

Washington County

Solid Waste Management Plan

2024-2042

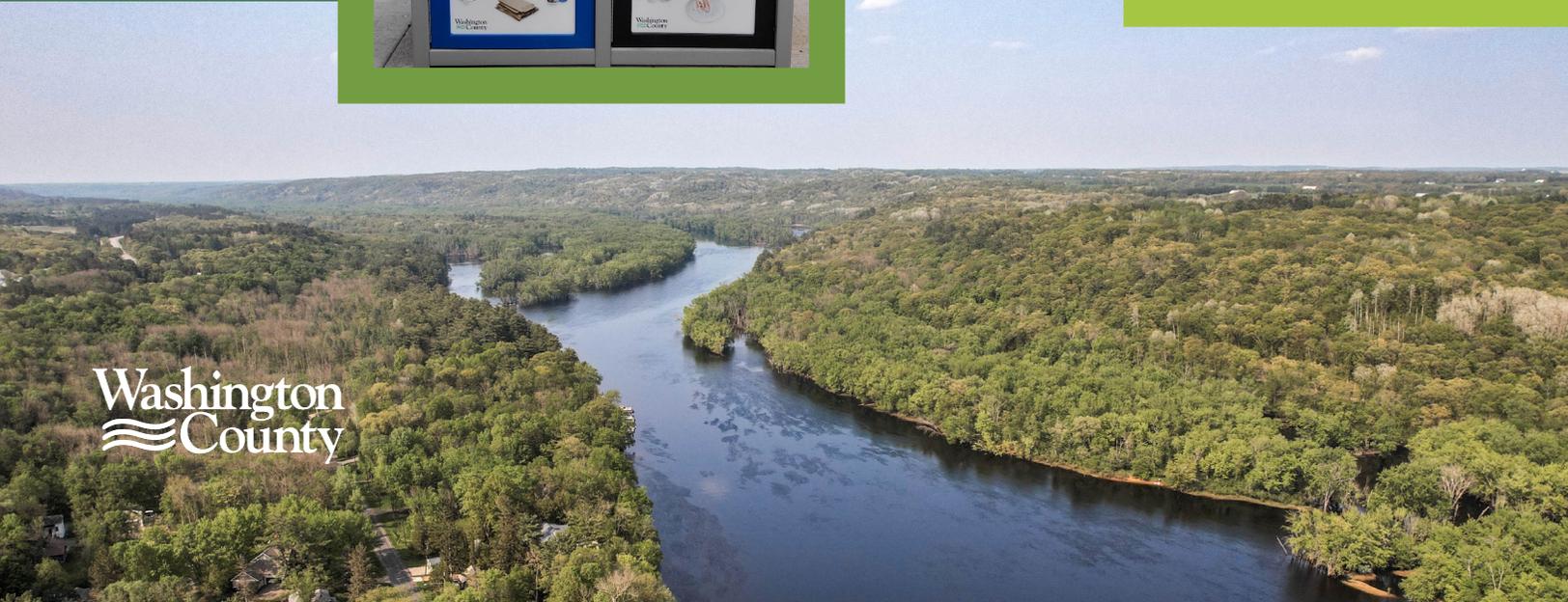


Table of Contents

- County Approval Resolution v
- Plan Background and Overview 1
 - Metropolitan Solid Waste Management Policy Plan 2022-2042 1
 - Solid Waste Management Plan Preparation 2
 - Connections with Other County Plans and Efforts 5
 - Plan Implementation..... 5
- 1. Introduction 6
 - Washington County..... 6
 - Washington County Public Health & Environment 6
 - Washington County and Public Health & Environment Shared Values..... 7
 - Plan Priority Areas..... 7
- 2. Solid Waste Management Plan Overarching Policies..... 8
 - Health Equity and Environmental Justice 8
 - Working with Partners 9
 - Connection with Other Relevant County Plans 9
 - Facilitating Meaningful and Sustained Behavior Change 10
 - Use of Public Policy to Drive Environmentally Responsible Systems Change 10
 - Embodying Sustainable Materials Management and Circularity in Decision-making 10
 - Sustainable End Markets..... 11
- 3. Governing Partnerships 12
 - Ramsey/Washington Recycling & Energy 12
 - Ramsey/Washington Recycling & Energy Vision, Mission and Values 13
 - Washington and Ramsey Counties Partnership Policies 14
 - Partnership on Waste and Energy 15
- 4. Communication and Engagement 16
- 5. Product Stewardship and Extended Producer Responsibility 19
- 6. Health and Environmental Risk Reduction 20
 - 6A. Health and Environmental Risk Reduction 20
 - 6B. Emergency Debris Management 22
- 7. Waste Reduction and Reuse 23
 - 7A. Waste Reduction and Reuse 23
 - 7B. Upstream Food Management..... 25

8. Recycling and Organics 27

 8A. Residential Recycling..... 27

 8B. Residential Food Scraps 29

 8C. Non-Residential Recycling and Organics 30

 8D. Internal Recycling and Organics 33

9. Bulky Waste Management..... 34

10. Yard Waste and Wood Waste 35

11. Construction & Demolition Waste and Deconstruction 37

12. Processing 39

 12A. Waste Processing..... 39

 12B. Processing Technologies and End Products..... 41

13. Regulation 43

14. Performance Measurement 45

15. Cost and Finance..... 47

Appendices 48

 Appendix A: Solid Waste Management System Overview 49

 Appendix B: Ordinances..... 80

 Appendix C: Acronyms and Abbreviations..... 82

 Appendix D: Definitions 84

 Appendix E: County Oversight of Waste Industry 94

 Appendix F: Environmental Justice Review 96

 Appendix G: Policy Plan Implementation Table..... 99

List of Figures

Figure 1. Solid Waste Management Hierarchy.....	1
Figure 2. Key Connections Between Washington County 2024-2042 Solid Waste Management Plan and other County Plans and Efforts.....	5
Figure 3. IAP2 Spectrum of Public Participation.....	16
Figure 4. EPA Food Waste Scale.....	25
Figure 5. Performance Measurement Tool.....	45
Figure 6. Minnesota’s waste management hierarchy, identifying the order of preference for waste management practices from most to least preferred	49
Figure 7. Population and Households in Washington County.....	51
Figure 8. Race & Ethnicity in Washington County.....	51
Figure 9. Washington County Population (2020 actual, 2023 estimated).....	52
Figure 10. Recycling Rate Trend (2013–2022).....	53
Figure 11. Washington County Waste Managed (2022)	53
Figure 12. Types of Recycling.....	61
Figure 13. 2023 MSW Collection Type	67
Figure 14. 2023 Recycling Collection Type	68
Figure 15. Solid Waste Facility Locations and Census Tracts	98

List of Tables

Table 1. MPCA Solid Waste Goals	2
Table 2. Washington County City/Township Population	51
Table 3. Historical Waste Generation – Management, Processing, Recycling, and Landfill Data.....	53
Table 4. Combined Trash and Recycling Rates in Organized Cities	69
Table 5. Combined Trash and Recycling Rates in Open Cities.....	69
Table 6. Combined Trash and Recycling for Commercial Collection	70
Table 7. Waste Facility Types and Rates	70
Table 8. Summary of County Oversight	95
Table 9. Policy Plan Implementation	99

BOARD OF COUNTY COMMISSIONERS
WASHINGTON COUNTY, MINNESOTA

RESOLUTION NO. 2024-108

DATE October 1, 2024
MOTION
BY COMMISSIONER Miron

DEPARTMENT Public Health and Environment
SECONDED BY
COMMISSIONER Clasen

2024-2042 WASHINGTON COUNTY SOLID WASTE MANAGEMENT PLAN

WHEREAS, Washington County is required by Minnesota Statute §473.803 to revise the county’s Solid Waste Management Plan; and

WHEREAS, Washington County has the duties of a community health board, as established in Minnesota Statute §145A.04 subd. 1a, to promote healthy communities and protect against environmental health hazards by developing policies and programs to reduce exposure to environmental health risks and promote healthy environments; and

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

WHEREAS, the county established a Waste Reduction Advisory Committee to provide input on aspects of the revision of the Solid Waste Management Plan, per Minnesota Statute §473.803 subd. 4; and

WHEREAS, the Washington County Department of Public Health and Environment has prepared a revised Washington County Solid Waste Management Plan, which will guide policies and programs to promote healthy environments, in alignment with Ramsey County’s Solid Waste Management Plan, with policies and strategies developed in accordance with Minnesota Statute §473.803 and Minnesota Statute §115A.

NOW, THEREFORE, BE IT RESOLVED, that the Washington County Board of Commissioners adopts the 2024-2042 Washington County Solid Waste Management Plan 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:

Kevin Corbid

COUNTY ADMINISTRATOR

Stan Karwoski

COUNTY BOARD CHAIR

YES NO

MIRON	<u>X</u>	___
KARWOSKI	<u>X</u>	___
KRIESEL	<u>X</u>	___
BIGHAM	<u>X</u>	___
CLASEN	<u>X</u>	___

Plan Background and Overview

The purpose of the 2024-2042 Washington County Solid Waste Management Plan (Plan) is to guide county waste management activities. This plan, revised from the 2018-2036 Solid Waste Management Plan, includes strategies and policies to address waste throughout the county. The Plan was developed with guidance from the Metropolitan Solid Waste Management Policy Plan 2022-2042 (Policy Plan) adopted by the Minnesota Pollution Control Agency (MPCA) in January 2024.

Metropolitan Solid Waste Management Policy Plan 2022-2042

The Policy Plan provides guidance to all entities responsible for Twin Cities Metropolitan Area solid waste management and was developed in accordance with the requirements of Minn. Stat. §473.149, subd. 2d. for a land disposal abatement plan. It describes broad regional system objectives, a landfill diversion goal and the strategies necessary for solid waste programs and services to meet the region’s needs for the next 20 years.

The Policy Plan emphasizes the upper end of the solid waste management hierarchy and includes strategies developed by the state to advance reducing waste and increasing recycling and organics recovery. These strategies are designated in the Policy Plan as either required or optional for counties to implement or led by the state.

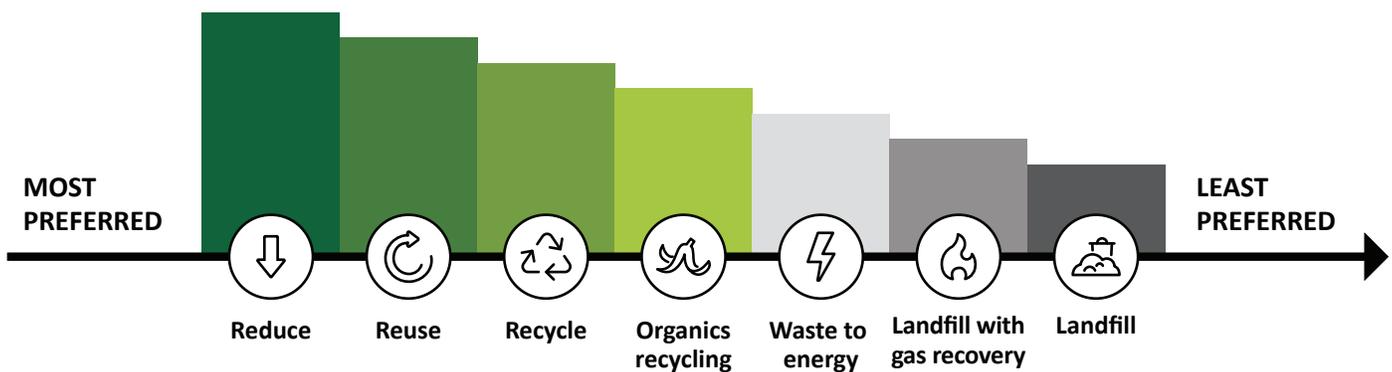
New in this iteration of the Policy Plan, optional strategies are assigned a point value between one and nine, and each county must include a minimum of 75-points worth of strategies in their Plan. **Appendix G** lists the strategies and point values in this plan.

Key themes and the full list of strategies can be found in the final Policy Plan document on the [MPCA’s website](#).

Policy Plan Objectives

Through the Policy Plan, the state sets specific, quantifiable objectives that the county must strive towards to reduce land disposal of waste through 2042. The objectives are provided in five-year increments beginning in 2021 and include objectives for waste reduction, recycling, organics

Figure 1. Solid Waste Management Hierarchy



recovery, waste to energy and landfilling. Strategies in this plan outline how the county plans to advance towards these set objectives.

Table 1 depicts objectives set by the state for the future. It represents the percentage of metropolitan solid waste managed using these methods, based on weight. This includes the percentages of how waste is managed according to the most recent annual county reports to the MPCA (as of the publication of the Policy Plan).

Table 1. MPCA Solid Waste Goals

System Mgmt. Method	Current	Policy Plan Objectives (Goals)			
	2021	2025	2030	2036	2042
Waste Reduction	0%	2.9%	6.4%	10.7%	15%
Recycling	28.6%	36.9%	47.4%	47.4%	47.4%
Organics	16.6%	21.5%	27.6%	27.6%	27.6%
Waste-to-Energy	21.4%	24%	20%	20%	20%
Landfill	33.4%	17.6%	5%	5%	5%

Solid Waste Management Plan Preparation

Required Plan Iteration

The Washington County 2024-2042 Solid Waste Management Plan replaces the 2018-2036 Plan. This new plan guides waste management activities through 2030 while striving to achieve quantifiable objectives to reduce land disposal of waste through 2042.

Minnesota Statute §473.803 requires counties in the Twin Cities Metropolitan Area to prepare plans following the release of the MPCA’s Policy Plan every six years. Upon the publication of the Policy Plan, each of the seven metropolitan counties has nine months to submit their plan to the MPCA for approval. This is the county’s seventh solid waste management plan since 1980.

The Plan is an important tool in protecting public health and the environment by establishing policies and strategies to reduce waste that impacts health and the environment.

Solid Waste Management Plan Background and History

The waste management system in Minnesota has evolved over time. Since the early 1980s, Washington County Plans have guided changes in solid waste management from being a system dependent on land disposal to one that integrates a variety of management strategies. The Plan sets clear policy direction, protects public and environmental health, reduces various risks and stabilizes the economics of the waste management system.

A historical example of this stability is found in the development of curbside recycling. In the early 1990s, curbside recycling was in its infancy, and there was skepticism about its value and longevity. Washington County’s Plans established clear policy direction that:

- Municipalities would be responsible for the collection of recyclables
- Recycling collection service be institutionalized

This direction established a clear role for household recycling and was the basis for the service being a permanent fixture in the system.

Another important role of the Plan has been to address various risks to public health, safety and the environment. For example, the county’s Plans have established policies, regulations and services to reduce the

hazardous characteristics of waste. This reduces a variety of risks, especially occupational health risks to waste industry workers, risks to waste industry equipment and environmental and health risks related to waste disposal and environmental emissions.

The Plan has also addressed economic risks. Public policies, such as requiring delivery of waste to the Ramsey/Washington Recycling & Energy Center (R&E Center), have facilitated a system that is financially stable. Further, the system, as developed, has reduced environmental liability risks for businesses and government entities in the county.

Partnership with Ramsey County and Ramsey/Washington Recycling & Energy (R&E)

Washington and Ramsey Counties have been working together since the early 1980s on waste reduction, reuse, recycling and solid waste management. By working together, the counties achieve efficiency and consistency across the region. The two counties created R&E to help facilitate and continue this collaborative work.

Development of this plan was supported through partnership with Ramsey County and R&E. Through this partnership, a joint alignment workgroup was formed. The workgroup consists of Washington County, Ramsey County and R&E staff who met regularly throughout the planning process and focused on plan development, alignment of strategies and policies and drafting of the plans.

The workgroup conducted a joint workshop in February 2024 to engage with staff responsible for implementing strategies in the existing plans. Staff input was used to inform the drafting of strategies and policies of the Plan. More information on this partnership can be found in Chapter 3.

Interested Parties Engagement

Community engagement was integral in developing the county’s Solid Waste Management Plan. Engagement ensures that the needs and perspectives of the community are reflected in the Plan, which is key for the development of a plan that best serves the Washington County community.

The Plan was prepared by staff from the Washington County Department of Public Health and Environment, alongside staff from Saint Paul–Ramsey County Public Health and staff from R&E. Direct input through a public engagement process guided the drafting of this plan.

- **Waste Reduction Advisory Committee.** This group of 11 included members of the community, municipality representatives and waste industry representatives. The group included a resident from Newport, home to the Recycling & Energy Center (R&E Center). A representative from the MPCA participated as an ex-officio member. The group met twice in 2024 to provide plan input.
- **Pop-up community engagement.** Staff attended community events to request feedback on plan priorities.
- **Resident survey.** The county conducted a survey of residents that included questions to guide plan preparation and plan priorities. Nearly 570 residential households responded.
- **Municipality engagement.** The county conducted a survey for municipality representatives to provide input on the Plan. Sixteen (16) municipalities responded to the survey.
- **Tree care company engagement.** The county facilitated conversations with six local tree care companies to learn more about current concerns and challenges of managing wood waste.
- **Internal partner engagement.** Staff from the Department of Public Health & Environment met with internal partners impacted by the Plan.
- **Waste industry engagement.** The county hosted conversations with representatives from the waste industry serving the region for feedback on plan preparation.

Washington County thanks those who participated in this engagement process.

Responding to Changes

Since the previous Plan, published in 2018, changes in policy, economics and social dynamics have shifted the context for solid waste planning. For example, in recent years, recycling rates have not increased at the pace needed to meet waste objectives, leading to Washington County’s recognition of increased urgency for additional strategies to achieve the state’s 75% recycling goal by 2030. In addition, efforts to prevent waste and increase recycling require the commitment of residents and businesses, but relying on voluntary changes in behavior is insufficient when the marketplace does not offer consumers enough no- or low-waste choices or products that are easy to recycle.

Washington County sees the need for more focus on policy strategies to drive more reuse activities and increase recycling rates, such as extended producer responsibility, which brings producer resources and problem-solving to the table. Additionally, shifts in international recycling markets in the past several years, such as China’s restrictions on importing recyclables, underscored the importance of strong local recycling infrastructure and markets.

With the purchase of the R&E Center by Washington and Ramsey Counties in 2015 and the formation of R&E, the two counties are even better positioned now to leverage their resources for more efficient and effective solid waste solutions for the East Metro. For example, there are greater collaboration opportunities to address bulky waste like mattresses and to move the management of organics higher up the waste hierarchy.

The built environment has significant impacts on the environment and public health. Nearly as much waste

is created from building construction and demolition as goes in the trash at homes and businesses every day. Washington County is devoting more attention on ways to salvage materials when buildings are remodeled or removed through deconstruction, reuse and recycling strategies. These practices save resources and landfill space, create new economic activity and reduce climate impacts.

Washington County is committed to improving how it measures the results and impact of programs and services, going beyond measuring tons disposed or recycled. The county places increasing value on authentic engagement with communities and prioritizing work through a public health equity lens across a variety of program areas, including solid waste management. Furthermore, the county continues to assess how the COVID-19 pandemic permanently impacted waste generation and disposal patterns, and how this might change programming and strategy.



Connections with Other County Plans and Efforts

Figure 2. Key Connections Between Washington County 2024-2042 Solid Waste Management Plan and other County Plans and Efforts



Plan Implementation

Washington County’s Plan provides a roadmap for addressing waste in the county. Following the plan’s approval, the county will develop tactics for addressing the strategies outlined in this document. Determining

timelines, responsible parties, and performance metrics are all crucial elements of plan implementation. Implementation of a given strategy or tactic is subject to County Board approval through annual budgeting.

1. Introduction

The 2024-2042 Washington County Solid Waste Management Plan (Plan) provides policy-based guidance for the solid waste system that supports healthy people, a healthy economy and a healthy environment. Per Minnesota statute, Plans are submitted to the Minnesota Pollution Control Agency (MPCA) for approval in response to direction from the Metropolitan Solid Waste Management Policy Plan.

Washington and Ramsey Counties are committed to working together directly and through Ramsey/Washington Recycling & Energy, which views waste as a resource. The two counties' individual plans come together to frame the future for waste and resource management across the East Metro. This collaboration framework has led Washington and Ramsey Counties to be national leaders in solid waste planning and program development. The strategies and policies identified in this plan are designed to prevent waste, reduce risk to human health and the environment and meet the specific needs of Washington County's residents and businesses.

Washington County

Vision

A vibrant county embracing the diversity of its communities, advancing equitable access to resources and opportunities, and prioritizing the sustainability of its natural environment.

Mission

We strive to provide exceptional services that enhance quality of life and promote a safe, healthy, and welcoming community for all.

Goals

- **Organizational Excellence:** Develop and sustain an environment where employees and the organization are equipped and supported to deliver outstanding service to everyone in Washington County.
- **Safe Communities and Thriving People:** Ensure that everyone in Washington County has access to services that address inequities, foster well-being, and promote safety.
- **Strong and Sustainable Environment:** Enhance and maintain investments in the built and natural environment to encourage responsible growth, accessibility, and resilient communities.
- **Financial Health and Capacity:** Sustain strong financial policies and practices to provide and improve valued public services and make progress towards the county's five-year vision.

Washington County Public Health & Environment

Mission

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

Vision

A healthy and thriving community, environment, and workplace.

Commitment Statement

Diversity, equity, and inclusion (DEI) and environmental justice are issues reflected throughout the strategic planning process.

We carry the county's overall DEI vision of creating a vibrant workplace and community that practices engagement, representation, and service to all members inclusively and equitably with dignity and respect. We also acknowledge that as global climates change, the makeup of our community and the stresses it faces will also change. These stresses will not fall disproportionately amongst our community members.

The Department of Public Health & Environment recognizes the impact these topics have across all programs and services, and we are committed to integrating these topics into all aspects of our work.

Washington County and Public Health & Environment Shared Values

- **Caring:** We serve all with dignity, respect, and understanding.
- **Collaborative:** We connect with each other and our community to make intentional decisions.
- **Equitable:** We are committed to fostering an inclusive community and delivering accessible services to achieve equitable outcomes.
- **Ethical:** We act with integrity and make transparent decisions to build public trust.
- **Fiscally Responsible:** We support current and future generations through prudent financial decisions that respect public investments and advance the long-term interest of the community.
- **Responsive:** We anticipate evolving community needs and embrace innovative approaches to solve problems and promote positive change.
- **Sustainable:** We recognize the significance of our natural environment and are proactive in protecting our resources.

Plan Priority Areas

There are several areas prioritized throughout the Plan.

- **Reducing risk to public health and environment** – ensuring a safe and sustainable future for current and future generations.
- **Waste reduction and reuse** – focusing on actions at the top of the waste hierarchy.
- **Preventing and managing food waste** – working toward food security for all while reducing greenhouse gas emissions and conserving resources.
- **Reducing greenhouse gas emissions** – mitigating climate change through programs and policies.
- **Advancing race and health equity** – addressing inequity to improve the health and wellbeing of all.
- **Environmental justice** – ensuring that all communities have equal access to a clean and healthy environment and are not disproportionately burdened by environmental hazards, pollution and climate change.
- **Policy development** – using local and state policy tools to advance solid waste reduction, recycling, responsible solid waste management and environmental health goals.
- **Extended producer responsibility** – holding manufacturers accountable for the environmental impact of their products throughout their entire lifecycle, encouraging more sustainable and less toxic products.
- **Market development** – ensuring markets for recycled materials exist and are sustained to foster a circular economy.
- **Trash as a resource** – fostering innovation in waste management technologies and creating opportunities for the development of new opportunities to recover value from waste.
- **Support for businesses** – working with businesses to encourage improvements in waste reduction and management.

2. Solid Waste Management Plan Overarching Policies

This plan's overarching policies establish the approaches for the county and its partners to implement the 2024-2042 Solid Waste Management Plan and the Metropolitan Solid Waste Management Policy Plan. Overarching policies are intended to be applied across the implementation of all Plan chapters. They also identify the priority of county efforts and funding in the solid waste management system.

1. Health Equity and Environmental Justice

Ensuring that all communities have equitable access to information and the ability to participate in waste management services is essential for promoting public health and well-being. This includes not only the collection and disposal of waste but also the prevention of environmental hazards and pollutants that can disproportionately affect some communities.

Environmental justice is 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 environment is the physical and natural world and the indoor and outdoor places where people live, work, play and learn. Environmental justice encompasses the principle that all individuals and communities have the right to be protected from environmental degradation or environmental policies that put them at a disadvantage. It adopts a public health model of prevention and protects people, their communities and the natural environment.

Although Washington County consistently ranks as one of the least socially vulnerable counties in the Metro County area overall, several communities within Washington County face disparities in health outcome. Factors that are determinates of who faces these challenges disproportionately include: socioeconomic status, race/ethnicity/language, household composition and housing/transportation.

Washington County serves an estimated population of 280,325 (2023). The county's population has been steadily growing over the past several decades and is projected to grow by an additional 27% by 2040. Washington County continues to increase in diversity. In American Community Service Data, 2018-2023, white non-Hispanic residents account for 84% of the population in Washington County which was down from 87% in 2018. Nearly 8% of the population is foreign-born. In Washington County, 15% of residents live in a home that has a household income 200% below the poverty level. This is lower than the state average of 22%; however, when census tracts that face housing, income, and poverty inequalities were tracked, people identifying as Black or African Americans faced the highest disparities in this area.

The most recent data indicates that the unemployment rate in Washington County in 2023 was 2.3% which is slightly lower than the Minnesota average at 2.7%. When compared to other races, the Hispanic population faces a higher unemployment rate of 5% in Washington County. Washington County will continue to see demographic shifts, including an aging population, and will need to be proactive in planning for the changing needs of the community.

Members of our communities may face barriers and challenges to participating in waste reduction and management programs that others would not. For example, nearly 13% of Washington County's population speaks a language other than English at home and may experience language barriers to understanding program

information presented in English. As another example, those who cannot access a or who have a disability may have challenges transporting materials to a collection site.

Barriers need to be addressed to allow full participation by all. By incorporating health equity and environmental justice into waste management planning, we can address systemic inequalities, reduce exposure to harmful

toxins and promote a cleaner, safer environment for everyone. Community engagement and collaboration in the decision-making process can help ensure that all communities' needs and concerns are considered, leading to more effective and sustainable waste reduction and management solutions.

2. Working with Partners

Washington County recognizes that county waste programs are part of a comprehensive system which is most effective when using strategies of coordination, cooperation and collaboration with other governmental entities and the private sector to achieve its goals.

As an example of this, Washington and Ramsey Counties have worked together since the 1980s on waste reduction, reuse, recycling and solid waste management. This work, in more recent years, includes shared principles for joint administration of waste management activities via Ramsey/Washington Recycling & Energy (R&E), continuous collaboration on waste management programming, ownership and operation of the R&E Center and pursuit of emerging technology solutions that harness economic, environmental and community benefits. Details on the policies of partnership between Washington and Ramsey Counties through R&E are found in Chapter 3 of this plan.

As another example, Washington County works with its municipalities by partnering on pilot projects, as well as communicating waste reduction and recycling messages to residents and businesses through their communication channels. The county also offers grant funds and technical resources for recycling projects. Municipal staff are kept informed of the county's solid waste efforts through quarterly meetings and direct communication as needed.

Washington County will work with partners to implement this plan through multiple approaches, including formal collaboration, shared planning with individual implementation and sharing of ideas and lessons learned. This will allow the county and its partners to continue harnessing efficiencies, cross-county consistency and economies of scale to maximize effectiveness.

3. Connection with Other Relevant County Plans

The county will provide leadership by showing awareness of environmental consequences in its actions and by protecting land, air, water and other natural resources, as well as public health. The policies and strategies in the Plan overlap with many other priority areas of county work. With recognition of this, the county will work to find opportunities across its different planning initiatives to harness synergies, find efficiencies, leverage resources and meet common goals. These areas of overlap are reflected in this plan. This includes the plans depicted in and **Figure 2** of this document.

4. Facilitating Meaningful and Sustained Behavior Change

Facilitating meaningful and sustained behavior change is crucial for reducing and better managing waste. Efforts such as communication initiatives, community engagement, incentives, effective solid waste programming

and equitable infrastructure development motivate and empower individuals to adopt habits such as reducing consumption, composting, recycling and managing waste responsibly. These key activities are embodied in this plan.

5. Use of Public Policy to Drive Environmentally Responsible Systems Change

Using incentives, assistance and education to drive individual behavior change is the priority for implementing waste reduction and solid waste system improvements. There are additional tools that can be used when voluntary efforts alone cannot drive effective change. The county supports the evaluation and, if appropriate, adoption of public policies such as ordinances and state statutes to drive environmentally responsible systems improvement in the county where individual action is not effective.

As an example, a product stewardship framework known as extended producer responsibility (EPR) creates producer-led reduction, reuse and recycling programs to address a product's lifecycle impacts from design through end-of-life management, without relying solely on state and local governments. Product stewardship has historically

focused on hazardous products, but is increasingly focused broadly on other materials, such as packaging and bulky items including mattresses. This approach reduces the need for government programs and funding to ensure proper end-of-life management of materials. This type of approach cannot be implemented with local incentives and policy alone; it requires a statewide economy of scale to be feasible. As such, Washington County has supported state legislation to implement EPR in Minnesota.

In situations in which the objectives in this plan are more likely to be met and sustained in a cost-effective manner using public policy tools, Washington County supports exploring and, if favorable, adopting local policy or advocating for state policy as the approach to achieve county goals.

6. Embodying Sustainable Materials Management and Circularity in Decision-making

Sustainable materials management (SMM) offers a systematic approach to using and reusing materials more productively over their entire life cycles. SMM considers the environmental impact of the entire life cycle, not just disposal, generally minimizing the quantity of materials involved and the associated environmental impacts, including greenhouse gas emissions. This holistic approach emphasizes management methods at the top of the waste hierarchy and reduces toxicity.

