



# Beyond the Garbage Can

Ramsey County's  
Solid Waste Master Plan  
2011 - 2030



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## **Chapter I: Introduction**

### **Background and History**

Solid waste management planning and implementation in the metropolitan area is largely governed by statutes specific to the seven-county Twin Cities Metropolitan Area. Required by Minnesota statute, the solid waste planning process has comprised a periodic revision of the regional solid waste policy plan (Minn. Stat. §473.149), followed by a revision of county solid waste master plans to implement the regional policy plan (Minn. Stat. §473.803) since the 1980s.

Regional solid-waste planning was under the direction of the Metropolitan Council until 1994, when it shifted to the non-regulatory Office of Environmental Assistance (OEA), which was folded into the regulatory Minnesota Pollution Control Agency (MPCA) in the mid-2000s. The Metropolitan Solid Waste Management Policy Plan (Policy Plan) was developed and revised by the Metropolitan Council during the 1980s and 1991, by the OEA in 1997 and 2003, and most recently by the MPCA, which approved a revised Policy Plan in April 2011. The planning horizon for the Policy Plan and county master plans is 20 years, with revisions occurring about every 6 years. Certain items are required to be stated in 6-year increments.

Per Minnesota statute, county master plans and revisions to the plans are to be submitted to MPCA for approval within a specified time frame. As such, during the past two decades the master plans were submitted in the year following the completion of the Policy Plan revisions: 1992, 1998, 2004 and 2010. For this round of revisions, Ramsey County is required to submit a revised Master Plan by April 2, 2012.

Since 1992, county master plans have included a regional component, developed in a coordinated fashion through the Solid Waste Management Coordinating Board (SWMCB), such that parts of each county master plan have been regional in nature, and parts have been county-specific. In both 1998 and 2004, a regional master plan for SWMCB member counties was developed that consisted of the common regional elements, and each county's master plan was then written to be consistent with and serve to adopt the regional plan.

### **Why is the Master Plan Important?**

As described above, Ramsey County has had a series of solid waste master plans dating back to the early 1980s. These 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 and performs at one of the highest levels in the nation. These plans have served as guidance to the counties, municipalities, the waste industry, and others as decisions are made about waste management. The master plans have come to be respected as setting clear policy direction for solid waste management, and provide a level of stability to a very dynamic 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. Ramsey County's master plans established clear policy direction, directing that municipalities would be responsible for collection of recyclables, that it is an expectation that such service become institutionalized, that long term funding sources for recycling be developed, and that certain goals had to be met. This direction established the clear role for curbside recycling, and was the basis for the service being a permanent fixture in the system.

Another important role of the master plan has been to address various risks. At its core, many of the changes in solid waste management over the past thirty years have been aimed at reducing risk to public health, safety and the environment. For example, the County's solid-waste plans have established policies, regulations, and services to reduce the hazardous character of waste. There is now significantly less hazardous waste in mixed municipal solid waste than there was in the past. This reduces a variety of risks, especially occupational health risks to waste-industry workers, property damage risks to waste-industry equipment, environmental risks related to disposal of waste, and health risks associated with environmental emissions.

The master plans have also addressed economic risks. Policies that assure markets for recyclables, delivery of waste to the resource recovery facility, and stable sources of recycling funding have assured that the system is financially stable. Further, the system as developed has reduced environmental liability risks for business and government in Ramsey County. While often overlooked as a benefit of solid-waste planning, this liability reduction is a hidden economic development tool that has saved millions of dollars over thirty years. (Recall that the cost of cleaning up closed old landfills in Minnesota is over half a billion dollars.)

In sum, the 20-year Ramsey County Solid Waste Management Plan is an important tool to protect public health and the environment, to reduce a variety of risks, and to stabilize the economics of waste management for residents and businesses.

### **Looking Ahead**

The Policy Plan is neither law nor rule, but is established in Minnesota statute to guide system development. Within the Policy Plan are a number of requirements that county master plans must meet. Some key issues include:

- **Regional Governance:** The Policy Plan states that the MPCA and SWMCB will evaluate ways in which solid waste is currently governed to determine if and what changes are needed. The Plan goes on to outline key issues to be included in a regional governance study.
- **Greenhouse Gas Reductions:** Even though not required in Minnesota statute, the MPCA included reductions of greenhouse gases associated with waste management in the development of the plan.
- The Policy Plan sets specific quantifiable objectives to reduce land disposal of waste through 2030. The objectives are provided in five-year increments beginning in 2015, and include objectives for source reduction, recycling, organics recovery, resource recovery, and landfilling.

The chart below depicts the Policy Plan's percent\* of total MSW objectives for 2010-2030:

<b>Management Strategy</b>	<b>2010 Region Actual</b>	<b>2015 State Objective</b>	<b>2020 State Objective</b>	<b>2025 State Objective</b>	<b>2030 State Objective</b>
Source Reduction & Reuse	-	1-2%	2-4%	3-5%	4-6%
Recycling	40%	45-48%	47-51%	49-54%	54-60%
Organics	4%	3-6%	4-8%	6-12%	9-15%
Resource Recovery	28%	32-34%	32-33%	30-31%	28-24%
Landfilled	28%	20%	17%	15%	9%

\*2010 Regional Data Presentation to the SWMCB - June 22, 2011. Note: recycling does not reflect source reduction and yard waste credits.

Ramsey County supports the MPCA's objectives for source reduction, reuse, recycling, organics recovery, resource recovery and land disposal found in the 2010 Regional Solid Waste Policy Plan.

There are 8 key themes in the Policy Plan:

- Accountability: waste is everyone's responsibility, not just government's.
- Waste should be considered a resource, saving money, energy and reducing pollution.
- The solid-waste management hierarchy identified in state law should guide decision making.
- Generators of waste are responsible for the waste they produce.
- Government, in all its functions, generates waste, and should serve as a leader in properly handling waste.
- Product stewardship, which is a preventive approach to waste, and which creates shared responsibility, is a key future direction.
- Private-sector initiatives are key for the future, with State law giving preference to privately provided services.
- Greenhouse gas reductions can be met by handling waste appropriately.

### **Ramsey County Solid Waste Management Plan Revisions**

The Ramsey County Solid Waste Management Plan will have two components: a regional component and local component. The regional component is developed jointly with Anoka, Carver, Dakota, Hennepin and Washington Counties, through the Solid Waste Management Coordinating Board (SWMCB). Each member of the SWMCB adopts an identical regional component to their plan. The local component includes policies and strategies that focus on County-specific activities.

Revisions to the draft Ramsey County plan assumed a 20-year planning horizon, and builds on the previous master plan, on-going and future work, and previous and new research. This draft plan offers a solid basis for moving Ramsey County's system toward the MPCA's short- and long-term objectives. Areas of emphasis in this plan – in an effort to more fully develop certain parts of the waste-management system – include:

- Organic waste management
- Non-residential recycling
- Municipally provided services, such as multi-unit recycling
- Demolition/construction waste reuse and recycling
- Communication, consultation and technical assistance
- Expanded hauler licensing for consistency and oversight of highest and best use of waste.

The reader will note throughout this document that some strategies are quite specific while others are vague. This reflects the recognition that we can't fully predict future conditions and the realization that there is value in leaving room for flexibility to ensure effectiveness in an ever-changing world. Detailed strategies pertain to areas in which the County has workplans in place and/or is committed to existing contractual language. The County will base future decisions aimed at meeting or exceeding State objectives identified in the Policy Plan on sound science, good judgment, best practices, consultation with state and local partners, and review of relevant data.

### **Public Engagement Process**

Minnesota statutes require that Ramsey County appoint a solid-waste advisory committee to aid in the preparation and revision of the master plan. With more than 25 years experience in solid waste management planning, evaluation and regulation, Ramsey County has expertise in the topical areas of solid waste management, hazardous waste management, recycling systems, financing solid-waste systems and community outreach. Despite this expertise, the County needs and values the involvement of the community in the process to develop a strong document that will influence outcomes. In years past, a small number of participants provided input in a limited number of advisory committee meetings. With the rise in popularity of electronic media and the changing demographics of our community, the County requested permission from the MPCA to open participation and feedback opportunities to a wider audience through active community engagement.

The County's aim was that residents, waste-management professionals, and representatives of municipalities and other public entities, businesses and institutions would have a greater understanding of the integrated waste management system and how that system protects health and the environment and that these individuals would participate in the opportunity to comment on the Ramsey County master plan.

The County created a home webpage titled "Planning Beyond the Garbage Can" ([www.co.ramsey.mn.us/ph/rt/planning\\_beyond\\_the\\_garbage\\_can.htm](http://www.co.ramsey.mn.us/ph/rt/planning_beyond_the_garbage_can.htm)) which included opportunities for interested individuals to explore in-depth policy documents, participate in workshops and tours, provide feedback through email or surveys, and be updated regularly through our GovDelivery email service.

The County gathered feedback through in-person focus groups, electronic surveys, telephone surveys, in-depth interviews, postcard surveys, meetings with key stakeholders, email, and Facebook conversations. We proactively sought opportunities to provide information to audiences that may not be currently connected to our electronic communication channels, including seniors, ethnic communities and low-income families.

#### **By the Numbers:**

- 1,000+ website visits
- 275+ GovDelivery subscribers
- 1,000+ Twitter and Facebook followers
- 5 meetings with municipal recycling coordinators and managers
- 500+ business participants in survey, focus groups and/or in-depth interviews
- 475+ resident participants in survey and focus groups
- 85+ request-for-feedback letters to waste-management professionals
- 180+ request-for-feedback letters to businesses

We believe our new, open, and inclusive approach has added depth and breadth to the advisory committee process by involving a large group of individuals from diverse backgrounds in a continuous feedback loop over the course of the development of this master plan. As such, the plan reflects the needs of the community, not just the will of the experts.



## Chapter II: Ramsey County Policies and Strategies

### *Overarching Policies*

#### **Overarching Policy 1: Product Stewardship**

Ramsey County strongly supports a product-stewardship framework, also known as extended producer responsibility, which creates effective 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 products with a toxic or hazardous character, but should be focused broadly on other products, such as packaging. Such an approach can reduce the need for government programs to assure proper end-of-life management of discarded items. Ramsey County believes that the objectives in the Policy Plan are more likely to be met and sustained in an affordable manner only if a product-stewardship framework is implemented in Minnesota.

#### **Overarching Policy 2: Objectives and Measurement**

Minnesota spends a considerable amount of time and money to measure progress in solid-waste management. A recently completed analysis of data by the MPCA documents the inefficiency and ineffectiveness of these efforts. Ramsey County believes strongly in measuring performance of the system, but in a meaningful manner. Ramsey County urges the MPCA to fully implement changes in data gathering and evaluation that are more efficient and that will truly assist in meeting objectives. Further, the County believes that moving to a measurement system that focuses on a diversion goal from landfills would be a more sensible approach to performance measurement.

#### **Overarching Policy 3: Credit for Yard Waste**

Ramsey County provides convenient and effective services for residents to manage yard waste, including woody waste, and complies with the State ban on yard waste. While expensive, these services are extremely important in a fully urbanized County, and are an efficient way for residents to comply with State law, practice environmentally sound behavior, and engage in community. As the new Policy Plan moves the system more strongly into separate management of organic waste, the value of yard waste is changing significantly. The yard waste collected by Ramsey County will now be an important component of the solid-waste system, with leaves and grass serving as bulking agents for composting other organics. Further, the woody wastes collected serve as a renewable energy source, supporting the movement to reduce greenhouse gas emissions. Ramsey County believes that yard waste should be included in the State's performance measures associated with the solid-waste system and will work with the MPCA and the SWMCB to include yard waste in future performance measures so as to better reflect overall organics diversion activity within the region and the county, and to improve the ability of both to compare its progress to other areas across the country.



### **Ramsey County Collection and Land Disposal Policies**

1. Ramsey County will use responsible waste management principles, and careful risk analysis, when arranging for land disposal of waste. Public entities in Ramsey County are expected to do the same.
2. Old dumps and landfills pose a variety of potential public health, safety and property risks. To mitigate these risks, Ramsey County will invest resources to inventory, monitor and, when necessary, take action.

### **Ramsey County Collection and Land Disposal Strategies**

1. Ramsey County will work with the SWMCB to explore the expansion of regional hauler licensing to include non-MSW, recycling and organics haulers. This includes efforts to work collaboratively to develop a standard non-residential recycling data collection and reporting program.
2. Ramsey County will work with other entities to promote proper, convenient, financially accessible management of bulky materials, in order to reduce illegal dumping and burning and to improve neighborhoods by reducing nuisance situations. With regard to bulky waste, Ramsey County:
  - a. Supports a product stewardship approach in which some bulky items are best managed through shared responsibility by manufacturers, distributors, retailers, and consumers;
  - b. Encourages Resource Recovery Technologies (RRT) to continue the processing of bulky waste items that can be processed by equipment at the Newport Resource Recovery Facility;
  - c. Expects that municipalities that provide clean-up events or separate waste collection programs for residents assure that bulky waste items are separated and managed appropriately and in accordance with the hierarchy;
  - d. Will work with municipalities regarding optimum methods for collection and proper disposal of major appliances, electronics, tires, and other bulky waste items; and
  - e. Will work with the mattress industry, including manufacturers, wholesalers and retailers, to foster implementation of a mattress recycling program.
  - f. Will work with the MPCA, generators, retailers and recyclers of carpet to foster more recycling of carpet recycling program, while continuing to support a product-stewardship approach for carpet.
3. Ramsey County will work with the SWMCB to develop a model ordinance for municipalities to allow the bi-weekly collection of non-putrescible wastes in the event a municipality adds a weekly residential organics collection program.
4. Ramsey County will maintain its inventory of old dumps and periodically review the status of those sites. The County will evaluate selected old dump sites to determine if further investigation or other action is needed to protect the environment, including groundwater and surface water.

5. Ramsey County will work with other agencies if environmental or public-health issues related to old dumps arise. The County will take appropriate action to evaluate or mitigate health and environmental risks.

### **Ramsey County Communication and Technical Assistance Policies**

1. Ramsey County will use communication and outreach as a key strategy to reach solid and hazardous waste goals.
2. Ramsey County will deliver robust outreach, promotion and education campaigns that motivate behavior change by individuals.
3. Ramsey County will strengthen partnerships with municipalities, community groups, ethnic organizations, the waste and recycling industry, and others to promote management of solid waste in accordance with this plan.
4. Ramsey County's waste-management campaigns will recognize the value of community expertise in the development and dissemination of campaign messages, and will use a wide variety of communication tools including traditional methods and emerging technologies.

### **Ramsey County Communication and Technical Assistance Strategies**

1. Ramsey County will use interactive communication strategies, such as social media, that go beyond traditional methods of outreach, engaging community partners as active contributors in the process of increasing broad understanding of a socially desirable, environmentally sound and cost-effective solid-waste management system.
2. Ramsey County, working with targeted populations within the County, will develop and deliver culturally specific and appropriate marketing and education on waste management for both residential and non-residential generators. The "targeted" community will vary based on the topical area, changing community needs, and the extent to which the messages are aimed at specific ethnic groups.
3. The County will use appropriate expertise to bridge cultural and language communication needs related to understanding and accessing the waste management system.
4. Ramsey County will increase awareness of and commitment to environmentally sustainable practices in the workplace on the part of County employees. Strategies may include web-based campaigns, on-line tutorials, and/or in-person trainings, among others.
5. Ramsey County will work with public entities to share innovative public information messages and technical assistance to further waste management goals.
6. Municipalities are responsible for providing information specific to their programs to their residents. As a condition of receiving SCORE funds, municipalities must use elements of the County outreach, education and promotional program materials. Ramsey County will work jointly with municipalities in the development of messages and tools, including consistent promotion of the regional RethinkRecycling.com website, the Ramsey County 633-EASY

recycling/disposal telephone line, A-Z Recycling/Disposal Guide, and County yard waste and household hazardous waste program information.

7. Ramsey County will work with public and private entities, including schools, businesses, institutions, government agencies and non-profit organizations, to develop coordinated communication messages that minimize confusion members of the public may have related to traditional recycling and other solid waste management methods.
8. Ramsey County will assure that the County's waste communication programs for residential and non-residential waste generators are compatible and consistent with other programs in the region.
9. Ramsey County will provide the resources necessary to assure that its communications programs are appropriately designed, accountable, effective, and evaluated.
10. Ramsey County will work with Washington County and through the Ramsey/Washington County Resource Recovery Project to enhance education on solid waste issues for residential and non-residential generators.
11. Ramsey County will develop a range of outreach tools for residential and non-residential generators to use when seeking information and assistance on waste management issues. Every non-residential generator will be contacted at least twice each year, and every residential generator will be contacted at least four times per year, focusing on actions that can be taken to increase waste education and recycling.
12. Ramsey County will work with public entities, providing resources as appropriate, 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.
13. Ramsey County will continue to fund Community POWER grants through the SWMCB, explore the development of a new volunteer Master Recycler Program, and explore other opportunities to create volunteer programs to assist with outreach.
14. Ramsey County will contract with University of Minnesota Extension to work with the Master Gardener program for education, outreach and technical assistance on proper yard management, tree and shrub management, proper handling of yard waste and certain aspects of household hazardous waste management.
15. Ramsey County will conduct outreach, technical assistance and consultation to enhance waste generator understanding of the role and benefits of waste processing and taking action to direct waste to a processing facility.

