing	Waste Reduction & Reuse strategy #3
	Support the State's Sustainable Purchasing Program	MPCA	Ongoing	
		Counties	Ongoing	Waste Reduction & Reuse strategy #10
	Implement a program for either businesses or residents that prevents food from being wasted			Recycling, Organics & YW strategy #2
	Implement at least two active programs that focus on reuse at county level	Counties, Cities	Ongoing	Waste Reduction & Reuse strategy #4, #6, & # 8. Toxicity Reduction strategy #6
Collection best practices (incorporate at least 1)	Cities contract for residential recycling	Counties – restructure funding agreements to include a requirement for organized recycling	By 2022	Recycling, Organics & YW strategy #15
		Cities – develop contract(s) for citywide recycling collection	By 2025	
		MPCA, counties, cities, League of Minnesota Cities	Ongoing	

Appendix K: MPCA Policy Plan Strategy Implementation table

Topic	Strategy	Accountable party	Timing	Chapter, number, page
Collection best practices (incorporate at least 1)	Cities contract for residential MSW collection	Cities – develop contract(s) for citywide MSW collection	By 2025	
		MPCA, counties, cities, League of Minnesota Cities	By 2025	
	Collect recycling weekly			
	Pair bi-weekly trash collection with weekly recycling and organics collection			
	Collect recyclables and trash on same day			Recycling, Organics & YW strategy #15
Recycling management – traditional and non-traditional (incorporate at least 1)	Implementation of mandatory commercial recycling in the metro area shall focus on generators of large quantities of recyclables and the generators of most impactful materials	MPCA, counties	By 2018	
		MPCA – research, prioritization Stakeholders – prioritization	By 2020	
		Counties	By 2022	
		MPCA	By 2022	
	Support the collection of nontraditional recyclables such as furniture, mattresses, carpet	Counties, Cities	By 2020	Land Disposal & NonMSW strategy # 6
	Continue efforts on compliance with the public entities requirements	Counties, cities	Annually	While not listed as a specific strategy, the county does this and will continue compliance with 115A.151
		MPCA	Ongoing	

Appendix K: MPCA Policy Plan Strategy Implementation table

Topic	Strategy	Accountable party	Timing	Chapter, number, page
Recycling management – traditional and non-traditional (incorporate at least 1)	Evaluate the effectiveness and the impacts of mandatory upfront processing of waste prior to or at resource recovery facilities and landfills that accept waste from the TCMA	MPCA, counties, industry	By 2022	Processing - Emerging Technologies
Organics management (incorporate at least 3)	When working with organizations, encourage preventing food waste and food donation first	Counties, Cities	Ongoing	Recycling, Organics & YW strategy #2
	Make residential curbside organics collection available region-wide	Counties	By 2020	Processing -Emerging Technologies
		Cities	By 2022	
		Cities	By 2025	
	Require organics diversion by large generators of organic material	Counties, Cities	By 2022	
	Support community based social marketing campaigns that educate residents on ways to reduce the amount of food that is not eaten	Counties, Cities	By 2020	Communication & Ed strategy #5
	Develop additional transfer capacity in the region	MPCA – provide technical assistance, coordination, and work with partners to secure necessary funding Industry and Counties – Collaborate to ensure adequate total transfer capacity exists	By 2022	

Appendix K: MPCA Policy Plan Strategy Implementation table

Topic	Strategy	Accountable party	Timing	Chapter, number, page
Organics management (incorporate at least 3)	Implement organics diversion at public entity facilities and in large event venues	Counties, Cities	By 2025	Recycling, Organics & YW strategy #5, & #16
	Evaluate mixed waste processing for organics recovery	MPCA, stakeholders	By 2018	Processing -Emerging Technologies & Recycling, Organics & YW strategy #3
Non-MSW (incorporate at least 1)	Ensure that projects that receive general obligation bond funding from the State of Minnesota are in compliance with the B3 guidelines	MPCA	By 2018	Land Disposal & NonMSW strategy #3
	Counties should work with their cities to adopt ordinances that require waste plans for demolition/deconstruction projects	Counties, cities	By 2018	
		MPCA – review existing studies	By 2018	
		Counties, cities	By 2021	Land Disposal & NonMSW strategy #7
	All entities implementing the solid waste system shall correctly classify MMSW and ISW	MPCA, counties, cities, industry	By 2022	
	Waste composition studies must be conducted at all disposal facilities that accept waste from the TCMA	MPCA, Industry	By 2022	Performance Measurement strategy #1
	Develop more comprehensive measurement of the industrial and C&D segments of the solid waste stream	MPCA, counties, industry	By 2022	Land Disposal & NonMSW strategy #1