Circularity, also known as the circular economy, keeps materials and products in circulation for as long as possible. A circular economy reduces material use, redesigns materials and products to be less resource intensive, and recaptures "waste" as a resource to manufacture new materials and products. Circularity is embraced within the SMM approach.

A circular economy approach under the SMM umbrella demonstrates continuity in the emphasis on reducing negative lifecycle impacts of materials, including climate impacts, reducing the use of harmful materials and decoupling material use from economic growth while

meeting society's needs. Washington County will view solid waste management through the lens of SMM and with opportunities for circularity in mind in its planning and implementation of strategies in this plan.

7. Sustainable End Markets

Minnesota needs a comprehensive and sustained market development to pivot the solid waste management system from waste to resource. When a material is discarded in a landfill, it is waste. When that material is used by someone else, it is a resource. For the latter to occur, there needs to be a market for the material to be manufactured or repurposed into a marketable end product.

Recycling and waste processing harvest resources by recovering discarded materials and processing them into new products. Recycling and processing activity in Minnesota captures these resources and generates economic activity in the state and region, but only if

reliable and scalable end markets exist. This includes end markets for recyclables, food waste, wood waste, bulky waste and other discarded materials.

The State of Minnesota has a primary role and should facilitate collaboration with the parties that make up the state's solid waste system. Any new initiative should have local government representation in scoping and implementation. Washington County supports the MPCA leading market development research and investment on a local level to pilot and pursue new material processing approaches, ensure markets for challenging materials and build needed capacity.

3. Governing Partnerships

Ramsey/Washington Recycling & Energy

The R&E Joint Powers Agreement (R&E JPA) was adopted on September 22, 2015, and most recently amended and approved by both county boards on July 18, 2023, to reflect changes in the organizational structure at R&E. Due to the complex and ever-changing growth and priorities of R&E as an entity, the R&E leadership structure has shifted from joint leadership across Ramsey and Washington counties to an executive director model. The executive director reports directly to the R&E Board and ensures the overall vision and direction aligns with the respective county partnerships through the public health directors.

The JPA demonstrates both counties' commitment to implementing the counties' solid waste management plans via waste processing and joint solid waste activities, stating:

The counties recognize the clear environmental, financial and policy benefits to public ownership and operation of the [Ramsey/Washington Recycling & Energy Center] Facility and desire to amend and restate their Joint Powers Agreement for the purpose of owning, operating and improving the Facility; advancing recycling and other waste management goals of the counties; and overseeing other joint waste management activities.

The highest shared priority of the counties is to prevent waste through upstream efforts. This has resulted in the creation and growth of Joint Activities, the programs and projects funded by the two counties while being administered through R&E to address the shared solid waste priorities of the two counties. Section 5 of the R&E JPA, Scope and Authority, sub-section 9, lists the responsibilities of R&E to administer joint solid waste management activities, including (but not limited to):

- Conducting waste education and outreach related to reduction, recycling, waste processing and other waste management messages
- Engaging in educational activities with schools
- Administering non-residential recycling programs
- Making plans and conducting research in pursuit of the goals of the JPA

For waste not managed upstream, the next shared priority is to prevent waste from going to landfills through waste processing. This priority was strengthened through the extensive evaluation of the future of waste processing, resulting in the purchase of the Recycling & Energy Center (R&E Center), a waste processing facility in Newport, Minnesota at the end of 2015. Commissioners in both counties recognize the need to pivot from a waste stream to a resource stream. The counties do this by recovering additional value from the trash through the recovery of recyclables and energy from the trash and identifying markets for materials to be used by others to manufacture consumer goods while working to support waste reduction and recycling in the community. Through investment in enhancing the R&E Center's operations, materials such as additional recyclables and food scraps are recovered from the trash, helping the counties move closer to the state's 75% recycling goal.

The counties, through R&E, are pursuing the use of next generation technologies to get the most value from discarded materials. The Ramsey/Washington Recycling & Energy Board (R&E Board) is also seeking non-combustion solutions for processed waste using technologies that produce bio-based fuels or other value-added products. These alternative technologies have been operating in Europe, North America and around the world on a commercial scale for years or decades. In the United States, facilities such as anaerobic digesters have moved from pilot to commercial scale operations and are becoming more common across the country as a viable and sustainable way to manage organic materials.

New technologies can help increase jobs locally and offer alternative end uses for materials found in trash, preventing the environmental harm and financial liability risks to taxpayers that would otherwise result from landfilling waste. R&E continues to monitor, evaluate and support the development of these technologies, including their environmental, economic and community impacts.

R&E programs and operations represent all aspects of the integrated waste management system. Additional details are included in **Appendix A**.

Washington and Ramsey Counties have been working together successfully since the early 1980s on waste reduction, reuse, recycling and solid waste management. Washington and Ramsey Counties created Ramsey/Washington Recycling & Energy (R&E) with the commitment to continue this collaborative work.

Washington County is responsible for implementing the strategies outlined in this plan. However, the implementation of sections of this plan depends on continued and strengthened partnerships through R&E as well as additional coordination between the counties. In many cases, implementation is more effective and efficient through East Metro collaboration. Strategies outlined in this plan have been aligned with Ramsey County with the intention to plan and/or implement jointly where it mutually benefits and allows better stewardship of resources.

Ramsey/Washington Recycling & Energy Vision, Mission and Values

Vision

Vibrant, healthy communities without waste.

Mission

Enhancing public health and the environment by creating value from waste through partnerships.

Values

- **Commitment:** Committed to public health, safety and the environment
- **Teamwork:** Making the biggest impact by working beyond ourselves
- **Respect:** Treating the earth and all people with esteem, dignity and compassion
- **Trust:** Maintaining diligent stewardship of public trust and funding, with our work informed by research and science
- **Innovation:** Focusing on excellence, continual improvement and adaptation in pursuit of the mission

Washington and Ramsey 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 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 fund and 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)
 - 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 solid waste management in the two counties, established as part of the decision to purchase the R&E Center, including:
 - a. The Scope for Resource Management
 - Increased source-separation efforts for recycling and organics from residential and non-residential waste generators
 - The use of a front-end recyclables recovery system to recover additional recyclables and organic-rich materials that remain in mixed municipal solid waste
 - Organic waste being used as a feedstock for anaerobic digestion
 - A transition beyond using refuse-derived fuel for electrical generation
 - b. The R&E Board principles
 - Plan for a 20- to 30-year horizon
 - Assure flexibility
 - Manage risk
 - Pivot the view from “waste” to “resources” to add value to the local economy and environment
 - Move resources up the waste management hierarchy
4. The R&E Board will continue to own, operate and improve the R&E Center as outlined in the [Washington and Ramsey Counties Joint Waste Designation Plan](#).
5. The R&E Board will continue to conduct and facilitate shared programs and projects that address solid waste goals of the two counties and will evaluate these activities and remain responsive to evolving needs and priorities of the counties' diverse communities.
6. The R&E Board will continue to evaluate and implement appropriate changes to its governance structure and size to ensure effectiveness.

Partnership on Waste and Energy

Washington, Ramsey and Hennepin Counties collaborate in areas of waste and energy management, including legislation and policy development, communication and outreach, planning, evaluation of waste processing technologies and other selected programs. The counties do this through a JPA between Hennepin County and R&E. The resulting entity is called the Partnership on Waste and Energy (Partnership). The Partnership seeks to end waste, promote renewable energy and enhance the health and resiliency of the communities we serve, while advancing equity and responding to the challenges and opportunities of a changing climate.

The Partnership is led by a governing board comprised of a commissioner from each county. Hennepin County appoints a commissioner, while the chair and vice chair of the R&E Board represent Washington and Ramsey Counties. Hennepin County and R&E contribute resources to fund the Partnership's activities. R&E is the administrative agent for the Partnership, providing staff support for administrative activities, finance, procurement and communications. The Governing Board approves an annual legislative platform on waste and energy issues and engages in advancing that platform.

By working together, the Partnership leverages shared expertise, effort and advocacy to go beyond what individual counties could do alone. Working with a shared vision enables significant progress in recovering resources and moving materials up the solid waste hierarchy. Examples of areas the Partnership activities have supported legislative advancement include:

- Creating an EPR system for packaging, paper and single-use products via the Packaging Waste and Cost Reduction Act (2024)
- Redirecting Solid Waste Management Tax receipts from the General Fund into SCORE grants to counties (2023)
- Allocating funding to address the ongoing issue of emerald ash borer and wood waste management (2023)

4. Communication and Engagement

Introduction

Washington County places a high value on communication and engagement for achieving solid waste management and environmental health goals. Using the International Association of Public Participation (IAP2) spectrum of public participation as a framework, the county can identify the optimal level of participation for a program, project or effort.

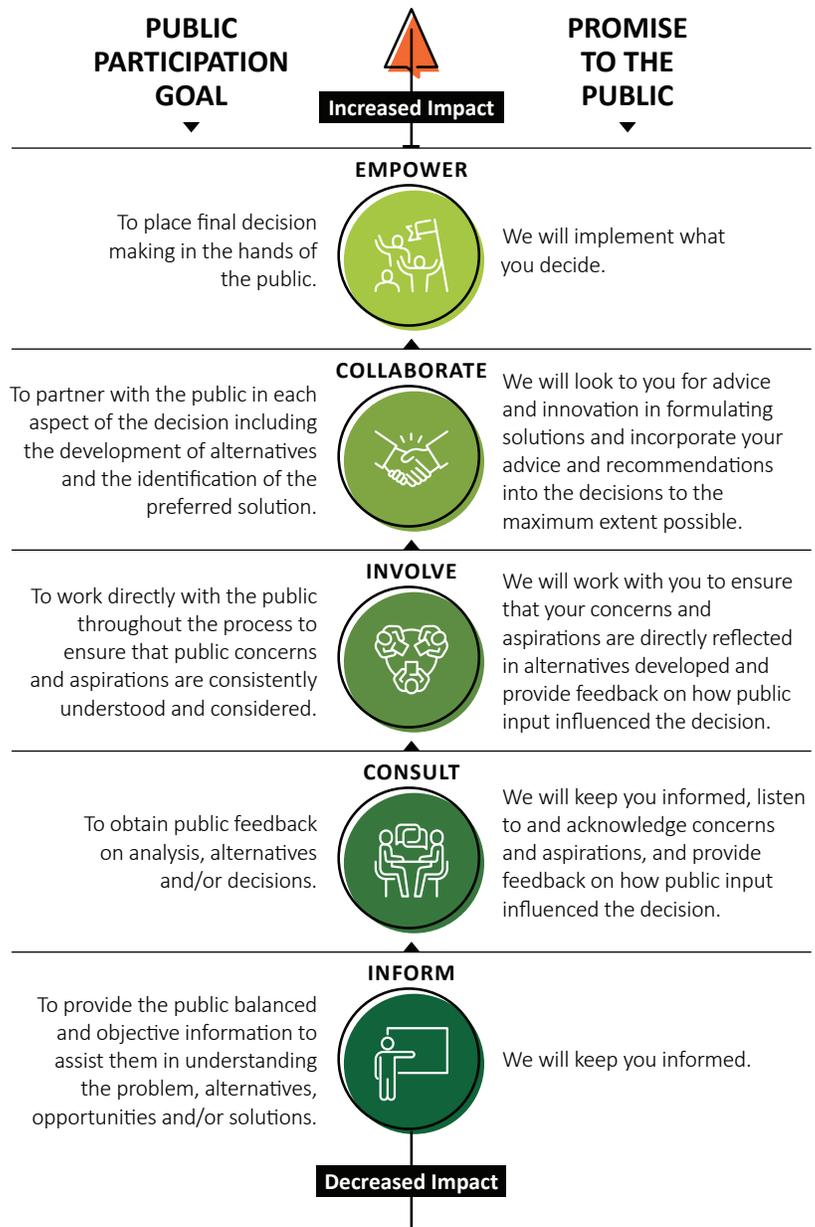
In this plan, the term “communication” refers to any means of conveying information to an audience. In the IAP2 spectrum, communication is the “inform” level. Through ongoing communication efforts, the county strives to ensure that the public is well-informed. This includes employing various methods to reach diverse audiences and expand that reach via collaboration with community partners.

“Community engagement” refers to meaningful dialogue and shared decision-making through public participation activities. In the IAP2 spectrum, engagement refers to the levels “consult,” “involve,” “collaborate” and “empower.” These processes treat communities as the experts in identifying both the challenges they face and the solutions to these challenges. Input from interested parties across the solid waste system is instrumental in shaping policies and practices.

Together, communication and engagement efforts enable the community to be informed, provide input and participate in the robust system of waste reduction, recycling and responsible waste management in Washington County.

Figure 3. IAP2 Spectrum of Public Participation

This spectrum assist with the selection of the participation level that defines the public’s role in any engagement process. The Spectrum is found in public participation plans around the world.



Policies

1. Washington County will conduct authentic engagement practices, which establish trust-based relationships by adhering to best practices and ethical engagement standards and continuously evaluating efforts for improvement. The county will prioritize efforts guided by insights from community members. Washington County will maintain transparency on interested parties' influence on decision-making processes.
2. Washington County recognizes the importance of an equity lens in waste management initiatives. By prioritizing equity, communication and engagement can address systemic barriers and empower all community members, fostering genuine dialogue and meaningful participation.
3. Washington County commits to proactively monitoring emerging communication and engagement tools, resources and approaches, including advancements in technology-based methods. The county will try new methods when those methods can improve communication and engagement efforts.
4. Washington County will collaborate with partners, including Ramsey County and Ramsey/Washington Recycling & Energy (R&E), to ensure consistency in communication efforts.

Strategies

1. **Communication tools and resources.** Develop and utilize a range of outreach and education tools and resources to educate residents, businesses and other entities about waste reduction and management.
 - a. Use communication tools, including (but not limited to) web, social media, media engagement, print materials, direct mail, community events, workshops and webinars.
 - b. Implement educational programming, including (but not limited to):
 - i. Lesson plans and education programs for school and community groups
 - ii. Tours of the Ramsey/Washington Recycling & Energy Center (R&E Center), county environmental centers, compost facilities, material recovery facilities, transfer stations and other facilities to facilitate understanding of the counties' and residents' role in the waste system.
 - c. Use a lens of the broader impacts of waste reduction and management, such as community, economic and climate benefits, to educate about waste reduction and management.
2. **Engagement tools and resources.** Use interactive engagement tools and practices (e.g., social media, focus groups, surveys, community partner engagement) to gather community input and guidance on solid waste programs and services.
3. **Environmental justice principles.** Prioritize environmental justice through meaningful engagement with community and build staff capability to develop responsive solid waste programming.
4. **Access and relevance.** Ensure specific, equitable, relevant and accessible communication and engagement that meets the public's diverse needs across waste reduction and management topics for residents, businesses and others.
 - a. County communications and engagement efforts will identify and address the needs specific to culture, ability, education level, language, housing type, technology access and geographic location.
 - b. Explore, implement and continually enhance translation best practices for materials.
5. **Building community capacity.** Invest in community members to enable them to conduct outreach and education activities in their communities.
 - a. Use programs that include education curriculum and supportive resources to create champions in the community for recycling and waste reduction, such as the Recycling Ambassador and Apartment Recycling Specialist programs.
 - b. Explore and implement programs to provide community groups with resources and training to support them in conducting their own programs and education related to waste reduction and management.

- 6. Removing barriers to participation and engagement.** Identify and address barriers to participation in county engagement activities. Removing barriers may include (but is not limited to):
- Addressing transportation and childcare needs through tactics such as transit vouchers, flexible scheduling, remote meeting options, food offerings and childcare accessibility.
 - Compensation for time, expertise and lived experience.
 - Providing multiple options for engagement (e.g., digital surveys, community meetings, focus groups, pop-up engagement).
 - Use of approaches such as community liaisons, cultural consultants, interpreters and communication in multiple languages.
- 7. Regional consistency.** Commit to standardized communication and engagement by conducting outreach collaboratively, as appropriate, with Ramsey County and R&E (*Policy Plan required strategy 10*). Additionally, leverage opportunities for regional communications efforts, such as (but not limited to):
- Participation in the Recycling Education Committee and coordination with other counties on messaging.
 - Collaborative efforts with the Partnership on Waste and Energy.
 - Collaborative regional outreach and messaging efforts with other entities such as counties, haulers, organics processors, anaerobic digestion facilities, material recovery facilities, product stewardship and producer responsibility organizations operating in the state and recycling end markets.
 - Participation in professional groups (e.g., Minnesota Resource Recovery Association, Recycling Association of Minnesota, Association of Recycling Managers, Minnesota Reuse Association, Minnesota Chapter of the Solid Waste Association of North America, Minnesota Composting Council and Solid Waste Administrators Association).
 - Participate in an annual joint commissioner/staff meeting on solid waste (*Policy Plan required strategy 9*).
- 8. Coordinating with partners.** Coordinate with key waste system partners (e.g., haulers, businesses, municipalities and other public entities) to communicate and engage about waste issues and programs. Coordination may include (but is not limited to):
- Working through the local health department to reach regulated entities (e.g., businesses).
 - Working with public entities, institutions, community groups and other organizations, such as the University of Minnesota Extension Program, to develop and/or distribute information.
 - Collaborating with waste haulers to develop and distribute communication resources in alignment with county messaging on topics such as the Food Scraps Pickup Program, County Environmental Charge, tipping fees and the R&E Center to their customers. Waste haulers are responsible for communicating accurate and consistent information to their customers.
 - Working jointly with municipalities in the development of messages and tools.
 - Utilizing regional partnerships to engage the community on environmental issues related to waste management, such as air and water quality, emergency response and healthy homes, to expand reach and ensure consistency.
- 9. Workforce development.** Work with partners to explore education programs and training to facilitate future careers in waste management and environmental health. This could include (but is not limited to):
- Offering internships and leveraging volunteer programs.
 - Explore offering a fellowship program that recruits a diverse workforce and emphasizes development of skills appropriate for future careers in waste management or environmental health.

5. Product Stewardship and Extended Producer Responsibility

Introduction

Washington County is focused on a product stewardship approach to managing materials throughout the county. Extended producer responsibility (EPR) policies are a way to implement product stewardship and can help encourage sustainable materials management and a circular economy that eliminates waste and maximizes the continued use and regeneration of resources. An EPR policy approach extends the producer's responsibility to include environmental impacts from all stages of the product's life cycle. This can include addressing durability, reusability, recyclability, toxicity reduction and finding the highest and best use of materials and waste. EPR policies also often include producer responsibilities for end-of-life management systems and costs.

Policies

1. Washington County, with Ramsey County and Ramsey/Washington Recycling & Energy (R&E), 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 managing waste and financing such efforts.
2. Washington County will implement residential collection programs until product stewardship collection systems are reliably in place for consumer materials that are hazardous or problematic to manage. The county will accept reimbursement for management of hazardous and problematic consumer materials when product stewardship programs do not directly provide convenient collection opportunities for those materials.
3. Washington County will coordinate with others to assure programs and services implemented under EPR and product stewardship laws and voluntary industry-led efforts meet the needs of residents, municipalities and others who are eligible for services, and to assure programs and services are implemented in ways that advance the policies in this plan. The county will accept reimbursement for eligible county expenses as provided for in product stewardship or EPR programs.

Strategies

1. **Extended producer responsibility.** Through collaboration on legislation and policy development with partners, such as the Partnership on Waste and Energy, support policies that implement and improve EPR for key products and materials, such as (but not limited to):

<ol style="list-style-type: none"> a. Product packaging b. Non-recyclable or hard-to-recycle plastic products and films 	<ol style="list-style-type: none"> c. Mattresses and other bulky items such as furniture, carpet, etc. d. Appliances and electronic waste (including emerging materials like solar panels) 	<ol style="list-style-type: none"> e. Batteries f. Paint, pharmaceuticals, sharps and other hazardous products g. Textiles and clothing
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2. **Partnering on product stewardship.** Support regional and state efforts to advance product stewardship efforts, including (but not limited to) participation in committees and reporting on materials managed through county facilities.
 - a. Participate with the Product Stewardship Committee under the Solid Waste Administrators Association (*Policy Plan required strategy 60*).

6. Health and Environmental Risk Reduction

6A. Health and Environmental Risk Reduction

Introduction

Reducing risk to public health and the environment is a foundational element of the solid waste management system. This chapter addresses Washington County's health and environmental risk reduction policies and strategies, including toxicity reduction and hazardous waste management. Minnesota's regulation of hazardous waste generated by commercial entities is among the strictest in the nation. Washington County's hazardous waste compliance program focuses on ensuring compliance and encouraging pollution prevention.

Hazardous waste generated at home is known as household hazardous waste (HHW). HHW includes household chemicals, paint, cleaning products and other household-generated materials that pose a hazard to human or environmental health. Other problem materials that need special disposal include electronic waste (e-waste), propane cylinders, tires, batteries, mercury-containing devices (e.g., fluorescent lamps), pharmaceuticals and medical sharps.

Washington County has one of the most convenient HHW collection programs in Minnesota, and program evaluation indicates that county HHW programming is effective. Further, community engagement in 2018 indicating the largest barrier to participating was distance to the Environmental Center. Washington County is expanding its HHW services to expand access to residents in the northern parts of the county, with the construction of an additional Environmental Center anticipated to be operational by 2025.

Policies

1. Washington County will prevent, mitigate and manage risks to public health and the environment in a manner that upholds the county's environmental justice and equity values while addressing and improving climate resilience throughout the county.
2. Washington County will regulate the generation and management of hazardous waste as required by Minnesota statutes in a manner that uses a variety of methods to ensure compliance and focus on risk reduction. The county, with Ramsey County and Ramsey/Washington Recycling & Energy, will provide technical and financial assistance to improve management of toxic and hazardous wastes.
3. Washington County will be a leader in reducing the use of materials that contain toxic and hazardous ingredients in county operations.

Strategies

1. **Regulated entity hazardous waste management and pollution reduction.** Provide training, education, technical assistance and other resources to regulated entities to facilitate proper management of solid and hazardous wastes. Assistance includes opportunities to reduce air, land and water pollution by changing business practices related to hazardous materials and hazardous wastes, such as lead.
 - a. Monitor emerging waste streams, such as cannabis products waste, and work with regulated entities to ensure materials are being properly managed.
2. **HHW disposal and management.** Provide convenient and safe HHW disposal and management for residents by partnering with municipalities to provide education and services to residents.

- a. Continue county participation in the reciprocal use agreement for HHW collection sites across the metro area (*Policy Plan required strategy 62*).
 - b. Partner with municipalities to increase participation in HHW collection (*Policy Plan required strategy 63*).
- 3. Address barriers to HHW collection.** Explore, identify and implement methods to remove barriers to use and access of HHW collection, including (but not limited to) hosting drop-off sites at various locations, providing pick-up services, etc., with specific focus on historically underserved communities (*Policy Plan optional strategy 64*).
- a. Complete construction and begin operations in the new Environmental Center that will provide more convenient and accessible HHW collection services.
- 4. Residential problem materials.** Develop a range of residential communication tools and disposal opportunities for the management of HHW and other problem materials to ensure these materials do not end up at recycling facilities, compost sites, resource recovery facilities or landfills. Examples of problem materials include, but are not limited to, hazardous materials recovered during residential structure demolition, pharmaceuticals, sharps, lead, cannabis products waste, propane tanks, batteries and electronics.
- a. Work with law enforcement and examine possibilities for public-private cooperation for collection of household pharmaceuticals until there is implementation of a statewide product stewardship approach.
 - b. Encourage retailers to increase consumer awareness of responsible end-of-life handling for products containing lithium-ion batteries (*Policy Plan required strategy 61*).
- 5. Hazardous waste management in county operations.** Ensure that hazardous and universal wastes that are generated in county operations are properly managed. This includes waste illegally dumped in public spaces, at municipal or county facilities and waste being addressed in the abatement of public health nuisances.
- 6. Very Small Quantity Generator (VSQG) Program.** Operate a VSQG educational and collection program to protect public health and the environment by providing a convenient and cost-effective disposal option for eligible hazardous waste generators.
- 7. Healthy homes.** Develop education, outreach and comprehensive programming to help residents understand how home environment can affect their health, how to reduce exposure to potentially harmful substances in and around the home.
- a. Explore implementing programs that target various environmental hazards, including (but not limited to) abatement of public nuisances, hoarding behavior, lead, mercury, radon, pesticides and other household contaminants.
 - b. Explore a lead paint remediation program that aims to reduce lead poisoning in children, ensures proper disposal of building components coated in lead-based paint (such as old windows) and provides more energy-efficient housing.
- 8. Partnerships.** Explore partnerships with state agencies (Minnesota Department of Health, Minnesota Pollution Control Agency), municipalities and non-profits to coordinate efforts, leverage funding opportunities and ensure oversight to support vulnerable communities.
- 9. Climate resiliency.** Explore and address climate resilience as an approach to environmental health risk reduction. Consider climate resilience as a factor for solid and hazardous waste management programming decisions.
- 10. Coordination with the county’s groundwater plan.** The Washington County Groundwater Plan supports the work of the Plan to implement activities for an integrated solid waste management system that is protective of groundwater. This includes, but is not limited to:
- a. Provide technical assistance and education on proper storage and disposal of hazardous waste. Provide information on less toxic/hazardous alternatives and best practices to minimize or eliminate toxic materials used.
 - b. Evaluate and prioritize compliance activities for hazardous waste generators located in sensitive geologic or well-head protection areas.
 - c. Evaluate the need for a solid waste and HHW/agricultural chemical management assistance program.
 - d. Explore options to identify when and where movement of contaminated soil is occurring and evaluate a process to monitor this activity under existing solid and hazardous waste regulations. Monitor and advocate for research and studies (e.g. biomonitoring, additional surveillance) on health effects from per- and polyfluoroalkyl substances (PFAS) and other contaminants.

6B. Emergency Debris Management

Introduction

Proper management of waste that results from emergency situations, such as natural or human-caused disasters, is important to protect public health and the environment. Debris from emergencies may include trees, sand, gravel, building components, wreckage, vehicles, hazardous materials and other personal property. The following policies and strategies serve as an addendum to the Washington County All Hazard Mitigation Plan and are intended to complement that plan.

Policies

1. Washington County will work collaboratively and proactively across departments to ensure that the clearance, removal and proper management of debris resulting from emergencies is carried out safely, comprehensively and effectively to reduce risks to public health, public safety and the environment.
2. Washington County encourages the use of emergency debris to its highest and best purpose when feasible in any given response scenario. This is consistent with requirements of the Federal Emergency Management Agency (FEMA) and Minnesota Homeland Security and Emergency Management (HSEM).

Strategies

1. **Assist in emergency debris management.** Assist in ensuring the management of municipal solid waste (MSW), non-MSW, household and commercial hazardous waste, major appliances, tires and related waste resulting from emergency situations. Address challenges and barriers to proper materials management related to emergency preparedness and response.
 - a. The county will include a provision allowing temporary collection of household hazardous waste (HHW) generated from emergencies, such as flooding and other storm damage, as part of its contract for HHW collection services.
 - b. The county will use its discretion in an emergency to halt, redirect or waive restrictions on services to properly manage waste.
 - c. The county will act in accordance with the Washington County All Hazard Mitigation Plan.
2. **Assist municipalities.** Assist municipalities in planning and coordination for the management of emergency debris by offering technical assistance and resources and identifying recycling and reuse opportunities.
3. **Environmental centers in emergencies.** As appropriate, continue the use of county environmental centers as a hub for certain emergency operations.
4. **Climate adaptation.** Evaluate, account for and increase awareness of the impacts of climate change on debris management from storms, heavy rainfall, flooding and high wind events to reduce the volume and/or toxicity of debris that needs to be managed as waste. Continue to prioritize the public health vulnerability assessment and the resilience and sustainability chapter of the county comprehensive plan and any future iterations of this chapter.
5. **Community relationship-building.** Educate, promote services and build trusting relationships with the community, including those not typically reached, to ensure equity of preparedness and response services.

7. Waste Reduction and Reuse

7A. Waste Reduction and Reuse

Introduction

Waste reduction is the act of preventing waste by not producing items that need disposal or other management. Reduction is the most preferred waste management method in Minnesota’s waste management hierarchy. Waste reduction results from decisions made in the production, purchase and use of materials. While some waste reduction results from individual choices by residents in the products they consume, major waste reduction is the result of systemic change, such as when manufacturers, distributors or retailers change packaging for products or make products in a manner that extends their lives. Programs that promote product stewardship are examples of systemic changes that can favor reduced waste.

The following policies and strategies highlight Washington County waste reduction, reuse and repair efforts, including joint efforts through Ramsey/Washington Recycling & Energy (R&E).

Policies

1. Washington County will focus on removing barriers to achieving a zero-waste approach to waste management.
2. Washington County supports efforts to ensure reuse information, programs and resources are available to all residents and businesses.
3. Washington County, with Ramsey County and R&E, encourages other public entities and the private sector to incorporate waste reduction and reuse activities within their operations, including product and service design, manufacturing and transportation to end markets.
4. Washington County, with Ramsey County and R&E, will provide technical and financial assistance to businesses to support waste reduction and reuse in the county.
5. Washington County will be a leader in internal waste reduction and reuse activities by continuously improving operations to conserve natural resources and energy, reduce or eliminate hazardous waste, support reuse markets and reduce the need for landfilling and waste-to-energy.
6. Washington County will coordinate, as appropriate, with producer-led initiatives and others to promote and support reuse and refill programs and services for packaging, including food and beverage packaging.