### **Ramsey County Cost and Finance Policies**

1. Ramsey County will continue to use the County Environmental Charge (CEC) as a funding tool that also serves as an incentive for waste to be managed higher on the waste management hierarchy. The CEC applies to mixed municipal solid waste (MSW) and the County has the authority to, by ordinance, apply it to non-MSW waste as well.
2. Amendments to the Solid Waste Ordinance that change the CEC rates will include a notice period for generators and haulers before the rate change becomes effective, to give them the opportunity to adjust billing systems.
3. The policy related to the use of solid waste fund balance is as follows:
  - a. Pursuant to State law, solid waste fund balance may be used for purposes only described in the Solid Waste Master Plan.
  - b. Maintain the assignment of \$1,000,000 of fund balance tort liability associated with waste management activities.
  - c. Maintain the assignment of \$500,000 of fund balance for a recyclable market support fund.
  - d. Establish the following priorities for use of solid waste fund balance by Ramsey County, in this order:
    - a. One-time waste management related expenses, such as purchase or development of fixed assets or capital equipment;
    - b. Maintenance of waste-related capital equipment/sites; and
    - c. Operating expenses that present significant opportunities for meeting environmental goals.
  - e. The Department of Public Health, in consultation with the County Manager and Office of Budgeting & Accounting, will bring requests forward for new funding commitments through the Capital Improvement Program process and/or through the Requests for County Board Action process.
4. Ramsey County will consider the opportunity to use the CEC currently collected for resource recovery purposes for use in the County's efforts to shift resources and effort to higher levels of the waste management hierarchy, including waste and toxicity reduction, recycling and reuse, organic waste management, toxicity reduction, and other issues such as illegal dumping and innovative processing opportunities.
5. Ramsey County supports consistent, clear billing by the waste industry for residential and non-residential customers.

## **Ramsey County Cost and Finance Strategies**

1. Ramsey County requires each municipality to be responsible for developing a long-term financing mechanism to fund its residential recycling and organics programs.
2. Ramsey County allows municipalities use of the County's statutory service charge authority, through joint powers agreements with the County, to collect a municipal recycling fee for the municipality that includes services for the management of recyclables and organic waste.
3. Ramsey County will work with local partners to conduct a review of waste and recycling billing practices to ensure consistent, clear billing.
4. Ramsey County will create a public entity grants program to provide funds to municipalities, school districts, and other local public entities (excluding the University of Minnesota, Metropolitan Council and the State of Minnesota) for the purpose of innovative programs to start or improve recycling and organics management.
5. Ramsey County will fund its internal waste management operations using the CEC, employing best-management practices and demonstrating leadership in waste management.

## *Emergency Debris Management*

These policies and strategies serve as an addendum to Ramsey County emergency management plans, and are intended to interpret and complement those plans.

### **Ramsey County Emergency Debris Management Policies**

1. Ramsey County will ensure that the clearance, removal and proper disposal of debris resulting from natural and man-made disasters, such as trees, sand, gravel, building components, wreckage, vehicles, household hazardous waste, and other personal property is carried out to reduce risks to public health, public safety and the environment.
2. During an emergency, reduction of risks to public health and safety are a priority. To that end, waste of a toxic or hazardous character should be managed separately and safely. Once that is assured, then Ramsey County encourages as much recycling of emergency debris as is technologically and economically feasible in any given response scenario.
3. Ramsey County Departments will work collaboratively and proactively to plan and prepare for emergency debris management that eliminates immediate threats to public health and safety, removes obstructions to emergency response activities, disposes of the debris in the most environmentally responsible manner as possible, and unifies the efforts of city, county, state and federal organizations for a comprehensive and effective response.
4. Ramsey County will include as part of its contract for HHW collection services a provision that allows for temporary collection of HHW generated from emergencies such as flooding and other storm damage.

### **Ramsey County Emergency Debris Management Strategies**

1. In an emergency, Ramsey County may temporarily waive restrictions prohibiting C&D haulers from transporting MSW to enhance regional capacity to move materials as quickly as possible.
2. Ramsey County will assist municipalities in planning for management of emergency debris.
3. Ramsey County will provide, to the extent possible, technical assistance and other resources to manage household hazardous waste and yard waste to municipalities in support of emergency debris management.
4. Ramsey County will provide resources to convene municipalities to create coordinated plans for the clearance, removal and proper management of debris caused by a major debris-generating event, including the management of special wastes such as hazardous waste, household hazardous waste, major appliances, electronic waste and infectious wastes.
5. Ramsey County may temporarily waive restrictions prohibiting commercial service vehicles from delivering tree and shrub waste to County yard waste sites during and following an emergency in the event that municipalities are managing recovery of the material through contracted vendors.



6. Ramsey County will coordinate or perform environmental assessments as needed to establish, identify or analyze risk and to make debris management decisions.
7. Ramsey County may utilize its existing contract services for removal of tree and shrub waste from County yard waste sites at other locations in the event that an emergency warrants creation of additional marshalling yards for the debris.
8. Ramsey County will prepare and update an environmental health annex to its all-hazard response and recovery plan.

### Ramsey County Evaluation and Measurement Policies

1. Ramsey County believes that measuring and reporting results is integral to managing solid waste. High quality data are important to identify gaps, acknowledge successes, make improvements, and support policy positions in solid waste management programs. Ramsey County supports accurate measurement of state, regional and county waste management progress, in order to improve overall accountability.
2. Ramsey County will provide required data to the State of Minnesota for the purpose of measuring progress toward achieving the objectives set forth in the Metropolitan Policy Plan. However, because measuring results depends on accurate data collected efficiently and consistently, and recognizing that current methods to collect solid waste data are inefficient, cumbersome, inaccurate and in need of revision, Ramsey County will focus on gathering and reporting data of high quality.
3. Ramsey County will provide the public with progress reports on solid waste management. Ramsey County supports more efficient methods to collect solid waste data, and will work with the MPCA, SWMCB and other entities to create data gathering and evaluation methods that are more efficient, consistent and accurate. Ramsey County will support the MPCA's efforts to develop tools for measuring solid waste management through hauler and facility licensing/permitting.
4. The chart below depicts the Policy Plan's percent\* of total MSW objectives for 2010-2030. Recognizing that these are regional objectives, Ramsey County, working jointly with the SWMCB, will use these as targets as it carries out the strategies in this master plan.

Management Strategy	2010 Region Actual	2015 State Objective	2020 State Objective	2025 State Objective	2030 State Objective
Source Reduction & Reuse	-	1-2%	2-4%	3-5%	4-6%
Recycling	40%	45-48%	47-51%	49-54%	54-60%
Organics	4%	3-6%	4-8%	6-12%	9-15%
Resource Recovery	28%	32-34%	32-33%	30-31%	28-24%
Landfilled	28%	20%	17%	15%	9%

\*2010 Regional Data Presentation to the SWMCB - June 22, 2011. Note: recycling does not reflect source reduction and yard waste credits.

### Ramsey County Evaluation and Measurement Strategies

1. Ramsey County supports the regional plan, Policy Plan and MPCA's SCORE Implementation Report and legislative efforts to work collaboratively to develop a standard commercial recycling data collection program, as articulated in the 2011 – 2030 Regional Solid Waste Master Plan.

2. Ramsey County supports more efficient methods to collect solid waste data, and will work with the MPCA and SMWCB to implement recommendations in its SCORE implementation plan report to the Legislature, dated April 2011.
3. Ramsey County will continue to use, and will expect its municipalities, to use ReTRAC to record recycling program, contract and financial data.
4. Ramsey County will develop and implement a performance scorecard for municipalities to measure progress toward achieving recycling goals.
5. Ramsey County will use its regulatory compliance programs to gather data that assist in regulation and solid waste system management.
6. Ramsey County will gather and use information to design improvements to solid waste programs, including information gathered through focus groups and surveys aimed at residential and non-residential generators, as well as data on the access and use of telephone and web-based information available to residential and non-residential generators.
7. Ramsey County will prepare an annual report on solid waste activities within the County, and provide it to the public.

### **Ramsey County Non-MSW Management Policies**

1. Because Ramsey County is fully developed, most new development is associated with demolition of old structures. Because of this, Ramsey County will give special attention to non-MSW that is generated within the County.
2. Ramsey County will apply the State hierarchy of waste management to non-MSW, and will develop strategies, regulations and programs to promote the management of non-MSW higher on the hierarchy, and to reduce health, safety and property risks associated with non-MSW.

### **Ramsey County Non-MSW Management Strategies**

1. Ramsey County will work with the SWMCB to explore the expansion of regional hauler licensing to include non-MSW collectors.
2. Ramsey County will continue to regulate demolition activities through a pre-demolition inspection program, assuring hazardous building materials, including asbestos are properly identified, removed and managed from structures slated for renovation or demolition, and will partner with municipalities in the implementation of this program.
3. Ramsey County will provide technical assistance and consultation on topics including collection, contracting, management options and permit issues, to municipalities and other entities to encourage appropriate management of demolition, construction, and deconstruction materials.
4. Ramsey County will continue the Reuse, Recycle, and Renovate for Reinvestment (“4R”) Program on County Tax Forfeited structures, promoting deconstruction, building material salvage and recycling in renovation and demolition projects.
5. By 2015, Ramsey County will provide technical assistance and consultation supporting public entity procurement practices that encourage incorporation of deconstruction, building material salvage and recycling practices in government-let contracts such that projects achieve a minimum 75% diversion rate based on what can reasonably be recovered.
6. Ramsey County will specify the use of tear-off shingle scrap in paving projects and encourage other public entities to do the same.
7. Ramsey County will work with the MPCA and SWMCB to expand markets for materials associated with non-MSW and bulky waste, with special attention to wallboard and mixed biomass.
8. Ramsey County will continue to work to promote healthy homes through the reduction of health and environmental hazards associated with lead, mercury and other contaminants, as well as the proper management and abatement of public-health nuisances.

## *Organics (including Yard Waste)*

### **Ramsey County Organics Policies**

1. Ramsey County will work with local partners and consultants to divert organic materials from the residential and non-residential waste streams using a variety of organics management methods.
2. Ramsey County will use the EPA's food waste management hierarchy as guidance in making policy decisions about organic waste.
3. Separate management of organic waste is becoming a necessary component of waste management in Ramsey County. Ramsey County expects residents, businesses and institutions to make progress during the term of this plan to incorporate the separate management of organic waste, and recognizes that it is the responsibility of everyone in Ramsey County to meet that objective.
4. Ramsey County will lead by example, assuring that County property generating organic waste is designed and built for organics management, and that County organics management operations implement best-management practices.
5. Ramsey County will encourage the development of a market-driven approach to organic waste management, with strong participation by the private sector, and will consider regulatory approaches, to be determined based on up-to-date research as well as political and economic climate, if the market approach fails to meet objectives.
6. Ramsey County will work with municipalities, school districts, institutions, and other non-residential generators to assure that organics management opportunities are maximized.
7. Ramsey County will use its resources in a strategic manner to assure that residents and non-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.
8. Ramsey County supports organic-waste collection options that allow for the bi-weekly collection of non-putrescible wastes.
9. Ramsey County supports reduction of soft-bodied yard waste through on-site management and reduction of tree and shrub waste through proper urban forestry practices.
10. Ramsey County will operate a system of yard-waste sites that are convenient, provided at no charge to site users, and only for residents of Ramsey County. Commercial yard-waste haulers, lawn services, and tree services are prohibited from using County yard waste sites.

## Ramsey County Organics Strategies

1. Ramsey County municipalities shall offer residents the opportunity to recycle organic materials by the end of 2016.
2. The County will evaluate progress in meeting the State's policy plan objectives for organic waste management, as well as the level of service availability and the status of the market for organic waste management. Should the evaluation show that there is not significant progress towards enhancing organics collection by 2017, the County will explore the use of regulatory tools.
3. Ramsey County will develop and implement an outreach and education program, technical assistance and consultation program, and a targeted grants program for non-residential generators of organic waste and recyclables. The County will evaluate and may provide financial support to stimulate the market for non-residential organic waste management. Ramsey County will coordinate this program with Washington County through the Ramsey/Washington County Resource Recovery Project.
4. Ramsey County will work with the SWMCB to explore the expansion of regional hauler licensing to include organics haulers.
5. Ramsey County will work with other agencies and entities to identify and monitor current and emerging diseases and insect threats to the urban forest, including Emerald Ash Borer, which may affect the volume of yard waste managed at County yard-waste sites, and will respond as appropriate.
6. Ramsey County will continue to operate its system of seven yard-waste sites. The County will continue to accept soft-bodied yard waste at all sites and tree and shrub waste at four of the sites. The County will periodically review aspects of its yard-waste management system, which could lead to improvements in operation.
7. Ramsey County will provide compost and wood mulch, when available, at the yard-waste sites, at no charge to County residents. Ramsey County will provide access to compost and wood mulch, when available, to government agencies and other public entities, including community gardens. Saint Paul – Ramsey County Public Health will develop criteria to manage requests for finished compost and mulch from government agencies, community gardens, and public entities.
8. Ramsey County will work with other entities to promote availability of products such as backyard composting bins and rain barrels that provide sustainable approaches to managing organic waste and storm water.
9. Ramsey County will provide access to its property at the Frank and Sims yard-waste site called the "Big Urban Woods" through joint powers agreements with participating schools, for use as a School Forest. Ramsey County will work with the schools, the Department of Natural Resources, the University of Minnesota's Extension Service, and community groups to develop and maintain the property as a School Forest.

10. Ramsey County will allow community groups to use the yard waste sites to provide public service, and fundraising, that enhances public service, improves quality of service to County residents, promotes civic engagement, and encourages physical activity.



## **Ramsey County Processing Policies**

1. Consistent with the State hierarchy, Ramsey County affirms processing of waste, for the purpose of recovering energy and recyclable and other beneficially useful materials, as the preferred MSW and non-MSW management method over landfilling for waste that is not reduced, reused, or separately recycled or composted. This policy applies both to waste generated throughout the county and specifically to MSW generated by public entities including contracts for organized collection of solid waste. Pursuant to State law, public entities in Ramsey County will assure that MSW that they generate or contract for is processed rather than land disposed.
2. Ramsey County supports the processing of waste in a manner that encourages waste reduction, reuse or recycling, including the separate management of organic waste.
3. Ramsey County supports a merchant approach for waste processing, in which the financial risk and benefit of owning and operating a waste-processing facility rests with the private sector.
4. As part of the merchant approach, Ramsey County expects the following objectives to be met by waste-processing facilities operated by the private sector that serve the County:
  - a. Waste haulers that serve Ramsey County will have access to processing facilities.
  - b. Public entity waste will be accepted at the lowest price offered at processing facilities.
  - c. Processing facilities will receive sufficient waste and tipping fee revenue to be sustained as a viable competitive solid waste management business.
  - d. Processing facilities will meet performance requirements established in law.
5. Ramsey County seeks to eventually eliminate any public subsidy, in the form of Processing Payments or Hauler Rebates, for waste processing. Recognizing that market forces are out of the County's control, some subsidy to assure continued waste processing may be needed.
6. In the event of a failure of the solid-waste market to support a merchant approach or other County environmental goals, Ramsey County will consider the following actions:
  - a. Seek to acquire the Resource Recovery Facility in Newport, to maintain its operation as a resource recovery facility – this includes consideration of public operation and the use of flow-control; and/or
  - b. Pursuant to action taken following the Public Collection study in 2001-2002, move forward with design of a public collection system for residential and commercial solid waste to achieve environmental goals and protect public health and safety; and
  - c. Intervene in the market and use public funds to encourage processing.

## Ramsey County Processing Strategies

1. Until termination of the Processing Agreement for the Resource Recovery Facility in Newport at the end of 2012, Ramsey and Washington counties will coordinate resource recovery activities through the Ramsey/Washington County Resource Recovery Project.
2. Ramsey and Washington counties will continue to work cooperatively on specific waste management issues through a joint powers agreement after 2012 to enhance the efficiency of waste management services and assist in achieving regional goals in processing.
3. Until termination of the Processing Agreement for the Resource Recovery Facility in Newport and during merchant operations, Ramsey County will inform and work with municipalities and refuse haulers regarding methods to reduce delivery of unacceptable or non-processible materials to the Facility.
4. Ramsey County will work cooperatively with the Minnesota Pollution Control Agency as the State enforces provisions found in Minn. Stat. §473.848, requiring waste to be processed before land disposal. Ramsey County adopts the MPCA criterion for determining when MSW is unprocessable. That criterion is found in Appendix D of the Policy Plan, and reads, in part: “TCMA mixed MSW is unprocessable when all reasonably available capacity within the TCMA processing system is fully utilized at 100% of its operating capacity.”
5. Ramsey County will continue to identify and evaluate waste processing issues, such as monitoring merchant operations and exploring new processing opportunities.
6. Ramsey County will work with public entities (as defined by Minn. Stat. §115A.471) and the MPCA to ensure MSW is delivered to a processing facility, including evaluating the amount of MSW generated by public entities, and the volume delivered for processing.