Appendix K: MPCA Policy Plan Strategy Implementation table

Topic	Strategy	Accountable party	Timing	Chapter, number, page
Recycling Market Development/ Traditional recycling markets (MPCA led, county participation)	Research best practices for MRF optimization	MPCA, Counties, MRFs, and other partners	By 2021	Processing - Emerging Technologies
	Invest in new technologies and equipment for sorting	MPCA	By 2022	Processing - Emerging Technologies
	Expand the capacity for existing markets, specifically glass, paper, and film	MPCA, Industry, Counties, and recycling organizations	Ongoing	Recycling, Organics & YW policy #7
	Establish a shared vision to build and improve local market development infrastructure and capacity	MPCA and partners (industry, government, nonprofit, institutional, etc.)	By 2018	Recycling, Organics & YW policy #7
Organics markets (incorporate at least 1)	Expand the use of compost in Minnesota Department of Transportation's (MnDOT's) and in local government transportation infrastructure projects	MPCA – advise and assist MnDOT with spec development MnDOT – update specs, use compost in projects Counties – update specs, use compost in projects	By 2022	
	Assist local governments in adopting policies that require the use of compost in new construction projects	MPCA – provide technical assistance Counties, Cities – adopt policies on use of compost in new construction projects	By 2022	Recycling, Organics & YW strategy #29

Appendix K: MPCA Policy Plan Strategy Implementation table

Topic	Strategy	Accountable party	Timing	Chapter, number, page
Emerging technology (MPCA led, county participation)	Evaluate anaerobic digestion for the region	MPCA, stakeholders	By 2018	Processing - Emerging Technologies
	Develop a process for gathering the information necessary to make more timely and consistent policy decisions	MPCA	By 2019	Overarching waste policy #12
Product stewardship (incorporate both)	Counties report annually on the management of priority materials for product stewardship	Counties	By 2020	Toxicity Reduction strategy #1
	Create a regional Product Stewardship committee	Counties	By 2018	Toxicity Reduction strategy #8

Appendix L: Additional Licensed Solid Waste Facility Rates

Facilities and Hauler rates

It is difficult to obtain pricing for private-sector facilities and commercial MSW and recycling collection as contracts are negotiated between the facility or hauler and the customer and is private information. This is the same case for recycling facilities. Pricing depends on a range of factors including volume, location, cleanliness of materials, and other factors. However, below is a summary of charges at facilities in Washington County:

Company Name	MSW	Recycling	Other
Gene's Transfer	Market Rate	Market Rate	N/A
Northstar Recycling, Inc.	N/A	No charge for recyclable materials	N/A
Tennis Sanitation, LLC	Market Rate	Market Rate	N/A
Washington County Environmental Center	N/A	Free to residents	HHW-Free to residents
Winnick Supply, Inc	N/A	No charge for recyclable materials	N/A
Xcel- AS King Ash Transfer Station	N/A	N/A	Industrial Ash-Internal Use Only

Currently, five communities and three private companies operate yard waste sites in the county. The private sites and some communities have implemented fee systems to help cover site costs. Sites are located in Cottage Grove, Denmark Township, Forest Lake, Hugo, Marine on St Croix, Newport, St Paul Park, and Woodbury. A summary of user charges for each yard waste site is provided below:

Residential				Commercial		
Yard Waste Site	Yard waste, grass and leaves	Branches, brush, shrubs	Logs and stumps	Yard waste, grass and leaves	Branches, brush, shrubs	Logs and stumps
Buberl Black Dirt Compost Site	N/A	N/A	N/A	Market Rate	Market Rate	Market Rate
City of Forest Lake Compost Site	Free to residents	Free to residents	Free to residents	N/A	N/A	N/A
Composting Concepts Inc.	\$7/cubic yard	\$7/cubic yard	\$7-40/cubic yard	Market Rate	Market Rate	Market Rate
Cottage Grove Compost Site	\$5/cubic yard	\$2-5/cubic yard	\$5-40/cubic yard	Market Rate	Market Rate	Market Rate
Gerten's Denmark RES	\$8/cubic yard	\$11/cubic yard	\$11/cubic yard	Market Rate	Market Rate	Market Rate
Hugo Compost Site	Free to residents	Free to residents	Free to residents	N/A	N/A	N/A
Marine on St. Croix Compost Site	Free to residents	Free to residents	Free to residents	N/A	N/A	N/A
Newport Compost Site	\$5/cubic yard	\$5/cubic yard	N/A	N/A	N/A	N/A
St. Paul Park Compost Site	\$3-6/trip	\$6-10/trip	N/A	N/A	N/A	N/A