Strategies

1. **Waste reduction and reuse programs.** With Ramsey County and R&E, expand collaboration with partners, including (but not limited to) the Minnesota Pollution Control Agency, counties, municipalities and community organizations to implement and promote new and existing waste reduction and reuse programs at residential, commercial and institutional levels.
 - a. Explore grants, technical assistance and resources to residents, community organizations, businesses and other entities to develop and expand waste reduction, reuse and repair.
 - b. Support collection of usable items through reuse businesses and organizations.
 - c. Work with schools to explore and implement reuse opportunities.
 - d. Implement biannual waste reduction challenges for residents (*Policy Plan required strategy 15*).

- 2. Increase reuse and repair opportunities.** Support and expand reuse and repair opportunities within the county.
 - a.** Host, promote and track waste diversion through reuse and repair events such as Fix-It Clinics and product reuse rooms at county environmental centers.
 - b.** Promote community-centered reuse. For example, promote items exchange in local Buy Nothing groups and lending libraries. Support building community capacity for direct reuse.
 - c.** Expand community capacity for repair. Through existing county programs such as Fix-It Clinics and collaboration with partners, increase opportunities for skilled individuals to teach repair and mending skills and promote repair as an alternative to purchasing new (*Policy Plan optional strategy 25*).
 - d.** With Ramsey County and R&E, develop and promote a reuse and repair resource directory. Explore opportunities to collaborate with other metro counties and partners such as Reuse Minnesota.
 - e.** Work with municipalities to evaluate and, as appropriate, implement curbside set-out days to allow residents to set out used items for reuse (*Policy Plan optional strategy 27*).
 - f.** Explore ways to quantify and/or document community reuse and repair activities.
- 3. Reuse location for residential drop-off and pick-up.** Maintain free product rooms at environmental centers for residential reuse of household hazardous waste material and explore hosting and/or supporting material swap events, including with municipality and other partners (*Policy Plan optional strategy 26*).
- 4. Waste reduction at events.** Support waste reduction at public events, such as those sponsored by municipalities, the county and other entities. Develop and promote best practices for waste reduction at events.
- 5. Non-residential waste reduction and reuse grants.** Through R&E (e.g., BizRecycling), offer support, resources and incentives to businesses and other non-residential entities related to waste reduction and reuse. Support and incentives may include (but is not limited to):
 - a.** Offering grants for waste reduction, reuse and repair (*Policy Plan required strategy 20*).
 - b.** Offering grants or rebates for organizations to transition to reusable food and beverage service ware (*Policy Plan required strategy 19*).
- 6. Regulatory and legislative solutions.** Explore regulatory and legislative solutions that promote waste reduction and reuse. As appropriate, support regulatory and legislative solutions being proposed by other entities. These may include:
 - a.** “Right to repair” legislation
 - b.** Restrictions on disposable food service ware provided with takeout
 - c.** Mechanisms that discourage the use of disposable bags in retail stores
- 7. Staff education via a reuse network.** Join and/or actively participate in a reuse network, like Reuse Minnesota, to provide county and city staff with learning opportunities to broaden their reuse expertise (*Policy Plan optional strategy 24*).

7B. Upstream Food Management

Introduction

Through programming, funding and technical assistance, Washington County collaborates with residents, businesses and other entities to focus on preventing edible food waste. The county prioritizes food-to-people opportunities for diverting edible food to individuals who need it.

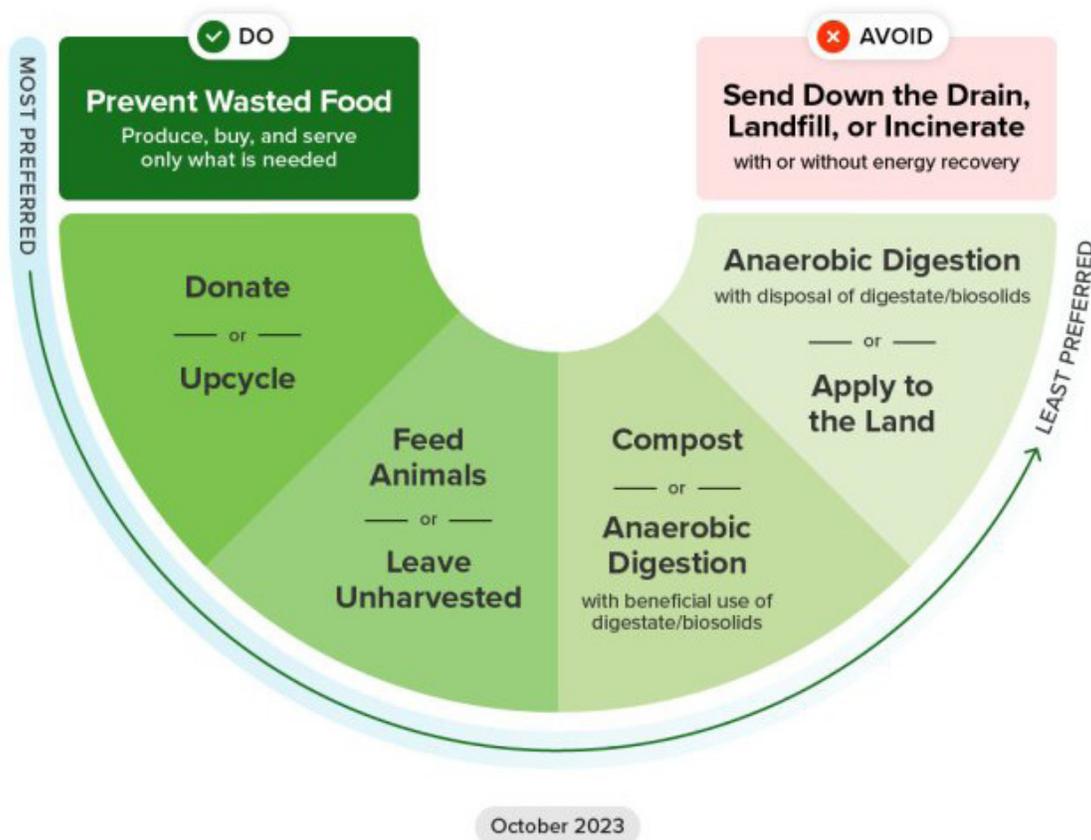
The United States Environmental Protection Agency (EPA) developed the Wasted Food Scale in October 2023 to provide guidance on prioritization of activities that prevent and divert wasted food from disposal. The scale can be used as a tool to guide decisions on programming and policy.

The following policies and strategies outline the innovative ways that Washington County, with Ramsey County and R&E, approaches upstream food waste management.

Policies

1. Washington County will use the EPA Wasted Food Scale as guidance in making policy decisions about food waste, prioritizing the prevention of wasted food and food surplus recovery.
2. Washington County will make policy decisions that ensure equitable program outcomes for residents, including fostering and supporting access to culturally relevant foods and supporting access to spaces for people to grow their own food.

Figure 4. EPA Food Waste Scale



Strategies

- 1. Food waste prevention.** Continue to support food waste prevention at the residential, commercial and institutional level, such as in schools, businesses, hospitals and commercial kitchens. Counties may partner with municipalities to expand such efforts.
- 2. Support food recovery.** Support food recovery via food-to-people partnerships and local food donation programs, including (but not limited to):
 - a.** Incentives for institutions to participate in food recovery.
 - b.** Support for a robust and adaptable system of recovered food through food banks, shelves, pantries and hubs.
 - c.** Support for distribution, transportation and logistics in food systems.
 - d.** Recovery of surplus food from farmers markets, community gardens and farms.
 - e.** Establish partnerships between food recovery organizations and restaurants/stores to increase food recovery (*Policy Plan required strategy 14*).
 - f.** Support for access to culturally relevant food by encouraging household and community garden food growing, gleaning and partnerships that grant additional space to grow food.
- 3. School food recovery.** Work with schools with kitchens to identify and address barriers to food waste prevention and food recovery.
- 4. Health inspector education.** Work with health inspectors to educate restaurants and other establishments that have surplus prepared food to donate (*Policy Plan optional strategy 18*).
- 5. Regulatory and legislative solutions.** Support regulatory and legislative solutions that improve or promote food donation and food recovery.

8. Recycling and Organics

8A. Residential Recycling

Introduction

Residential recycling is a fundamental part of reaching the state’s 75% recycling goal and is an essential component of waste management in Washington County. The county expects residents, businesses and institutions to incorporate recycling in the handling of discarded materials and recognizes it is the responsibility of everyone in the county to help achieve state recycling goals.

Policies

1. Washington County encourages municipalities to follow best practices for recycling by seeking continual improvement, especially with regards to contracting efficiency and implementation ease for residents and by assuring the availability of recycling services for all residents, including residents in multi-family housing.
2. Recycling is a necessary component of waste management in Washington County. The county expects residents to incorporate recycling in the handling of discarded materials and recognizes that it is the responsibility of everyone in Washington County to achieve state recycling goals.
3. Washington County, with Ramsey/Washington Recycling & Energy (R&E), will work with municipalities, the waste and recycling industries and public entities to maximize recycling opportunities. The county will use outreach and education, planning and evaluation, regulation, financial incentives, technical assistance and consultation to accomplish recycling objectives.

Strategies

1. **Municipality assistance.** Provide technical assistance and resources to support municipalities in meeting recycling objectives.
 - a. With municipalities, explore ways to maximize capacity for recycling collection, such as cart size options and collection frequency.
 - b. Provide technical assistance to municipalities for procurement of recycling and organics services including (but not limited to) contracts, ordinance revisions and the impacts on and opportunities for municipal programs and services under extended producer responsibility (EPR) laws.
 - c. Facilitate partnerships, networking and shared resources among municipalities and community groups.
 - d. Assist municipalities to ensure the following minimum levels of service as directed by the MPCA:
 - i. Recycling services for traditional curbside recyclables are available to all residents at their place of residence, including multi-units.
 - ii. Contract for residential recycling collection and/or recycling collection on same day as trash (*Policy Plan required strategy 30*).
 - iii. Collection of the county’s standard list of residential curbside recyclables.
 - iv. Add materials to their collection streams as markets become available.
 - v. Track municipal progress toward meeting waste objectives.

- 2. Multi-unit assistance.** The county, with Ramsey County and R&E, will provide assistance to multi-unit properties to improve recycling (*Policy Plan required strategy 37*). Some examples of activities that would achieve this strategy include:
- a.** Education to residents and property managers on how to recycle items that are accepted as part of building-provided collection, as well as how to recycle items that are not accepted as part of building-provided collection.
 - b.** Financial and/or technical assistance for infrastructure improvements and implementation of improvements.
 - c.** Ensuring property managers plan for and provide sufficient space for collecting recycling based on the number of residents.
 - d.** Collaborating with cities to promote assistance resources, on-site education and implementation of recycling improvements.
 - e.** Outreach to multi-family association networks (e.g., Minnesota Multi Housing Association) to promote resources, including opportunities for services and financial incentives available under any EPR laws.
- 3. Textile diversion.** Address textile waste through programs/education that encourages diversion of this material, prioritizing reduction, repair and reuse. Work with municipalities and other partners on opportunities for residential textile recycling, such as curbside collection and special collection/drop-off when markets become available.
- 4. Away-from-home recycling.** Washington County, with Ramsey County and R&E, will support municipalities and other entities to increase away-from-home recycling opportunities, such as at parks, athletic fields, recreation centers, arenas, fairgrounds and events. This includes supporting opportunities made possible under any EPR laws.

8B. Residential Food Scraps

Introduction

Food scraps make up over 20% of residential trash, making one of the largest single materials in the waste stream. Food scraps recycling is important to the Washington and Ramsey Counties' solid waste management system. The strategies outlined below will push the county toward the state goal of 75% recycling in metropolitan counties by 2030 by focusing on food scraps recycling.

In particular, rollout of the Food Scraps Pickup Program is allowing the county to reduce the amount of food scraps ending up as waste by composting, and eventually anaerobically digesting, these materials. See **Appendix A** for an overview of the Food Scraps Pickup Program.

Policies

1. Washington County, with Ramsey County and R&E, will work with local partners, private haulers, recyclers, transfer stations and other counties to divert food scraps from the residential waste stream using a variety of organics management methods, including anaerobic digestion. This will be done in a manner that ensures that all residents are aware of and have access to services.
2. Washington County, with Ramsey County and R&E, will use resources in a strategic manner to ensure that residents optimize organic waste management opportunities using outreach and education, planning and evaluation, regulation, financial incentives, technical assistance and consultation as necessary to accomplish organic waste management objectives.
3. Washington County will continue to provide free food scrap drop-off sites and will continue to support drop-off sites for residents at other locations in partnership with local entities.

Strategies

1. **Residential curbside food scraps collection.** Make residential curbside organics collection available to all residents of Washington County by 2027 via continued expansion and funding of the Food Scraps Pickup Program (*Policy Plan required strategy 40*). Success of the program entails:
 - a. The program is available to all residents, including residents in multi-unit buildings.
 - b. Application of continuous evaluation and process improvement efforts. This considers effective and equitable residential food scrap collection through collaboration with Ramsey County and R&E, private haulers, transfer stations and municipalities.
2. **Food scraps education.** Expand education to residents on the benefits of food scraps recycling and the organics system.
 - a. Continue regular promotion and education of the Food Scrap Pickup Program and food scrap drop-off sites, recognizing that terminology and program structure may vary from other regions with food scraps collection programs.
 - b. Educate and inform residents on progress on state Metropolitan Solid Waste Management Policy Plan objectives for organic waste management, service availability and markets for organic derived and finished products.
3. **Residential food scraps recycling drop-off sites.** Develop and maintain accessible residential food scraps drop-off services and establish additional residential food scraps drop-off sites through partnerships with municipalities and others. (*Policy Plan optional strategy 43*).
4. **At-home composting support.** Support at-home composting and sustainable approaches to managing stormwater by partnering with municipalities to promote at-home composting and rainwater collection, such as outreach and funding for compost bin/rain barrel distribution. Promotions will include online information, county publications and social media. (*Policy Plan required strategy 41*).

8C. Non-Residential Recycling and Organics

Introduction

Achieving the state's 75% recycling goal will depend heavily on increased recovery and recycling of traditional materials and organics from non-residential entities and multi-unit residential properties. Non-residential entities include businesses, institutions, not-for-profit organizations and schools. Multi-unit properties are defined as a type of housing where multiple separate units for residential living are contained within one building.

BizRecycling, a Washington and Ramsey County joint program through R&E, leads efforts to engage non-residential and multi-unit entities to reduce waste and recycle traditional materials and organics. It is important to note that state law mandates recycling in most businesses.

Policies

1. Washington County, through R&E, will provide public education and information, planning and evaluation, regulation, financial incentives, technical assistance and consultation to non-residential generators such as businesses, schools and municipalities to facilitate recycling and organics opportunities and will work with public entities to assure these opportunities are maximized.
2. Washington County, with Ramsey County and R&E, will evaluate progress in meeting the state's objectives for non-residential diversion from trash, as well as the level of service availability, with the aim to reach Minnesota's 75% recycling goal.
3. Washington County will use the County Environmental Charge (CEC) as an incentive for non-residential recycling and will promote the financial benefits of non-residential recycling.
4. Washington County supports the 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 show there is not significant progress towards improving non-residential recycling collection, Washington County and Ramsey County will jointly explore the local use of regulatory tools to enhance business recycling.
5. Washington County supports efforts to work collaboratively with the Minnesota Pollution Control Agency (MPCA) and all relevant parties to develop a standard non-residential recycling and organics data collection program.
6. Washington County, with Ramsey County and R&E, supports efforts to work collaboratively with MPCA, producer responsibility organizations created under extended producer responsibility (EPR) laws and all relevant parties on recycling and organics market development.

Strategies

1. **BizRecycling.** Continue to promote and utilize R&E's BizRecycling program to work with non-residential generators – including but not limited to multi-units, businesses and institutions such as health care facilities and schools – to increase participation in waste reduction, reuse, recycling and organics programs and activities:
 - a. Focus on non-residential generators through various outreach methods and provide education and awareness on waste reduction, reuse opportunities and recycling and organics management.
 - b. Provide technical assistance, including business-to-business consultations, to assist non-residential generators to assess and implement best practices to manage waste up the waste management hierarchy, prioritizing waste reduction.
 - i. Recruit a minimum of 12 commercial businesses a year to recycle at least three materials from their operations and promote environmental and resource benefits (*Policy Plan required strategy 35*).
 - ii. Provide grants for, or access to, software that can track food waste (*Policy Plan required strategy 13*).

- c. Continue to provide a diverse grant portfolio that supports non-residential generators' efforts to reduce and manage waste in accordance with the solid waste hierarchy.
 - d. Continue partnership program to engage non-residential generators.
 - e. Continue to establish partnerships with organizations that represent cultural, ethnic and/or traditionally underserved business communities.
 - f. Implement, as appropriate, research-based, equitable and innovative strategies to increase program effectiveness and adaptability across a wide range of non-residential generator audiences. This includes (but is not limited to):
 - i. Evaluate and adapt program incentives, such as grants, to maximize effectiveness.
 - ii. Acknowledge nuances in non-residential audiences and develop effective and targeted strategies, such as technical assistance, to assess and implement waste reduction, reuse, recycling and organics opportunities.
 - iii. Research and collaborate on methods to reduce costs and ensure more environmentally sustainable products are used in non-residential generators' operations.
 - iv. Research and develop strategies to increase employee, student and public engagement at non-residential sites, including (but not limited to) grocery and retail, restaurants, festivals and events, parks and gas stations, in waste reduction, reuse, recycling and organics opportunities.
- 2. Multi-unit residential properties.** Through R&E (e.g., BizRecycling), support recycling and waste reduction in multi-units through efforts like partnerships, municipal support, resources and improvement strategies.
- a. Explore BizRecycling's definition of multi-unit residential properties to ensure that it encompasses the full range of housing types to be supported by the program (e.g., townhomes, manufactured homes, etc.). Develop strategies, methods and best practices to best serve these entities.
- 3. Assistance to schools.** Washington County, through R&E, will provide technical assistance, resources, best practices and grants to schools and associated activities and spaces (e.g., sporting events) to foster sustained, recycling and organics programs.
- a. Harness efficiencies through R&E programs (e.g., BizRecycling), such as procurement opportunities.
 - b. Continue 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. Revise the continuum as new best practices and opportunities arise.
 - c. Facilitate partnerships and networking opportunities to share resources among schools and assist with obtaining leadership support for efforts.
 - d. Promote awareness of and provide technical assistance on recycling services and financial incentives available to eligible schools under any EPR law.
- 4. Organics diversion for large generators.** Explore and work with partners to develop requirements for the management of organics from large commercial food generators by 2030. Work with the MPCA, Ramsey County and other metro counties to explore opportunities for regional consistency (*Policy Plan required strategy 42*).
- 5. Very small business/school collection.** Explore opportunities for small businesses, schools and other entities that generate small quantities of waste to use alternative collection methods not normally available for businesses when volumes do not justify separate collection. This may include municipal organized recycling collection, food scraps drop-off sites or the Food Scraps Pickup Program. Work with municipalities, haulers and other partners to implement.
- 6. Outreach through regulators.** Monitor opportunities for non-residential entities and events (e.g., food establishments, schools, special events and food vendors) to improve waste reduction and recycling and reach those entities through connections with county regulation programs (e.g., food, pools and lodging inspections, event permitting). Outreach in this area may include:

- a. Connect establishments to educational resources, financial incentives, programs and services to aid in waste management.
 - b. Assist in obtaining baseline information on waste management practices and identifying barriers to implementing improvements.
 - c. Explore incentives, policy change and other methods to ensure new establishments recycle organics. This may include ensuring that building designs include space and enclosures for organics collection before permits are approved or providing credit for organics recycling.
 - d. Work with event organizers and public entities to encourage implementation of best management practices for purchasing and collection of recycling and food scraps.
 - e. Conduct ongoing assessments to determine sustainability improvements through surveys or site visits.
- 7. Space for recycling.** Through partners, reach businesses and multi-unit developers engaging in construction and remodeling to encourage inclusion of space for recycling collection service co-located with waste collection (including enclosures and recycling chutes).
- a. Inspectors will review plans submitted by licensed food and beverage establishments to ensure licensees meet recycling requirements in Washington County’s Food Protection Ordinance.
 - b. Work with state and local entities and other partners to improve state and local commercial and multi-unit building/zoning codes to ensure recycling best practices for collection, enclosures and signage.

8D. Internal Recycling and Organics

Introduction

Washington County places emphasis on internal recycling, reduction and reuse strategies to be a leader in achieving solid waste management goals. “Internal” county properties include parks, libraries, building entrances and lobbies, correctional facilities and service centers.

Policies

1. Washington County will lead by example, ensuring that county-occupied property is designed for recycling and organics management and that county policies and practices support waste reduction and recycling.

Strategies

1. **County facilities.** Ensure new or remodeled facilities are designed or remodeled to include sufficient space for collection of recycling, food scraps and waste both indoors and outdoors.
2. **Internal sustainable practices.** Increase employee awareness of and commitment to environmentally sustainable practices in the county workplace.
 - a. Partner with other departments to ensure county properties implement best practices for waste reduction, reuse, recycling and organics.
 - b. Develop and implement a county policy encouraging the use of reusable food and beverage service ware at county hosted events and department activities. (*Policy Plan optional strategy 22*).
 - c. Develop and implement a green meeting policy for county hosted events and department activities (*Policy Plan required strategy 21*).
 - d. Encourage contract specifications and internal policies pertaining to waste management expectations such as double-sided printing, electronic communication versus printing, etc.
 - e. Evaluate and measure performance of county programs using techniques such as waste audits or employee surveys.
3. **Reuse of county surplus items.** Prioritize the reuse of surplus items (e.g., furniture) generated by county facilities. Explore opportunities for residents to purchase county surplus items.
4. **Environmentally preferable purchasing.** Working with county procurement staff, develop and implement a county sustainable purchasing policy using Minnesota Pollution Control Agency (MPCA) guidance by January 2026 (*Policy Plan required strategy 16*). This policy will account for and complement county Procurement Policy #1202. As a part of this effort, explore opportunities through state contracts, including supporting the MPCA to develop sustainable state contracts.
 - a. Participate in Responsible Public Purchasing Council meetings (*Policy Plan required strategy 17*).
5. **Materials exchange.** Participate in materials exchange programs to best serve the county.
6. **Organics-derived products.** Create policies for the county and municipalities to incorporate food-derived compost and other organics-derived products into construction, landscaping and remediation projects (*Policy Plan required strategy 55*).
7. **Maximize recovery of materials.** As the county develops or redevelops land, maximize recovery of materials that result from that work through reuse, recycling or energy recovery and minimize land disposal (*Policy Plan optional strategy 66*).

9. Bulky Waste Management

Introduction

Bulky waste continues to pose waste management challenges. Bulky items include mattresses, carpeting, textiles, furniture and lumber – anything that may not fit in curbside collection carts. Improper bulky waste disposal, such as illegal dumping, results in stressors to the waste management system and has societal and environmental impacts affecting residents' quality of life.

The following policies and strategies focus on the management of bulky waste. This includes county programs, programming through Ramsey/Washington Recycling & Energy (R&E) and key partners. The strategies focus on collaboration needed to move bulky items higher on the waste hierarchy so they can be reused and repurposed, prioritizing community health and safety.

Policies

1. Washington County, with Ramsey County and R&E, will focus on the waste management hierarchy for all material management, thus enhancing public and community health and safety.
2. Washington County, with Ramsey County and R&E, will support policy approaches that include product stewardship for bulky items including mattresses and other hard-to-manage materials.
3. Washington County, with Ramsey County and R&E, will collaborate with municipalities, government entities, community organizations and other partners to address the contributing factors leading to bulky waste generation such as housing instability and “fast fashion” furniture.

Strategies

1. **Mattress recycling programs.** Through R&E, implement mattress recycling programming by working with the mattress industry (e.g., manufacturers, wholesalers and retailers), non-profit entities and mattress processors/recyclers. Expand programming to include other bulky items as opportunities arise.
2. **Community bulky waste management.** Partner with municipalities, waste haulers, businesses and schools to promote and provide resources for proper, convenient and affordable management of bulky materials in accordance with the waste hierarchy to best manage these materials and reduce illegal dumping, burning and nuisance situations.
 - a. Increase support for municipal bulky waste collection programs.
 - b. Set requirements for city bulky waste clean-up events.
 - c. Identify and remove barriers for convenient bulky waste collection.
3. **Bulky item reuse.** Partner with municipalities, reuse organizations and other entities to educate, promote and implement bulky item reuse opportunities, including at clean-up events.
4. **Bulky waste end markets.** Evaluate and support opportunities for value-added products from bulky waste. These markets may include upstream options (reuse and repurposing of bulky items) and downstream options (e.g., wood materials into mulch, engineered wood products, biochar and/or fuels).
 - a. Continue processing bulky waste items that can be processed by equipment at the Recycling & Energy Center (R&E Center).
5. **Bulky item trends.** Evaluate and monitor the impact of trends in furniture and other bulky items on waste generation and bulky waste management. Explore opportunities to proactively address bulky waste issues both upstream (e.g., design, manufacturing quality) and downstream (e.g., collection, recycling, processing, proper management).

10. Yard Waste and Wood Waste

Introduction

Yard and wood waste management are important components to the Washington County solid waste management system. Issues such as climate change, invasive species, pests and financial barriers affect how the county manages these waste streams. This chapter addresses how Washington County handles those issues.

Policies

1. Washington County is committed to ensuring residential yard waste is properly managed through accessible and convenient methods, including at county owned and operated yard waste sites.
2. Washington County will work with state agencies, municipalities and other entities to ensure a healthy and sustainable tree canopy by responding and adapting to emerging threats of disease, invasive species and climate change.
3. Washington County will partner with state agencies, municipalities and other entities to prioritize the highest and best use of wood waste resulting from emerald ash borer (EAB) and other causes.

Strategies

1. **Yard waste site operations.** Continue to operate county yard waste sites.
 - a. Washington and Ramsey Counties will continue the reciprocal use of yard waste programs.
 - b. Establish yard waste collection sites to ensure convenient access for all county residents.
2. **Proper yard waste management.** Ensure proper yard waste management for residents through education, technical assistance and continuous improvements to current yard waste operations and options, including addressing capacity to manage materials.
3. **Provide compost and wood mulch.** When available, provide finished compost and wood mulch at compost sites to residents and public entities. Promote and remove barriers to access finished product.
4. **Community group use of yard waste sites.** Explore allowing access to specific yard waste sites for education and civic engagement including (but not limited to):
 - a. Volunteer opportunities for community groups.
 - b. Fundraising activities that improve quality of service to county residents and/or encourage physical activity.
5. **Wood waste management plan.** Develop plans to prevent and manage wood waste in the county and throughout the region by the end of 2025. Work collaboratively on regional planning and offer support to municipalities, including working with the Minnesota Pollution Control Agency to identify funding sources for these efforts. Evaluate alternative processing methods and emerging technologies, such as gasification, to manage wood waste (*Policy Plan required strategy 45*).
6. **Forest-related threats.** Identify, monitor and respond to current and emerging threats affecting vegetation and impacting yard/wood waste management. These include impacts of climate change; pathogens; and invasive species including, but not limited to, EAB, spongy moth, oak wilt, Asian longhorned beetle, elongate hemlock scale and mountain pine beetle. Partner with relevant government agencies, higher education and research institutions and community organizations to increase awareness and share best practices, such as proper pruning to avoid spread of disease and reduce volume of wood waste.

- 7. EAB tree care education.** Develop and distribute EAB tree care education programs for privately owned land. This includes educating on tree removal options as part of tree care (*Policy Plan optional strategy 49*).
- 8. Removing cost barriers to tree care.** Explore opportunities to assist with cost barriers to tree care and removal, such as allowing assessments on property taxes to spread the cost of tree care over a multi-year timeframe (*Policy Plan optional strategy 51*).
- 9. End-use of wood waste.** Promote existing programs that use EAB-affected wood and other wood waste for furniture, home goods, flooring and other purposes. Expand to include other wood waste uses as opportunities arise, including (but not limited to) milling; prioritizing purchasing of products from recovered waste wood; and production of biomass pellets, renewable fuels or carbon soil amendments. (*Policy Plan required strategy 46*).

11. Construction & Demolition Waste and Deconstruction

Introduction

Washington County has well-established policies and strategies for management of materials not classified as mixed municipal solid waste (i.e., non-MSW) such as construction and demolition (C&D) waste. The county also encourages deconstruction, which is the process of taking apart a structure so that materials can be reused. The policies and strategies below state Washington County's commitment to ensuring the responsible management of these materials to create a more robust waste management system.

Policies

1. Washington County supports the management of C&D waste according to the waste management hierarchy. The county will work with municipalities and other entities to develop policies, programs and strategies that promote the management of non-MSW higher on the hierarchy. County projects and contracts shall maximize reuse, recycling and lastly processing for C&D when feasible.
2. Washington County is committed to reducing health, safety and property risks associated with C&D waste.

Strategies

1. **Green building practices.** Improve use of green building best practices, taking a sustainable materials management approach by using the Minnesota Sustainable Building Guidelines in new building design, construction or remodeling projects. Consider energy efficiency, conservation and measures to reduce impacts to the environment and public health.
 - a. Work with appropriate county departments to explore enacting county policies for deconstruction and reused building materials in county projects, considering reduction of health risks caused by toxic materials such as lead.
 - b. Work with the Public Works Department to implement the use of a Building Material Management Plan and consider adopting Minnesota Pollution Control Agency's (MPCA) Material Management Plan Template (*Policy Plan required strategy 65*).
2. **Pre-demolition inspections.** Explore opportunities for pre-demolition inspection efforts through cooperation with municipalities and Ramsey County, which would ensure hazardous building materials and wastes are properly identified, removed and managed from structures slated for renovation or demolition.
3. **Support deconstruction.** Through partnerships, programs, technical assistance and consultation, support deconstruction, building material salvage and recycling for construction, remodeling and demolition materials. This includes:
 - a. Through Ramsey/Washington Recycling & Energy, provide financial assistance through grants to offset the additional cost of building deconstruction, used building material installation and/or structural moving (*Policy Plan optional strategy 68*).
 - b. Provide deconstruction training, with consideration for toxic materials such as lead, for municipal officials, architects, designers, the public and general contractors (*Policy Plan optional strategy 69*).
 - c. Explore programs and workforce development to increase deconstruction, reuse and appropriate management of C&D materials.