### **Ramsey County Recycling Policies**

1. Ramsey County requires municipalities to assure recycling service is available to all residents at their place of residence, including multi-unit dwellings. Ramsey County encourages a level of service that will maximize residential recycling.
2. Recycling is a necessary component of waste management in Ramsey County. Ramsey County expects residents, businesses and institutions to incorporate recycling into the handling of discarded materials, and recognizes that it is the responsibility of everyone in Ramsey County to achieve State recycling goals.
3. Ramsey County will lead by example, assuring that County-occupied property is designed for recycling, that employees and users of County property have the opportunity to recycle, and that County recycling operations implement best-management practices.
4. Ramsey County will work with municipalities, school districts and other public entities to assure that recycling opportunities are maximized. The County will use outreach and education, planning and evaluation, regulation, financial incentives, technical assistance and consultation to accomplish recycling objectives.
5. Ramsey County will provide financial support to municipalities using State SCORE funds, when those funds are available, to support municipal recycling and related programs, subject to SCORE grant requirements.

### **Ramsey County Recycling Strategies – County-specific**

1. Ramsey County will assure that all County-occupied property is designed or remodeled to include sufficient space for the collection of recycling and waste collection. In addition, Ramsey County will assure that all County-occupied properties offer employees and visitors the opportunity to recycle and dispose of waste.
2. Ramsey County will ensure that all County-occupied spaces have recycling programs in place in accordance with State law that include, at a minimum, paper, cardboard, glass bottles, metal cans and plastic beverage and food containers, as well as organic waste when it is present in sufficient volumes.
3. Ramsey County will annually pass through a portion of SCORE funds received by the County to municipalities on a per-capita basis to provide partial support of municipal recycling and related programs, subject to SCORE grant requirements. Each year, the County will allocate about the same share of the total SCORE funds it receives as was allocated to municipalities in 2004 (approximately 84%).

### **Ramsey County Recycling Strategies – Residential**

4. Ramsey County requires each municipality to be responsible for developing a long-term financing mechanism to fund its residential recycling program.
5. Ramsey County allows municipalities use of the County's statutory service charge authority, through joint powers agreements with the County, to collect a municipal recycling fee for the municipality.
6. Municipalities must provide the following minimum levels of service: weekly or every-other-week collection, and collection of at least the following materials at curbside and multi-unit properties:
  - a. Mixed paper (e.g., mail, office and school papers)
  - b. Newspaper, inserts and phonebooks
  - c. Glossy paper (e.g., magazines and catalogs)
  - d. Corrugated cardboard (e.g., mailing boxes and moving boxes)
  - e. Paper board or boxboard (e.g., cereal boxes, shoe boxes, and boxes from toothpaste, medications and other toiletries)
  - f. Metal food and beverage cans
  - g. Plastic bottles (such as those for beverages, condiments, detergent, shampoo and body lotion)
  - h. Glass food and beverage containers.
7. Ramsey County expects municipalities to add materials to their collection streams as markets become available.
8. Ramsey County will develop and implement a performance scorecard for cities to measure their progress toward achieving recycling goals. Municipalities will work with Ramsey County to annually monitor progress in meeting recycling goals. Failure to meet stated goals will result in intensive collaboration with the County to identify and remedy gaps and, as a least-preferred consequence, will result in the County withholding SCORE grant funds.
9. Municipalities shall make their best effort to maximize collection and marketing of residential recyclable materials. Municipalities shall strive to avoid disruptions in established municipal recycling programs due to temporary difficulties in marketing specific materials.
10. Ramsey County will provide support to municipalities through the existing County Recycling Markets Support Fund and its guidelines.
11. If a municipality fails to demonstrate existing recycling service to all residents at their place of residence, including multi-unit buildings, the County will ensure provision of such service. In that event, the County will retain any portion of the municipality's SCORE grant sufficient to cover the County's cost to provide for that service, and will charge the appropriate party in the municipality for costs not covered by the municipality's SCORE grant.
12. Ramsey County will support municipalities in creating away-from-home recycling opportunities at locations such as parks, athletic fields, arenas, and recreation centers and at municipally sponsored events.

13. Ramsey County encourages and will support municipalities that work together to coordinate or consolidate recycling services, contracts, staffing, and outreach to increase recycling participation and quantities collected, save funds, develop expertise, and increase consistency and efficiency in service delivery
14. Ramsey County will offer technical assistance and consultation to public entities for recycling and other solid-waste issues, including offering contracted technical assistance to municipalities.

#### **Ramsey County Recycling Strategies – Non-Residential**

15. Ramsey County will collaborate with municipalities and others to perform a review of non-residential recycling services to determine levels of consistency, opportunities for co-collection with residential recycling, and other methods to increase collection of non-residential recyclables.
16. Ramsey County will review plans submitted by licensed food and beverage establishments, and ensure that licensees meet recycling requirements in the Food Protection Ordinance by Ramsey County. Ramsey County encourages Saint Paul and Maplewood to do likewise.
17. Beginning in 2012, Ramsey County will develop and implement a comprehensive non-residential recycling outreach program, including these elements:
  - a. outreach and education to increase awareness about recycling, including an east metro organics and recycling website targeting non-residential generators;
  - b. technical assistance and consultation, likely provided by one or more professional consultants, to assist non-residential generators in making decisions that maximize recycling; and
  - c. a targeted grants program for non-residential recycling.
18. Ramsey County will perform research, including an analysis of business-based GIS data, to identify and target non-residential sectors for organics and recycling outreach efforts. This research will highlight low-performing sectors as well as areas where outreach efforts are likely to achieve the greatest impact on higher recycling rates.
19. The County will evaluate and may provide financial support to stimulate collection and marketing of recyclables through grant programs with public entities.
20. Ramsey County will use the CEC as an incentive for non-residential recycling and will promote the financial benefits of non-residential recycling.
21. The County will evaluate progress in meeting the State's policy plan objectives for recycling, as well as the level of service availability. Ramsey County supports efforts to work collaboratively to develop a standard non-residential recycling data collection program. Should evaluation of non-residential recycling show that there is not significant progress towards enhancing non-residential recycling collection by 2017, the County will explore the use of regulatory tools.
22. Ramsey County will work with the SWMCB to explore the expansion of regional hauler licensing to include recycling haulers.
23. Ramsey County supports SWMCB and MPCA efforts to standardize computation of non-residential and residential recycling rates.

## *Regulation*

### **Ramsey County Regulation Policy**

1. Ramsey County will assure compliance with applicable laws, rules and ordinances related to the management of solid and hazardous waste, as required by Minn. Stat. Sec. 473.811.

### **Ramsey County Regulation Strategies**

1. Ramsey County will implement its solid- and hazardous-waste compliance program focused on risk. Fees charged for regulated activities will be based on risk factors previously used by the County.
2. Ramsey County will require, as a condition of licensure, all waste haulers and transfer stations operating in the county to remove and properly manage any hazardous waste materials to assure that regulated hazardous waste is properly managed, and that regulated entities are aware of options that reduce the quantity and hazardous character of waste.
3. Ramsey County will work with the SWMCB to explore the expansion of regional hauler licensing to include non-MSW collectors as well as recyclers and organics haulers
4. Ramsey County will provide training, education and information to businesses and waste generators about hazardous waste collection and disposal options as well as information and technical assistance to waste generators and facilities regarding the management of hazardous wastes, reduction of the toxicity of materials, and the use of alternative products.

### **Ramsey County Source Reduction, Reuse and Conservation Policies**

1. Recognizing that source reduction results from systemic change, such as product stewardship initiatives or price signals that favor reduced waste, Ramsey County believes that the MPCA must lead source reduction innovations and measurement.
2. Ramsey County will support actions to reduce waste in its own operations in order to conserve natural resources and energy, reduce or eliminate toxins, support recycling markets, and reduce the need for landfilling.
3. In order to protect both the environment and public health, and conserve natural resources, Ramsey County will promote and take actions that conserve energy and reduce greenhouse gas emissions. Ramsey County will also encourage the use of renewable energy including the recovery of energy from waste.
4. Ramsey County will engage in environmentally preferable procurement and other practices, as required in State law and in ways that are consistent with environmentally preferable procurement practices established by federal guidelines, and will consider environmental factors when making purchasing decisions.

### **Ramsey County Source Reduction, Reuse and Conservation Strategies**

1. Ramsey County will encourage residential and non-residential generators to produce less waste.
2. Recognizing that the MPCA has the capacity to effect changes in waste behavior on a statewide basis, Ramsey County will participate with the MPCA in the development and implementation of strategies to reduce waste.
3. Ramsey County will share information and technical expertise with municipalities so that they can work to promote innovative and effective ways of reducing waste generated by residents and businesses.
4. Ramsey County will promote a variety of reuse opportunities to residential and non-residential generators, through vehicles such as outreach, education and promotion of reuse markets.
5. Ramsey County will cooperate with the MPCA in measuring waste reduction on a statewide and regional basis.
6. Ramsey County will take a comprehensive, sustainable approach to building design, construction and remodeling (including materials selection), as well as daily operating practices, taking into consideration energy efficiency, conservation and environmental impacts.
7. In support of the stated environmentally preferable purchasing policy, Ramsey County will develop a framework for purchasing that simply and easily guides the buyer within an organization toward environmentally preferable alternatives.



8. Ramsey County will work with municipalities and community partners to identify innovative ways to reduce waste generated at public events and venues, under the Green Gatherings model.

### **Ramsey County Toxicity Reduction Policies**

1. Ramsey County supports a product stewardship approach in which products with a toxic or hazardous character are best managed through shared responsibility by manufacturers, distributors, retailers, and consumers. The County will implement residential collection systems only until product stewardship systems are reliably in place for toxic and hazardous materials.
2. Ramsey County will provide for household hazardous waste (HHW) management services at a level of convenience and financial accessibility to encourage proper management and that is compatible and consistent with other programs in the region, at the same time encouraging the reduction of the amount of HHW generated.
3. The Ramsey County HHW collection program will provide for management of HHW in a cost-effective manner that minimizes risks to public health, occupational health, property and the environment, and continues to share with the State of Minnesota the potential risks associated with managing HHW.
4. Ramsey County will contract with the private sector for HHW collection services, provided that doing so will protect public health and the environment and that cost and risk factors are similar to or more favorable than public operation of part or all of HHW collection services.
5. Ramsey County supports the use of less toxic products and materials in industries that use them for manufacturing and other business activities.

### **Ramsey County Toxicity Reduction Strategies**

1. Ramsey County will provide and promote convenient collection of HHW at both a year-round facility and at collection events held at various sites during spring, summer and fall.
2. Ramsey County will periodically review the list of items currently or potentially acceptable at HHW sites, determine how these items should be collected and managed, and determine how management of specific materials should be paid for, with particular attention to:
  - a. wastes that pose hazards for residential waste collectors or processors;
  - b. products that are banned from use;
  - c. hazardous or problem materials for which there are not convenient private-sector collection options; and
  - d. wastes identified in statutory disposal restrictions.
3. Ramsey County will allow for the management of HHW that is inappropriately dumped at municipal or County facilities and properties, or is recovered during the abatement of public health nuisances, through its HHW program.
4. Ramsey County will manage its HHW and yard-waste sites in accordance with the Ramsey County Storm Water Management Plan.

5. Ramsey County will evaluate the opportunity for privately provided HHW collection services to be provided to a county-owned building.
6. Ramsey County will provide for a product reuse area at its year-round HHW facility.
7. Ramsey County will provide, through its HHW vendor, fee-for-service collection for very small quantity generators of hazardous waste.
8. Ramsey County will collect pharmaceutical waste through its HHW program until a product stewardship approach is implemented statewide.

## Appendix I: Solid Waste Management System Description

### Overview

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 to not pass 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 (*Minn. Stat. Section 115A.02, as amended*) identifies its (a) purpose and (b) the waste management hierarchy as:

**(a)** *It is the goal of this chapter to protect the state's land, air, water, and other natural resources and the public health by improving waste management in the state to serve the following purposes:*

- (1) reduction in the amount and toxicity of waste generated;*
- (2) separation and recovery of materials and energy from waste;*
- (3) reduction in indiscriminate dependence on disposal of waste;*
- (4) coordination of solid waste management among political subdivisions; and*
- (5) orderly and deliberate development and financial security of waste facilities including disposal facilities.*

**(b)** *The waste management goal of the state is to foster an integrated waste management system in a manner appropriate to the characteristics of the waste stream and thereby protect the state's land, air, water, and other natural resources and the public health. The following waste management practices are in order of preference:*

- (1) waste reduction and reuse;*
- (2) waste recycling;*
- (3) composting of yard waste and food waste;*
- (4) resource recovery through mixed municipal solid waste composting or incineration;*
- (5) land disposal which produces no measurable methane gas or which involves the retrieval of methane gas as a fuel for the production of energy to be used on-site or for sale; and*
- (6) land disposal which produces measurable methane and which does not involve the retrieval of methane gas as a fuel for the production of energy to be used on-site or for sale.*

The Minnesota Pollution Control Agency (MPCA) is responsible for establishing solid waste policy and planning in accordance with the Waste Management Act. The guiding document for the metropolitan area is the *Metropolitan Solid Waste Management Policy Plan 2010-2030* (Policy Plan) developed jointly by the MPCA and the Solid Waste Management Coordinating Board (SWMCB). The Policy Plan has the effect of law and sets the standards against which local solid waste plans are reviewed and approved. The vision and goals in the Policy Plan provide the foundation for both regional and county-specific solid waste master plans. The Policy Plan, the SWMCB regional master plan and the county master plans work in concert to assure that the solid waste system addresses the environmental and health goals established in law. Waste management plans are written, reviewed and approved by the MPCA. Ramsey County uses the goals and policies set forth in the Policy Plan to update its plan.

Waste is complex. Waste is much more than what most people think is garbage, refuse, or trash. Waste is anything that a household, business or institution no longer needs. Waste can be relatively harmless, or be toxic or potentially harmful. The State of Minnesota has crafted a variety of laws and rules that regulate trash so that risk to public health and the environment can be managed. For example, products that contain mercury are banned from the trash, and have to be managed separately. Wastes that are

toxic, corrosive, flammable and that are produced by businesses are strictly regulated by federal, state and local law. Because waste is complex, the “waste management system” is complex, and is actually a large number of smaller systems put in place to safely handle discarded materials.

Except for yard waste and household hazardous waste (HHW), the County does not directly collect, handle or manage waste. State law includes a preference for private-sector management of waste. Many entities, including for-profit-businesses and non-profits, provide a wide array of waste management services throughout Ramsey County. To help accomplish the goals set by the MPCA and the standards set by Minnesota law, and to assure protection of the environment, public health and safety, Ramsey County uses a variety of tools. Examples include:

- **Regulation**, such as adopting ordinances to establish standards, licensing of hazardous waste generators, waste haulers and solid waste facilities, assuring compliance through training and consultation, inspecting licensees, and taking enforcement action when necessary.
- Providing **direct services**, including yard waste sites operated by the County to allow residents to deposit yard waste at no charge.
- **Contracting for services**, such as the household hazardous waste service provided by Bay West to residents of the county, joint powers agreements to share services with other counties, or contracting with RRT for waste processing services.
- **Providing grants**, such as using SCORE funds from the state to provide grants to municipalities to assist the delivery of recycling services, or Community POWER grants to organizations within the County.
- **Financing** County activities with the County Environmental Charge which is designed to reflect the volume of waste generated and to encourage recycling.
- Reaching broadly across and deeply into the community to provide **educational opportunities and innovative communication tools**, focused on community and putting how-to information in the hands of businesses and citizens, with special emphasis on reaching communities with limited-English proficiency.
- Providing **consultation and technical assistance**, such as pollution prevention advice to businesses or working with schools on food waste recycling.

### Demographics

Ramsey County is the smallest county geographically and the most densely populated in Minnesota. Its U.S. Census population was 511,035 in 2000 and 508,640 in 2010, and the number of households was 201,236 in 2000 and 202,691 in 2010. According to Metropolitan Council population forecasts, Ramsey County is the slowest growing of the metropolitan counties. While pockets of developable land remain, the vast majority of Ramsey County is fully developed. However, redevelopment continues to occur throughout the county.

Ramsey County’s population is becoming increasingly diverse in terms of race, culture, and language. Table 1 shows the population breakdown by race and ethnicity.

**Table 1: Race and Ethnicity in Ramsey County, 2005-2009 Average***Source: American Community Survey 2005-2009 5-Year Average*

	<b>Estimate</b>	<b>Percent</b>
<b>One race</b>	<b>487,199</b>	<b>97.4%</b>
<b>Two or more races</b>	<b>13,237</b>	<b>2.6%</b>
White	380,709	76.1%
Black/African-American	45,018	9.0%
American Indian/Alaska Native	3,236	0.6%
Asian	48,273	9.6%
Native Hawaiian/Other Pacific Islander	83	0.0%
Other race	9,880	2.0%
Hispanic/Latino (any race)	31,745	6.3%

Ramsey County includes all or part of 19 communities, the largest of which is the City of Saint Paul. The 2010 Census population for the Ramsey County portion of all communities is shown below in Table 2. (Note: The Ramsey County Solid Waste Master Plan focuses on 17 communities. The cities of Blaine and Spring Lake Park, with almost all of their populations in Anoka County, are addressed in Anoka County's plan.)