- d. Host or support home and building repair and refurbishment trainings (*Policy Plan optional strategy 70*).
 - e. Explore working with partners to host a building material collection event or swap (*Policy Plan optional strategy 67*).
 - f. Encourage municipalities to consider deconstruction that supports the goal of reusing as many building materials as feasible while considering environmental risks.
 - g. Explore requirements to encourage reuse of building materials. This could include requirements for material management plans or deconstruction assessments when projects are being permitted.
 - h. Explore other emerging technologies and practices which increase the reduction, reuse and recycling of building materials.
- 4. Deconstruction markets.** Work with the MPCA and other partners to explore, support, develop and/or expand markets for materials associated with construction, demolition, deconstruction and industrial wastes. Collect data on how much waste is being generated and where it is diverted or disposed of to understand market opportunities.
- 5. Externalities of C&D waste.** Explore opportunities to better account for the externalities of C&D waste. This includes working with the Partnership on Waste and Energy and advocacy groups and supporting state-wide solid waste management tax increases for C&D waste.

12. Processing

12A. Waste Processing

Introduction

In 2018, Washington and Ramsey Counties implemented waste designation of MSW to the Ramsey/Washington Recycling & Energy Center (R&E Center). Defined in Minnesota law, waste designation allows counties to enact an ordinance that requires all municipal solid waste (MSW) to be delivered to a designated waste management facility. The R&E Center employs multiple methods to add value to waste through processing, including, recyclables recovery, sortation of food scraps and the production of refuse-derived fuel (RDF). These processes are essential for maximizing landfill diversion and resource recovery.

Waste delivered to the R&E Center is comprised of MSW generated within Washington and Ramsey Counties, encompassing household, commercial and institutional waste. Unacceptable or non-processible waste includes construction or demolition debris, loads containing large quantities of metal, vehicle parts, hot tubs, propane tanks, major appliances, hazardous waste, infectious and biological waste and yard waste.

Public entities, defined by Minnesota Statute §115A.471, play a crucial role in waste management and are responsible for ensuring that MSW generated within their jurisdiction is processed, such as at the R&E Center.

Policies

1. Washington County, with Ramsey County and R&E, supports waste reduction, reuse and recycling, including the separate management of organics. Efforts will be made to continue increasing source-separation for recycling and organics from both residential and non-residential waste generators.
2. Consistent with the state hierarchy, Washington County, through R&E, affirms processing of waste, for the purpose of recovering energy, recyclables and other useful materials, as the preferred management method over landfilling for waste that is not reduced, reused, or separately recycled or composted. This applies to both MSW and non-MSW. 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.
3. Washington and Ramsey Counties shall jointly own the R&E Center in Newport, MN. Decisions regarding the R&E Center's operations will be guided by principles that include:
 - a. Planning for a 20- to 30-year horizon
 - b. Building on the current system and allowing changes in processing to emerge over time
 - c. Assuring flexibility
 - d. Managing risks
 - e. Pivoting the view from "waste" to "resources" to add value to the local economy and environment
4. Washington County shall continue to enforce its waste designation ordinance to ensure that all acceptable waste generated within its jurisdiction is delivered to the R&E Center. This ensures proper management of waste and supports the processing of materials for resource recovery.

Strategies

1. **R&E Joint Powers Agreement (JPA).** Continue working cooperatively on specific waste management issues through a JPA to enhance waste management services efficiency and help achieve regional processing goals in the East Metro.
2. **Joint designation plan.** With Ramsey County and R&E, continue to enforce compliance with the Washington and Ramsey Counties Joint Designation Plan. Evaluate the amount of MSW generated and the volume delivered for processing.
3. **Enforce restrictions on disposal.** Work cooperatively with the Minnesota Pollution Control Agency (MPCA), as the state enforces provisions found in Minnesota Statutes section §473.848, which requires waste to be processed before land disposal, to enforce restriction on disposal (*Policy Plan required strategy 58*).
 - a. Washington and Ramsey Counties adopt the MPCA criterion for determining when MSW is unprocessable. That criterion states that waste will be certified as unprocessable only when there is no reasonably available capacity in the Twin Cities Metropolitan Area system that could be used to process solid waste generated in the county.
4. **Unacceptable/non-processible waste.** Work with municipalities, waste generators and haulers regarding methods to reduce delivery of unacceptable or non-processible materials to the R&E Center.
5. **Resource recovery.** Washington and Ramsey Counties will coordinate resource recovery activities through R&E.
6. **Processing improvements.** Continue to identify, evaluate and implement new processing and sorting opportunities for the R&E Center and throughout the waste system, including technologies to enhance recycling.
 - a. Continue to operate pre-processing of waste at resource recovery facilities, such as the food scraps bag sortation line and recyclables recovery system at the R&E Center (*Policy Plan required strategy 36*).

12B. Processing Technologies and End Products

Introduction

Processing technologies enable the county to recover value from waste, conserving resources, reducing climate impacts, minimizing the need for land disposal and creating new end products.

Washington County emphasizes the importance of recovering organic waste to create organics-derived end products. This decreases the amount of waste created and helps meet the Minnesota Pollution Control Agency (MPCA) goal of 75% recycling by 2030. The county describes organics-derived products as including finished compost, biochar and other value-added products made from processing organic waste.

Policies

1. Washington and Ramsey Counties will continue work as identified in the Ramsey/Washington Recycling & Energy Board's Scope for Resource Management, an integrated vision for recycling, organics and processing. The Scope strongly supports the waste hierarchy and the US Environmental Protection Agency food waste hierarchy in managing waste higher on the hierarchies. 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 a front-end recyclables recovery system to recover additional recyclables and organic-rich materials that remain in municipal solid waste (MSW).
 - c. Organic waste being used as a feedstock for anaerobic digestion.
 - d. A transition beyond using refuse-derived fuel (RDF) for electrical generation.
2. Washington County supports the assurance of quality of organics-derived products, including minimizing contamination in feedstocks and supporting standards, testing and appropriate use of organics-derived materials that is aligned with county public and environmental health goals.
3. Washington and Ramsey Counties, with R&E, 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.

Strategies

1. **Organics-derived product market development.** Support the development of scalable markets for organics-derived products, e.g., biochar, compost products and renewable natural gas.
2. **Organics-derived products use.** Expand and support the use of organics-derived products in local, county, district and state projects and programs.
 - a. Support the expanded and preferred use of compost derived from food scraps and yard waste in Minnesota Department of Transportation and local transportation projects.
3. **Standardized testing, labeling and use of organics-derived products.** Collaborate with partners to educate about, support and encourage standardized testing, labeling and appropriate use of organics-derived products to assure quality and benefits for local end-uses, for example (but not limited to):
 - a. Promoting use of the US Composting Council Seal of Testing Assurance (STA) Program.
 - b. Promoting compliance with current MN compost labeling requirements
 - c. Promoting compliance with MN Rule 7035.2836 for production, distribution and end-use of compost.

- 4. Developing organics processing capacity.** Support increased capacity for organics processing (e.g., composting, mulching, food-to-animals, anaerobic digestion and biochar production) beyond existing operations (*Policy Plan optional strategy 52*).
 - a.** Continue to support composting, mulching and biochar operations (*Policy Plan required strategy 47*).
 - b.** Find new outlets to increase food-to-animal operations (*Policy Plan optional strategy 56*).
 - c.** Support and pursue the use of anaerobic digestion for organic waste feedstocks through R&E and partner with the MPCA to develop clear regulatory pathways for the development of regional digestion facilities.
- 5. Transitioning use of RDF.** Through R&E, explore and work toward the transition from using RDF and/or MSW for electrical generation to use by next-generation, non-combustion technologies that have climate, public health and environmental benefits, producing transportation fuels and other products.
- 6. Collaboration on solid waste infrastructure.** Share information, learnings and research on emerging and alternative technologies with the MPCA and other interested parties to raise understanding, address concerns and proactively adopt efficient regulatory frameworks. With regional partners, engage in efficient and value-added infrastructure planning (*Policy Plan required strategy 11*).
- 7. Contingency planning.** Develop plans for large facility closures or changes to operation to reduce landfill reliance, including considering opportunities to redirect the CEC used for resource recovery purposes, to efforts that shift resources to higher levels of the waste management hierarchy, including waste and toxicity reduction, reuse, recycling, organic waste management and other issues, such as illegal dumping and innovative processing technologies (*Policy Plan required strategy 12*).

13. Regulation

Introduction

Washington County ensures protection of public health and the environment through a well-established solid and hazardous waste regulation program. The county ensures compliance with applicable laws, rules and ordinances related to the management of solid and hazardous waste as required by Minnesota Statutes, section 473.811. Washington County implements its solid and hazardous waste compliance program focused on risk reduction.

Policies

1. Under the authorization of Minnesota Statute section 473.811, Washington County will regulate and enforce solid and hazardous waste activities to ensure compliance with applicable laws. This includes holding solid waste haulers and regulated facilities accountable for adhering to the guidelines outlined in this plan.
2. Washington County will provide information, technical assistance, outreach and consultation to regulated parties, emphasizing a collaborative approach to regulatory compliance.
3. Washington County places a priority on identifying and removing toxic or harmful materials from municipal solid waste. This proactive approach aims to mitigate environmental and public health risks associated with hazardous waste and underscores the county's commitment to responsible waste management practices.

Strategies

1. **Licensing and monitoring.** Continue to license solid waste haulers, waste facilities and hazardous waste generators. Inspect, monitor and use data from licensee operations for compliance with county regulations to ensure proper management of solid and hazardous materials/waste.
2. **Regional hauler licensing.** Continue to participate in the Regional Hauler Licensing program with other metropolitan counties. Explore improvements to the existing program which may result in more effective or efficient implementation of other plan strategies.
3. **Risk-based compliance programs.** Implement solid and hazardous waste compliance programs based on risk. Evaluate fee structure based on risk factors.
4. **Regulatory tools.** Evaluate progress toward waste reduction and management objectives. Should evaluation show there is not significant progress towards meeting objectives, Washington and Ramsey Counties will, in partnership with the Minnesota Pollution Control Agency and other metro counties and entities, explore the use of local regulatory tools and incentives.
 - a. Support state law that mandates recycling in businesses (Minnesota Statutes, section 115a.551, subdivision 2a).
5. **Connecting ordinances to goals.** Review county ordinances, such as the county food code and hazardous waste ordinances and, where applicable and appropriate, explore opportunities to connect ordinance language to waste and recycling goals to ensure that regulatory frameworks remain effective and up to date with evolving industry standards and best practices.
6. **Regulation process improvement.** Evaluate and improve regulatory compliance programs, including commercial hazardous waste generator programs, to ensure efficient licensing, reporting and inspections, while addressing health and environmental risks to air, water and land.
 - a. Evaluate commercial hazardous waste generator program to determine if changes to generator categories are warranted, including consideration of a minimal generator category.

- b. Coordinate with the county groundwater program to evaluate and prioritize compliance activities for hazardous waste generators and other active sources of regulated solid/hazardous waste contamination located in sensitive geologic areas or wellhead protection areas.
- 7. Commercial subsurface sewage treatment system impacts.** Perform an assessment of impacts from the waste management practices of commercial establishments using subsurface sewage treatment systems (SSTS) including restaurants and hazardous waste generators. Use information gained from commercial SSTS assessments to develop and implement best management practices with businesses using SSTS.

14. Performance Measurement

Introduction

Performance measurement refers to monitoring and evaluation of programs, projects, initiatives and other activities to understand their effectiveness. Metrics can be applied to all aspects of the solid waste management system described throughout this plan. Performance measures are important to ensure ongoing quality improvement of programs and to evaluate Washington County’s progress in meeting Plan goals and objectives.

To determine impacts from Plan strategy and program implementation, the county will utilize results-based accounting (RBA). RBA considers both population and performance accountability and includes specific measurable outcomes. The tool will be used where applicable as strategies are implemented, on a project-by-project basis and will be reviewed regularly.

Figure 5. 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 (%)? 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.	

Policies

1. Washington County, with Ramsey/Washington Recycling & Energy (R&E), 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.
2. Washington County, with Ramsey County and R&E, will use data-driven decision-making to prioritize efforts with the greatest benefits to the community, economy and environment.
3. Washington County will share updates with the public and partners on solid waste management activity progress to uphold results-based accountability. With Ramsey County and R&E, communicate East Metro data and performance measures to the public.
4. Washington County encourages Minnesota Pollution Control Agency (MPCA) to transition from the current 75% recycling goal to an approach that incorporates life cycle analysis. This approach incorporates the total impact of managing materials from production to final disposal. Life cycle analysis informs decision making around the full impact of a material and its management, compared to simply whether it is recycled.
5. Washington County, with Ramsey County and R&E, prioritizes proactivity in data collection and measurement activities, including responding to changes in systems and utilizing new technology opportunities.

6. Recognizing waste reduction results from systemic change, such as product stewardship initiatives, sustainable materials management or price signals that favor reduced waste, Washington County believes the Minnesota Pollution Control Agency (MPCA) must lead public sector waste reduction and measurement.

Strategies

1. **County and MPCA collaboration.** Pursue collaboration with Ramsey County, R&E, MPCA and other metro counties to ensure consistent data collection, reporting and analysis.
 - a. Strive for increased compliance with hauler reporting per Minn. Stat. § 115A.93 (*Policy Plan required strategy 1*).
 - b. Provide required county reporting to the MPCA (*Policy Plan required strategy 2*).
 - c. Leverage and strengthen existing partnerships such as R&E and the Partnership on Waste and Energy to advance measurement and analysis efforts.
2. **Partner data and reporting.** Work with funding recipients, such as municipalities, schools and businesses, to track performance and progress.
 - a. Use the county’s municipal residential waste reduction and recycling continuum and annual work plans for municipalities to measure progress toward achieving objectives.
 - b. Evaluate performance metrics for public generators (e.g., schools) and municipalities to measure effects of waste management changes and improvements (e.g., school continuum) to ensure effectiveness and continuously improve efforts.
3. **Collaborative use of software tools and technology.** Align waste data collection programs with Ramsey County, as appropriate and, through R&E, use software tools to collect, analyze and share data among the two counties.
4. **Waste composition studies.** Conduct waste composition studies through R&E, including on non-municipal solid waste materials, to inform waste reduction/diversion efforts.
5. **Alternative measurement.** Supporting the MPCA’s role in setting responsive measurement standards, collaborate with public entities and the waste industry to research, develop and implement performance measures beyond tonnage-based metrics. Alternative measurements to tonnage may include (but are not limited to) pounds per person per day, material-specific capture rates, reductions in material use and toxicity, material reuse and climate impacts.
 - a. Leverage other entities’ life cycle analyses, as available, to measure impacts of programs and waste management activities and guide decision-making.
 - b. Use data-driven decision-making to prioritize efforts with the greatest benefit.

15. Cost and Finance

Introduction

Washington County cost and finance policies and strategies are well-established. The policies and strategies below restate Washington County's commitment to ensure funding of its solid waste management programs and services.

Policies

1. Washington County will make effective use of public resources and allocate costs equitably to waste generators, while assuring maximum environmental protection.
2. Washington County supports consistent and visible waste management costs and billing by the waste industry for residential and nonresidential customers that is based on volume and paid directly by the generator.
3. Washington County will continue to use the County Environmental Charge (CEC) as a funding tool for environmental efforts and programs and as an incentive to manage waste higher on the waste management hierarchy.
4. Amendments to the Solid Waste Ordinance that change CEC rates will include a notice period of 90 days for generators and haulers before the rate change becomes effective to provide the opportunity to adjust billing systems.
5. Washington County supports increased Select Committee on Recycling and the Environment (SCORE) funding for recycling programs and encourages the state to fully use Solid Waste Management Tax dollars for SCORE and related recycling purposes.
6. Washington County will continue to manage and use state funding as appropriate in programs relating to the integrated waste management system, including SCORE and Local Recycling Development Grant (LRDG).
7. Washington County will provide funding for and approval of the Ramsey/Washington Recycling & Energy (R&E) Joint Activities Budget in accordance with Ramsey/Washington Recycling & Energy Board Joint Powers Agreement, Section VII and Bylaws Article V, Section II.
8. The use of the solid waste fund/reserve balances will be pursuant to state law Minn. Stat. § 473.811 subd. 9. The intent of the service charge is to implement strategies contained in county Solid Waste Management Plan.
9. The county will fund waste regulation programs primarily by licensing fees.

Strategies

1. **Public entity funding.** Continue and evaluate grant programs that provide funds to local public entities for starting and/or improving waste reduction and reuse, recycling and organics diversion.
2. **Incentivize progress toward waste goals.** Identify opportunities (such as reduced program fees) to incentivize businesses and organizations in reaching county waste management goals in waste reduction and reuse, recycling and organics diversion.
3. **CEC.** Continue to implement the CEC, a service charge on waste fees, to better account for the externalities of land disposal. Evaluate the amount of funds generated from the CEC (*Policy Plan optional strategy 59*).
4. **LRDG.** Use LRDG funds to support municipalities in a way that encourages reuse, recycling and organics management results. Continue to assess funding mechanism to ensure it best serves the county's waste reduction and management goals.

Appendices

- **Appendix A:** Solid Waste Management System Overview
- **Appendix B:** Ordinances
- **Appendix C:** Acronyms and Abbreviations
- **Appendix D:** Definitions
- **Appendix E:** County Oversight of Waste Industry
- **Appendix F:** Environmental Justice Review
- **Appendix G:** Implementation Table

Appendix A: Solid Waste Management System Overview

Section 1: Solid Waste Management System Description

Washington County is required by state law to produce a waste management plan that details how it will implement the goals, policies and objectives outlined in the Metropolitan Solid Waste Management Policy Plan 2016-2026. This section describes the existing system of solid waste generation, collection, processing and disposal within Washington County.

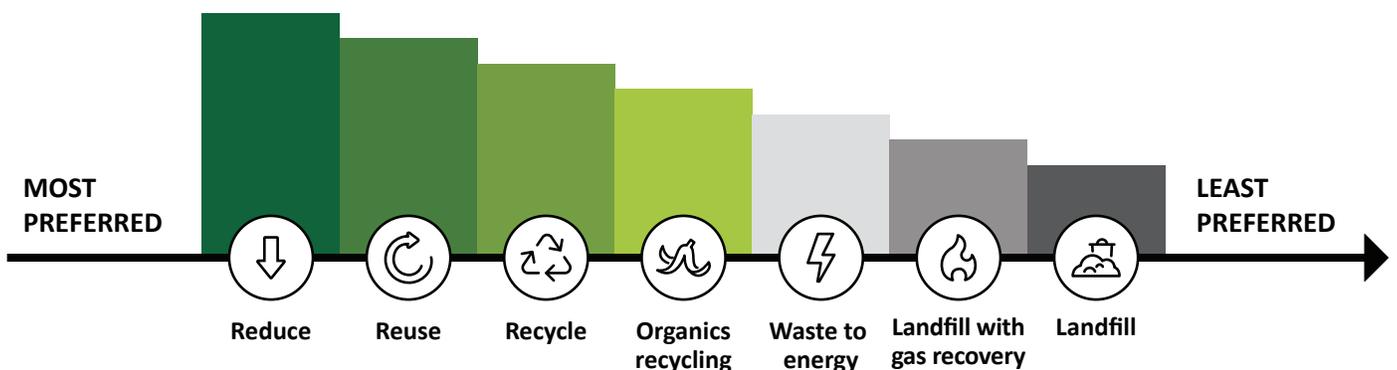
Since 1980, Minnesota has taken a systems approach to waste management, built on the public health model of prevention. This approach intends to prevent pollution, conserve resources, protect health and the environment and prevent passing costs onto future generations. Minnesota law includes a hierarchy of preferred methods to manage waste, emphasizing prevention of environmental problems and protection of public health.

The Waste Management Act of 1980, as amended (Minnesota Statutes, section 115A), identifies in order of preference, the state priorities for the following waste management practices (Minnesota Statutes, section 115A.02(b)), as seen in **Figure 6**:

1. Waste reduction and reuse;
2. Waste recycling;
3. Composting of source-separated compostable materials, including but not limited to yard waste and food waste;
4. Resource recovery through 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 to produce energy used onsite or for sale; and
6. 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 onsite or for sale.

The Minnesota Pollution Control Agency (MPCA) has primary responsibility for waste management in Minnesota. Counties are the units of government charged with planning waste management and being accountable for several responsibilities under the guidance of the MPCA.

Figure 6. Minnesota’s waste management hierarchy, identifying the order of preference for waste management practices from most to least preferred



Metropolitan counties are held to a different standard than greater Minnesota counties and are required to develop plans that implement the MPCA’s 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 plans that guide the system.
- **Partnering** with cities and towns, school districts and private and non-profit entities, recognizing the system is operated by a wide variety of entities.
- **Financing the system** by utilizing state funding sources (select Committee on Recycling and the Environment grants, local Recycling Development Grants, etc.) and the County Environmental Charge, designed to reflect the volume of waste generated by users of the system.
- **Providing grants** to municipalities, 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 and managing certain materials, such as yard waste, brush and organics; collecting household hazardous waste at the county’s facilities; providing very small quantity generator 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** broadly and deeply into the county, using a wide variety of methods and tools, with emphasis on reaching all people in the county.
- **Consulting with and providing technical assistance** to municipalities, school districts, businesses, regulated entities and institutions, through staff and consultants to emphasize pollution prevention, reduction, recycling and wise waste management.

This comprehensive approach has resulted in an effective and accountable system in the county.

Section 2: General Description of County

As one of Minnesota’s original nine counties, Washington County is on the eastern edge of the Twin Cities Metropolitan area, composed of 423 square miles of land, and possessing a distinct set of landscapes and resources. It runs more than 40 miles in length north to south and encompasses 468 lakes of 10 acres or more in area. The county seat is in Stillwater, Minnesota, along the St. Croix River.

The geography of Washington County is diverse and includes prairies, bluffs, forests, lakes, and rivers. County residents share an appreciation for the beauty of their natural surroundings and the resources of their communities.

While much of Washington County has retained its rural atmosphere, today it is considered a suburban county. Scenic beauty, historic significance, recreational amenities, and proximity to the growing Twin Cities Metropolitan Area have made Washington County a popular recreation

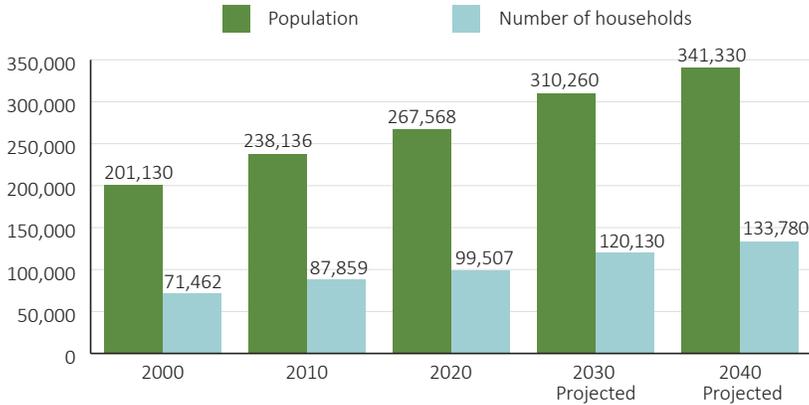
and tourism destination, as well as a desirable place to live. These qualities also explain the county’s continued popularity for residential and commercial development.



Washington County’s population increased from 238,126 in 2010 to 267,568 in 2020 and the estimated population is 280,325 in 2023. The number of households in 2020 was 99,507 and is projected to reach 133,780 by 2040. The median household income in Washington County was \$106,509 compared to the median household income of Minnesota which was \$82,338 in 2022. (American Community Service Data, 2018-2023)

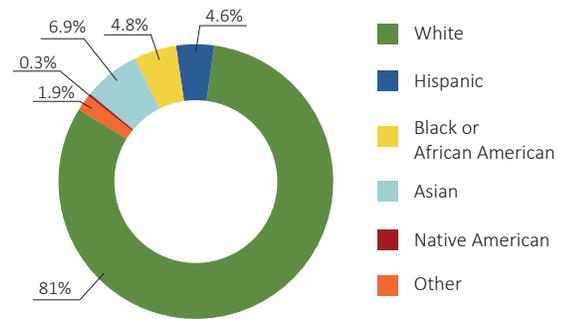
Nearly 13% of Washington County’s population speaks a language other than English at home, and notably, people of color have increased from 14% in 2010 to 22% in 2020, according to 2020 U.S. Census data and the Minnesota State Demographic Center.

Figure 7. Population and Households in Washington County



Source: US Census, Metropolitan Council

Figure 8. Race & Ethnicity in Washington County



Source: American Community Survey

Washington County includes all or part of 33 communities, the largest of which is the city of Woodbury. The 2020 U.S. Census population and the 2023 estimated population for the Washington County portion of all communities is shown below.

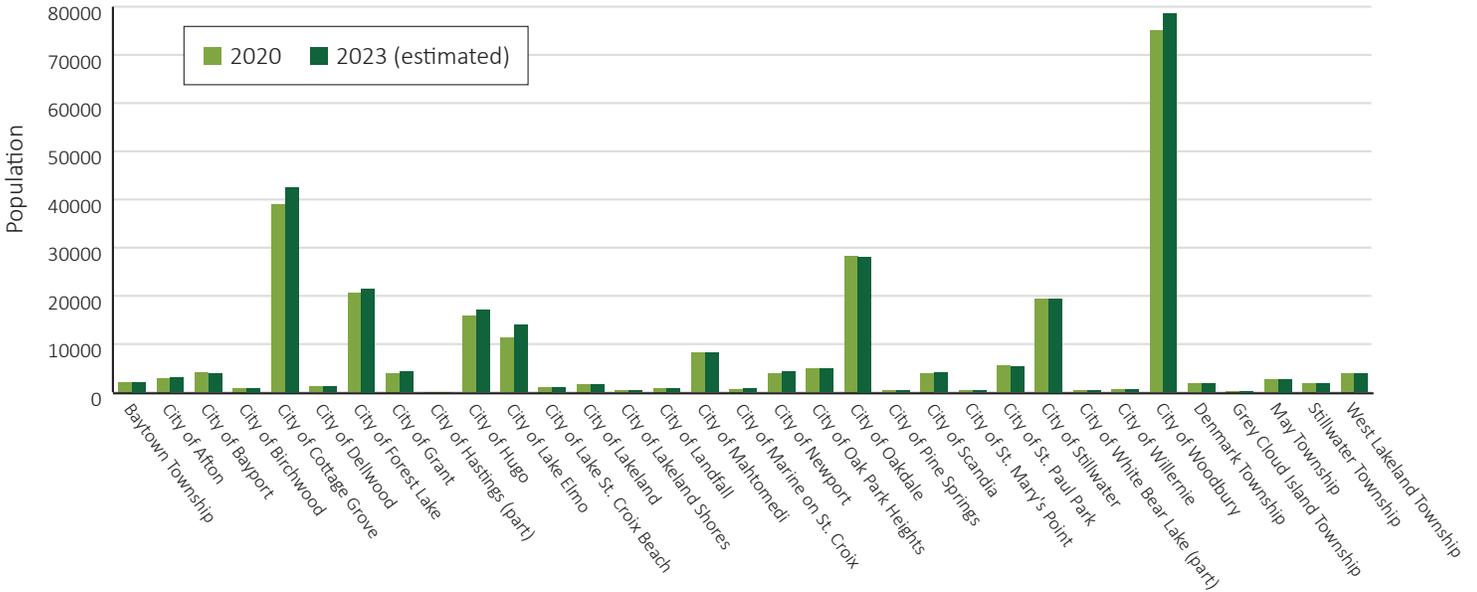
Table 2. Washington County City/Township Population

City/Township	Population (2020 census)	Population (2023 estimate)
Baytown Township	2,088	2,120
City of Afton	2,955	3,044
City of Bayport	4,024	3,848
City of Birchwood	863	898
City of Cottage Grove	38,839	42,648
City of Dellwood	1,171	1,160
City of Forest Lake	20,611	21,502
City of Grant	3,970	4,188
City of Hastings (part)	2	2
City of Hugo	15,766	17,044
City of Lake Elmo	11,335	14,033
City of Lake St. Croix Beach	1,043	1,037
City of Lakeland	1,710	1,656
City of Lakeland Shores	339	327
City of Landfall	843	794
City of Mahtomedi	8,134	8,206
City of Marine on St. Croix	664	704
City of Newport	3,797	4,288

City/Township	Population (2020 census)	Population (2023 estimate)
City of Oak Park Heights	4,849	4,820
City of Oakdale	28,303	28,169
City of Pine Springs	377	376
City of Scandia	3,984	4,136
City of St. Mary’s Point	353	373
City of St. Paul Park	5,544	5,376
City of Stillwater	19,394	19,426
City of White Bear Lake (part)	397	347
City of Willernie	515	527
City of Woodbury	75,102	78,740
Denmark Township	1,801	1,883
Grey Cloud Island Township	283	286
May Township	2,670	2,780
Stillwater Township	1,866	1,833
West Lakeland Township	3,976	3,840
Total Population	267,568*	280,411

*Final estimate differs from preliminary estimate
Source: Met Council

Figure 9. Washington County Population (2020 actual, 2023 estimated)



Additional data can be found in the Washington County community health data profiles: <https://www.washingtoncountymn.gov/3661/Health-Data-Profiles>

Section 3: Waste Generation

Historic Waste Generation

The Ramsey/Washington Recycling & Energy Center (R&E Center) in Newport began operations as a privately-owned and operated facility in 1988. Since that time, an integrated solid waste and recycling system has developed in the East Metro area, guided by county solid waste management plans, policies and programs in both Washington and Ramsey Counties. The two counties, through Ramsey/Washington Recycling & Energy, jointly purchased the facility in 2015. This system has resulted in a significant positive environmental impact over the decades and measurable improvements in efficiency and capacity of managing solid waste higher on the waste management hierarchy.

The chart below summarizes the last ten years of waste generation in both Washington and Ramsey Counties. Washington County’s data shows trends of increasing recycling percentage rates.

Current Waste Generation

The county reported 97,000 tons of municipal solid waste (MSW) managed in 2022. Figure 11 shows the breakdown of waste managed from both residential and commercial generators. Data from this figure shows:

- A recycling and organics rate increasing to 53.3% in 2022, which includes
 - A recovery of organic waste increase to 20.91% in 2022
 - A decrease in the amount of waste sent directly to landfills from 13,000 tons in 2021 to 11,000 tons in 2022

Table 3. Historical Waste Generation – Management, Processing, Recycling, and Landfill Data

Total MSW Managed	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Ramsey County	620,000	700,000	730,000	763,000	842,000	631,000	651,000	584,000	503,000	631,000
Washington County	157,000	168,000	167,000	213,000	227,000	229,000	225,000	236,000	237,000	243,000
Total Ramsey/Washington	777,000	868,000	897,000	976,000	1,069,000	860,000	876,000	820,000	740,000	874,000
Percent Recycled	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Ramsey County	28%	33%	35%	37%	40%	48%	50%	46%	37%	51%
Washington County	34%	37%	38%	43%	49%	49%	47%	51%	50%	53%
Total MSW Delivered for Processing	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Ramsey County	240,000	250,000	250,000	242,000	289,000	294,000	292,000	275,000	280,000	278,000
Washington County	81,000	84,000	87,000	85,000	95,000	104,000	103,000	95,000	97,000	97,000
Total Ramsey/Washington	321,000	334,000	337,000	327,000	384,000	398,000	395,000	370,000	377,000	375,000
Total Unprocessed MSW Landfilled	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Ramsey County	60,000	80,000	90,000	130,000	133,000	61,000	68,000	84,000	82,000	69,000
Washington County	8,000	9,000	12,000	19,000	11,000	7,000	9,000	12,000	13,000	11,000
Total Ramsey/Washington	68,000	89,000	102,000	149,000	144,000	68,000	77,000	96,000	95,000	80,000

Figure 10. Recycling Rate Trend (2013–2022)

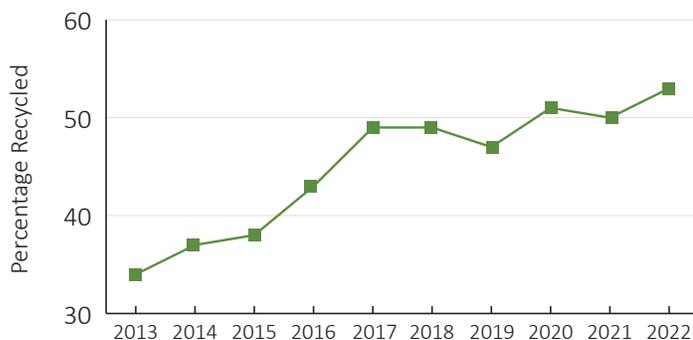
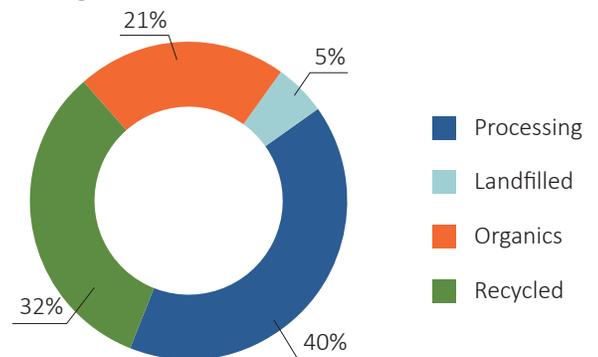


Figure 11. Washington County Waste Managed (2022)



Section 4: Ramsey/Washington County Alignment

Washington and Ramsey Counties have worked together to manage waste responsibly since the 1980s. The counties now work jointly through a formal Joint Powers Agreement (JPA), Ramsey/Washington Recycling & Energy (R&E). R&E is governed by the joint powers Ramsey/Washington Recycling & Energy Board (R&E Board), which is composed of commissioners from the two counties and ex officio members from the city of Newport and the Minnesota Pollution Control Agency (MPCA). R&E serves over 810,000 residents and nearly 30,000 businesses, and its vision is “vibrant, healthy communities without waste.”

Ramsey/Washington Recycling & Energy Center

In 2016, Washington and Ramsey Counties began the process of implementing a joint waste designation plan. Waste designation requires that all MSW generated within Washington and Ramsey Counties be delivered to the Ramsey/Washington Recycling & Energy Center (R&E Center), where the MSW is processed to recover value. The counties’ waste designation plan was approved by the MPCA, and the two counties use waste designation as a critical strategy to achieve state waste management goals. Designation is detailed in the Ramsey/Washington County Joint Waste Designation Plan.

The waste processing facility located in Newport, Minnesota has been in operation since 1988. It was purchased by Washington and Ramsey Counties in 2015 and has since become the R&E Center. The counties have made significant investments to modernize the R&E Center using the following principles and priorities:

- Plan for a 20-to-30-year horizon
- Assure flexibility and manage risk
- Pivot the view from “waste” to “resources” to add value to the local economy and environment
- Move resources up the waste hierarchy

The facility has an annual intake of approximately 400,000 tons of MSW. Ferrous and non-ferrous metal, plastics, cardboard and food scraps are recovered from the waste stream for recycling, and the remaining material is processed to create refuse-derived fuel, which is used to generate electricity. **Section 11: Waste Processing** further describes these processes.

Ramsey/Washington Recycling & Energy Programming

R&E prioritizes work upstream, before materials are discarded, and focuses on the best use and management of materials. R&E programs touch on various aspects of the waste management system and are described in further detail in the corresponding sections of this appendix.

BizRecycling

Washington and Ramsey Counties launched BizRecycling in 2013 to help businesses start or enhance recycling and organic waste management programs, providing free resources and assistance to help businesses achieve these goals. The program has evolved since 2013 to meet the unique needs of the business community in the two counties. Many grantees have decreased their waste volumes by initiating or improving recycling and organics programs.



BizRecycling goals are to:

- Provide technical assistance to East Metro businesses and institutions to help them increase recycling rates, lower costs and manage waste higher on the hierarchy.
- Develop and promote robust communications resources for East Metro businesses and institutions to help them learn how to reduce costs, better manage commercial waste and access support resources.
- Make targeted and equitable investments (through grants) to East Metro businesses and institutions to encourage the development and institutionalization of recycling and organics recovery programs.
- Provide direct service to businesses to rescue usable food for redistribution in the community and increase organic recovery rates.
- Conduct strong data analysis and performance evaluation so all programs are targeted to maximize recycling and organic material diversion rates.

Since the program launched in 2013, these efforts have resulted in:

-  **2,800** businesses, schools and multi-units have received technical assistance.
-  **1,048** grants have been awarded.
-  **1,067** entities have new or expanded recycling.
-  **449** entities have started organics collection.
-  **8 million** tons of total waste diversion have been reported.
-  Creation of **10** different grant programs, each suited to support a unique waste need.

BizRecycling also offers partner grants to Washington and Ramsey 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.

Business Pollution Prevention

R&E’s Business Pollution Prevention Program works to assist businesses in reducing employee, community and environmental health risks. The Business Pollution Prevention Program provides technical and financial assistance to help businesses:

- Reduce the use of harmful chemicals
- Transition to safer, more sustainable chemicals
- Install modern, high-efficiency equipment

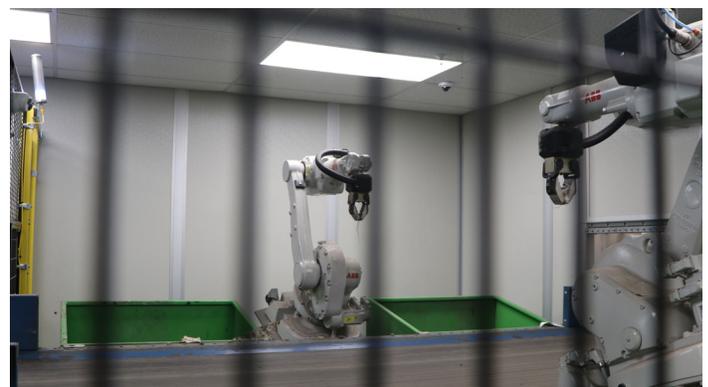
This program reduces health risks while also providing businesses with the opportunity to reduce hazardous waste production and increase efficiencies. In 2023, the program awarded seven grants to businesses totaling over \$188,000 for projects that reduce emissions and improve worker and community health.

Food Waste Prevention

Through programming, financial and technical assistance, Washington and Ramsey Counties collaborate with residents, businesses and other entities to focus on preventing edible food waste.

Food Scraps Pickup Program

The Food Scraps Pickup Program (FSPP) is a food scraps recycling program offered to residents of Washington and Ramsey Counties. Participating residents collect food scraps in specially designed compostable bags. When the bags are full, residents tie a knot at the top of the bag to seal it, then place them in their trash cart or dumpster. The bags are collected along with the trash, reducing the need for additional collection days, collection carts or hauling trucks. The trash is brought to the R&E Center in Newport where food scrap bags are separated from trash by machinery that is programmed to recognize and sort out the bags. Food scrap bag sortation will also occur at transfer stations in the future. The food scrap bags are then sent to an industrial composting facility and turned into compost. Washington and Ramsey Counties are planning a new facility that uses a biological process called anaerobic digestion to create renewable energy and a soil nutrient from food scraps. Eventually, food scraps collected from this program will go to an anaerobic digestion facility. More information on this technology is available in **Section 11: Waste Processing.**



In 2023, the counties completed a successful pilot test of the FSPP and since then have launched the program to all residents of Afton, Bayport, Baytown Township, Birchwood Village, Cottage Grove, Dellwood, Denmark Township, Grant, Grey Cloud Island Township, Lake Elmo, Lake Saint Croix Beach, Lakeland, Lakeland Shores, Landfall, Mahtomedi, Newport, Oak Park Heights, Pine Springs, St. Mary's Point, St. Paul Park, Stillwater, Stillwater Township, West Lakeland Township, Willernie and Woodbury. The program will continue to roll out over the next several years until all residents in Washington and Ramsey Counties can participate.

Food Scraps PICKUP Program™



Compost Market Development

As Washington and Ramsey Counties help increase the residential collection of food scraps, R&E is working to ensure that the end products, such as compost, created from those food scraps can benefit communities. End-products derived from food scraps can be used in agriculture, gardening, landscaping, construction and other projects by adding nutrients to soil, encouraging healthy plant growth, increasing moisture retention while improving drainage and more. R&E offers resources (education, soil testing, finished compost, etc.) to community gardens, businesses, and public entities to encourage the use of compost to grow market demand

for this valuable product. R&E provides free soil tests and analysis to community gardens and provided over 275 cubic yards of food scrap-derived compost to community gardens in 2023.

Deconstruction

R&E administers deconstruction grants to encourage deconstruction rather than demolition. Deconstruction is the process of taking apart a building in a way that allows building materials to be reused. Grant program details are included in **Section 12: Non-Municipal Solid Waste Management**.

Outreach and Education

R&E has long provided tours of the R&E Center to community groups. Between 2020 and 2022, tours were on pause due to the COVID-19 pandemic. During this time, staff were able to plan and implement interactive educational enhancements to the tour space at the facility. Tours started again in mid-2022. Since then, tours have engaged a wide range of audiences including K-12 groups, community groups, business/industry and government groups.

R&E also conducts educational campaigns to raise awareness of issues related to waste. Examples include campaigns on proper battery disposal and on food waste reduction.



Partnership on Waste and Energy

Ramsey, Washington and Hennepin Counties collaborate in areas of waste and energy management, including legislation and policy development, communication, outreach, planning and evaluation of waste processing technologies. This coordination is done through a JPA between Hennepin County and R&E – the resulting entity is called the Partnership on Waste and Energy.

Section 5: Waste Reduction and Reuse

Washington County engages in a variety of outreach activities and programs to encourage residents and businesses to reduce and reuse.

Reduction

Residents

Partnering with Hennepin and Ramsey County, Washington County offers “challenges” to residents using an interactive online platform. These challenges focus on reducing food waste and reducing single-use plastics. The 2023 Stop Food Waste Challenge had 590 participants who reported keeping 2,330 pounds of food waste out of the trash.

Businesses

For businesses, schools and non-profits, Washington County offers grants and resources through the joint Ramsey/Washington County BizRecycling program. Interested organizations can apply for a variety of grants that fit their needs to reduce waste and increase recycling and organics collection. Funding up to \$50,000 can be used for planning, equipment, supplies and capital improvements that result in the reduction of trash produced by the organization.

A priority of Washington and Ramsey Counties for businesses is to ensure that as much food as possible is consumed by people, rather than being wasted. The counties are working together to prevent edible food from being wasted through:

- Financial and technical assistance to help organizations rescue edible food for consumption by people
- Education and promotion of opportunities for individuals to reduce food waste
- Collaborating within and across counties, as well as with other partners, to identify opportunities and plan programs to reduce food waste

In 2023, the counties:

- Provided operational support for five food recovery organizations totaling over \$175,000
- Approved 17 grants totaling over \$208,000 to organizations working to recover more food
- Recovered over 8 million pounds of food and redistributed it to people in need

Reuse

Residents

Residential reuse information is incorporated into the annual Washington County communications campaign, and the webpage with reuse resources such as the Disposal Directory and the Buy, Sell, Donate Secondhand Guide at WashCoRecycles.com/Reuse.



Residents have many opportunities to reuse including the Free Product Room where residents can find free products such as paints, automotive fluids and household cleaners that other residents no longer need. The Free Product Room is operated in conjunction with the county’s environmental center. In 2023, over 730,000 pounds of material was reused through the Free Product Room at the South Environmental Center, an estimated \$1.4 million dollars worth of product. A free product room will also be located at the new North Environmental Center.

Another reuse opportunity is the county’s Fix-It Clinic program. Fix-It Clinics started in January 2019 but were suspended in 2020 due to the COVID-19 pandemic. The program resumed in 2024 with four clinics scheduled throughout the year. Clinics allow residents to bring in small household items like lamps, clothing and electronics to receive free guided assistance from volunteers with repair skills.

To practice reuse on a larger scale, residents and businesses doing major remodeling can apply for a grant through Ramsey/Washington Recycling & Energy (R&E) to help fund deconstruction work to promote reuse of building materials. More information on this program

is available in **Section 12: Non-Municipal Solid Waste Management**. Information on building material reuse outlets is provided on the county’s website.

Businesses

The BizRecycling program supports reuse efforts for businesses. Read more about BizRecycling in **Section 4: Ramsey/Washington County Alignment**.

In 2023, R&E completed a research and engagement project that evaluated the reuse and repair network of businesses and resources, while also gauging resident interests in and knowledge of reuse and repair activities. This research will inform future work regarding reuse and repair activities in the counties in the coming years.

Washington County promotes the Minnesota Technical Assistance Program materials exchange program at trainings and in the HazWaste Quarterly newsletter.

Section 6: Toxicity Reduction

Reduction in the toxic/hazardous character of waste refers to efforts with ultimate goal of reducing potential impacts to public health and the environment. Washington County encourages residents to use fewer toxic products and safely dispose of hazardous items through the various county programs designed to protect people and the environment.

Household Hazardous Waste Collection

The county provides safe disposal options for automotive products, batteries, pesticides and other hazardous items for free through its household hazardous waste (HHW) collection program. Washington County has operated an HHW facility since 1994, starting with a small facility located in Oakdale and expanding to the current Environmental Center located in Woodbury in the fall of 2009. The Woodbury Environmental Center operates year-round, and a second year-round site is scheduled to open in late 2024 in Forest Lake. The county also hosts one-day collection events throughout the county, operating from April through October. Washington County participates in a reciprocal use agreement with seven other metropolitan counties, which allows residents of Washington County to use HHW services in any other metro county for free and, residents of those counties can use Washington County’s services for free.

In 2023, 59,845 visitors brought waste to the Environmental Center or a one-day collection event, resulting in the collection of 1,803 tons of discarded materials. Of the waste collected, 54% was recycling, 35% was HHW, 7% was organics and 4% was MSW. Over 20% of the HHW collected was successfully diverted from disposal using the Environmental Center Free Product Room.

North Environmental Center

Washington County is building its second Environmental Center in Forest Lake. Construction began in September of 2023 and is expected to be completed in late 2024.

The 15,375-square-foot facility will allow the county to provide more equitable service throughout the county. The county started this process in 2018 by surveying residents to learn more about their needs for recycling and waste collection. The site has been designed to make recycling and waste reduction easier for county residents. The site will feature:

- A covered drive-through drop-off for HHW and electronics so residents can conveniently drop off waste year-round in all types of weather
- Self-serve recycling for cardboard, scrap metal and mixed recycling
- Self-serve food scraps drop-off
- Self-serve yard waste drop-off
- A Free Product Room
- Space for Fix-It Clinics and other environmental education and activities

Services offered at the current Environmental Center in Woodbury will remain available once the new facility is open. The two locations will have complimentary hours. The county will discontinue the Forest Lake one-day collections once the new facility is open.

Medicine Collection

Partnership between the Washington County Sheriff's Office and Department of Public Health & Environment provides residents in the county with free collection drop boxes to safely dispose of unwanted, expired and unused medicines. Safely disposing of medicine helps prevent crime, drug abuse, and accidental poisoning while protecting our environment. In 2023, 12,240 pounds of pharmaceutical waste were collected and properly managed.

Electronics Recycling

Electronics are the fastest growing type of waste in the United States and are banned from the MSW stream in Minnesota. Recycling electronics instead of throwing them in the trash prevents toxic metals – such as lead, mercury and cadmium – from entering the environment and allows the electronic items to be refurbished for reuse or recycled into new products.

In 2009, Washington County began collecting unwanted electronics from residents at the HHW facility for free. Accepted items include computers, TVs, cell phones and devices that connect to them, such as keyboards, printers, DVD players, gaming consoles, chargers and headphones.

All data from electronics is destroyed physically or electronically wiped by Dynamic Lifecycle Innovations. Items with life left in them are refurbished and sold. Other items are deconstructed and recycled. In 2023, Dynamic collected more than 1,058,000 pounds of residential electronics.

Healthy Homes

Washington County promotes healthy homes through education about health and environmental hazards associated with lead, mercury and other contaminants, as well as the proper management and abatement of public health nuisances. Specific hazards addressed include asthma triggers, childhood lead exposure, radon, mercury-containing products, and well water testing.

Abandoned Waste

Washington County also accepts abandoned HHW from municipal public works departments. If a city or township finds abandoned HHW materials on the roadside, they can arrange to bring it to the Washington County HHW facility at no charge.

Volatile Organic or Inorganic Compounds and Per- and Polyfluoroalkyl Substances Contamination

All public water systems in Washington County utilize groundwater, with another 50,000 residents served by private wells. The county has several unique geological features that allow for the transport of contaminants in groundwater. Unfortunately, several areas of the county are impacted by the presence of groundwater contamination plumes resulting from legal and illegal waste disposal, underground tanks and spills. The primary contamination plumes stemming from these sources contain volatile organic or inorganic compounds (VOC) and per- and polyfluoroalkyl substances (PFAS) contamination.

VOCs are carbon-containing compounds that evaporate easily from water into air at normal air temperatures. They are contained in a wide variety of commercial, industrial and residential products. The Minnesota Department of Health (MDH) has declared four Special Well and Boring Construction Areas (SWBCA) within the county, related to VOC contamination: Lake Elmo/Oakdale (around the former Washington County Landfill), West Lakeland/Baytown Township, Lakeland/Lakeland Shores and St Paul Park/Newport. The purpose of a SWBCA is to inform the public of potential health risks in areas of groundwater contamination, provide for the construction of safe water supplies, require additional precautions for the drilling of new wells and prevent the spread of contamination due to the improper drilling of wells or borings. Both public and private wells within these SWBCAs are impacted with remediation efforts led by the Minnesota Pollution Control Agency (MPCA).

In addition to VOC contamination described above, the state has identified extensive groundwater contamination related to PFAS. PFAS are a group of more than 5,000 human-made chemicals that do not break down over time. In Washington County, there are four PFAS compounds of concern, that have been found in surface and groundwater. PFAS contamination in the groundwater resulted from the disposal of 3M materials at four sites located in the county: 3M Oakdale disposal site, former Washington County landfill, 3M Woodbury disposal site and the 3M Cottage Grove plant. The drinking water sources of nine communities in Washington County have been impacted by PFAS in the groundwater, as well as many private wells. The state leads the response to PFAS contamination in the East Metro through the coordination of several agencies: MPCA, MDH and MN Department of Natural Resources.

The state coordinates the testing of public and private wells and provides treatment of water systems. Testing and treatment for PFAS was funded through a 2007 Consent Order between 3M and the MPCA. In more recent years, 3M and the state settled a Natural Resources Damages lawsuit, with a resulting 3M Settlement Fund. The state has been working with communities in the East Metro to develop and implement the priorities of the settlement, which include clean and sustainable drinking water.

The county works closely with state and local partners to monitor and participate in efforts related to these various contamination issues. These efforts include:

- Staying up to date on state and federal drinking water standards for PFAS, VOCs and other contaminants

- Participating in 3M Settlement activities
- Monitoring and participating in MPCA PFAS Blueprint activities
- Providing technical assistance and support for licensed Non-community Transient Public Water Suppliers that have PFAS contamination

The county is in the process of updating a county Groundwater Plan which provides a framework for protection and conservation of groundwater resources. Strategies in the Groundwater Plan align with efforts under this Solid Waste Management Plan to maximize groundwater protection and use of County Environmental Charge funding.

Section 7: Hazardous Waste

Commercial Hazardous Waste

The county has operated a hazardous waste regulation program since 1985 and is mandated by Minn. Statute §473.811 subd.5 to regulate and enforce state and local hazardous waste regulations. Washington County Ordinance #195, adopted in 2014, describes the county regulations related to hazardous waste management. Any business or non-household entity that is a hazardous waste generator must comply with these regulations. The regulations are designed to protect public health and the environment and focus on preventing hazardous waste releases to the environment or exposure to people. Hazardous waste generator sizes are classified based on the maximum monthly amount of hazardous waste generated:

- Large Quantity Generators (LQG) generate in a calendar month more than 2,200 pounds of hazardous waste and/or more than 2.2 pounds of acute hazardous waste
- Small Quantity Generators (SQG) generate in a calendar month more than 220 pounds but less than 2,200 pounds of hazardous waste and/or 2.2 pounds or less of acute hazardous waste
- Very Small Quantity Generators (VSQG) generate 220 pounds or less per month of hazardous waste or one kilogram or less per month of acutely hazardous waste.

Hazardous waste generators are required to obtain a license from the county and 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 and inspections. In 2024, there were 11 LQGs, 30 SQGs and 514 VSQGs in the county, totaling 555 licensed hazardous waste generators.

Outreach and education are the primary tools for maintaining compliance. In 2024, targeted trainings were delivered to over 300 hazardous waste generator staff, and over 200 generators received one-on-one in-person training and technical assistance during site visits.

If violations are identified during inspections, regulatory staff use a variety of methods to gain compliance including verbal and written orders, letter of warning and notice of violation.

Solid and Hazardous Waste Facilities

The county also regulates hazardous waste facilities that treat, store or dispose of hazardous waste. These 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 Minnesota Pollution Control Agency (MPCA) and the EPA.

The county regulates a variety of solid waste facilities, including solid waste transfer stations, recycling facilities, 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 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 Ordinances.

In addition to ensuring compliance with state rules, the county Solid Waste Management Ordinances establishes county-specific requirements including the application of the County Environmental Charge (CEC), which waste services the CEC applies to, the rate of the CEC and waste hauler licensing.

As a service to businesses, R&E’s Business Pollution Prevention Program assists businesses in reducing employee, community and environmental health risks. More about this program can be found in **Section 4: Ramsey/Washington County Alignment**. See **Section 6: Toxicity Reduction** for information on HHW.

Section 8: Recycling

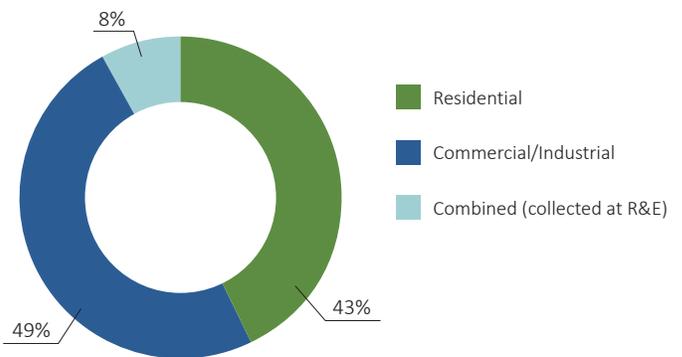
Recycling includes traditional curbside or single stream recycling as well as recycling drop-off programs. Organics management includes food waste prevention, food rescue, food-to-animals and food scraps collection for composting. Minnesota state statute establishes a goal for Twin Cities metro counties to ensure that 75% of solid waste generated is recycled (including organics that are composted) by 2030.

The County Environmental Charge (CEC), a service charge on the cost of trash collection, was developed, in part, as an incentive to increase recycling, especially for non-residential waste generators (businesses, schools, colleges). Both traditional recyclables and organic waste are exempt from the CEC when recycled.

Recycling Collection and Management

Recycling is an essential component of waste management in Washington County. The county took the lead in developing curbside recycling programs and recycling processing in the early 1990s. The county expects residents, businesses and institutions to incorporate recycling into the handling of discarded materials and recognizes it is the responsibility of everyone in Washington County to help achieve state recycling goals. The county works with municipalities, school districts and businesses to ensure recycling opportunities are maximized.

Figure 12. Types of Recycling



Residential Recycling

The county requires municipalities to ensure recycling service is available to all residents at their place of residence, including multi-unit dwellings. Curbside recycling is available in all communities in the county. Approximately one-third of Washington County’s 33 municipalities contract for waste and recycling service, with an additional one-third contracting for only recycling service. The county provides financial support to municipalities using state Local Recycling Development Grant funds to support municipal recycling and related programs. 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 of grant funding is targeted to specific projects that are related to broad and general recycling goals. In addition, the county provides technical assistance to municipalities for recycling contracts and

ordinance review and to assess infrastructure needs. Washington County provides additional funding for projects that go beyond a municipality’s allocated annual funding and for collaborative efforts referred to as incentive and shared resources funding, respectively. These funding sources are intended to bolster efforts beyond what a municipality is already doing.

Residential recyclables are collected through municipal programs, which work with the county to monitor progress toward meeting recycling goals. Washington County measures municipal progress towards achieving recycling goals, utilizing recycling performance work plans developed in conjunction with each municipality.

Business, Commercial and Institution Recycling

BizRecycling provides free technical assistance, resources and grant funding to support commercial waste generators and multi-unit residential buildings in the following waste management activities:

- Waste reduction and reuse
- Trash, recycling and organics management
- Recovering surplus, edible food to distribute to people in need

More details can be found in **Section 4: Ramsey/Washington County Alignment.**

School Recycling

Washington County has long supported increased opportunities for waste reduction, recycling and organics management in schools. The county has worked with districts to increase the opportunity to recycle through grants, technical assistance, direct assistance and training. School recycling support is available to all public and non-public K-12 schools in Washington County. County assistance and funding help schools achieve waste management goals described in the Schools Waste Reduction and Recycling Best Practices Continuum. Provided funds may not support existing activities or operations. Funding is intended for new and innovative projects or to expand the scope of existing waste management efforts. Funds are to be used to cover project capital and startup expenses and education/promotional costs for implementation of activities.

In addition to county efforts, R&E’s BizRecycling program works with preschools, K-12 schools, colleges and universities to set up recycling and organics infrastructure

for classrooms and cafeterias that do not qualify for, or have reached their maximum grant, funding within the county.

Extended Producer Responsibility

More than 40% of municipal solid waste is packaging and paper products. Recycling rates for many types of packaging and single-use products have stalled out. The increasing complexity of packaging makes recycling more challenging. Many types of packaging have no realistic recycling path or are designed for single use. Local governments and consumers are left to manage the materials, with communities covering the costs.

Extended producer responsibility (EPR) policies are a way to implement product stewardship and can help encourage sustainable materials management and a circular economy that eliminates waste and maximizes the continued use and regeneration of resources. Starting in 2020, the Partnership on Waste and Energy, a collaboration between Hennepin, Washington and Ramsey Counties, was involved in crafting a legislative proposal to establish an EPR policy for packaging and paper products. In 2024, the state legislature passed the Packaging Waste and Cost Reduction Act (Act) to create an EPR system for packaging, paper and single-use products. The Act puts responsibility on brand owners and producers of these products to use packaging that is more sustainable and bears a significant share of the cost to reuse, recycle or compost what they put on the market in the state. The Act incentivizes redesign of packaging to reduce waste and use of toxic ingredients, expand reuse and require packaging and products covered under the Act to be reusable, recyclable or compostable by 2032. It requires producers to pay at least 90% of the cost of recycling services for residents, government buildings and public areas, schools and smaller non-profits; fund improvements in reuse, recycling and composting systems; engage in outreach and educational efforts statewide and ensure recycling services are available to all residents. The Act includes:

- Oversight and enforcement responsibilities by the Minnesota Pollution Control Agency
- Requirements for producers to work with existing waste haulers and recycling facilities to ensure recycling services are conveniently available to all Minnesotans and
- Funding for recycling education materials that will be consistent across the entire state

Section 9: Organics

Food Scraps Collection and Management

The majority of the food Minnesotans throw out — about 62% — could have been eaten or donated, according to a Minnesota Pollution Control Agency (MPCA) commissioned study of solid waste in 2019 and 2020.