**Table 2: 2000 and 2010 Census Population for Communities in Ramsey County**

<b>Municipality</b>	<b>2000 Population</b>	<b>2010 Population</b>
Arden Hills	9,652	9,552
Blaine (part)	0	0
Falcon Heights	5,572	5,321
Gem Lake	419	393
Lauderdale	2,364	2,379
Little Canada	9,771	9,773
Maplewood	35,258	38,018
Mounds View	12,738	12,155
New Brighton	22,206	21,456
North Oaks	3,883	4,469
North St. Paul	11,929	11,460
Roseville	33,690	33,660
St. Anthony (part)	2,348	3,070
Saint Paul	286,840	285,068
Shoreview	25,924	25,043
Spring Lake Park (part)	105	178
Vadnais Heights	13,069	12,302
White Bear Lake (part)	23,974	23,394
White Bear Township	11,293	10,949
<b>RAMSEY COUNTY</b>	<b>511,035</b>	<b>508,640</b>

## Waste Generation

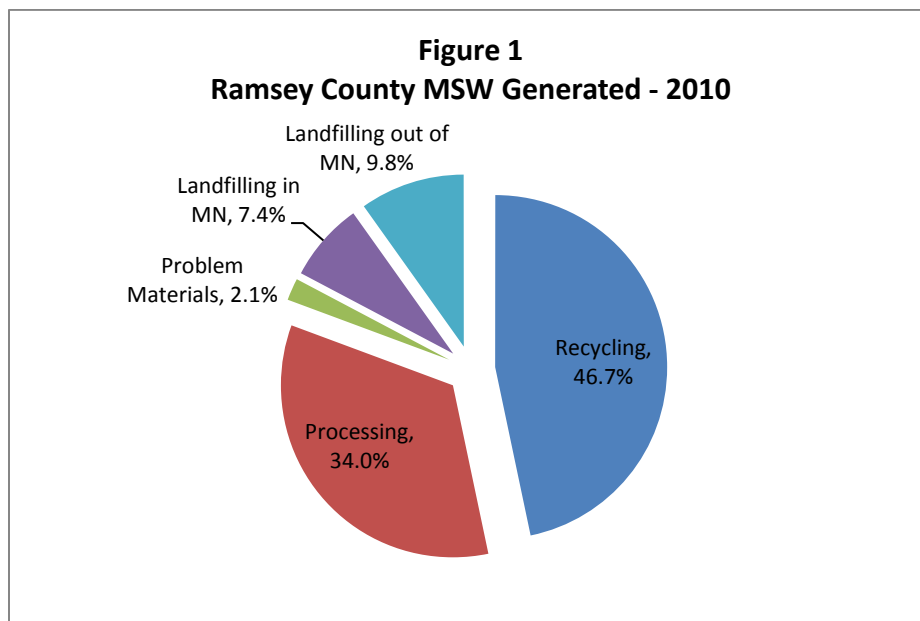
Waste is called many things – garbage, trash, waste, refuse, rubbish, solid waste – and is generated from many sources. Waste is classified into a few basic categories defined by state and federal regulations. Residential or municipal waste is generated by people where they live. Commercial or non-residential waste is generated by organizations such as businesses, schools, hospitals and malls. Industrial waste is generated during the manufacturing of products. Construction and demolition waste is generated by all of these sectors but is related to building, remodeling and demolition.

Much of the residential and non-residential waste generated is called mixed municipal solid waste or MSW for short. MSW includes recyclable materials and non-recyclable wastes that are generated through the normal course of a day.

Ramsey County reported about 630,000 tons of MSW generated within the County during 2010. This total does not include an additional 68,000 tons yard waste managed at Ramsey County yard waste sites. Of the total, shown in Figure 1:

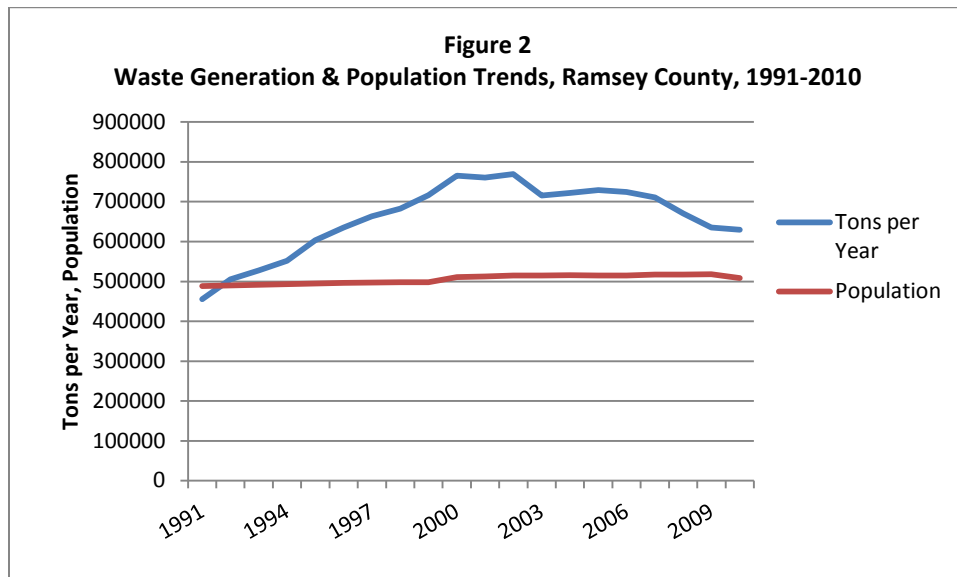
- 46.7% was recovered for recycling. The State of Minnesota awards a 3% credit for source reduction activities and a 5% credit for yard waste collection if counties meet certain criteria. These credits are applied to the total recycling number and increase the County's reported recycling rate to 54.7%.
- 34.0% \* was delivered to the RRT-Newport waste processing facility. Most was converted to refuse- derived fuel (RDF) after metals were removed for recycling.
- 2.1% was separately managed as problem materials. These materials are not recycled, and not processed at an MSW facility. Problem materials include tires, used oil and white goods (stoves, washers, etc.).
- 17.2% was landfilled as unprocessed waste. 9.8% of this waste was delivered to landfills outside of Minnesota and 7.4% to landfills within Minnesota. This total does not include any waste delivered to RRT-Newport.

\*The percentage changes to 35.2% when recycled metals at RRT-Newport are included. However, this material is already included in the 46.7% recovered for recycling.





Typically, waste generation has grown faster than population. Each person in Ramsey County produces about 7 pounds of waste (including recyclables) at home and at work or school each day. The recent downward trend can be attributed, in part, to the downturn in the economy (see Figure 2).



### **Waste Reduction and Reuse**

Ramsey County encourages waste reduction in its technical assistance, outreach and marketing activities. The County uses a variety of methods in its extensive efforts to provide information to the public on waste reduction and reuse, as well as other solid waste management issues. Print materials, electronic media, training, phone service and partnerships are the core delivery methods.

Ramsey County offers financial and staff support to Community POWER (Partners On Waste Education and Reduction) through the Solid Waste Management Coordinating Board (SWMCB). Staff members are part of a team to develop Environmentally Preferable Practices (EPP) policies and educate people on options to reduce what they buy. Through the Ramsey/Washington Counties Resource Recovery Project, Ramsey County works with Second Harvest Heartland to significantly expand food rescue with emphasis on larger grocery stores. Food rescue means that healthy and safe food can be redirected to organizations feeding people instead of throwing the food in the trash.

As an organization, Ramsey County:

- Purchased an electronic document management system to reduce paper usage.
- Supports an Earth Action Challenge for employees.
- Hosts a joint team between the City of Saint Paul and Ramsey County to evaluate opportunities to buy more environmentally preferable products and enhance contract specifications.
- Distributes a joint Ramsey County/City of Saint Paul newsletter focused on purchasing, Green Alternatives, quarterly to all City and County staff. Staff members participate in the GREEN Group, convened by the Minnesota Pollution Control Agency (MPCA) to network and coordinate activities around EPP.
- Partners with organizations to provide the opportunity for interested residents to purchase backyard composting bins for food waste and yard waste.

- Created and marketed the reusable transport packaging program with other metropolitan counties.
- Promotes and provides funding for reuse opportunities, including the Twin Cities Free Market.
- Is partnering with the ReUse Alliance pilot project funded by the MPCA for one year to establish measurement tools for reuse.

## **Waste Collection**

Metropolitan counties licensed 230 waste haulers to collect and transport MSW in 2010. Of these, 21 waste hauling firms are based in Ramsey County. Ramsey County issued operating licenses to an additional 65 waste haulers based in other counties.

Ramsey and Washington counties track waste generated in both counties and delivered to RRT-Newport's processing facility. For waste generated in the two counties during 2010 and delivered to RRT-Newport, the largest three waste hauling firms collected and delivered 56% and the ten largest haulers collected and delivered 87%.

Municipalities in Ramsey County require people who generate waste – both at home and at work – to contract for regular waste collection service. Residents in five communities in Ramsey County are served by organized collection. Organized collection means that the city or township arranges for waste collection for all of its residents, or at least all single-family residential properties, by contract with one or more waste haulers. Little Canada, North St. Paul, Vadnais Heights, White Bear Lake, and White Bear Township have organized collection. The other residents and all businesses, industries, and institutions are served by open collection, also known as “subscription service.” This type of collection means that waste generators contract directly with a waste hauler of their choice.

Waste haulers take MSW directly to RRT-Newport, to a transfer station, or to a landfill. Waste generators can also haul their own waste to transfer stations in the county, RRT-Newport, or to transfer stations or landfills in other counties.

## **Facilities and Hauler Rates**

There are three solid-waste facilities open to the public for disposal of solid waste in Ramsey County: J & J Recycling, Inc, Twin City Refuse & Recycling Transfer Station, Inc, and Veolia ES Vasko Solid Waste, Inc. Information on the rates and charges for these three facilities is included in annual license applications submitted to the Department of Public Health, demonstrating that they adhere to statutory volume-based fee requirements. There are three transfer stations in Ramsey County not open to the public (Veit, Keith Krupenny and Ray Anderson & Sons). As they are not open to the public, there is no schedule of rates and charges.

Ramsey County does not collect data on rates and charges for licensed waste haulers that serve residential and commercial waste generators. Several municipalities gather this information for residents within their community. Five municipalities in Ramsey County have contracted for both residential refuse and recycling collection for more than 20 years: Little Canada, North St. Paul, Vadnais Heights, White Bear Lake, and White Bear Township. Table 3 reflects prices residents paid in 2011 for curbside collection of refuse 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.) Rates shown include all applicable services when residents choose 30-38 gallon, 60-68 gallon, or 90-96 gallon refuse collection service levels (other rates, such as for unlimited service or a senior rate, are not included). The State Waste Management Tax (9.75%) and Ramsey County Environmental Charge (28%

for residential) are included. Note that rates are shown per month, but actual billing may be on a different basis. Note that Maplewood, which already contracts for recycling collection, has also approved a contract for refuse collection for which service will begin in late 2012.

**Table 3: 2011 Rates by Service Level for Municipalities in Ramsey County that Contract for Residential Refuse and Recycling Collection**

Municipality	Total Monthly Price for Base Services			Base Services Included in Addition to Refuse and Recycling Collection
	30-38 Gallon	60-68 Gallon	90-96 Gallon	
Little Canada*	\$18.10	\$20.98	\$25.01	Bulky items/appliances; holiday tree
North St. Paul	\$21.91	\$23.48	\$26.49	Bulky items/appliances; holiday tree
Vadnais Heights	\$18.01	\$20.94	\$25.01	Bulky item; holiday tree
White Bear Lake	\$12.04	\$17.71	\$24.09	-
White Bear Township**	\$20.22-\$22.45	\$21.79-\$24.52	\$25.19-\$28.42	Bulky items/appliances; holiday tree; yard waste

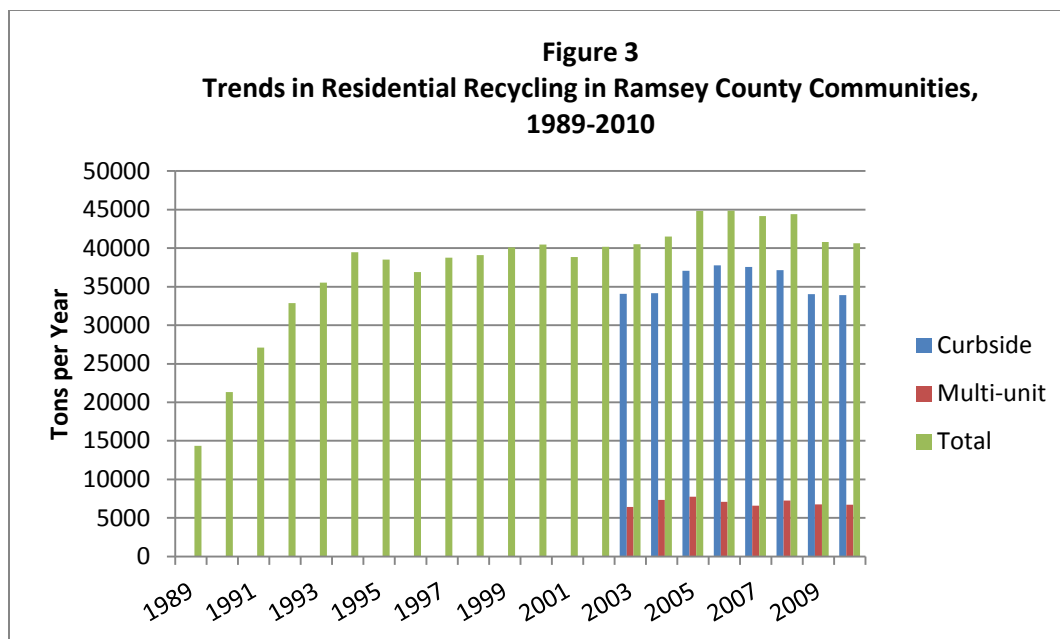
\*Reflects rates paid by most residents.

\*\*Range reflects residents providing their own garbage containers vs. cart provided by hauler.

## Recycling

In 1990, Ramsey County introduced a system to assure residents the opportunity to recycle and since that time has had a stable and growing residential recycling program. Most municipalities contract with one or more haulers or recycling collectors to provide curbside service. Two municipalities (Mounds View and St. Anthony) provide for curbside service by an ordinance requiring licensed waste haulers to provide a specified level of recycling service to their customers.

For multi-unit housing, some municipalities provide service to using the same contract as for curbside recycling, some require by ordinance that licensed waste haulers provide recycling service, and some rely on arrangements by building management through ordinance requirements. All municipalities provide for collection of at least four broad materials (e.g., paper/cardboard, metal, plastic, glass, textiles), at least every other week. As shown in Figure 3, curbside recycling tonnage has been relatively stable at around 40,000 tons per year for about a decade.



Municipal recycling programs use SCORE grants\* and long-term financing mechanisms to fund residential recycling programs. The County is able to offer SCORE grants to cities to support a basic level of service for residential recycling. Each municipality maintains long-term financing mechanisms for recycling. Six cities have a joint agreement with Ramsey County for the collection of a municipal recycling fee while the other cities collect funds through other means such as utility bills.

*\*SCORE grants originate from the SCORE (Select Committee on Recycling and the Environment) program administered by the Minnesota Pollution Control Agency, and funded by the State Waste Management Tax assessed on garbage bills.*

The vast majority of recycling activity in the non-residential sector occurs by private-sector arrangement. Most commercial waste haulers in the County offer some kind of recycling service to their customers, although the types of materials collected and collection arrangements vary significantly. A number of material brokers and businesses specializing in recycling services also provide recycling options for a wide variety of materials. There are specialty recyclers as well, such as confidential records destruction firms that recycle paper, metal recyclers, electronic recyclers, and carpet recyclers.

The Twin Cities are fortunate to be home to manufacturing firms that use recycled materials as feedstock for new products. From the Rock-Tenn paper mill to Anchor Glass, there are local markets for many of the recyclable materials generated in Ramsey County. Since the mid-1980s Ramsey County has assumed a role in helping guarantee market availability for recyclable materials collected in municipal programs. After providing a County recycling center from 1984 – 2000, the County has provided this role through a Recycling Market Support Fund to assume some of the risk faced by municipalities in collecting and marketing recyclables. The County also provides on-going technical assistance for recycling available to municipalities. In addition, the County supports the Minnesota Pollution Control Agency’s efforts to develop new, local recycling markets.

The County Environmental Charge (CEC - see “Cost and Finance” below) was partly developed as an incentive, especially for non-residential waste generators (businesses, schools, colleges), to increase recycling. Both traditional recyclables and organic waste are exempt from the CEC when recycled. With the development of the CEC in 2003, Ramsey County through the Ramsey/Washington Counties Resource Recovery Project greatly expanded work on food waste and organics management to provide

consulting, outreach services and information to organic-rich entities.