Food and compostable paper and packaging make up a quarter of everything households and businesses throw in the trash. Within that category:



40% is food that could have been eaten at some point before it spoiled.



6% is unopened and unexpired food that could go to people in need.



25% is inedible food scraps ideal for composting, such as vegetable peels and eggshells.



24% is paper and packaging that could be composted alongside food scraps.

The MPCA's goal is to cut the amount of food wasted in Minnesota in half by 2030, using 2013 numbers as a starting point.

Food Scraps Management in Schools

The county provides technical assistance and grant funding to schools to decrease waste, increase recycling and prevent edible food waste. Food waste recycling can result in cost savings when coupled with “right-sizing” of garbage collection to reduce pickup frequency and/or container size.

There are 73 public, private and charter K-12 schools located in Washington County, and 22 of them (30%) operate an organics diversion program. In 2023, about 630 tons of food scraps were diverted from the waste stream. Sixteen (16) schools diverted about 602 tons of food and beverage waste to livestock at a local farm. Six (6) schools diverted about 28 tons of source-separated food scrap waste to a commercial compost facility.



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.

Diverting food waste to feed animals is another method of food recovery. The local Food-to-Hogs program accepts edible food scraps and milk collected in the lunchroom which is recycled into pig food. In 2022, there were 22 schools participating in the program within Washington County.

Food Scraps Pickup Program

The Food Scraps Pickup Program offers residents a way of recycling their food scraps from home. Program details are included in **Section 4: Ramsey/Washington County Alignment**.

Food Scraps Drop-off

The county maintains a robust food scraps drop-off program that is widely used by county residents. The program is promoted through a variety of channels, including the Going Green Guide mailing, Environmental Update mailing, monthly Environmental eUpdate and social media posts (Facebook, Twitter (X) and NextDoor). Rack cards are distributed at the Environmental Center and via partners such as cities/townships and libraries, to share information about the program. Additionally, the program is promoted through the translation of materials, U of M Extension Master Gardener volunteer program, community events and our work with cities.

The Environmental Center, Northern Yard Waste Site and the Mahtomedi Food Scraps Drop-off Sites are open to all county residents. In 2023, the drop-off program collected over 437,500 pounds of organic waste that was sent for composting. Once the North Environmental Center opens, it will replace collection at the Northern Yard Waste Site.

Businesses

BizRecycling supports businesses in starting and improving organics collection (in addition to traditional recycling programs). See above for more information on BizRecycling.

Compost Market Development

Ramsey/Washington Recycling & Energy is working to ensure that there is demand for compost produced from food scraps. They offer education and grants to help increase demand for this product.

Compost Bins and Rain Barrels

Through a partnership with the Recycling Association of Minnesota, residents have the opportunity to purchase discounted backyard compost bins and rain barrels, sold at the Environmental Center in Woodbury. In 2023, 266 compost bins and 624 rain barrels were purchased by Washington County residents through this sale.

Food to People

Washington and Ramsey Counties are working together to ensure that as much food as possible is used by people. Preventing edible food from being wasted is a priority and is supported through:

- Financial and technical assistance to help organizations rescue edible food and get it to people who can use it.
- Support to organizations that reduce food waste including Today’s Harvest, a 100% recovered food drop-in food shelf. This model is designed for people to pick up three to five days of food at a convenient location. Designed by Open Cupboard, there are now locations in Maplewood, Oakdale and Cottage Grove.
- Collaborating within and across counties, as well as with other partners, to identify opportunities and plan programs to ensure surplus food gets to people who can use it.

During the COVID-19 pandemic, Washington County created a Food Security Unit to address the community impacts of the pandemic on food security. The unit drew

upon collaborations across Community Services and Public Health & Environment. Staff leveraged expertise to advance priorities related to healthy eating in the food system, food recovery, waste reduction and transportation. These food distribution events were created to help distribute a large amount of food in a short time, while reducing food waste. In partnership with organizations such as grocery stores, food that could no longer be sold was sorted and distributed at an accessible community location. During the pandemic, food pack delivery was also offered, which helped reduce barriers, such as transportation or having to quarantine, to getting to a traditional food shelf. The county had almost 10,000 (9,829) total household food shelf deliveries and 1,144 total meals were delivered.

Yard Waste Collection and Management

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. Yard waste includes leaves, grass clippings, garden waste and tree and shrub waste.

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

The county offers technical assistance about yard waste management to residents and municipalities. Currently, in addition to the county yard waste site in Hugo, there are three community and two private yard waste sites in the county. Sites are located in Cottage Grove, Denmark Township, Forest Lake, Hugo and Marine on St Croix. Private yard waste sites have implemented fee systems to help cover site costs. Yard waste sites in the county include:

- Marine on St. Croix Compost Site (City residents only)
- City of Forest Lake Compost Site (Forest Lake residents ONLY)
- Washington County- Northern Yard Waste Site (all county residents)
- Gertens RES- Denmark Township (all county residents)
- Rumpca Companies Inc- Cottage Grove Compost Site (all county residents)

All yard and garden waste collected at the county site is transported offsite and composted by private vendors. Tree and shrub waste collected is processed into wood mulch, most of which is used as a biofuel at St. Paul District Energy’s combined heat and power plant. Additional wood waste is either chipped into mulch and left onsite for residential use or transported offsite for additional processing by private vendors.



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 convenient hours and ensure sites are within fifteen minutes or less drive time of most residents.

Wood Waste

The county monitors the effects of emerald ash borer (EAB) infestation in partnership with the Minnesota Department of Agriculture and the Department of Natural Resources. The county provides an outlet for residents

to dispose of wood infested by the EAB at yard sites that accept wood waste. The county has done engagement with local commercial tree care businesses and is exploring opportunities to support tree care businesses with an influx of wood waste.

Local governments statewide face unfunded mandates to respond to EAB and the growing volume of wood waste. The seven-county metro area is expected to enter the peak phase of ash tree loss during this decade, requiring the management and disposal of more than 1.67 million tons of wood waste. As of early 2024, there are 48 counties in Minnesota with reported EAB.

In 2022, the Partnership on Waste and Energy (Partnership) piloted a one-time grant for a local business that reclaims discarded ash trees to create high-quality wood products. The funding increased their processing of ash tree waste with critical equipment purchases, staff time and public messaging around utilization of urban ash wood. Additionally, the Partnership worked with Cambium Carbon to assess current wood waste flows within the wood waste disposal industries. The report details their research and findings, which also provides recommendations for future wood waste management. For more information about the Partnership visit the [Partnership on Waste and Energy’s website](#).

In 2023, after a large snowstorm, the Department of Public Health & Environment coordinated with emergency management staff in the Washington County Sheriff’s Department to set up a temporary debris management site at the Belwin Conservancy for residential debris. Over the course of the 26 days it was open, 5,460 residents dropped off nearly 1,190 tons.

Section 10: Waste Collection

In 2023, metropolitan counties licensed 196 waste haulers to collect and transport municipal solid waste (MSW). Of these, 21 haulers are based in Washington County. Washington County issued operating licenses to an additional 66 waste haulers based in other counties.

Washington and Ramsey Counties track waste generated in both counties and delivered to the Ramsey/Washington Recycling & Energy Center (R&E Center) and transfer stations under contract with R&E. In 2022, the largest three waste hauling firms collected and delivered 58% of the MSW in the two counties and the ten largest haulers collected and delivered 92%.

Municipalities in Washington County require people who generate waste – both at home and at work – to contract for regular waste collection service. Municipalities can opt for an organized or open collection system. Organized collection means the municipality arranges waste

collection for all of its residents, or at least all single-family residential properties, by contracting with one or more waste haulers. Open collection, also known as “subscription service,” means waste generators contract directly with a waste hauler for the individual collection. A summary of municipal ordinances in Washington County related to waste management and the content of this solid waste plan is available in **Appendix B**.

In 2018, Washington and Ramsey Counties implemented waste designation, which requires all MSW generated in the county be delivered to the R&E Center or a transfer station under contract with R&E. Total system MSW inbound from Ramsey County and Washington County in 2023 was 434,542 tons.

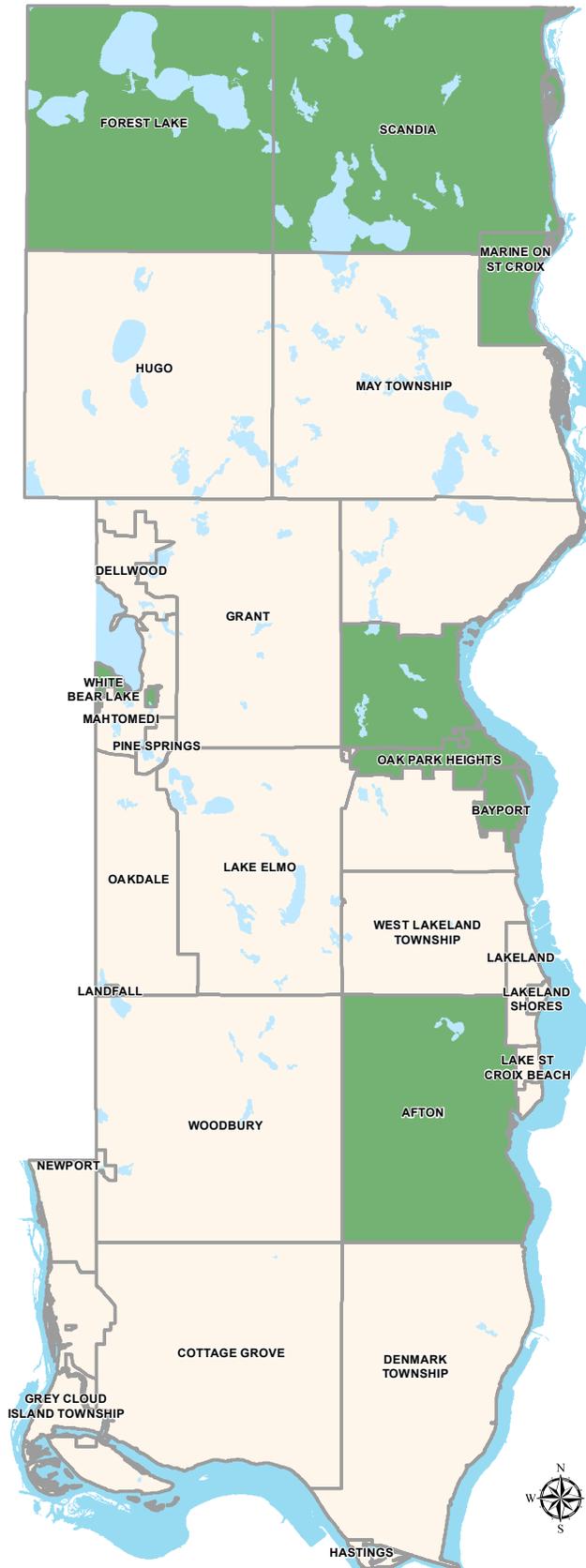
The following maps outline which cities and townships have open or contracted recycling collection and which cities have open or contracted MSW collection.

Figure 13. 2023 MSW Collection Type



**City & Township
2024 MSW
Collection Type**

- MSW**
-  Contracted
 -  Open Collection



Map Prepared By: Washington County GIS Support Unit 5/3/2024

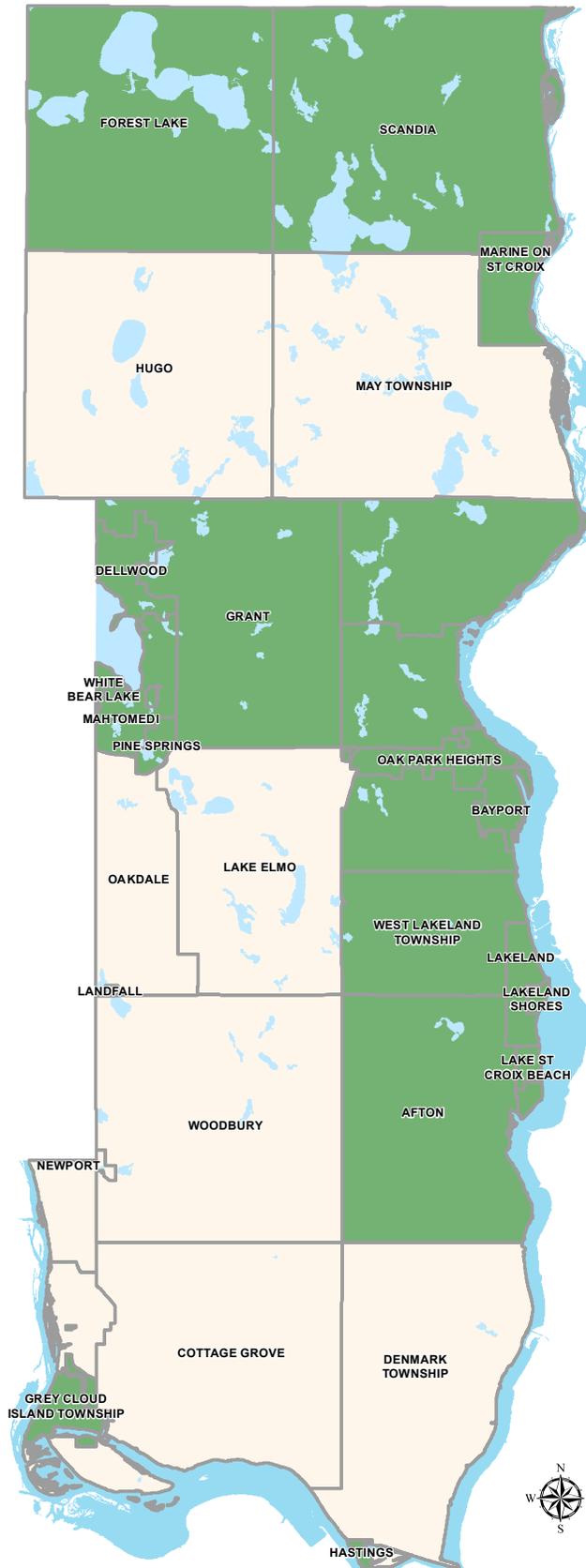
Figure 14. 2023 Recycling Collection Type



**City & Township
2024 Recycling
Collection Type**

Recycling

-  Contracted
-  Open Collection



Map Prepared By: Washington County GIS Support Unit 5/3/2024

Facilities and Hauler Rates

Rates and Charges

Competition between haulers and a variety of contracting methods between municipalities make it challenging to compare hauling rates across the county.

Obtaining rates from private-sector companies is difficult. Contracts are negotiated between the facilities and their customers, and it is considered private information. Contract pricing varies based on volume, location, material and other factors.

Rates at recycling facilities vary because recycling markets vary. Pricing also depends on other factors, including whether the waste is from residential or commercial generators and the cleanliness of the materials.

Washington County Ordinance No. 202 includes the following requirements related to hauler collected fees:

- Waste hauling fees must be weight or volume based.
 - Section 9.3 i: The Licensee shall charge residential and commercial customers rates for the collection of MMSW that vary with the volume or weight of the waste collected. The Licensee shall provide, upon request of a residential customer, a quote of the Licensee’s charges.
- Recycling cannot be penalized financially.
 - Section 9.3 j: The Licensee shall not impose a greater charge on residents who recycle than on residents who do not recycle.

Organized Residential Collection Rates

Nine municipalities in Washington County contract for both residential trash and recycling collection: Afton, Bayport, Birchwood Village, Forest Lake, Marine on the St. Croix, Oak Park Heights, Stillwater, White Bear Lake and Willernie. The table below reflects prices residents of these municipalities paid in 2023 for curbside collection of trash and recycling, and any other base services that all residents served under the collection contract were required to pay for. Prices for optional services are not included. Some municipalities include an allowance for a certain number of bulky items per year at no extra charge, and most

municipalities offer yard waste collection as an optional service with an additional fee. Rates shown include all applicable services when residents choose 30-38 gallon, 60-68 gallon or 90-96 gallon waste collection service levels. The State Waste Management Tax (9.75%) and Washington County Environmental Charge (35% for residential) are not included. Rates are shown per month, but billing cycles may vary.

Table 4. Combined Trash and Recycling Rates in Organized Cities

Cart size	Low	High
30-38 gallon	\$16.32	\$30.68
60-68 gallon	\$18.06	\$37.01
90-96 gallon	\$19.10	\$41.75

Open Collection Rates

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 trash and recycling services in 2024 (excluding County Environmental Charge, state taxes and fees). The county plans to develop methodology to collect more data on open collection rates.

The table below reflects prices residents of open collection municipalities paid in 2024 for curbside collection of trash and recycling. Prices for optional services are not included. The State Waste Management Tax (9.75%) and Washington County Environmental Charge (35% for residential) are not included. Rates are shown per month, but billing cycles may vary.

Table 5. Combined Trash and Recycling Rates in Open Cities

Cart size	Low	High
30-38 gallon	Not enough data	Not enough data
60-68 gallon	\$19.19	\$31.50
90-96 gallon	\$25.59	\$29.80

Commercial Collection Rates

Commercial collection rates are considered confidential business information and are privately negotiated between businesses and haulers. These rates are variable due to many factors, including business location, length of contract and service requirements. A non-scientific review of commercial roll-off collection costs ranged from \$210-\$260 per pickup + \$103/ton for disposal of trash.

Some municipal contracts include commercial collection. The table below reflects prices available for commercial collection of trash and recycling. Prices for optional services are not included. The State Waste Management Tax (9.75%) and Washington County Environmental Charge (35% for commercial) are not included. Rates are shown per month, but billing cycles may vary.

Table 6. Combined Trash and Recycling for Commercial Collection

Size		Collection Frequency	Low	High
Trash	2 yd dumpster	1x/week	\$80.07	\$106.60
	4 yd dumpster	1x/week	\$122.52	\$160.14
	6 yd dumpster	1x/week	\$158.78	\$240.19
	8 yd dumpster	1x/week	\$194.31	\$290.11
Recycling	2 yd dumpster	1x/week	\$59.84	\$74.42
	4 yd dumpster	1x/week	\$66.26	\$102.75
	6 yd dumpster	1x/week	\$72.40	\$129.79
	8 yd dumpster	1x/week	\$77.85	\$178.46

Waste Collection Facility Rates

It is difficult to obtain pricing for private-sector facilities as contracts are negotiated between the facility or hauler and the customer, and rate information is confidential. This is the same case for recycling facilities. Pricing depends on a range of factors including volume, location, cleanliness of materials, and other factors.

The facilities in the table below accept waste from Washington County.

Table 7. Waste Facility Types and Rates

Facility	Material Type	2023 Rate
Barthold Farms	Food to Hogs	Market Rate
SMSC Organics Recycling Facility	SSOM	Market Rate
National Recycling Inc	Recycling	Market Rate
Tennis Sanitation LLC	Recycling	Market Rate
Winnick Supply, Inc	Recycling	Market Rate
R&E Center	MSW	\$103/ton
Republic Pine Bend Landfill*	MSW	N/A*
Waste Management Burnsville Sanitary Landfill*	Non-processable MSW/residue/bypass waste	\$65.89-79.79/ton, depending on material type
Waste Management Elk River Landfill*	Non-processable MSW/residue/bypass waste	\$65.50-74.66/ton, depending on material type
J&J Recycling, Inc. Transfer Station	MSW	MSW: \$38/cubic yard
	C&D	C&D: \$30/cubic yard
Walters Recycling & Refuse Transfer Station	MSW	Market Rate
	C&D	Market Rate
Waste Management Transfer Station	MSW	MSW: \$103/ton
	C&D	C&D: \$126/ton

*MSW originating from Washington County may not be disposed of in a landfill unless directed there by R&E under the terms of waste delivery agreements/waste designation. R&E does not currently have a contract in place with Republic Pine Bend Landfill.

Facilities

Residential and commercial materials are delivered to facilities inside and outside the county. Facilities located within Washington County are listed below. Current facilities owned/operated by Washington County include multiple source-separated organics drop-off sites, a yard waste site, a yard waste transfer station and the Environmental Center, plus an additional Environmental Center currently in development. At this time, Washington County does not have any plans for new facility development.

Material Recovery and Recycling Facilities

There are five material recovery facility or recycling facilities located in Washington County:

- Tennis Sanitation LLC, St. Paul Park
- National Recycling Inc, Hugo
- Recycling and Energy Center, Newport
- Washington County Environmental Center, Cottage Grove
- Winnick Supply Inc, Forest Lake

Source Separated Organics Drop-off Sites

There are four source separated organics drop-off sites, free for residents to use, located in Washington County:

- Washington County Food Scraps Drop-off Site at the Washington County Environmental Center, Woodbury
- Washington County Food Scraps Drop-off Site at the Washington County Northern Yard Waste Site, Hugo
- Washington County Food Scraps Drop-off Site, Mahtomedi
- Cottage Grove Food Scraps Drop-off Site (city-owned site for city residents only), Cottage Grove

Yard Waste and Compost Facilities

There are seven yard waste or compost facilities located in Washington County:

- Washington County Northern Yard Waste Site, Hugo
- Rumpca Companies Inc., Cottage Grove Compost
- Gertens RES, Denmark Township
- City of Forest Lake Compost Site, Forest Lake
- Marine on St. Croix Compost Site, Marine on St. Croix
- Buberl Black Dirt Inc., Grant
- City of Cottage Grove Compost Site, Cottage Grove

Transfer Stations

There are four transfer stations located in Washington County.

- Gene's Disposal Service Inc., Hugo
- Recycling and Energy Center, Newport
- Washington County Yard Waste Transfer, Hugo
- Xcel Energy- Allen S King Generating Plant, Bayport

Resource Recovery Facilities

There is one resource recovery facility located in Washington County:

- Recycling and Energy Center, Newport

Land Disposal Facilities

There are no active landfills located in Washington County. Waste that cannot be processed at the R&E Center is delivered to Waste Management's landfills in Burnsville and Elk River.

Household Hazardous Waste Facilities

Washington County collects household hazardous waste at the Environmental Center in Woodbury.

In late 2024, the county will open its North Environmental Center in Forest Lake. This facility will collect household hazardous waste, yard waste, food scraps and more. This facility will also replace the Northern Yard Waste Site.

Ordinances

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

Landfilling

There are no operating MSW land disposal facilities in Washington County. In 2023, 24,608 tons of MSW from the county were 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.

Section 11: Waste Processing

Consistent with Minnesota’s waste management hierarchy, the county processes waste for the purpose of recovering energy, recyclables and other useful materials at the Ramsey/Washington Recycling & Energy Center (R&E Center). Waste processing is the preferred management method over landfilling for waste that is not reduced, reused or separately recycled or composted.

In late 2015, Ramsey/Washington Recycling & Energy (R&E) purchased the waste processing facility now called the R&E Center, in Newport, Minnesota. Ownership of the facility and the use of waste designation provides greater stability to the solid waste management system in the counties, enabling significant progress in recycling, reduced landfilling of waste and increased recovery of resources from waste. In 2016, 86% of municipal solid waste (MSW) generated by residents and businesses in the county was diverted from landfills into recycling or energy production.

The R&E Center receives approximately 1,500 tons of MSW per day from Washington and Ramsey Counties. The R&E Center uses shredding, magnetic separation and density separation to recover recyclables and convert waste into refuse-derived fuel (RDF). In 2023, over 13,029 tons of metal, including ferrous and non-ferrous metals, were recovered at the R&E Center for recycling. The facility generates approximately 340,000 tons of RDF per year. After being processed, 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 13,000 homes annually.

In 2023, the R&E Center installed a new resource recovery line that can separate an additional 25,000 tons of recyclable materials (cardboard, plastics, metal) from the waste stream and separate organic-rich material that will eventually be sent to an anaerobic digestion facility. Also in 2023, the R&E Center installed a new food scrap recycling building and equipment, including AI-powered robotics that can separate food scrap bags from the waste stream. See Section 9: Organics for more information on the Food Scraps Pickup Program.

Overall, the Ramsey/Washington Recycling & Energy Board’s (R&E Board) ownership and control over the R&E Center allows it to:

- Evaluate new technologies to best manage waste
- Continue to ensure waste is managed to protect the environment and public health
- Meet Minnesota’s 75% recycling goal
- Support local jobs
- Work towards a more stable, predictable waste processing system that controls costs and saves taxpayers’ money

With the ownership of the R&E Center, there is an opportunity for the counties to determine the downstream uses of the products that result from waste processing, and market that material toward beneficial end uses. R&E continues to evaluate technology to best manage the waste generated in the counties.

Anaerobic Digestion

Washington County, with Ramsey County, has been evaluating next-generation technologies to manage waste for two decades. The R&E Board has led this effort on behalf of the two counties seeking environmental and economic benefits for the East Metro. Pursuing new technologies to capture more value from waste is a key strategy for the counties to meet the state’s 75% recycling goal by 2030.

One such technology is anaerobic digestion (AD). In the AD process, organic materials are placed into a container deprived of air with specialized microbes to produce biogas and digestate. Biogas, composed mainly of methane and carbon dioxide, can be used for heat or for generating electricity, or it can be refined into renewable natural gas (RNG) as a substitute for fossil fuels. RNG can be used for vehicles or in the natural gas utility system for homes and businesses. RNG from food waste has a negative carbon intensity, which provides an environmental benefit by reducing greenhouse gas emissions in the transportation sector compared to diesel, conventional natural gas and RNG from landfills.

Digestate, the solid and/or liquid byproducts from AD, contains plant nutrients from the breakdown of organic waste. Solid digestate can be composted to make a soil amendment or further processed into other value-added products. Digestate can also be converted into biochar through pyrolysis or gasification. The processing of biochar allows for a potential mitigation solution to PFAS in our waste stream. AD is a proven technology for managing organic wastes, with flexibility and decades of operation and success in North America and worldwide.

In August 2020, R&E began a solicitation process for vendors capable of meeting the need for processing technologies and end-use markets for byproducts from the R&E Center, such as source-separated food scraps and organic-rich material. After a two-phase solicitation and multiple dimensions of proposal evaluation, the R&E Board approved an organic material feedstock supply agreement with the vendor Dem-Con HZI BioEnergy in September 2023. Under the agreement, the vendor will construct, own and operate a facility by 2027 that digests organic materials from the R&E Center, upgrades and sells the biogas as RNG, and processes the digestate into biochar. R&E will deliver at least 50,000 tons of organics per year, paying a tipping fee to the AD facility. The agreement also includes a revenue-sharing agreement for the sale of biogas and biochar.

Bulky Waste Management

Bulky wastes are large, difficult to manage materials that are discarded along with regular trash. This includes items like mattresses, carpet, large pieces of furniture, building materials and certain industrial materials from commercial generators.

Washington County works with other entities to promote proper, convenient and affordable management of bulky materials to reduce illegal dumping and burning. The county expects municipalities to provide clean-up events or separate waste collection programs for residents to ensure bulky items are separated and managed appropriately. The county also works with municipalities regarding optimum methods for the collection and proper disposal of major appliances, electronics, tires and other bulky items.

From a policy perspective, the county supports a product stewardship approach in cases in which bulky items, such as mattresses, furniture, and carpet are best managed through shared responsibility by manufacturers, distributors, retailers and consumers.



Some bulky items are processed by equipment at the R&E Center. However, these materials can be challenging to recycle and are problematic for waste processing, which means large amounts of bulky materials end up in landfills. When managed properly, some bulky items can be reused or recycled through specialized processes. Washington and Ramsey Counties are addressing bulky waste through:

- Partnering with organizations to reuse or recycle mattresses and furniture. In 2023, R&E partnered with cities and multi-unit residential properties to collect and recycle nearly 5,000 mattresses. R&E has also launched a pilot program to collect quality mattresses and furniture that can be reused.

Incentivizing deconstruction over demolition of buildings to promote the reuse of building materials. See **Section 5: Waste Reduction and Reuse** for more information on this program.

- Working with cities and municipalities to provide reuse and recycling options for materials collected at city clean up events.

Community Cleanup Events

Several municipalities provide annual cleanup events to collect bulky waste, like furniture, lawn mowers, mattresses and other problem materials from residents. When possible, the county coordinates their own one-day collection events for these materials to provide convenient HHW drop-off services.

Section 12: Non-Municipal Solid Waste Management

Non-municipal solid waste (non-MSW) encompasses solid waste materials that are not managed as municipal solid waste (MSW). Non-MSW includes materials determined by the state to be problem materials (e.g., treated wood), items specifically excluded from the statutory definition of MSW, or materials otherwise managed as separate waste streams. Management of non-MSW occurs primarily through private sector services. Some materials are collected by haulers specializing in transporting particular types of waste materials, while others may be collected by MSW haulers or delivered by the generator directly to a collection, transfer station or management facility.

Deconstruction Grants

Through the joint work of Ramsey/Washington Recycling & Energy, Washington County also offers deconstruction grants to incentivize the reuse of building materials for both residential and commercial projects. Deconstruction is the process of carefully dismantling a building structure

to preserve building materials so that they can be reused. In this process, a building is taken apart mostly by hand and materials are sorted into categories for efficient recycling and reuse. Building materials can then be donated to non-profit organizations, sold to private companies or individuals, and/or reused on another project. The funding provided by the county aims to assist bridging the gap between the cost of deconstruction compared to traditional demolition.

Since the program launch in Washington County in 2022, the program has approved four residential grants, totaling 14.14 tons of materials reused and 120 tons of material recycled. The county also worked with a property development firm to complete a first-in-the-nation commercial deconstruction project in downtown Stillwater. This project recovered over 23,000 lbs. of usable materials, including doors, lumber, light fixtures, cabinets and more, saving 18 metric tons of greenhouse gases compared to traditional demolition.

Section 13: Communication and Engagement

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 (HHW) 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.

Washington County places a high value on connecting with communities in a variety of ways to encourage reducing, reusing and recycling. Ongoing communication is needed to engage the public in these activities, and a variety of approaches are utilized to reach multiple audiences and engage community partners.

County staff continue to provide outreach to residents, businesses, schools and institutions to raise awareness about waste management. Topic areas have included waste reduction, reuse, general recycling, yard waste collection, electronics recycling, HHW, food scraps collection and medicine collection. The county continually seeks feedback and direction from various audiences using surveys, focus groups and other forms of community engagement. Messages are tailored to a targeted audience and delivered in a manner that is most likely to reach them. Partnerships with other entities are key to reaching people in the county. In 2023, the county launched an environmental planning survey translated into four languages. The translated survey and supplemental resources (information poster, engagement activity, QR codes to the translated digital survey) were distributed at local events. An ad for this survey translated into Spanish was promoted on social media and garnered positive feedback from residents.

Residential Audiences

Washington County works with public and private entities, including schools, businesses, institutions, government agencies and non-profit organizations to develop coordinated communication messages that minimize confusion the public may have regarding recycling and waste management. The county provides resources to increase education and awareness of away-from home

recycling opportunities in places such as parks, athletic fields and arenas and for special events, such as festivals, family reunions and parades.

Each year, staff develops a HHW 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 HHW program.

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

Going Green Guide – This comprehensive guide, mailed to all households, provides information on waste management programs in the county including food scraps drop-off, yard waste composting, HHW reduction and disposal, waste reduction and recycling. The guide also includes information on education kits 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. The county continues to evaluate content and distribution methods to best meet the needs of our community.

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, HHW 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 recycling 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 – 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 Environmental Center services, the Disposal Directory, the backyard compost bin and rain barrel sale, and other timely waste reduction and recycling information.

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

Social media – Recycling and waste messages are shared on the Washington County Facebook page, Twitter (X) account and Next-door page.

Presentations – The county is available to present on a variety of waste topics such as recycling, food waste and reduction/reuse. Presentations can be interactive workshops or given as a talk. Presentation opportunities are available to schools, community groups, grantees and other organizations within Washington County.

Education Kits – The county developed several education kits that can be distributed in the community to meet growing demands for information on various waste topics such as reuse/reduction, food waste and recycling. The kits are hands-on learning opportunities for schools, businesses or community groups. Kits are evaluated annually to update information ensuring they remain relevant to County efforts.

Green Cleaner Activity – The county provides a green cleaner activity for residents at several events. This activity allows residents to create their own green cleaner with non-toxic ingredients. All ingredients and spray bottles are provided free of cost. The recipe to remake the cleaner is printed on the bottle so it can be easily recreated when the cleaner runs out. Groups can request this activity when asking for county staff to attend events.

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

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.

Ramsey/Washington Recycling & Energy Center Tour – Ramsey/Washington Recycling & Energy (R&E) regularly offers tours of the facility to educate people about the East Metro’s waste system. Tour content, delivery, and facility access are planned based on the audience. In 2023, R&E welcomed 817 individuals from 97 different groups for tours.

Business and Commercial Audiences

Business engagement is jointly conducted by Washington and Ramsey Counties through R&E’s BizRecycling program. Communications to the approximately 40,000 businesses and institutions in the two 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. BizRecycling directs business owners to the website via paid advertising and social media content.

Since 2015, BizRecycling has partnered with local chambers of commerce to increase the visibility of recycling opportunities and coordinate with trusted messengers to engage their communities. The partnerships include funding for communications, staff time and outreach events including lunch and learns, green business awards and networking events to further educate businesses on waste and recycling best practices and to schedule a grant visit. Since the start of the program, the partnerships have grown to seven chambers in Washington County and eight in Ramsey County.

Section 14: County Leadership in Waste Management

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 has diverted an average of 80% of materials 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 deskside recycling box.
- Centralized sorting stations located within 40 steps from most employee areas.
- Sorting stations comprised of three hands-free, color-coded bins, providing employees with the opportunity to recycle via single-sort recycling or commercial composting stream.
- Partnership with the Building Services Department and Community Correction Department’s Sentence to Service program.

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

- Educational campaigns and challenges staff can participate in that promote behavior change around reducing, reusing and recycling in-office and at home.
- Divert 70 sorting stations located in large conference and training rooms, cafeteria and break rooms and building entryways.
- Paper towel compost collection pilot in designated bathrooms.
- Divert 70 presence at some county-sponsored events.

Other Plans

The priorities in the Solid Waste Management Plan overlap with many other areas of work. Recognizing this allows the county to find opportunities across its different planning initiatives to harness synergies, find efficiencies, leverage resources and meet common goals. These areas of overlap in county plans are listed below.

Washington County 2040 Comprehensive Plan: The Resilience and Sustainability chapter is dedicated to specifically recognizing four key areas that are linked to a resilient, sustainable and equitable future: Hazard Mitigation/Community Vulnerability, Healthy Communities, Energy and Solid Waste Management.

Washington County Energy Plan: This Energy Plan outlines strategies and priorities for the county to continue to work toward achieving statewide goals, and to realize goals outlined in the 2040 Washington County Comprehensive Plan. The plan promotes policies related to energy reduction in county buildings, modes of transportation, waste removal and water resource management.

2024-2035 Groundwater Plan: Landfill pollution and groundwater contamination are the central reasons for Washington County and Ramsey County’s partnership since 1987 regarding waste processing and recovering energy from trash. The plan is a comprehensive document that lays out the technical framework, issues, policies and strategies to address existing and future groundwater related problems. The plan addresses issues related to groundwater quality and groundwater quantity. The county regularly works with local, regional and state partners on groundwater issues.

All Hazards Mitigation Plan: The county is subject to many natural, technological and human hazards that are important to consider when managing solid waste, including hazardous waste management and emergency debris management. This All Hazards Mitigation Plan is meant to identify those hazards, risks and vulnerabilities and determine how to reduce, minimize or eliminate the loss of life and property damage.

Community Health Improvement Plan (CHIP): Solid waste management affects the environmental conditions in which people live and should be considered when planning for and promoting healthy communities. The CHIP is a long-term effort by Washington County and partners to address the following health priorities: access to care and health, environmental conditions that promote health, mental health and well-being, nutrition and physical activity and substance abuse.

2024-2029 Countywide Strategic Plan: The Strategic Plan identifies a shared vision for the future and aligns our resources around a set of clearly defined priorities, goals, and objectives. This framework ensures we are on the right path to managing solid waste in our community through the development of climate change strategies and policies to improve community resiliency and sustainability of natural resources.

Section 15: Cost and Finance

Washington County's solid waste programs and services are made possible by a combination of funding sources.

Revenue

County Environmental Charge

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

Select Committee on Recycling and the Environment Grant

The state assesses a Solid Waste Management Tax on certain waste management activities. This tax goes into Minnesota's general revenue fund, and a portion is provided to counties in the form of Select Committee on Recycling and the Environment (SCORE) grants. Eligible expenses include waste reduction, recycling, problem materials management, public information and education, technical assistance and MSW processing. The county is mandated to report activities funded by SCORE dollars annually.

Local Recycling Development Grant

Landfills in the metropolitan area must collect a surcharge on waste tipped at those facilities and remit those funds to the state. Per statutory formula, a portion of those proceeds becomes Local Recycling Development Grant (LRDG) for metropolitan counties. Washington County uses LRDG funds to support municipalities through technical assistance and a municipal recycling grant program.

License Fees

Washington County licenses waste haulers, solid waste and hazardous waste facilities and commercial hazardous waste generators. License fees collected are used for solid and hazardous waste compliance programs administered by the county.

Household Hazardous Waste Program Contracts

Washington County charges fees for the collection of certain materials to cover the cost of program related costs. For instance, the county has an agreement with Xcel Energy for reimbursement of costs associated with collecting and managing fluorescent lamps through the county's HHW program. In 2023, Washington County collected over 78,000 bulbs and was reimbursed nearly \$52,000 for program related costs. The county also has agreements with PaintCare, Call2Recycle and the Department of Agriculture for reimbursements.

Expenses

Washington County uses CEC proceeds to fund its solid and hazardous waste management programs. These programs offer a variety of services, including but not limited to:

- Mandated planning, evaluation and reporting.
- Outreach, promotion and education.
- Direct services to the public, such as yard waste collection sites and HHW services.
- Business waste assistance services.
- Technical assistance and grants to municipalities, school districts and other public entities.
- Resource recovery.
- Research and evaluation.

Each of the above activities is related to a strategy or policy in the county's Solid Waste Management Plan.

Section 16: Research

To more fully understand the opportunities and barriers related to the development of the next generation's solid waste management system, the Ramsey/Washington Recycling & Energy Board has commissioned several studies:

- **An Integrated Organic Waste Management System: From the Perspective of Commercial Waste Generators (May 2010)** analyzes anaerobic digestion as a new organic waste management concept from the perspective of commercial waste generators located in the Washington and Ramsey 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.
- **Alternative Technologies for Municipal Solid Waste (July 2013)** provides a review of the status and application of the following technologies: gasification, pyrolysis, plasma arc, mass burn, anaerobic digestion, mixed waste processing and plastics to fuel.
- **Preliminary Resource Recovery Feasibility Report (January 2014)** addresses the technologies selected for continued evaluation as part of the future of waste processing: anaerobic digestions, gasification, mass burn, mixed waste processing and plastics to fuel.
- **Waste Composition Study (September 2014)** determined the composition of waste from residential and commercial generators to inform planning efforts for future options for processing and disposal of waste. The results in the report are useful for the planning process addressing state goals for recycling and organics recovery.
- **Anaerobic Digestion (AD) – Update on Technology Status (April 2015)** provides an update on the planned scope of AD; existing projects providing AD systems; and economic and marketability of AD products (i.e. biogas and compost).
- **Seasonal Waste Composition Study (December 2017)** determined the composition and sizing of waste from residential and commercial generators at four points during the year using a characterization technique that

tried to mimic potential equipment to inform the planning efforts for future options for processing waste. The results in the report were used to inform decisions for processing at the Ramsey/Washington Recycling and Energy Center (R&E Center) and are useful for the planning process addressing state goals for recycling and organics recovery.

- **Preliminary Design for Processing Enhancements at the R&E Center (March 2019)** reviewed potential options for removing organics using a co-collection model with food scraps in compostable bags collected with MSW and removed at Ramsey/Washington Recycling & Energy, as well as options for equipment to recover additional recyclables and moving additional materials up the waste hierarchy.

Reports produced for the Partnership on Waste and Energy:

- **Anaerobic Digestion Evaluation Study (September 2018)** reviews how anaerobic digestion technology has worked in other locations and evaluates the primary economic factors that contribute to the financial feasibility of an anaerobic digestion operation in the Twin Cities metro area.
- **Case Study: Renewable Natural Gas in a Minnesota Clean Fuels Policy (Fall 2020)** explores how renewable natural gas from an anaerobic digestion (AD) facility could perform in a clean fuels policy in Minnesota. The study analyzes carbon intensity and the economics of AD using various feedstocks.
- **Policy and Regulatory Considerations to Develop Food Waste Digestion in Minnesota (December 2020)** focused on food waste digestion. This report investigates Minnesota's existing permitting and regulatory environment and explores potential policies and incentives that would support development of anaerobic digestion in the state.
- **Twin Cities Metro Area Emerald Ash Borer (EAB) Wood Waste Study (December 2022)** provides an opportunity analysis for alternative and higher use of wood waste for the Twin Cities metropolitan area towards the goal of effectively managing an increasing amount of EAB-driven waste within Hennepin, Ramsey and Washington Counties.

A full list of reports is available on the Ramsey/Washington Recycling & Energy Board's website:

- recyclingandenergy.org/investing-in-the-future
- recyclingandenergy.org/partnership-reports

Appendix B: Ordinances

Washington County ordinances related to the plan:

- Solid Waste Management Ordinance No.202
<https://www.co.washington.mn.us/DocumentCenter/View/20786/SW-Ord-202Final?bidId=>
- Solid Waste Service Charge Ordinance No. 194
<https://www.co.washington.mn.us/DocumentCenter/View/5959/Ordinance-194-?bidId=>
- Hazardous Waste Management Ordinance No. 195
<http://www.co.washington.mn.us/DocumentCenter/View/5155>
- Public Health Nuisance Ordinance No. 165
<https://www.co.washington.mn.us/DocumentCenter/View/78/Ordinance-165?bidId=>
- Food Protection Ordinance No. 215
<http://www.co.washington.mn.us/DocumentCenter/View/62>

Municipal ordinances related to solid waste include:

- Baytown Township: Ordinance No. 69: Recycling and Solid Waste
<https://webqen1files1.revize.com/baytowntwpmn/Ordinances/Ordinance%20No.%2069%20-%20Recycling%20&%20Solid%20Waste.pdf>
- City of Afton: Chapter 50: Solid Waste Management
<https://codelibrary.amlegal.com/codes/aftonmn/latest/aftonmn/0-0-0-472>
- City of Bayport: Chapter 46: Solid Waste
https://library.municode.com/mn/bayport/codes/code_of_ordinances?nodeId=MUCO_CH46SOWA
- City of Birchwood Village: Section 401 & 402: Public Health and Welfare*
<https://cityofbirchwood.com/general-city-information/city-code/public-health-and-welfare-4xx/>
*Ordinance is being updated during the revision of this plan, please visit the city website to find the most current version.
- City of Cottage Grove: Chapter 2: Mixed Solid Waste and Recycling
https://codelibrary.amlegal.com/codes/cottagegrovemn/latest/cottagegrove_mn/0-0-0-1999
- City of Dellwood: Chapter 50: Garbage and Rubbish
<https://www.dellwood.us/wp-content/uploads/2024/01/Dellwood-Code-Book-2023.pdf>
- City of Forest Lake: Chapter 50: Collection of Garbage and Waste Materials
https://codelibrary.amlegal.com/codes/forestlake/latest/forestlake_mn/0-0-0-25863
- City of Grant: Chapter 26: Solid Waste
<https://www.cityofgrant.us/sites/default/files/chapter26-solid-waste.pdf>
- City of Hastings: Chapter 50.07: Garbage and Refuse Haulers
https://hastingsmn.municipalcodeonline.com/booktype=ordinances#name=50.07_Garbage_And_Refuse_Haulers
- City of Hugo: Chapter 62: Solid Waste
https://library.municode.com/mn/hugo/codes/code_of_ordinances?nodeId=COOR_CH62SOWA
- City of Lake Elmo: Chapter 52: Solid Waste
https://lakeelmo.municipalcodeonline.com/book?type=ordinances#name=CHAPTER_5.12_SOLID_WASTE
- City of Lake St. Croix Beach (contact Lake St. Croix Beach City Hall to view in person)
- City of Lakeland: Chapter 50: Garbage and Solid Waste
https://codelibrary.amlegal.com/codes/lakeland/latest/lakeland_mn/0-0-0-400
- City of Lakeland Shores Chapter 51: Solid Waste Disposal
https://lakelandshores.govoffice.com/vertical/sites/%7BA9F2A22B-D974-45AE-B10B-77FF147E25BE%7D/uploads/TITLE_V_-_PUBLIC_WORKS-CHAPTER50.pdf
- City of Landfall: Chapter 6: Section 630 Disposal of Garbage, Rubbish Refuse, Waste Materials
<http://citcms.cityoflandfall.com/FileUpload/Codes%2FCity%20of%20Landfall%20Ordinances.pdf>
- City of Mahtomedi: Chapter 12.02: Public Health, Safety, and Welfare
<https://www.ci.mahtomedi.mn.us/DocumentCenter/View/439/Adopted-Version-of-Chapter-12-Public-Health-Safety-and-Welfare-PDF>
- City of Marine on the St. Croix: Chapter 6: Garbage and Rubbish
https://marineonstcroix.org/vertical/sites/%7BE6A156D5-6FCB-4DD8-BA60-2F231F862CF9%7D/uploads/City_Code_updated_2024-02.pdf

- City of Newport: Chapter 24: Solid Waste
https://library.municode.com/mn/newport/codes/code_of_ordinances?nodeId=COOR_CH24SOWA
- City of Oakdale: Chapter 6: Solid Waste and Environment
<https://www.oakdalemn.gov/DocumentCenter/View/1448/Chapter-6---Solid-Waste-and-Environment-PDF?bidId=>
- City of Oak Park Heights: Chapter 500: Garbage and Rubbish
https://www.cityofoakparkheights.com/index.asp?Type=B_BASIC&SEC={8FD17B61-07B5-4E63-A0E7-5COD4A8EE6C1}
- City of Pine Springs: Ordinance 13: Burning of Trash, Refuse, etc.
<https://static1.squarespace.com/static/567ed48bc21b8647030a5edd/t/6002544971e85811ae307d96/1610765385093/Ordinance+No+13+v1.2.pdf>
- City of Scandia: Chapter 52: Garbage
https://codelibrary.amlegal.com/codes/scandiamn/latest/scandia_mn/0-0-0-523
- City of St. Mary's Point: Chapter 800: Solid Waste Disposal
<https://www.stmaryspointmn.org/index.asp?SEC=66A1AE40-B7B5-4B49-A53F-0C147757F4D1&DE=56B36AFD-CC6C-4E99-8DEA-98CB037E5D85>
- City of St. Paul Park: Chapter 54: Solid Waste Management
https://library.municode.com/mn/st._paul_park/codes/code_of_ordinances?nodeId=COOR_CH54SOWAMA
- City of Stillwater: Chapter 30: Solid Waste and Recycling
https://library.municode.com/mn/stillwater/codes/code_of_ordinances/422240?nodeId=CH30SOWARE
- City of White Bear Lake: Article 5: Public Health, Welfare and Sanitation
<https://www.whitebearlake.org/administration/page/article-v-public-health-welfare-and-sanitation>
- City of Willernie: Chapter 1101: Garbage and Refuse
http://www.willernie.org/ordinances/City_Ordinances/Chapters_200-1200_Approved_6.21.22.pdf
- City of Woodbury: Chapter 19: Solid Waste
https://library.municode.com/mn/woodbury/codes/code_of_ordinances?nodeId=CICO_CH19SOWA
- Denmark Township: Ordinance No. 1997-1 (contact Denmark Township City Hall to view in person)
- Grey Cloud Island Township: Ordinance No. 58.1
https://www.greycloudislandtwpmn.us/files/ugd/feff80_3e9198747b714631816c3cf5baf5aa6a.pdf
- May Township: Chapter 507 and 508: Refuse Removal and Recycling
https://www.townofmay.org/vertical/sites/%7B28473C76-23EA-4214-B95E-E14504D5AF70%7D/uploads/May_Township_Code_Book_-_12-20-23.pdf
- Stillwater Township:
 - Ordinance No. 12
https://stillwatertownshipmn.gov/vertical/sites/%7B44993CD9-4A26-46F5-A42D-7C1D05E1B8BA%7D/uploads/Ordinance_12.pdf
 - Ordinance No. 15
https://stillwatertownshipmn.gov/vertical/sites/%7B44993CD9-4A26-46F5-A42D-7C1D05E1B8BA%7D/uploads/Ordinance_15.pdf
 - Ordinance No. 111
https://stillwatertownshipmn.gov/vertical/sites/%7B44993CD9-4A26-46F5-A42D-7C1D05E1B8BA%7D/uploads/Ordinance_111.pdf
 - Ordinance No. 122
https://stillwatertownshipmn.gov/vertical/sites/%7B44993CD9-4A26-46F5-A42D-7C1D05E1B8BA%7D/uploads/Ordinance_122.pdf
- West Lakeland Township: Section 13: Environmental Regulations
https://westlakeland.govoffice2.com/vertical/sites/%7B4302F8BA-2E20-46AE-A97A-E6644431668F%7D/uploads/Section_13_-_Environmental_Regulations_-_2017-05-08.docx.pdf

Appendix C: Acronyms and Abbreviations

Acronym or Abbreviation	Definition
AD	Anaerobic digestion
Bylaws	R&E Bylaws
CEC	County Environmental Charge
C&D	Construction and demolition
DEI	Diversity, equity and inclusion
EAB	Emerald ash borer
EPA	Environmental Protection Agency
EPR	Extended producer responsibility
HHW	Household hazardous waste
IAP2	International Association of Public Participation
JPA	Joint Powers Agreement
LRDG	Local Recycling Development Grant
LQG	Large quantity generators
MDH	Minnesota Department of Health
MPCA	Minnesota Pollution Control Agency
MSW	Municipal solid waste
Partnership	Partnership on Waste and Energy
PFAS	Per- and polyfluoroalkyl substances
Plan	2024-2042 Washington County Solid Waste Management Plan
Policy Plan	Metropolitan Solid Waste Management Policy Plan 2022-2042
RDF	Refuse-derived fuel
RNG	Renewable natural gas
R&E	Ramsey/Washington Recycling & Energy
R&E Board	Ramsey/Washington Recycling & Energy Board

Acronym or Abbreviation	Definition
R&E Center	Ramsey/Washington Recycling & Energy Center
R&E JPA	Recycling & Energy Joint Powers Agreement
SCORE	Select Committee on Recycling and the Environment
SMM	Sustainable materials management
SSTS	Subsurface sewage treatment system
STA	US Composting Seal of Testing Assurance
SWBCA	Special Well and Boring Construction Areas
SQG	Small quantity generators
VOCs	Volatile organic compounds
VSQG	Very small quantity generator
WRAC	Waste Reduction Advisory Committee

Appendix D: Definitions

A

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

Anaerobic digestion (AD): A technology that, in the absence of oxygen, uses microorganisms to convert various types of organic wastes into renewable energy and digestate. See also: biogas, renewable natural gas, digestate, biochar.

B

Banned materials: Wastes that are statutorily banned from disposal with municipal solid waste – yard waste, electronic waste, hazardous waste, appliances, tires, used motor oil, etc.

Biochar: Charcoal-like substance that can capture, store and/or sequester carbon produced through high temperature decomposition of organic material with little or no oxygen.

Biogas: Combination of mostly methane and carbon dioxide, with very small amounts of water vapor and other gases, generated during anaerobic digestion when microorganisms break down organic materials in the absence of oxygen.

BizRecycling: A Ramsey/Washington Recycling & Energy program that helps businesses, nonprofits, schools, apartment buildings and institutions reduce waste and recycle better.

Built environment: Human-made or modified structures that provide people with living, working, learning, mobility and recreational spaces.

Bulky items: Household items or other materials that, when discarded, due to their dimension and weight, become bulky waste. See also: bulky waste.

Bulky waste: A subset of municipal solid waste. 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 for collection or management, such as furniture, carpeting and mattresses. Excludes major appliances and electronic waste. See also: bulky items.

Business: Entity that engages in commercial/non-residential activity as a means of livelihood. Includes both for-profit, non-profit and academic entities. See also: commercial.

Business Pollution Prevention Program: A program that offers technical and financial assistance to help businesses reduce the use of harmful chemicals, transition to safer chemicals that are more sustainable and install less polluting, higher-efficiency equipment.

C

Circular economy: A system designed to eliminate waste and keep materials and products in circulation as long as possible through maximizing the reuse, recycling and regeneration of resources. See also: circularity.

Circularity: Practices that optimize resource use and eliminate waste across the entire production and consumption cycle, emphasizing sustainability and economic efficiency. Economic activities that mimic natural processes by optimizing resource use and eliminating waste across the entire production and consumption cycles of products and resources. See also: circular economy.

Climate change: Long-term shifts in the average weather patterns that have come to define Earth's local, regional and global climates. These changes have a broad range of observed effects that are synonymous with the term.

Climate resiliency (also: climate resilience): The ability of entities to anticipate, prepare for, respond to and recover from the impacts of climate change by reducing risk vulnerability.

Collection (as in "waste 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). See also: curbside collection.

Commercial (as in “commercial waste” or “commercial recycling”): Refers to non-residential sources, including businesses, government facilities or operations, institutions, schools, non-profit organizations, managed multi-unit properties, community activities, etc. Interchangeable with “non-residential.” See also: business.

Communication (also: communications): any means of conveying information to an audience.

Compost: a biologically stable material derived from the composting process (Minn. Stat. §18C.005, Subd. 6). See also: composting.

Composting: The controlled, aerobic biological decomposition of organic material to produce a nutrient-rich material (Minn. Stat. §115A.02).

Community capacity: Ability of the community to effectively use resources to address its needs and achieve goals.

Community engagement: actions resulting in meaningful dialogue and shared decision-making through public participation activities. See also: engagement.

Conservation: Avoiding the use of energy and/or depletion of natural resources.

Construction and demolition waste (C&D waste): Term referring to construction waste and demolition debris. See also: demolition debris, construction debris.

Construction debris (also: “construction waste”): 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 certain waste services and must appear as a separate line item on a bill. Washington County’s CEC rate is 35% (2024) 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 and certain types of industrial waste. The CEC also does not apply to other taxes or government fees.

County Solid Waste Management Plan (Plan): Guidance to all entities responsible for Twin Cities Metropolitan Area solid waste management that was developed in accordance with the requirements of Minn. Stat. §473.149, subd. 2d. for a land disposal abatement plan.

Curbside collection: Collection of waste (garbage, recyclables, yard waste, etc.) from residences at the point of generation. See also: collection.

Curbside recycling: Collection of recyclables from residences at the point of generation. See also: recycling.

D

Deconstruction: The process of dismantling buildings in a manner that allows for materials to be reused.

Demolition debris (also: demolition waste): Solid waste resulting from the demolition of buildings, roads and other man-made structures including concrete, brick, bituminous concrete, untreated wood, masonry, glass, trees, rock, plastic building parts and other inert waste materials, but not including asbestos wastes.

Designation: See Waste Designation.

Digestate: Product from anaerobic digestion consisting of solids and liquids rich in nutrients that can be used as a soil amendment or fertilizer for crops.

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).

Divert 70: A Washington County internal waste diversion program created in 2012.

Downstream: Activities that take place after waste is generated. See also: upstream.

E

East Metro: Refers to the eastern part of the Twin Cities Metropolitan Area of Minnesota, consisting of Ramsey and Washington counties.

Electronic waste (also “e-waste,” “electronics”): a category of waste that includes items such as televisions, computers, printers, cell phones, etc.

Emergency debris: Waste that results from emergency situations, such as natural or human-caused disasters. This may include trees, sand, gravel, building components, wreckage, vehicles, hazardous materials and/or other personal property.

Engagement: Activities resulting in meaningful dialogue and shared decision-making of interested parties. See also: community engagement.

Engineered wood products: Composite materials made from wood fibers, particles or veneers bonded with adhesives.

Environment: The physical and natural world, including indoor and outdoor spaces, where people, plants and animals live.

Environmental health: A branch of public health that centers around the relationships between human health and the environment.

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

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.

Explore: With respect to strategies listed in the Solid Waste Management Plan, to gather information and data to determine feasibility (budget, staff capacity, impact, etc.) of pursuing further action.

Extended producer responsibility (EPR): A policy approach to hold product producers accountable for environmental impacts from all stages of the product's life cycle.

F

Fast fashion: Clothing that is quickly produced in response to the latest fashion trends, resulting in low-cost production and rapid turnover of items.

Feedstock: Material that is delivered to a facility to create an end product.

Fix-it clinic: Program through which a resident can bring

broken household items to a specialist for assistance in repairing the broken item.

Food-to-animals: A type of food recovery effort that provides suitable food materials to livestock operations.

Food-to-people: A type of food recovery effort that provides safe-to-eat food to people.

Food recovery: An umbrella term referring to diverting food materials from being disposed of as waste. See also: food waste prevention, food-to-people, food-to-animals.

Food scraps (also: "food waste"): Unwanted food or parts of food items. See also: organic waste.

Food Scraps Pickup Program: A food scraps recycling program offered to residents of Washington and Ramsey counties. Residents collect food scraps in specially designed compostable bags, which are placed in their trash cart or dumpster and picked up by waste haulers. The haulers bring these bags to the R&E Center or transfer stations where they are sorted and sent to a composting or anaerobic digestion facility.

Food waste prevention: Eliminating or reducing the generation or disposal of food waste.

G

Gasification: An emerging technology for converting waste materials into a synthetic gas using intense heat.

Generator: Any person or entity that generates waste (Minn. Stat. §115A.03, Subd. 12).

Groundwater: Water contained below the surface of the earth in the saturated zone including, without limitation, all waters whether under confined, unconfined, or perched conditions, in near-surface unconsolidated sediment or regolith, or in rock formations deeper underground (Minn. Stat. §115.01, Subd. 6).

H

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).

Health equity: The state in which all people have a fair and just opportunity to attain their full health potential without the limits of structural barriers.

Household hazardous waste (HHW): Waste generated from household activity that exhibits the characteristics of or 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).

I

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: 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.

Interested parties: A person, group or organization that can affect, be affected by, or perceive itself to be affected by a decision or activity.

J

Joint powers agreement (JPA): A legally binding agreement between two or more governmental entities. A tool for intergovernmental action on, for example, solid waste management activities.

L

Land disposal: The disposal of waste on land, typically at a landfill. See also: disposal, landfill.

Land disposal abatement: Actions that prevent placing waste into land disposal facilities or landfills, such as waste reduction, recycling, composting or resource recovery.

Landfill (also “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.