Initiated by Ramsey County, GreenGatherings offered an exceptional opportunity for a public-private partnership to reduce waste and increase recycling during the Republican National Convention and has resulted in the development of a comprehensive guide to help planners for events of all sizes learn why going green matters and what could work for them. Resources include planning guides, tips and case studies. The partnership was significant as it allowed an increase in awareness and collection of traditional recyclable materials and organic waste at special events and festivals. Businesses are encouraged by County staff to adopt Environmentally Preferable Practices (EPP) and to access resources such as MnTAP, Waste Wise and the Resourceful Waste Management Guide to enhance recycling programs.

On-going efforts to increase recycling within Ramsey County as an organization include:

- “3 Ways You Can Help Ramsey County be an Environmental Leader” is provided for new employee orientation.
- Information on recycling systems in several county buildings is provided on the intranet.
- Earth Action Challenge education campaign is offered for County employees.
- Recycling is available at all Ramsey County facilities including parks, beaches, golf courses and ice arenas.
- County departments purchase recycled products – from paper to motor oil to road aggregate.

## **Organic and Yard Waste Management**

### **Organic Waste Management**

Upon introduction of the County Environmental Charge, Ramsey and Washington counties greatly expanded their joint efforts to increase the diversion of food waste and other organics from the trash. Organic waste is defined in state law but is commonly thought of as kitchen scraps. Through the Resource Recovery Project (RRP), Ramsey County provides outreach services and increased information to organic-rich businesses and institutions. Since 2003, the RRP has retained both staff and consultants who provide extensive outreach services – especially to schools. Services focus on food waste since it is easy to understand and to separate from garbage.

### **Food Rescue through Second Harvest Heartland**

In 2008, the RRP and Second Harvest Heartland (SHH) entered into a grant agreement to significantly increase the quantity of edible, perishable foods recovered from deli, dairy, meat, produce, and bakery departments in major grocery store chains to feed hungry people. As a result, the quantity of food waste recovered by SHH within the County has steadily increased.

### **K-12 Schools**

The RRP continues to work with K-12 schools in both Ramsey and Washington counties, providing technical assistance and liaison services for the implementation of food waste recovery and recycling systems. Food waste recycling can result in cost savings when coupled with “right-sizing” of garbage collection to reduce pick-up frequency and/or container size.

Ramsey County highlights include:

Roseville Area Schools

Recycling throughout the schools continued and a “How to” recycling DVD was prepared for other schools and districts to use as an educational tool.

Saint Paul Public Schools (SPPS)

All SPPS elementary and many middle and high school facilities recycle food waste. 1,691 tons of food waste were collected in SPPS in 2010.

White Bear Lake Schools

Both middle schools began food waste recycling and both high school campuses continue to recycle the kitchen food waste.

## **Research**

To more fully understand the opportunities and barriers relates to the development of an organics-management system, the Resource Recovery Project (RRP) commissioned a number of studies of organic waste generators. The first, “An Integrated Organic Waste Management System: From the Perspective of Commercial Waste Generators, 2010” analyzes anaerobic digestion as a new organic waste management concept from the perspective of commercial waste generators located in Ramsey and Washington counties by exploring logistics of daily operations, types of upfront costs, and changes in the configuration of waste management services. The second, “Organic Materials from Commercial Establishments: A Supply Assessment, 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. Both are available on the RRP website.

## **Yard Waste Management**

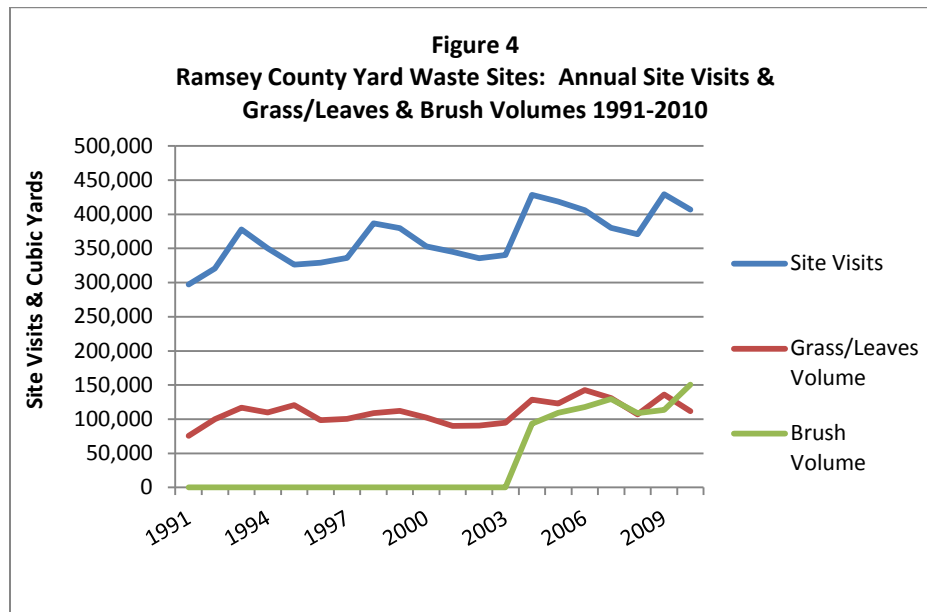
State law prohibits yard waste from being put in the trash or being disposed of in a landfill or resource recovery facility. Yard waste is defined in law to include leaves, grass clippings, garden waste, and tree and shrub waste. A combination of public and private systems provides generators of yard waste with several management options.

Ramsey County operates a network of seven yard waste collection sites. Begun as neighborhood or municipal sites during the 1980s, the sites became exclusively operated by the County after the statutory yard waste ban went into effect in 1990. The sites are open 38 hours per week, five days per week, from April through November, weather permitting, and are also open one weekend per month during winter. Each site has at least one site monitor present, employed by the County, to direct and assist residents and to prevent illegal dumping. There are no user charges at the sites. The County composts leaves at one site and distributes finished compost to all sites for residents to take. Compost is also made available for community gardens.

Beginning in 2004 the County began accepting tree and shrub waste from residents at four of the seven sites. The material is processed into wood mulch, most of which is combusted to produce energy. Wood mulch is also provided to residents.

Figure 4 presents the annual number of visitors to the Ramsey County sites, and the estimated volume of yard waste, both leaves/grass and brush (tree and shrub waste) received, from 1991 through 2010. On average the sites receive about 400,000 site visits annually and about 125,000 cubic yards of yard

waste and 120,000 cubic yards of brush. The estimated annual cost of operation and maintenance of the yard waste sites is \$1.3 million.



The County encourages residents to reduce the amount of yard waste and brush they generate through changes in turf and tree management (e.g., leaving grass clippings on the lawn and avoiding excessive fertilization), backyard composting, and proper selection, planting, and care of trees and shrubs. The University of Minnesota's Extension Service, through a contract with the Department of Public Health, provides information on lawns, trees and gardens to residents, primarily through the Master Gardener program.

#### **Private and Municipal Sites and Transfer Stations**

For a fee, residents and businesses may deliver yard waste to private yard waste sites and solid waste transfer stations located both within and outside the county. Rates charged may vary by site, by type of material, and by quantity. Residents of the City of Roseville may, at no charge, bring leaves to a City compost site in spring and fall.

A number of communities, including both municipalities and neighborhood community councils in Saint Paul, have offered residents opportunities to dispose of tree and shrub waste at municipally sponsored cleanup events or other locations. Typically, but not always, a fee is charged.

#### **Yard Waste Collection at Home**

The vast majority of residents are served by waste haulers offering separate collection of yard waste, including tree and shrub waste. Rates vary: increasingly haulers are charging for season-long pickup although some charge for individual pickups. In the five communities with organized trash collection, residents are offered yard waste pickup, either as an optional cost or as part of the contracted service. Haulers typically specify preparation requirements, and some place limitations on the quantity collected per stop. Some lawn services and tree services also provide collection of yard waste.



## **Waste Processing and Landfilling**

The Ramsey/Washington County Resource Recovery Project (RRP) traces its history to a landfill that polluted groundwater in the late 1970s. The two counties jointly managed this landfill. After the pollution was discovered, county commissioners decided that there must be a better way to handle waste. This led to recovering energy from waste, and later to joint work on waste education and organics recovery. Processing waste to recover materials and energy is one of many tools in the waste management hierarchy used to reduce risk to health and the environment.

In 1987, both counties entered into a 20-year agreement with Northern States Power Company, and later NRG Energy, Inc., to process waste into fuel (known as refuse-derived fuel or RDF) and recover metals from waste to sharply reduce the amount of waste being landfilled. As the 20-year agreement with NRG Energy, Inc. was drawing to a close, the counties saw an opportunity to further explore a shift to less government involvement and a more market-based approach for the delivery and processing of waste at the Newport facility. The counties have worked with Resource Recovery Technologies, Inc. (RRT), through a 6-year Processing Agreement since 2007. In accordance with the processing agreement, RRT has the responsibility to secure waste by contracting with haulers and to continue production of RDF. The RRP places a heavy emphasis on minimizing the counties' dependence on landfills.

Since 1987, most of the waste generated in Ramsey and Washington Counties that hasn't been recycled has been delivered to the Resource Recovery Facility in Newport, Minnesota. Most of the waste is delivered by licensed waste haulers, but citizens also deliver waste to the facility. The RDF produced at RRT-Newport is delivered to Xcel power plants in Red Wing and Mankato and sometimes to Great River Energy in Elk River. Metals are recycled locally. The remaining residue is landfilled.

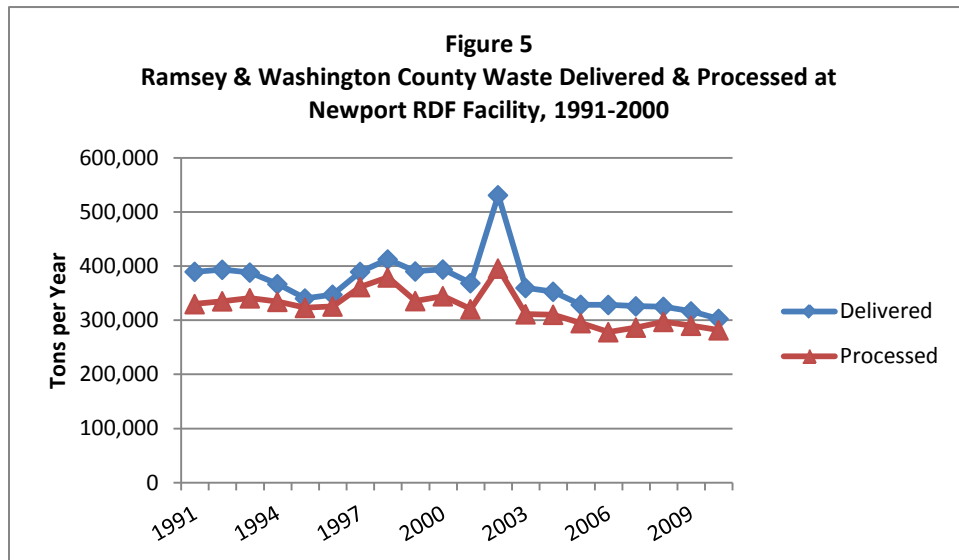
Currently, waste delivered to the Resource Recovery Facility is weighed at the scale house, dumped onto the tipping floor, and fed into one of two processing lines. An oversized bulky waste shredder is used as needed to shred items too large to be processed directly through the processing lines. Non-processible waste (as defined in the Service Agreement) and waste delivered in excess of processing capacity is transferred to a landfill. Small amounts of other materials, such as car batteries and tires, are sometimes found in the waste and separated by RRT for proper management. Waste is shredded in a large hammermill, ferrous metals are removed by magnets, aluminum is removed with an eddy-current separator, and the waste is sorted using a series of screens and blowers. The result is four waste streams: 1) RDF, primarily composed of lightweight materials; 2) ferrous metals recovered for recycling; 3) aluminum recovered for recycling; and 4) residue, comprising the remaining materials.

The Processing Agreement between the RRP and RRT requires RRT to manage and make available to residents of the two counties a location for depositing waste. Residential waste has been accepted at the Newport facility since the facility's inception. (Prior to 2009 RRT also provided for a drop-off site for citizen waste at the St. Paul Transfer Station; RRT's arrangement with the transfer station terminated in 2009.) A total of 1,081 tons of citizen waste was received in 2010, compared to 1,051 tons in 2009. Under the Processing Agreement, RRT is responsible for contracting with waste haulers for a supply of waste, assuring that at least 280,800 tons per year of waste are under contract, and meeting certain performance guarantees. RRT has entered into contracts with 79 haulers through 2012 and has met the minimum tonnage requirement.

In 2010, a total of 303,703 tons of waste from Ramsey and Washington counties was delivered for processing by haulers and citizens. This tonnage is a slight decrease from the 2009 amount of 317,589 tons. The long-term trends in both waste delivered and processed is shown in Figure 5. RRT-Newport is



considered a “merchant facility,” and can freely market its services. RRT is also able to secure waste from other counties which helps improve economic efficiencies. The total deliveries received at the facility, including waste from other counties, were 392,633 tons, a slight increase from 2009 amount of 391,329.



There are two performance guarantees in the processing agreement. The first guarantee is to process 85% of the Ramsey/Washington waste that RRT accepts. This was met by processing 91.5% in 2010. The second guarantee is to recover 85% of the waste processed as RDF or secondary materials (ferrous and aluminum). This guarantee was met by recovering 95.5% in 2010.

The other performance-related goal is to receive at least 280,800 tons per year from Ramsey and Washington counties. RRT received 303,703 tons from haulers and citizens.

### Landfilling

There are no operating landfills in Ramsey County. Some MSW generated in Ramsey County is delivered as unprocessed waste to landfills, located in Minnesota, Iowa and Wisconsin. Certain wastes from RRT-Newport are delivered to landfills (non-processible wastes, excess waste that bypasses the processing lines, and residue from the processing lines). A variety of non-MSW wastes generated in the county are also landfilled.

### Dump Inventory

Since 1988 Ramsey County has maintained an inventory of old dump sites to locate, identify, describe and document active and inactive solid waste disposal facilities, and dump sites in Ramsey County. The inventory includes known sites developed before regulations were in place, sites that operated under permits or other approvals and are now closed, solid waste disposal sites on the State Superfund list, and illegal dump sites. There are about 300 sites in the inventory, approximately 25 of which are sites that were at some time issued a permit or license to operate by a municipality, Ramsey County, or the MPCA.

### Hazardous Waste Management

Ramsey County emphasizes toxicity reduction to manage risks associated with waste. Proper management of hazardous materials can reduce health, safety, environmental and property risks. Federal law requires businesses that generate wastes to analyze that waste to determine if it is

hazardous. A waste is hazardous if it meets certain chemical or toxicity standards established in federal regulations. If wastes are corrosive, reactive, ignitable, toxic or lethal, or are listed for some reason, then they are required to be handled in a cradle-to-grave regulatory system. This regulatory system requires the wastes to be specially packaged, transported, handled and disposed, with a paper trail that follows the waste.

Most states regulate businesses that are considered “large quantity generators” (more than 2640 gallons of waste produced per year) or “small quantity generators” (264 gallons to 2640 gallons of waste produced per year). In those states, businesses that produce less waste are not strictly regulated, and it is more likely that hazardous waste from those businesses will end up in municipal solid waste. Minnesota, however, regulates all business generators including “very small quantity generators” (less than 264 gallons of waste produced per year) to assure that hazardous wastes do not enter MSW. The MPCA is charged with regulating hazardous waste in Minnesota. Ramsey County is required by Minnesota law to license generators, inspect facilities and enforce hazardous waste regulations.

### **Hazardous Waste Generators and Facilities**

Ramsey County licenses and inspects all businesses that generate and manage hazardous waste. In 2010 that was over 1,900 businesses, with 1,400 inspections. Ramsey County operates a volume-based fee system – license fees are structured to create an incentive for businesses to produce less hazardous waste.

Hazardous waste education for generators and other businesses through the Hazardous Waste Business Assistance program is a non-regulatory resource for businesses. Over 40 training sessions serving more than 750 people were held in 2010. In addition, *The HazWaste Quarterly*, a newsletter filled with useful tips and news, is sent to all licensed hazardous waste generators and 103 additional individuals. The website is regularly updated and in 2010 there were 1171 subscribers to the electronic version of *The HazWaste Quarterly*. Staff fielded nearly 3100 phone calls from businesses and conducted 257 site visits in 2010.

### **Pre-demolition Program**

Because Ramsey County is fully developed, almost all new construction in Ramsey County is preceded by demolition of some sort. The pre-demolition inspection program, created in 2008, addresses the need to identify, remove and properly manage hazardous materials prior to building demolition. This program is the first of its kind in Minnesota. The program encourages deconstruction, salvage and recycling. The regulatory standard for demolition contractors creates consistency, reduces the toxicity of wastes disposed, protects occupational exposure to hazards and reduces landfilling of wastes. Ramsey County staff work closely with local building and zoning officials and place a priority on integrating the pre-demolition program requirements within existing permitting processes. In 2010 the program worked on 169 demolition projects, and, as a result over 101,000 pounds of hazardous materials and problem materials were properly handled and kept out of landfills. The success of the program has been rooted in the collaborative relationships between the contractors, city staff, county staff and waste managers.

### **Auto Salvage Yard Initiative**

Staff initiated a collaborative compliance effort with the auto industry in 1996, which resulted in a significant improvement overall in compliance and adoption of Best Management Practices. The mercury-switch removal program piloted at auto salvage yards in Ramsey County is a national model.

### **Hospital Health Care initiative**

Staff initiated regional work with health care institutions on proper management of hazardous, solid,

and infectious waste. The collaborative compliance effort with the industry has resulted in significant changes and improvements in how waste, especially hazardous waste, in health care settings is managed. Over 30 trainings sessions have been attended by 1378 industry representatives and government inspectors.

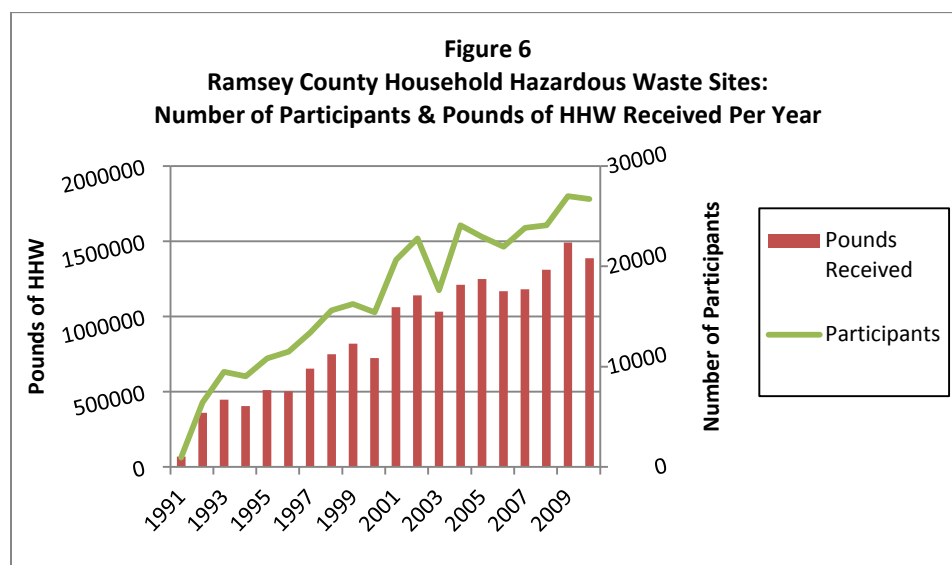
### Mercury-Free Zone

All public schools and several private schools in Ramsey County enrolled in the now-defunct Mercury-Free Zone program. 121 pounds of mercury was removed from Ramsey County schools before it could become a health problem.

### Household Hazardous Waste (HHW) Collection

Products used to clean kitchens and bathrooms, maintain cars and homes, and control rodents and insects contain harmful materials. When these products containing harmful materials are no longer needed, they are considered “household hazardous waste.” Ramsey County offers collection sites to prevent harm to human health and the environment.

Year-round drop-off site for HHW is located in the heart of Ramsey County, just north of downtown Saint Paul. Mobile collection sites are offered from spring to fall in Saint Paul, Roseville, Maplewood and Arden Hills. Used oil is collected year-round in Arden Hills. Participation in these programs continues a long-term upward trend, as shown in Figure 6 below.



Use of both the mobile and permanent HHW sites requires an individual to bring proof of residency, such as a driver's license or utility bill. For safety and convenience, technicians unload the HHW from private vehicles. Periodically people delivering waste to the HHW sites are asked to complete a short survey in order to help improve the HHW program.

### Banned From Disposal

Certain common household items are banned from disposal in regular garbage because they contain toxic materials. Recycling opportunities for residents exist through community clean-ups, HHW collection and many private companies. Businesses are required to manage the following wastes under regulation:

- Electronic waste or “E-waste” containing a cathode ray tube such as TVs and computers
- Major appliances (washers, dryers, refrigerators)
- Fluorescent lamps and bulbs

- Batteries (includes mostly rechargeable ones) containing lead acid, mercuric oxide, silver oxide, nickel-cadmium or other rechargeable batteries (vehicle and cell phone batteries)
- Motor oil, brake fluid, power steering fluid, transmission fluid, motor oil filters, or motor vehicle antifreeze
- Mercury and mercury-containing devices such as thermostats, thermometers, electric switches, appliances, gauges, medical or scientific instruments, or electric relay or other electrical devices from which the mercury has not been removed for reuse or recycling

### **Non-MSW Management**

"Non-MSW" is a term encompassing solid waste materials that are not managed as municipal solid waste. Non-MSW includes materials determined by the State to be problem materials (e.g., treated wood) and certain items specifically excluded from the statutory definition of MSW or otherwise managed as separate waste streams (e.g., agricultural waste, ash, construction debris, demolition debris, industrial waste, sludges, street sweepings).

Management of non-MSW occurs primarily through private sector services. Some materials are collected by haulers specializing in transporting particular waste materials, while some others may be collected by MSW haulers or delivered by the generator directly to a collection, transfer, or management facility.

Ramsey County participated in the development of several studies on non-MSW, including:

- Construction, Demolition, & Industrial (CD&I) Waste, 2006. This report was prepared by SWMCB, MPCA, and AMC's Solid Waste Administrators Association and focuses on what can be recovered for recycling or other productive use.
- Phase II of CD&I, 2008. This study focuses on wallboard, shingles, biomass fuel from construction and demolition debris, and mixed glass.

In addition, Ramsey County worked with many other entities on a successful effort encouraging the Minnesota Department of Transportation to adopt a permissive specification for the use of tear-off shingle scrap in hot mix asphalt.

### **Ordinances**

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

### **Communication**

Ramsey County has always placed a high value on connecting to the community in a variety of ways. The primary goals of our communication methods are to first raise awareness and subsequently influence behavior change to reduce waste, increase recycling and properly dispose of municipal solid waste.

A variety of approaches are utilized to reach multiple audiences and engage community partners. Based on surveys and other community feedback, people want to receive information in a variety of ways, including:

- 633.EASY Recycling and Disposal Hotline – for people who do not have a computer or prefer to speak to a person. Answered 24 hours a day, 7 days a week, provides clear and accurate information, interpreters available.
- A to Z Disposal Guide – for people who have access to and prefer a computer.

Many methods and tools are used to connect with members of the Ramsey County community including:

- GreenGatherings website for guidance on recycling at events
- “Going Green Guide”
- Collaboration with SWMCB on RethinkRecycling.com
- The web-based “A to Z Disposal Guide”
- “The HazWaste Quarterly” is sent to all hazardous waste generators
- Community Power grants
- Messages on electronic signs and dasher boards at County arenas
- Notification of website revisions automatically sent to subscribers
- Sponsorships on TPT to promote RethinkRecycling.com and other messages
- In cooperation with Washington County through the Resource Recovery Project:
  - ❖ Postcards sent to residences and businesses with recycling messages
  - ❖ Web ads
  - ❖ Provide funding for on-site presentations at the Resource Recovery Facility for schools and community groups
  - ❖ Provide targeted outreach on solid waste issues to residents of both counties
  - ❖ Provide Trash Trunks for checkout by individuals and community groups

### **Culturally Specific Outreach**

Cultural consultants are on contract to ensure the provision of culturally appropriate outreach and communication to the Hmong, Hispanic/Latino and Somali communities. Numerous discussion and focus groups have been held within the Hmong, Hispanic/Latino and Somali communities in order to learn more about each community’s communication needs.

In 2011, a large partnership with Hmong businesses located in the Hmong Village on the East Side of Saint Paul centered on capturing food waste and recycling for cans and bottles. 10,000 Spanish-language calendars to provide information about HHW were developed and distributed. And a total of 230 households participated in a special HHW collection event held at Our Lady of Guadalupe Church in Saint Paul. The event was heavily promoted to the Hispanic/Latino community through direct mail postcards, newspapers and radio.

Culturally specific education is delivered through presentations, events, newspaper, radio and printed handouts. The 633.EASY Recycling and Disposal Hotline offers interpretation service residents who have limited proficiency in English.

### **Partnerships**

Ramsey County partners with cities, district councils and watershed districts to deliver consistent messages to residents.

Ramsey County partners with Washington County through the Ramsey / Washington County Resource Recovery project to enhance education on solid and hazardous waste issues to residential and non-residential generators.

Health education staff members work directly with municipalities recycling coordinators to provide technical assistance, assist with outreach, and coordinate events that include recycling and waste reduction activities. In addition, these same staff work with recycling coordinators and district councils to increase recycling at multi-unit residential buildings through the distribution of recycling bags, facts sheets, posters and education sessions.

Ramsey County, in coordination with the Solid Waste Management Coordinating Board (SWMCB), funds education efforts at the grassroots level through the Community POWER grant program.

Through regional partnerships, Ramsey County is able to leverage education tools and resources to share with its residents and businesses.

### **Evaluation**

Feedback from the community is an important tool when designing, implementing and evaluating a communication program. Ramsey County conducts surveys of residential and non-residential generators every other year to identify opportunities for program changes and to measure changes in attitudes and behavior. In 2010 the residential survey included cell-phone users. The residential survey results showed that many people want to receive their information online and that residents want to be able to recycle when they are away from home. In response, we are providing recycling bins to cities and other public places, like athletic fields and community centers.

### **Cost and Finance**

Solid waste programs and services in Ramsey County depend on a blend of public and private initiatives to manage waste. This blend complicates any discussion of financing, as much of the money that funds private waste management programs is not reported to the County. Those elements under the purview of Ramsey County are described below.

### **Expenses**

Ramsey County uses the proceeds from the CEC to fund its solid and hazardous waste management programs, which includes a variety of services, such as

- mandated planning, evaluation and reporting,
- outreach, promotion and education,
- direct services, such as yard waste sites and household hazardous waste services,
- business waste assistance services,
- technical assistance and consultation to municipalities, school districts and other public entities,
- certain regulatory activities not funded by license fees (such as old dump inventory and evaluation, solid and hazardous waste dumping complaints, pre-demolition inspections) ,
- resource recovery services,
- sustainability programming,
- research and evaluation, and more.

Each of these activities is related to a strategy or policy in the Master Plan.

### **Revenue Sources**

Ramsey County relies on several revenue sources to pay for waste management services. Major sources include:

#### **SCORE Grant**

The State of Minnesota assesses a Solid Waste Management Tax on certain waste management activities. This tax goes into the Minnesota's general revenue fund, but a portion of this amount is provided to counties in the form of SCORE grants. Eligible expenses include waste reduction, recycling, problem materials management, public information and education, technical assistance, litter prevention, and MSW processing.

**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 Grants for metropolitan counties.

**License Fees**

Ramsey 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. Ramsey County Board policy states that license fees must cover the cost of operating the regulatory program, including indirect administrative costs.

**Household Hazardous Waste Program Contracts**

Ramsey County has an agreement with Xcel Energy for reimbursement of costs associated with collecting and managing fluorescent lamps through the County's HHW program. Ramsey County is also a party along with other SWMCB counties in the region's Reciprocal Use Agreement, which entitles the County to be reimbursed by another county for costs associated with serving a resident of that county.

**County Environmental Charge**

Ramsey County implemented the County Environmental Charge in 2003. The County Environmental Charge (CEC) appears on hauler bills for all customers of garbage services in Ramsey County. The CEC also applies to residents and others bringing their own garbage to a solid waste transfer station in Ramsey County. The CEC replaced the Waste Management Service Charge that was collected on the property tax bill.

The CEC applies only to services to collect, transport, process or dispose of mixed municipal solid waste generated in Ramsey County, including equipment rental. The CEC does not apply to wastes that are separated for recycling or composting and delivered to facilities where they are recycled or composted. And unlike the State's Solid Waste Management Tax, the CEC does not apply to waste services for construction and demolition waste, medical/infectious waste, or certain types of industrial waste.

The CEC is more visible to generators than the old property tax-based service charge, especially generators who do not pay a property tax but do pay a garbage bill. The increased visibility can provide a greater incentive to look at options for managing waste differently. Generators get a better picture of how much it really costs to manage the garbage they create because costs are presented in one place, rather than some costs on the garbage bill and some costs on the property tax statement. Also, the CEC is more closely related to volume of waste than the old property tax-based service charge because haulers charge customers according to how much garbage they pick up. CEC funds are used for the Resource Recovery Project and for other solid waste programs.



## **Appendix II: Ordinances**

Ramsey County ordinances relevant to this plan include:

- Administrative Ordinance
- Food Protection Ordinance
- Hazardous Waste Management Ordinance
- Public Health Nuisance Ordinance
- Solid Waste Ordinance

Municipal ordinances pertaining to garbage, recycling, and other solid waste issues are found in the following municipal codes and specific ordinances (provisions related to setting specific fees and to clandestine drug labs have generally not been included).

### **Arden Hills**

- Chapter 03, License and Regulations
- Chapter 06, Nuisances and Offenses: including Section 660, Garbage, Refuse, and Recycling, and other provisions
- Chapter 07, Recreation
- Chapter 13, Zoning: Section 1320, District Provisions; Section 1325, General Regulations
- Chapter 14, Property Maintenance Code
- Chapter 15, Erosion and Sediment Control

### **Falcon Heights**

- Chapter 14, Businesses: Article VIII, Refuse Haulers
- Chapter 22, Environment: Article II, Blight
- Chapter 38, Solid Waste
- Chapter 105, Buildings and Building Regulation: Article III, Housing Code
- Chapter 107, Stormwater Management: Section 107.8, Approval Standards
- Chapter 113, Zoning: Section 113.240, Accessory Buildings and Structures; Section 113.370, Exterior Storage

### **Gem Lake**

- Ordinance No. 43K, Zoning Ordinance
- Ordinance No. 45, Garbage and Refuse
- Ordinance No. 83, Housing Maintenance Code
- Ordinance No. 86, Nuisance Ordinance

### **Lauderdale**

- Title 4, Health and Sanitation: Chapter 2, Garbage and Refuse; Chapter 6, Health and Safety; Nuisances
- Title 8, Public Works: Chapter 4, Stormwater Management; Chapter 5, Illicit Discharge Ordinance
- Title 9, Building Regulations: Chapter 11, Rental Housing Licensing Provisions

### **Little Canada**

- Chapter 600, Public Health and Welfare: 601, Nuisance Ordinance



- Chapter 800, Regulated Activities and Businesses: 809, Mixed Municipal Solid Waste and Recyclable Materials Storage and Collection
- Chapter 900, Zoning Code: 903, General Provisions; 928, Stormwater Management Ordinance
- Chapter 1400, Garbage, Rubbish and Trash: 1401, Burning Regulations

#### Maplewood

- Chapter 14, Businesses and Licensing
- Chapter 18, Environment
- Chapter 20, Fire Prevention and Protection
- Chapter 30, Solid Waste Management
- Chapter 44, Zoning

#### Mounds View

- Title 500, Business License Regulations
- Title 600, Public Health and Safety: Chapter 603, Garbage and Rubbish; Chapter 607, Nuisances
- Title 900, Public Ways and Property: Chapter 909, Parks and Recreation
- Title 1000, Building Regulations
- Title 1100, Zoning Code: Chapter 1103, General Building Requirements; Chapter 1110, Mobile Home District; Chapter 1120, Planned Unit Developments
- Title 1300, Flood Control Regulations: Chapter 1303, Construction Site and Land Disturbance Runoff Control

#### New Brighton

- Chapter 7, Buildings
- Chapter 9, Fire Protection and Prevention
- Chapter 11, Garbage and Trash
- Chapter 13, Housing
- Chapter 14, Land Excavation and Reclamation
- Chapter 17, Nuisances
- Chapter 19, Parks and Recreation
- Chapter 31, Stormwater Utility
- Zoning Code: Chapter 4, Residence Districts; Chapter 6, Industrial Districts; Chapter 7, Planned Developments

#### North Oaks

- Title 9, General Regulations: Chapter 93, Health and Safety, Nuisances
- Title XV, Land Usage: Chapter 151, Zoning Code

#### North St. Paul

- Chapter 32, Boards and Commissions: Environmental Advisory Commission
- Chapter 33, City Policy on Abandoned Property
- Chapter 55, Solid Waste, Recycling, and Composting
- Chapter 56, Sanitary and Storm Sewer System Utilities
- Chapter 91, Fire Prevention and Protection
- Chapter 92, Parks and Lakes: 92.02, Littering
- Chapter 94, Street and Sidewalks: 94.57, Dumpsters, Roll-offs or Similar Waste Receptacles
- Chapter 98, Nuisances
- Chapter 130, General Offenses: 130.19, Offenses Involving Public Health and Safety

- Chapter 152, Structures and Premises Maintenance and Occupancy Code
- Chapter 154, Zoning Regulations
- Ordinance 702, Establishing Regulations Concerning Unattended Collection Bins

#### Roseville

- Chapter 402, Solid Waste Collection
- Chapter 403, Recycling
- Chapter 407, Nuisances
- Chapter 409, Residential Composting
- Chapter 502, General Offenses
- Chapter 701, Parks and Recreation
- Chapter 803, Storm Water Drainage, 803.03, Storm Water Illicit Discharge and Connections
- Zoning: Chapter 1005, Commercial and Mixed Use Districts; Chapter 1006, Employment Districts; Chapter 1008, Park and Recreation District; Chapter 1011, Property Performance; Chapter 1017, Shoreland, Wetland and Storm Water Management