Life cycle analysis: An approach that assesses the total environmental impact of materials from raw material sourcing through production and use to final disposal. This approach is typically used to inform decision making to account for the full impact of a material and just its final management, such as simply evaluating whether or how it is recycled.

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 established under Minn. Stat. Sec. 473.844 using funds from a surcharge imposed by the state on waste delivered to metro area landfills.

M

Major appliances: Items banned by State law from disposal with solid waste (clothes washers and dryers, dishwashers, 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.

Markets (as in: end markets): Demand for a commodity or service, such as the purchase of materials by a manufacturer or other entity to make products.

Mass burn: A waste-to-energy technology that uses unprocessed municipal solid waste for combustion to create steam for electricity production. See also: refuse-derived fuel.

Metropolitan Solid Waste Management Policy Plan (also: Policy Plan): A regional policy plan for solid waste management in the Twin Cities metropolitan area, adopted by the Minnesota Pollution Control Agency as required under Minn. Stat. Sec. 473.149.

Minnesota Pollution Control Agency (MPCA): State agency responsible for overall environmental quality of the state, created by the legislature to protect Minnesota’s air, water, and land, with a focus on preventing and reducing pollution and leading Minnesota’s efforts to protect against the effects of climate change, primarily through enforcement of State rules, issuing of permits, distributing grants, collecting and analyzing data, providing technical assistance and coordinating educational initiatives and campaigns on a variety of environmental issues. The Governor appoints MPCA commissioner.

Municipal solid waste (MSW) (also: mixed municipal solid waste): 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: A classification of housing where multiple separate units for residential living are contained within one building. Multi-unit can also refer to mixed use properties, in which residential units and commercial units are contained within the same building.

Municipality: A county, town, city or other municipal corporation or political subdivision of the state authorized by law to enter contracts.

N

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. See also: C&D waste, infectious waste, industrial (solid) waste.

Non-processible waste: Waste that a resource recovery facility cannot mechanically process due to its physical characteristics or potential harmful effects.

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.”

O

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 (also: “organics”): Overarching term for carbon-based wastes derived from plants and animal materials. Includes yard waste (leaves, grass, tree and shrub waste and other plant waste), food scraps, food manufacturing/production by-products, produce and meat trimmings, plant waste, certain paper products and similar materials that readily degrade in nature or in human-structured aerobic or anaerobic conditions. See also: food scraps.

Organics recycling: The process of breaking down organic waste into beneficial end-use products which can include biochar, digestate, and/or nutrient-dense compost. See also: biochar, compost, digestate.

Organics-derived products: The value-added output from processing organic waste, such as finished compost and biochar.

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).

P

Partnership on Waste and Energy: Entity resulting from a joint powers agreement between Hennepin County and Ramsey/Washington Recycling & Energy. Facilitates collaboration in areas of waste and energy management, including legislation and policy development, communication and outreach, and planning and evaluation of waste processing technologies.

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.).

Private sector: Part of the economy not directly 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 (Minn. Stat. §115A.03, Subd. 24a).

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, share 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.

Public entity: 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.

Public health: The health of the population as a whole, especially as the subject of government regulation and support.

Pyrolysis: Chemical decomposition induced in organic materials by heat in the near absence of oxygen to generate multiple by-products.

R

Ramsey/Washington Recycling & Energy (R&E): Entity resulting from a joint powers agreement between Ramsey and Washington counties that works 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 waste management activities.

Ramsey/Washington Recycling & Energy Board (R&E Board): Governing board of R&E. Comprised of commissioners from Ramsey and Washington counties.

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

Recyclables recovery system: Processing equipment at the Ramsey/Washington Recycling & Energy Center that separates recyclables that generators have inadvertently placed in the waste stream and redirects those materials to beneficial end markets.

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 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): A product resulting from the processing of MSW 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). RDF results 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.

Renewable natural gas (RNG): Anaerobically-generated biogas that has been upgraded (or refined) for use in place of fossil natural gas. See also: biogas.

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 in the Solid Waste Management Plan typically refers to the recovery of energy and usable materials resulting from the processing of mixed municipal solid waste.

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).

Restriction on disposal: Restriction indicating that a person may not dispose of unprocessed mixed municipal solid waste generated in the Twin Cities metropolitan area at a waste disposal facility unless the waste disposal facility meets the following standards:

- The waste has been certified as unprocessable by a county.
- The waste has been transferred to the disposal facility from a resource recovery facility.
- No other resource recovery facility serving the metropolitan area is capable of processing the waste.
- The waste has been certified as unprocessable by the operator of the resource recovery facility.

Results-based accountability (RBA): A performance measurement system that considers both population

and performance accountability and includes specific measurable outcomes.

Reuse: The practice of avoiding disposal of material that would become solid waste were it not used again in its original form.

S

Saint Paul–Ramsey County Public Health: The joint city and county public health department that provides a range of services to protect and improve the health of people and the environment in Ramsey County.

School: Educational institutions, including pre-kindergarten (pre-k), K-12 schools, higher education (e.g., public and private colleges and universities) and other academic institutions. Includes public, charter and private schools.

Select Committee on Recycling and the Environment (SCORE): A State task force appointed by the Governor that met in the late 1980s to recommend strategies for supporting recycling in Minnesota. SCORE is used to refer to a set of statutes enacted as a result of the recommendations, and most commonly to a particular State grant program that provides funding to counties to support local source reduction and recycling programs, as well as the improved management of household hazardous wastes, yard waste, and problem materials.

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 byproduct material as defined by the Atomic Energy Act of 1954, as amended (Minn. Stat. §116.06, Subd. 22).

Solid waste management: See Waste Management.

Solid waste management hierarchy (also: waste management hierarchy or waste hierarchy): A ranking of waste management methods or preference practices in the order in which they are the preferred method or practice. 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 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 no measurable methane gas and does not involve the retrieval of methane gas as a fuel for the production of energy to be used on-site or for sale.

Solid Waste Management Tax: Established in 1998, a 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 tax rate on the sales price of MSW services is 9.75% for residential generators and 17% for commercial generators.

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

Source-separated compostable materials: 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 (Minn. Stat. §115A.03, Subd. 32b.).

Subsurface sewage treatment system (SSTS): A sewage treatment system, or part thereof, that uses subsurface soil treatment and disposal, or a holding tank, serving a dwelling, other establishment, or a group thereof, and that does not require a state permit. Subsurface sewage treatment system includes a building sewer connected to a subsurface sewage treatment system (Minn. Stat. §115.55, Subd.1h).

Support: Offer an entity financial resources, expertise and/or connection to networks of common interests to achieve shared goals and objectives.

Sustainability (also “sustainable”): The ability to be maintained at a certain rate or level, typically to do so without depleting natural resources.

Sustainable materials management (SMM): 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). 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 and production, product use and end-of-use management.

T

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. Rules 7045.0131, one of the six characteristics of hazardous waste, typically exhibiting effects of being poisonous.

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).

Tree canopy: The upper layer of tree branches, leaves, and stems that provide a dense cover over the ground when aerially viewed.

Tree care: Activities that maintain, improve or manage trees for health, structure, appearance or safety. These activities can include chemical treatment, trimming and removal.

Twin Cities Metropolitan Area: A geographical area that includes the seven metropolitan counties which include or surround the cities of Minneapolis and Saint Paul, also known as the Twin Cities. The seven counties include Anoka, Carver, Dakota, Hennepin, Ramsey, Scott and Washington.

U

Unacceptable waste: Waste not acceptable at a resource recovery facility. Unacceptable waste includes waste which would likely pose a threat to health or safety, or which may cause damage to or adversely affect the operation of the facility. See also: non-processible waste.

Unprocessable: In describing waste for the purpose of compliance with Minn. Stat. § 473.848, not capable, after collection and before disposal, of undergoing 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 to the extent that the weight of the waste is reduced at least 65% before disposal in a mixed municipal solid waste disposal facility, on an annual average.

Upstream: Activities that take place prior to waste generation and disposal, including material sourcing, product design, reuse, repair, recycling, composting, etc. See also: downstream.

US Composting Council Seal of Testing Assurance: A compost testing, labeling and information disclosure program designed to provide information on how to get the maximum benefit from the use of compost.

V

Very small quantity generator (VSQG): Entity that generates 100 kilograms or less per month of hazardous waste or one kilogram or less per month of acutely hazardous waste.

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.

W

Waste: Solid waste, sewage sludge and hazardous waste (Minn. Stat. §115A.03, Subd. 34).

Waste 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 generation: The act or process of producing waste (Minn. Stat. §115A.03, Subd. 11).

Waste hauler (also: hauler): A business or other entity that collects waste from a generator and transports and disposes of it at a waste management facility. It does not include a person hauling their own residential waste.

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 Act: 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 (also: source reduction): An activity that prevents generation of waste or the inclusion of toxic materials in waste, including: (1) reusing a product 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).

Waste Reduction Advisory Committee: Committee convened to advise on the development of a county's Solid Waste Management Plan. Includes residents and representatives from waste haulers and municipalities.

Wasted Food Scale: Developed by the United States Environmental Protection Agency, the Wasted Food Scale prioritizes actions organizations can take to prevent and divert wasted food. Each tier focuses on different management strategies for wasted food with the top tier being the most preferred strategy.

Waste-to-energy (WTE): Process where MSW is burned to produce steam in a boiler, and the steam is used to power an electric generator turbine.

Wood waste: Waste resulting from the removal of trees or parts of trees from the landscape (aka “tree waste”) and byproducts resulting from the use of trees or parts of trees to manufacture products and discarded products that were made from trees.

Y

Yard waste: Garden wastes, leaves, lawn cuttings, weeds, shrubs and tree waste (Minn. Stat. §115A.03, Subd. 38) 115A.91.

Z

Zero waste: The concept of resource conservation and the design of all products, packaging and materials to become resources rather than landfilling or combusting them.

Appendix E: County Oversight of Waste Industry

Minnesota Statutes, section 473.803, subdivision 5 states:

Role of private sector; county oversight.

A county may include in its solid waste management 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 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.

This appendix explains Washington County's conformance with this law. The solid waste management system serving Washington County, and the East Metro area in general, is comprised of a combination of services provided by public and private entities. The private sector plays a critical role in carrying out solid waste functions in the county. The tools that the county uses to hold the private sector accountable include:

- 1. Regulation** – ensuring compliance with county ordinances and, where applicable, state laws that relate to solid waste management.
- 2. Contracts** – ensuring 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.

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 in the following table.

Table 8. Summary of County Oversight

Function	Provided By	Oversight Method
Collection of waste, organics and yard waste	Private for-profit and non-profit companies, including specialty companies, and certain municipalities	<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
Delivery of acceptable waste to the R&E Center	Private for-profit and non-profit companies, including specialty companies, and certain municipalities	<ul style="list-style-type: none"> • Enforcing waste designation provisions of solid waste ordinance • Monitoring and enforcing 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 • Responding to complaints • Reviewing reporting required by contract or MPCA
Land disposal	Private landfills in Minnesota and Wisconsin	<ul style="list-style-type: none"> • Ensuring compliance with contracts between R&E and landfills for disposal
Portions of services provided to residents, such as yard waste sites, household hazardous waste services	Private companies under contract to Ramsey County	<ul style="list-style-type: none"> • Ensuring compliance with contracts
Collection of residential recyclables	Services provided by contractors to municipalities, provided directly by municipalities or ensured via municipal 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 • Providing technical assistance to cities to ensure recycling service agreements are enforceable • Reviewing reporting to municipalities by service providers • Reviewing reporting to the MPCA by service providers
Collection of non-residential recyclables, including organics	Services provided to non-residential entities under contract or via ordinance	<ul style="list-style-type: none"> • Increasing awareness of state law requiring recycling by certain businesses • Monitoring service levels and quality through BizRecycling and other county and R&E programs

Appendix F: Environmental Justice Review

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

Environmental justice is achieved when everyone benefits from the same degree of environmental protection and has equal access to the decision-making processes that contribute to a healthy environment.

Environmental justice encompasses the principle that all individuals and communities have the right to be protected from environmental degradation or environmental policies that put them at a disadvantage. It adopts a public health model of prevention, protecting people and the natural environment.

Impacted Communities

Although Washington County consistently ranks as one of the least socially vulnerable counties in Twin Cities Metro Area overall, several communities within Washington County face disparities in health outcomes. Factors determining who faces these challenges disproportionately include: socioeconomic status, race/ethnicity/language, household composition and housing/transportation. Low-income communities and communities of color are at greater risk of exposure to environmental hazards.

With a population of 267,568 (2020 Census), Washington County ranks fifth out of 87 counties in the state and the population is expected to increase 27% by 2040. The county continues to increase in diversity (American Community Service Data, 2018-2023). In 2022, White, non-Hispanic residents account for 84% of the population, which is a decrease from 87% in 2018. Nearly 8% of the population is foreign-born. In Washington County, 15% of the population lives 200% below the Federal Poverty Level, which is lower than the state average of 22%. When identifying census tracts that face housing, income, and poverty inequalities were tracked, people identifying as Black or African American faced the highest disparities in this area. The most recent data indicates that the

unemployment rate in 2023 was 2.3% in Washington County which is slightly lower than the Minnesota average at 2.7%. When compared to other races, the Hispanic population faces a higher unemployment rate of 5% in the county.

Figure 15 shows solid waste facility locations and census tracts that are considered, by the Minnesota Pollution Control Agency (MPCA), areas of concern for environmental justice in Washington County. These are defined by the MPCA using data from the U.S. Census and American Community Survey, as census tracts that meet one or both of the following demographic criteria:

- Total population of people of color greater than 40%
- At least 35% of people reported less than 200% of the Federal Poverty Level

The MPCA chose these two criteria because their models show low-income communities and areas of higher concentrations of people of color are at a greater risk from air pollution.

Areas marked with (color) lines are census tracts with more than 35% of the population earning income less than 200% of the federal poverty level. As of 2022, this is an annual income of \$51,338 for a family of four (American Community Service Data, 2018-2023). Areas shaded in (color) are census tracts with greater than 40% people of color.

Impacts

The primary purpose of the Washington County Solid Waste Management Plan is to encourage best practices in waste management to protect human health and the environment, which is beneficial to all Washington County residents.

Implementing strategies identified in the Plan will reduce the amount of waste sent to landfills and waste-to energy facilities, diverting the material to recycling and organics recovery facilities, or eliminate the waste altogether. Washington County is home to 12 waste management

facilities – out of the 12 facilities, none are in areas of concern for environmental justice (as defined by the MPCA); however, 1 facility is located within a ½ mile of an area of concern for environmental justice: The Xcel Energy Allen S King Generating Plant.

When considering license renewals or new license applications in areas of environmental justice concern, Washington County will:

- Work with communities located in areas of environmental justice concern to ensure existing environmental regulatory data is accessible for community members.
- Review and update policies and procedures governing county regulatory work to ensure environmental equity is incorporated into regulatory practices.
- Work with state and local partners to identify areas of the community where environmental justice issues exist that are currently not being addressed due to lack of regulation or gaps in policy, and identify potential regulatory, policy, or public information solutions.

Health equity and environmental justice is an overarching policy in the Plan. Overarching policies are intended to be applied across the implementation of all Plan chapters. They also identify the priority of county efforts and funding in the solid waste management system. Examples of strategies in the Plan that would directly benefit communities in areas of concern for environmental justice include:

- Continuing to roll out a food scraps collection program that emphasizes accessibility to residents in all census tracts and all types of housing and utilizes existing trash trucks and routes (no additional vehicular traffic or noise)
- Ensuring access to communications and engagement as well as removing barriers to participation in county engagement activities
- Addressing barriers to household hazardous waste collection
- Providing education and programming to help residents understand and mitigate home health hazards, such as lead and radon
- Helping multi-unit residential properties to improve recycling opportunities
- Prioritizing reduction and reuse activities to prevent materials from needing to be managed in the waste stream

Community Engagement

Community engagement and collaboration in the decision-making process can help ensure that all communities' needs and concerns are considered, leading to more effective waste reduction and management solutions. Community engagement was integral in developing Washington County's Solid Waste Management Plan.

Engagement included:

- **Waste Reduction Advisory Committee.** This group of 11 included members of the community, municipality representatives and waste industry representatives. The group included a resident from Newport, home to the Recycling & Energy Center (R&E Center). A representative from the MPCA participated as an ex-officio member. The group met twice in 2024 to provide plan input.
- **Pop-up community engagement.** Staff attended community events to request feedback (offered in 4 languages) on plan priorities.
- **Resident survey.** The county conducted a survey of residents that included questions (offered in 4 languages) to guide plan preparation and plan priorities. Nearly 570 residential households responded.
- **Municipality engagement.** The county conducted a survey for municipality representatives to provide input on the Plan. Sixteen (16) municipalities responded to the survey.
- **Tree care company engagement.** The county facilitated conversations with six local tree care companies to learn more about current concerns and challenges of managing wood waste.
- **Internal partner engagement.** Staff from the Department of Public Health & Environment met with internal partners impacted by the Plan.
- **Waste industry engagement.** The county hosted conversations with representatives from the waste industry serving the region for feedback on plan preparation.

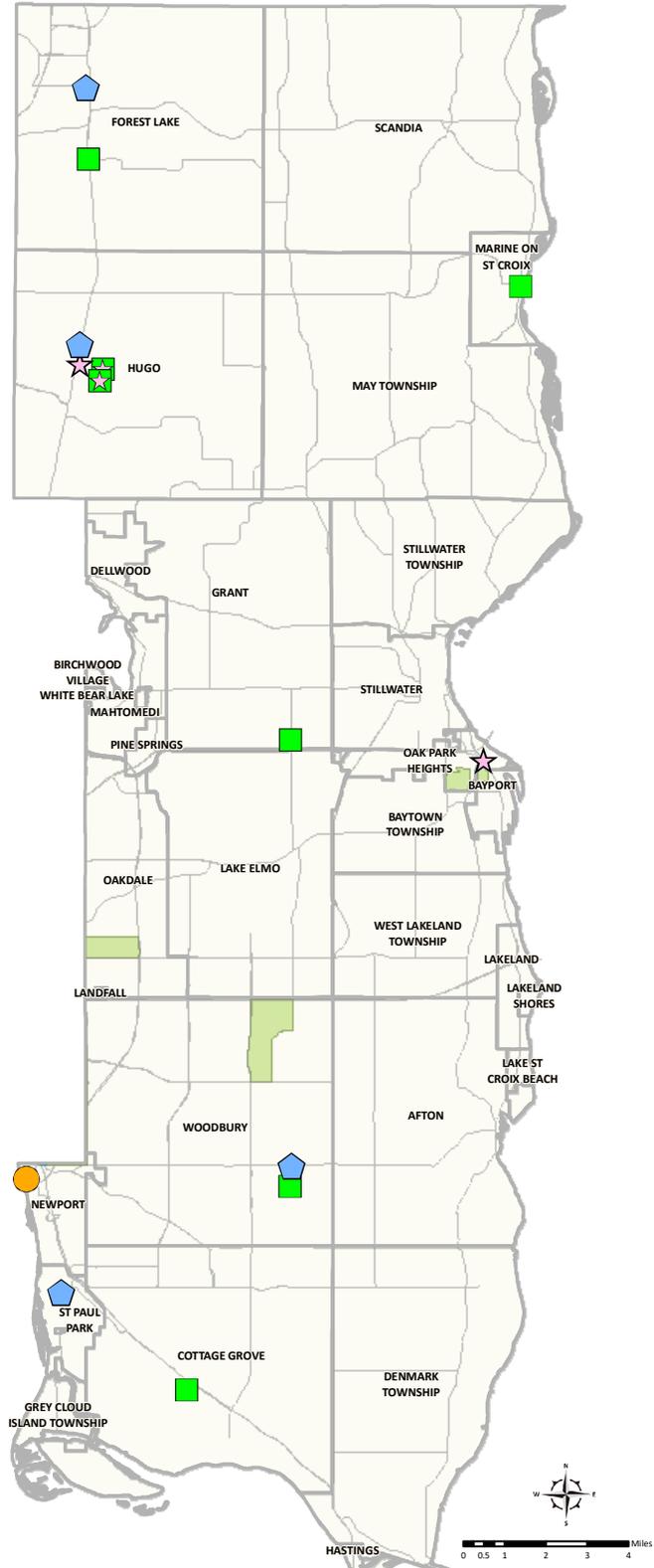
As this Plan is implemented the county will continue to conduct engagement, with a focus on those areas identified by MPCA as areas of environmental justice concern. The county will also utilize the MPCA's environmental justice review tool, once developed.

Figure 15. Solid Waste Facility Locations and Census Tracts



Solid Waste Facilities and Environmental Justice Boundaries

- Compost Site
- ★ Compost Site/Transfer Station
- ⬠ Recycling
- Recycling/Solid Waste Storage/Waste Processing/Transfer Station
- ★ Transfer Station
- Consider for poverty issues, over 35% of people living below 200% of the poverty level
- Over 50% people of color



Prepared By: Washington County GIS Support Unit, IT Department - 09/04/2024
Data Source: MN Pollution Control Agency

Appendix G: Policy Plan Implementation Table

The Metropolitan Solid Waste Management Policy Plan outlines numerous strategies for reducing waste and increasing recycling and organics recovery. All interested parties 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 Policy Plan strategies included in Chapters 4 through 14 of the County Plan. The Plan includes additional strategies not included in this implementation table.

Policy Plan Optional Strategy Points (minimum of 75 points required): 127

Table 9. Policy Plan Implementation

Policy Plan Strategy #	Type/Point Value	County Plan Chapter Location	County Plan Strategy Location	County Plan Strategy Language
				Improving the Reliability of Data
1	Required	13	1.a	Strive for increased compliance with hauler reporting per Minn. Stat. § 115A.93.
2	Required	13	1.b	Provide required county reporting to the MPCA.
				Regional Solutions
9	Required	4	7.e	Participate in an annual joint commissioner/staff meeting on solid waste.
10	Required	4	7	Commit to standardized communication and engagement by conducting outreach collaboratively, as appropriate, with Ramsey County and R&E.
11	Required	12B	6	Share information, learnings and research on emerging and alternative technologies with the MPCA and other interested parties to raise understanding, address concerns and proactively adopt efficient regulatory frameworks. With regional partners, engage in efficient and value-added infrastructure planning.
12	Required	12B	7	Develop plans for large facility closures or changes to operation to reduce landfill reliance, including considering opportunities to redirect the CEC used for resource recovery purposes, to efforts that shift resources to higher levels of the waste management hierarchy, including waste and toxicity reduction, reuse, recycling, organic waste management and other issues, such as illegal dumping and innovative processing technologies.

Policy Plan Strategy #	Type/Point Value	County Plan Chapter Location	County Plan Strategy Location	County Plan Strategy Language
				Waste Reduction – Food Waste Prevention/Food Rescue & Purchasing
13	Required	8C	1.b.ii	Provide grants for, or access to, software that can track food waste.
14	Required	7B	2.e	Establish partnerships between food recovery organizations and restaurants/stores to increase food recovery.
15	Required	7A	1.d	Implement biannual waste reduction challenges for residents.
16	Required	8D	4	Working with county procurement staff, develop and implement a county sustainable purchasing policy using Minnesota Pollution Control Agency (MPCA) guidance by January 2026.
17	Required	8D	4.a	Participate in Responsible Public Purchasing Council meetings.
18	Optional - 7 pts	7B	4	Work with health inspectors to educate restaurants and other establishments that have surplus prepared food to donate.
				Reuse
19	Required	7A	5.b	Offer grants or rebates for organizations to transition to reusable food and beverage service ware.
20	Required	7A	5.a	Offer grants for waste reduction, reuse and repair.
21	Required	8D	2.c	Develop and implement a green meeting policy for county hosted events and department activities.
22	Optional - 6 pts	8D	2.b	Develop and implement a county policy encouraging the use of reusable food and beverage service ware at county hosted events and department activities.
24	Optional - 6 pts	7A	7	Join and/or actively participate in a reuse network, like Reuse Minnesota, to provide county and city staff with learning opportunities to broaden their reuse expertise.
25	Optional - 7 pts	7A	2.c	Expand community capacity for repair. Through existing county programs such as Fix-It Clinics and collaboration with partners, increase opportunities for skilled individuals to teach repair and mending skills and promote repair as an alternative to purchasing new.
26	Optional - 7 pts	7A	3	Maintain free product rooms at environmental centers for residential reuse of household hazardous waste material and explore hosting and/or supporting material swap events, including with municipality and other partners.
27	Optional - 7 pts	7A	2.e	Work with municipalities to evaluate and, as appropriate, implement curbside set-out days to allow residents to set out used items for reuse.

Policy Plan Strategy #	Type/Point Value	County Plan Chapter Location	County Plan Strategy Location	County Plan Strategy Language
				Collection Best Practices
30	Required	8A	1.d.ii	Contract for residential recycling collection and/or recycling collection on same day as trash.
				Recycling Management
35	Required	8C	1.b.i	Recruit a minimum of 12 commercial businesses a year to recycle at least three materials from their operations and promote environmental and resource benefits.
36	Required	12A	6.a	Continue to operate pre-processing of waste at resource recovery facilities, such as the food scraps bag sortation line and recyclables recovery system at the R&E Center.
37	Required	8A	2	The county, with R&E, will provide assistance to multi-unit properties to improve recycling.
				Organics Management
40	Required	8B	1	Make residential curbside organics collection available to all residents of Washington County by 2030 via continued expansion and funding of the Food Scraps Pickup Program.
41	Required	8B	4	Support at-home composting and sustainable approaches to managing stormwater by partnering with municipalities to promote at-home composting and rainwater collection, such as outreach and funding for compost bin/rain barrel distribution. Promotions will include online information, county publications and social media.
42	Required	8C	4	Explore and work with partners to develop requirements for the management of organics from large commercial food generators by 2030. Work with the MPCA, Ramsey County and other metro counties to explore opportunities for regional consistency.
43	Optional - 7 pts	8B	3	Develop and maintain accessible residential food scraps drop-off services and establish additional residential food scraps drop-off sites through partnerships with municipalities and others.
				Wood Waste & Impact of Emerald Ash Borer
45	Required	10	5	Wood waste management plan. Develop plans to prevent and manage wood waste in the county and throughout the region by the end of 2025. Work collaboratively on regional planning and offer support to municipalities, including working with the Minnesota Pollution Control Agency to identify funding sources for these efforts. Evaluate alternative processing methods and emerging technologies, such as gasification, to manage wood waste.

Policy Plan Strategy #	Type/Point Value	County Plan Chapter Location	County Plan Strategy Location	County Plan Strategy Language
46	Required	10	9	Promote existing programs that use EAB-affected wood and other wood waste for furniture, home goods, flooring and other purposes. Expand to include other wood waste uses as opportunities arise, including (but not limited to) milling; prioritizing purchasing of products from recovered waste wood; and production of biomass pellets, renewable fuels or carbon soil amendments.
47	Required	12B	4.a	Continue to support composting, mulching and biochar operations.
49	Optional - 8 pts	10	7	Develop and distribute EAB tree care education programs for privately owned land. This includes educating on tree removal options as part of tree care.
51	Optional - 9 pts	10	8	Explore opportunities to assist with cost barriers to tree care and removal, such as allowing assessments on property taxes to spread the cost of tree care over a multi-year timeframe.
52	Optional - 5 pts	12B	4	Support increased capacity for organics processing (e.g., composting, mulching, food-to-animals, anaerobic digestion and biochar production) beyond existing operations.
				Organics Market Development
55	Required	8D	6	Create policies for the county and municipalities to incorporate food-derived compost and other organics-derived products into construction, landscaping and remediation projects.
56	Optional - 7 pts	12B	4.b	Find new outlets to increase food-to-animal operations.
				Waste to Energy & Landfilling
58	Required	12A	3	Work cooperatively with the MPCA, as the state enforces provisions found in Minnesota Statutes section §473.848, which requires waste to be processed before land disposal, to enforce restriction on disposal.
59	Optional - 4 pts	14	3	Continue to implement the County Environmental Charge (CEC), a service charge on waste fees, to better account for the externalities of land disposal. Evaluate the amount of funds generated from the CEC.
				Product Stewardship
60	Required	5	2.a	Participate with the Product Stewardship Committee under the Solid Waste Administrators Association (SWAA).
				Household Hazardous Waste
61	Required	6A	4.b	Encourage retailers to increase consumer awareness of responsible end-of-life handling for products containing lithium-ion batteries.
62	Required	6A	2.a	Continue county participation in the reciprocal use agreement for HHW collection sites across the metro area.

Policy Plan Strategy #	Type/Point Value	County Plan Chapter Location	County Plan Strategy Location	County Plan Strategy Language
63	Required	6A	2.b	Partner with municipalities to increase participation in HHW collection.
64	Optional - 8 pts	6A	3	Explore, identify and implement methods to remove barriers to use and access of HHW collection, including (but not limited to) hosting drop-off sites at various locations, providing pick-up services, etc., with specific focus on historically underserved communities.
				Sustainable Building and Deconstruction
65	Required	11	1.b	Work with the Public Works Department to implement the use of a Building Material Management Plan and consider adopting the MPCA's Material Management Plan Template.
66	Optional - 7 pts	8D	7	As the county develops or redevelops land, maximize recovery of materials that result from that work through reuse, recycling or energy recovery and minimize land disposal.
67	Optional - 8 pts	11	3.e	Explore working with partners to host a building material collection event or swap.
68	Optional - 8 pts	11	3.a	Through Ramsey/Washington Recycling & Energy, provide financial assistance through grants to offset the additional cost of building deconstruction, used building material installation and/or structural moving.
69	Optional - 8 pts	11	3.b	Provide deconstruction training, with consideration for toxic materials such as lead, for municipal officials, architects, designers, the public and general contractors.
70	Optional - 8 pts	11	3.d	Host or support home and building repair and refurbishment trainings.