#### St. Anthony

- Chapter 50, Storm Water and Sanitary Sewers
- Chapter 92, Health and Safety, Nuisances
- Chapter 93, Parks and Recreation
- Chapter 97, Fire Prevention and Protection
- Business Regulations: Chapter 111, Licenses, Permits and the Like: Mobile Home Parks; Haulers of Garbage, Refuse, Recyclables, and Yard Waste; Licensing of Multiple Dwellings
- Chapter 130, General Offenses: Garbage and Solid Waste Offenses
- Land Usage: Chapter 150, Buildings, Housing, and Construction; Chapter 152, Zoning Code; Chapter 153, Storm Water Management

#### Saint Paul

- Building and Housing: Chapter 32, Collection of Municipal Solid Waste for Residential Properties and User Charge; Chapter 34, Minimum Property Maintenance Standards for All Structures and Premises; Chapter 45, Nuisance Abatement
- Zoning Code: Chapter 65, Land Use Definitions and Development Standards: 65.300, Public Services and Utilities (includes yard waste sites); 65.400, Commercial Uses (including retail sales and services; limited production, processing and storage); Industrial Uses (including infectious waste facilities; metal shredders; recycling processing centers; solid waste compost facility; solid waste transfer station); 65.900, Accessory Uses
- Zoning Code: Chapter 66, Zoning District Uses, Density and Development Standards (e.g., yard waste sites, recycling processing centers)
- Health, Sanitation, and Disease: Chapter 210, Disposing of Contaminated Articles, Prohibition
- Garbage and Rubbish: Chapter 221, Littering by Contractors
- Public Health, Safety and Welfare: Chapter 236, Environmental Preservation: Plastic Packaging
- Licenses: Chapter 357, Solid Waste; Chapter 408, Recycling Collection Center/Recycling Processing Center; Chapter 429, Infectious Waste

#### Shoreview

- Chapter 200, Development Regulations: Section 205, Development Districts; Section 206, Site Development and Architectural Design Standards; Section 209, Environmental Standards; Section 210, Nuisance; Section 211, Property Maintenance Standards

- Chapter 400, Public Property and Improvements: Section 401, Recreation Areas
- Chapter 500, Municipal Utilities: Section 502, Municipal Sanitary Sewer System
- Chapter 600, General Regulations: Section 602, Open Burning; Section 607, Residential Recycling Service Fees;
- Chapter 700, Licensing: Section 703, Solid Waste Haulers

#### Vadnais Heights

- Building Code: Chapter 48, Apartment - Multiple Dwelling (except Duplex and Triplex); Chapter 53, Residential and Rental Housing
- Sewers: Chapter 59, Municipal Sanitary Sewer System
- Garbage and Rubbish: Chapter 121, Disposal of Refuse for Commercial, Industrial, and Residential Property of More Than Eight Dwelling Units; Chapter 121A, Disposal of Refuse for Residential Property of up to Eight Units in a Single Building; Chapter 122, License Requirements for Collectors Under Chapter 121; Chapter 123, Dumps, Sanitary Landfills and Filling of Land; Chapter 124, Unlawful Removal of Recycling Material
- Public Nuisances: Chapter 181, Nuisances Affecting Health, Safety, Comfort or Repose; Chapter 183, Nuisances Affecting Peace and Safety
- Public Safety, Health, Morals, and Welfare: Chapter 146, Burning Control; Chapter 147, Various Offenses

#### White Bear Lake

- Departments: Chapter 402, Municipal Sewer System
- Public Health, Welfare and Sanitation: Chapter 501, Garbage Collection; Chapter 502, Minimum Housing Standards; Chapter 505, Curbside Recycling Scavenging; Chapter 507, Refuse and Recyclables Collectors; Chapter 509, Composting
- Public Ways and Property: Chapter 905, Parks and Open Space
- Business Regulations: Chapter 1114, Rubbish Haulers and Junk Dealers
- Zoning: Chapter 1302, General Provisions

#### White Bear Township

- Ordinance 16, Nuisances
- Ordinance 22, Dumping
- Ordinance 31, Refuse
- Ordinance 35, Zoning Code
- Ordinance 45, Parks, Open Space, and Recreational Areas
- Ordinance 47, Housing Maintenance
- Ordinance 66, Compost Sites

### **Appendix III: Acronyms**

<b>C&amp;D</b>	Construction and Demolition Waste
<b>CII</b>	Commercial/Industrial/Institutional
<b>CSI</b>	County Supporting Initiative
<b>EPP</b>	Environmentally Preferable Purchasing
<b>HERC</b>	Hennepin Energy Resource Company
<b>HHW</b>	Household Hazardous Waste
<b>MPCA</b>	Minnesota Pollution Control Agency
<b>MSW</b>	Mixed Municipal Solid Waste
<b>RCRA</b>	Resource Conservation and Recovery Act
<b>RDF</b>	Refuse-Derived Fuel
<b>RRT</b>	Resource Recovery Technologies
<b>RRP</b>	Resource Recovery Project
<b>SCORE</b>	Select Committee on Recycling and the Environment
<b>SWMCB</b>	Solid Waste Management Coordinating Board
<b>VSQG</b>	Very Small Quantity Generator
<b>WMA</b>	Waste Management Act

## Appendix IV: Definitions

<b>Banned Materials</b>	Wastes that are statutorily banned from disposal with MSW – yard waste, e-waste, HHW, appliances, tires, used motor oil, etc.
<b>Bulky Waste</b>	A subset of MSW; Household items and other discarded materials that, due to their dimension and weight, are typically not collected as part of the regular trash and recycling or for which there is a separate fee, such as furniture, carpeting and mattress. Excludes major appliances and e-waste.
<b>Collection</b>	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)
<b>C &amp; D Waste</b>	Term referring to construction waste and demolition debris.
<b>Commercial</b>	As in “commercial waste” or “commercial recycling.” Refers to non-residential sources, including businesses, government facilities or operations, institutions, schools, non-profit organizations, community activities, etc. Interchangeable with “non-residential.”
<b>Commingled Recycling</b>	Placing two or more source-separated recyclable materials in the same container for recycling
<b>Composting</b>	The controlled microbial degradation of organic waste to yield a humus-like product. (Minn. Rules §7035.0300)
<b>Construction Debris</b>	Waste building materials, packaging, and rubble resulting from construction, remodeling, repair, and demolition of buildings and roads. (Minn. Stat. § 115A.03, Subd. 7)
<b>Curbside Collection</b>	Collection of waste (garbage, recyclables, yard waste, etc.) from residences at the point of generation
<b>Demolition Debris</b>	Solid waste resulting from the demolition of buildings, roads, and other man-made structures, including concrete, brick, bituminous concrete, untreated wood, masonry, glass, trees and tree trimmings, rock, plastic building parts, and other inert waste materials, but not including asbestos wastes.
<b>Designation</b>	See <i>Waste Flow Designation</i> .
<b>Disposal</b>	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)
<b>Electronic Waste (or “e-waste”)</b>	<p>E-waste or electronic waste includes the following items:</p> <ul style="list-style-type: none"> <li>• Cathode-ray tube or CRT - "Cathode-ray tube" or "CRT" means a vacuum tube or picture tube used to convert an electronic signal into a visual image.</li> <li>• Computer - "Computer" means an electronic, magnetic, optical, electrochemical, or other high-speed data processing device performing logical, arithmetic, or storage functions, but does not include an automated typewriter or typesetter, a portable handheld calculator or device, or other similar device.</li> <li>• Computer monitor - "Computer monitor" means an electronic device that is a cathode-ray tube or flat panel display primarily intended to</li> </ul>

	<p>display information from a central processing unit or the Internet. Computer monitor includes a laptop computer.</p> <ul style="list-style-type: none"> <li>• Covered electronic device - "Covered electronic device" means computers, peripherals, facsimile machines, DVD players, video cassette recorders, and video display devices that are sold to a household by means of retail, wholesale, or electronic commerce.</li> <li>• Peripheral - "Peripheral" means a keyboard, printer, or any other device sold exclusively for external use with a computer that provides input or output into or from a computer.</li> <li>• Video display device - "Video display device" means a television or computer monitor, including a laptop computer, that contains a cathode-ray tube or a flat panel screen with a screen size that is greater than nine inches measured diagonally and that is marketed by manufacturers for use by households. Video display device does not include any of the following: <ul style="list-style-type: none"> <li>(1) a video display device that is part of a motor vehicle or any component part of a motor vehicle assembled by, or for, a vehicle manufacturer or franchised dealer, including replacement parts for use in a motor vehicle;</li> <li>(2) a video display device, including a touch-screen display, that is functionally or physically part of a larger piece of equipment or is designed and intended for use in an industrial; commercial, including retail; library checkout; traffic control; kiosk; security, other than household security; border control; or medical setting, including diagnostic, monitoring, or control equipment;</li> <li>(3) a video display device that is contained within a clothes washer, clothes dryer, refrigerator, refrigerator and freezer, microwave oven, conventional oven or range, dishwasher, room air conditioner, dehumidifier, or air purifier; or</li> <li>(4) a telephone of any type unless it contains a video display area greater than nine inches measured diagonally.</li> </ul> </li> </ul>
<b>Environmentally Responsible Purchasing (procurement)</b>	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 other, typically more traditionally purchased, products or services.
<b>Flow Control</b>	See <i>Waste Flow Designation</i> .
<b>Generation</b>	The act or process of producing waste. (Minn. Stat. §115A.03, Subd. 11)
<b>Generator</b>	Any person who generates waste. (Minn. Stat. §115A.03, Subd. 12)
<b>Hazardous Waste</b>	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, or 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)
<b>Hierarchy</b>	See <i>Waste Management Hierarchy</i> .
<b>Household Hazardous Waste (HHW)</b>	Waste generated from household activity that exhibits the characteristics of or that is listed as hazardous waste under Minnesota Pollution Control Agency rules, but does not include waste from commercial activities that is generated, stored, or present in a household. (Minn. Stat. §115A.96, Subd. 1)
<b>Industrial (Solid) Waste</b>	Solid waste resulting from an industrial process, manufacturing, service activity, or commercial activity that is managed as a separate waste stream. (Minn. Stat. §115A.03, Subd. 13a) It does not include wastes regulated as hazardous wastes.
<b>Infectious Waste</b>	Laboratory waste, blood, regulated body fluids, sharps, and research-animal wastes that have not been decontaminated. (Minn. Stat. § 116.76, Subd. 12)
<b>Integrated Solid Waste Management</b>	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.
<b>Joint Powers Agreement</b>	A legally binding agreement between two or more governmental entities. It is a tool for intergovernmental action on, for example, solid waste management activities.
<b>Landfill (land disposal facility)</b>	A waste facility permitted by the Minnesota Pollution Control Agency that is designed or operated for disposing of waste on or in the land. (Defined as “disposal facility” in Minn. Stat. § 115A.03, Subd. 10)
<b>Landfill Abatement</b>	Actions that avoid landfilling of waste, such as waste reduction, recycling, or resource recovery.
<b>Landfill Surcharge</b>	A surcharge applied to waste tipped at landfills; can include State, county, and local surcharges.
<b>Leachate</b>	Liquid that has percolated through solid waste and has extracted, dissolved, or suspended materials from it. (Minn. Rules §7035.0330, Subd. 56)
<b>Local Recycling Development Grant</b>	Funds administered by the Minnesota Pollution Control Agency (MPCA) 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.
<b>Major Appliances</b>	Also commonly referred to as “white goods.” Includes items banned by State law from disposal with solid waste (clothes washers and dryers, dishwashers, hot water heaters, heat pumps, furnaces, garbage disposals, trash compactors, conventional and microwave ovens, ranges and stoves, air conditioners, dehumidifiers, refrigerators and freezers). (Minn. Stat. §115A.03, Subd. 17a)



<b>Materials Recovery Facility</b>	Facility designed for centralized sorting, processing, and/or grading of collected recyclable materials for marketing.
<b>Medical Waste</b>	Commonly used term referring to infectious waste from medical facilities or procedures.
<b>Metropolitan Landfill Abatement Account</b>	Established under Minn. Stat. Sec. 473.844, an account created to fund projects that result in landfill abatement in the metropolitan area. Part of the proceeds from a State landfill surcharge on waste tipped at metropolitan area landfills is deposited into this account.
<b>Minnesota Pollution Control Agency</b>	State agency responsible for overall environmental quality of the state, primarily through enforcement of State rules, issuing of permits, and education for compliance. The Governor appoints commissioner.
<b>Mixed Municipal Solid Waste (MSW)</b>	Garbage, refuse, and other solid waste from residential, commercial, industrial, and community activities that the generator of the waste aggregates for collection, but does not include auto hulks, street sweepings, ash, construction debris, mining waste, sludges, tree and agricultural wastes, tires, lead acid batteries, used oil, and other materials collected, processed, and disposed of as separate waste streams. (Minn. Stat. §115A.03 Subd. 21)
<b>Multi-family</b>	Multi-family (or “multi-unit”) residential dwellings are considered residences, not commercial establishments, for purposes of this plan.
<b>Multi-unit</b>	Multi-unit (or “multi-family”) residential dwellings are considered residences, not commercial establishments, for purposes of this plan.
<b>Non-MSW</b>	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.
<b>Non-processible Waste</b>	Waste brought to a resource recovery facility but which cannot be mechanically processed due to its physical characteristics or potential harmful effects.
<b>Non-putrescible Waste</b>	Solid wastes which are not capable of being decomposed by micro-organisms with sufficient rapidity as to cause odors, gases, attraction of vectors or other offensive conditions. (By contrast, putrescible wastes are a subset of organic wastes that tend to biodegrade very rapidly, such as food scraps.)
<b>Non-residential</b>	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.”
<b>Open Collection</b>	A solid waste collection system in which multiple waste haulers or collectors compete for collection accounts in the same geographical area.
<b>Organics</b>	Organics is an overarching term for wastes that can be reused, processed and recycled and includes yard waste (leaves, grass, tree and shrub waste and other plant waste), household vegetable/kitchen scraps, commercially generated food waste, food manufacturing/production by-products, produce and meat trimmings, plant waste, and soiled, non-recyclable paper.



<b>Organized Collection</b>	A system for collecting solid waste in which a specified collector, or a 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)
<b>Policy Plan</b>	The Metropolitan Solid Waste Management Policy Plan, a regional policy plan for solid waste management in the Twin Cities metropolitan area, adopted by the Office of Environmental Assistance (OEA) as required under Minn. Stat. Sec. 473.149. The Solid Waste Management Coordinating Board (SWMCB) and Office of Environmental Assistance jointly developed the current Policy Plan, adopted in October 1997.
<b>Pollution Prevention</b>	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.)
<b>Problem Material</b>	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, or pollutant or contaminant, as defined in section 115B.02, subdivisions 8,13, and 15; 2) pollution of water, as defined in section 115.01, subdivision 5; 3) air pollution, as defined in section 116.06, subdivision 3; or 4) a significant threat to the safe or efficient operation of a solid waste processing facility. The four conditions are further defined in (Minn. Stat. §115A.03, Subd. 24a).
<b>Processible Waste</b>	Acceptable waste brought to a resource recovery facility that may be mechanically processed using the existing technology at the facility.
<b>Processing</b>	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.
<b>Product Stewardship</b>	The concept that all parties who have a role in producing, selling or using a product, including material suppliers, manufacturers, retailers and consumers, assume responsibility for the environmental impacts of a product throughout its life-cycle. These include impacts from the selection of raw materials, the design and production processes, and the use and disposal of the product.
<b>Public Entities</b>	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.
<b>Ramsey/Washington County Resource Recovery Project</b>	See <i>Resource Recovery Project</i>
<b>Reciprocal Use Agreement</b>	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.

<b>Recyclable Materials (Recyclables)</b>	Materials that are separated from mixed municipal solid waste for recycling, including paper, glass, plastics, metals, automobile oil, and batteries. Refuse-derived fuel or other material that is destroyed by incineration is not a recyclable material. (Minn. Stat. § 115A.03, Subd. 25a)
<b>Recycled-content</b>	Used to describe a product that contains recycled materials. Often further clarified as to “post-consumer” recycled content and/or “pre-consumer” or “post-industrial” content. “Post-consumer” refers to a finished material that would normally have been discarded as solid waste, having completed its life cycle as a consumer item (Minn. Stat. §16B.122, Subd. 1c; and Minn. Stat. §115A.03, Subd. 24b), but instead was used to manufacture a recycled-content product. “Post-consumer” is typically thought of as those recyclable materials collected from residents and businesses in recycling programs. “Pre-consumer” or “post-industrial” typically refer to recyclable materials that come from manufacturers and product converters, including damaged or obsolete products, overruns, and trimmings. These materials have not yet completed a life cycle as a consumer item.
<b>Recycling</b>	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)
<b>Refuse-derived Fuel</b>	The product resulting from techniques or processes used to prepare solid waste by shredding, sorting, or compacting for use as an energy source. It consists of lighter weight materials such as paper products, with most metals, glass, and other non-combustible materials removed.
<b>Residuals, Residue</b>	Waste materials remaining after processing waste for the separation and recovery of materials or energy.
<b>Resource Conservation</b>	Preserving raw materials, energy, water, or other materials for future use.
<b>Resource Recovery</b>	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 is typically used to refer to the recovery of energy and usable materials during the processing of mixed municipal solid waste.
<b>Resource Recovery Facility</b>	A waste facility established and used primarily for resource recovery, including and appurtenant facilities such as transmission facilities and transfer stations primarily serving the resource recovery facility. (Minn. Stat. §115A.03, Subd. 28)
<b>Resource Recovery Project (RRP)</b>	A joint powers agreement between Ramsey and Washington Counties to protect and ensure the public health, safety, welfare and environment of each county’s residents and businesses through sound management of solid and hazardous waste generated in each county and collaboration on many waste management activities. Additionally, the RRP has an agreement with Resource Recovery Technologies through 12.31.12 for the purpose of processing waste through resource recovery.
<b>Reuse</b>	The practice of avoiding disposal of material that would become solid waste were it not put to use again in its original form.

<b>SCORE</b>	Acronym for “Select Committee on Recycling and the Environment,” a State task force appointed by the Governor in the 1980’s to recommend strategies for supporting recycling in Minnesota. “SCORE” is commonly used to refer to State grant funding to counties to support local source reduction and recycling programs.
<b>Separately Managed Wastes</b>	Waste materials that are managed as discrete waste streams, such as lead-acid batteries, recyclables, or infectious wastes.
<b>Service Charge</b>	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.
<b>Solid Waste</b>	Garbage, refuse, 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, but does not include hazardous waste; animal waste used as fertilizer, earthen fill, boulders, rock; 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 waste water effluents or discharges which are point sources subject to permits (in federal law), dissolved materials in irrigation return flows; or source, special nuclear, or by-product material as defined by The Atomic Energy Act of 1954, as amended. (Minn. Stat. Sec. 116.06, Subd. 22)
<b>Solid Waste Management Coordinating Board (SWMCB)</b>	A board formed under a Joint Powers Agreement, consisting of two Commissioners from each of the six metropolitan counties, plus two ex-officio members: the Director of the Minnesota Office of Environmental Assistance and the Commissioner of the Minnesota Pollution Control Agency. SWMCB is established to coordinate solid waste planning and programming on a regional basis.
<b>Solid Waste Management Tax</b>	A percentage tax collected by the State for management services for MSW and non-MSW (specifically construction waste, infectious waste, and industrial waste). Services subject to the tax include collection, transportation, processing, and disposal. Service providers (such as haulers and landfill operators) who directly bill generators or customers are responsible for collecting and remitting the tax. The rate in 1998 is 9.75% for residential generators and 17% for commercial generators.
<b>Source Reduction</b>	An activity that prevents generation of waste or the inclusion of toxic materials in waste, including: (1) reusing a production in its original form; (2) increasing the life span of a product; (3) reducing material or the toxicity of material used in production or packaging; or (4) changing procurement, consumption, or waste generation habits in smaller quantities or lower toxicity of waste generated. (Minn. Stat. §115A.03, Subd. 36b)
<b>Source Separation</b>	Separation of recyclable, compostable, or other materials by the waste generator prior to collection.
<b>Source-separated Compostable Materials</b>	"Source-separated compostable materials" refers to materials that: (1) are separated at the source by waste generators for the purpose of preparing them for use as compost; (2) are collected separately from mixed municipal solid waste, and are

	<p>governed by the licensing provisions of section 115A.93;</p> <p>(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;</p> <p>(4) are delivered to a facility to undergo controlled microbial degradation to yield a humus-like product meeting the agency's class I or class II, or equivalent, compost standards and where process residues do not exceed 15 percent by weight of the total material delivered to the facility; and</p> <p>(5) may be delivered to a transfer station, mixed municipal solid waste processing facility, or recycling facility only for the purposes of composting or transfer to a composting facility, unless the commissioner determines that no other person is willing to accept the materials.</p> <p>(Subd. 32b.MS 1994 [Renumbered subd 32d])</p>
<b>Source-separated recyclable materials</b>	Recyclable materials, including commingled recyclable materials, that are separated by the generator.
<b>Sustainable Building</b>	The Minnesota Office of Environmental Assistance defines a "sustainable building" as one that is healthy and comfortable for its occupants and is economical to operate. It conserves resources (including energy, water, raw materials and land) and minimizes the generation of toxic materials and waste in its design, construction, landscaping, and operation. A green building also consider historic preservation and access to public infrastructure systems, as well as the entire life cycle of the building and its components.
<b>Tipping Fee</b>	The fee charged by solid waste facilities to waste haulers, collectors, or other parties for the privilege of depositing or "tipping" waste.
<b>Toxicity</b>	Under Minn. R. 7045.0131, toxicity is one of the six characteristics of hazardous waste. Contaminants of concern include heavy metals, such as lead or mercury, volatile organic compounds, such as benzene or chloroform, semi-volatile organic compounds, such as pyridine or nitrobenzene, and pesticides/herbicides, such as endrin or lindane.
<b>Toxicity Reduction</b>	Term used to refer to efforts to reduce the toxic or hazardous character of the waste stream.
<b>Transfer Station</b>	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)
<b>Unacceptable Waste</b>	Waste that is not acceptable at a resource recovery facility under the terms of the service agreement.
<b>Volume-based (Weight-based) Fees</b>	A graduated pricing system for waste collection services in which the fees increase for larger quantities of waste collected.
<b>Waste</b>	Solid waste, sewage sludge, and hazardous waste. (Minn. Stat. §115A.03, Subd. 34)

<b>Waste Flow Designation</b>	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)
<b>Waste Management</b>	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)
<b>Waste Management Hierarchy (Order of Preference)</b>	A ranking of waste management methods or of preference practices in the order in which they are the preferred method or practice. Informally referred to as the “waste management hierarchy.” Minn. Stat. §115A.02 establishes the following order of preference for waste management: 1) waste reduction and reuse; 2) waste recycling; 3) composting of yard waste and food waste; 4) resource recovery through mixed municipal solid waste composting or incineration; 5) land disposal which produces no measurable methane gas or which involves the retrieval of methane gas as a fuel for the production of energy to be used on-site or for sale; and 6) land disposal which produces measurable methane gas and which does not involve the retrieval of methane gas as a fuel for the production of energy to be used on-site or for sale.
<b>Waste Management Act</b>	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.
<b>Waste Reduction</b>	See <i>Source Reduction</i> .
<b>Yard Waste</b>	Soft-bodied garden wastes such as leaves, lawn cuttings, and weeds, and other waste such as shrub and tree waste, and pruning clippings. (Minn. Stat. §115A.03, Subd. 38)

## **Appendix V: Regional Solid Waste Master Plan**

# Solid Waste Management Coordinating Board

## 2011-2030 Regional Solid Waste Master Plan



Anoka County  
Carver County

Dakota County  
Hennepin County

Ramsey County  
Washington County

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# The Solid Waste Management Coordinating Board

## 2011-2030 Regional Solid Waste Master Plan

*Reviewed by SWMCB and sent to Member Counties:  
December 14, 2011*

### **SWMCB Chair:**

Commissioner Victoria Reinhardt

Ramsey County

### **SWMCB Vice-Chair:**

Commissioner Joseph Harris

Dakota County

### **SWMCB Board Members:**

Commissioner Jim Kordiak

Anoka County

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Dakota County

Commissioner Peter McLaughlin

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Commissioner Jan Callison

Hennepin County

Commissioner Janice Rettman

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Commissioner Gary Kriesel

Washington County

Commissioner Lisa Weik

Washington County

### **SWMCB Ex-Officio Members:**

Division Director David Benke

MPCA

*For more information about the Regional Solid Waste Master Plan,  
please contact the SWMCB at:*

*477 Selby Avenue, St. Paul, MN 55102  
651-222-7227*

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# The Solid Waste Management Coordinating Board

## 2011-2030 Regional Solid Waste Master Plan

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# Introduction

## A. The Need for a Regional Master Plan

The 2011-2030 Regional Solid Waste Master Plan (referred to as the Regional Master Plan throughout this document) is the long-term, regional planning document for managing the six-county metropolitan area's solid waste. It is intended to respond to the vision and objectives described in the **state's** 2010-2030 Metropolitan Policy Plan (hereafter referred to as the Policy Plan). The Regional Master Plan was prepared by the Solid Waste Management Coordinating Board (SWMCB), a joint powers board comprised of Anoka, Carver, Dakota, Hennepin, Ramsey, and Washington counties, in consultation with the Minnesota Pollution Control Agency (MPCA). The Master Plan was prepared to fulfill the requirements of Minn. Stat. §115A.46 and §473.803.

This Regional Master Plan continues the legacy of adopting a strong regional approach to solid waste planning. The six metropolitan counties, through the SWMCB, jointly prepared this document in consultation with other solid waste stakeholders. Ultimately, the intent of the regional approach is to establish a common regional vision and set of goals that can support the collective and individual needs of counties within the SWMCB region (hereafter referred to as the Region).

## B. Priorities within the Regional Master Plan

The Regional Master Plan provides regional and partnership strategies across a wide array of solid waste management areas that are important to the State and Region, and every area will receive attention during the years ahead. However, with public resources significantly strained across every level of government, the SWMCB also recognizes that the prioritization of solid waste management initiatives is of the utmost importance. In accordance with the vision outlined in the Policy Plan, the SWMCB will concentrate its policy focus on preventing waste before costs need to be incurred to manage it. For waste that cannot be prevented, significant opportunities for improvement specifically exist in the areas of recycling and organics recovery, and the SWMCB will therefore explore a variety of management strategies in these areas to improve upon the status quo. Finally, forging stronger partnerships with other solid waste stakeholders (public, private and non-profit) offers opportunities to reach metropolitan-area solid waste objectives in the most cost efficient manner possible, and the SWMCB will serve as a primary forum through which collaborative initiatives can take hold.

## C. The Contents of the Regional Master Plan

The Regional Master Plan is divided into the following five sections:

- ***Introduction:*** Explains the impetus behind the development of the Regional Master Plan and highlights the SWMCB’s priorities for solid waste management in coming years.
- ***About the Regional Master Plan:*** Describes how the Regional Master Plan was developed and what entities contributed to that effort, outlines how a reader should view the Regional Master Plan alongside other state, regional and local solid waste management planning documents, and describes key components of the Policy Plan that are integrated into the strategies in the Regional Master Plan.
- ***Description of the Existing System:*** Provides data about the various aspects of the Region’s solid waste management system, citing the most recent data available at the time of Regional Master Plan publication (either 2010 or 2009 depending upon the specific solid waste topic) so that readers have a baseline from which to better assess regional and partnership strategies.
- ***Regional Coordination:*** Discusses three elements (cost and finance, governance, measurement and accountability) of the Region that fundamentally differ from the programmatic elements of solid waste management but are nonetheless contributors to regional effectiveness.
- ***Regional Strategies:*** Outlines regional and partnership strategies by specific programmatic element (communications and outreach, land disposal, non-MSW management, organics recovery, processing, recycling, regulation, source reduction, toxicity reduction) for improving solid waste management in the Region. **Strategies under “The SWMCB will” header indicate that the Region and its member counties will assume leadership for driving progress with support from the State; strategies under the “In Partnership with the MPCA, the SWMCB will” header indicate that the State has a leadership responsibility with support from the Region and its member counties.**

# About the Regional Master Plan

## Master Plan Development and Implementation

### A. Developing the Regional Master Plan

Following MPCA approval of its updated Policy Plan on April 6, 2011, the SWMCB and its member counties began a one-year process to update the Regional and individual county Master Plans that **directly respond to the Policy Plan's vision and objectives**. The Regional Master Plan, developed by the SWMCB, provides an overall regional vision and includes high-level regional and partnership strategies to enhance solid waste management during future years.

The Regional Master Plan should not be viewed as a standalone document, but instead as part of an integrated set of planning materials that includes the Policy Plan, the individual county Master Plans and the current edition of the SWMCB workplan. Together these documents provide a statewide, regional and county-specific view of the solid waste management landscape alongside long-term visions and short-term strategies that will enable the Region to fully achieve its solid waste management objectives.

### B. Input during the Regional Master Plan Development Process

The following entities were involved in the development of the Regional Master Plan by providing valuable input during specific points in the process:

- ***The SWMCB:*** Provided overall strategic guidance during the development process, reviewed a final draft of the Regional Master Plan and then sent a recommendation to SWMCB member counties to approve the Regional Plan concurrently with its individual Master Plan. Finally, once the Regional Master Plan and all individual county plans were approved, the SWMCB submitted the Regional Master Plan with the individual county Master Plans to the MPCA.
- ***Member Counties of the SWMCB:*** Coordinated individual county strategies with region-wide strategies, reviewed and officially approved **the county's** individual plan and the region-wide Master Plan.
- ***Staff of the SWMCB:*** Brainstormed potential regional strategies, evaluated progress on regional strategies from the 2004 Regional Master Plan, coordinated efforts with MPCA staff, and shared county best practices that could offer benefit to other counties in the Region.
- ***The MPCA:*** Provided comments during the development process both through its seat on the SWMCB board and through interactions with SWMCB staff,

offered insight into future state priorities and discussed partnership opportunities to achieve Policy Plan Objectives.

- **Public Input:** Provided comments to the SWMCB during a public meeting on November 14, 2011. Those comments were then integrated into the final version of the Regional Master Plan that was reviewed by the SWMCB during December 2011.

### **C. Implementing the Regional Master Plan**

The SWMCB intends that the Regional Master Plan be a document that, in concert with other state, regional and local planning documents, guides the vision and work of the SWMCB. The SWMCB will therefore annually consult the regional and partnership strategies in the Regional Master Plan to measure progress toward **Policy Plan objectives and to guide the prioritization of the coming year's SWMCB workplan.** Workplan strategies will therefore be specific initiatives derived from the foundational strategies set forth in the Regional Master Plan, and by following this multi-stage system of prioritization and year-end analysis, the SWMCB can, in partnership with the MPCA, transparently improve solid waste management outcomes throughout the Region.



# About the Regional Master Plan

## Master Plan Framework

The framework for the regional strategies found in this Regional Master Plan is built around a regional vision, key themes, a solid waste management hierarchy and policies that are outlined in the Policy Plan. For background purposes, the following is a brief overview of the key tenets of the Policy Plan:

### A. Vision

The Policy Plan is designed to assist all stakeholders in reaching the State's objectives for solid waste management. In all of its related efforts, SWMCB will follow the Policy Plan's vision for sustainability:

*A sustainable community minimizes waste, prevents pollution, promotes efficiency, reduces greenhouse gas emissions, saves energy and develops resources to revitalize local economies. The integrated waste management system is an essential component of the infrastructure of a sustainable community. Solid waste must be managed by technologies and methods that support sustainable communities and environments. The solid waste management hierarchy, with its associated objectives of protecting the State's air, land, water, and other natural resources and the public health, is central to attaining the twin objectives of sustainability and solid waste management, because it emphasizes source reduction and reuse over land disposal (2010 Metropolitan Solid Waste Policy Plan page 6).*

### B. Key Themes

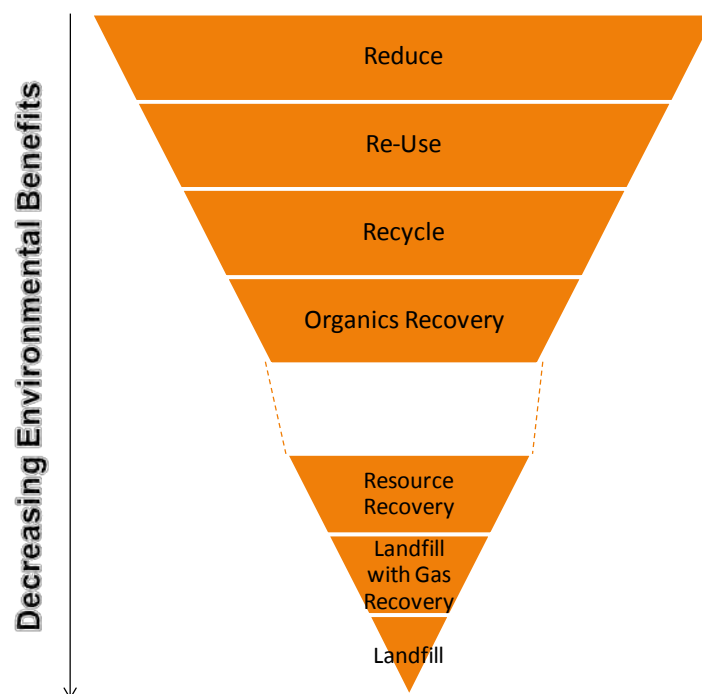
The following key themes underlie all solid waste management recommendations within the Policy Plan and are also incorporated into the vision of this Regional Master Plan (2010 Metropolitan Solid Waste Policy Plan pages 6-7):

- Accountability
- Waste as a resource
- Solid waste management hierarchy
- Generator responsibility
- Government as a leader
- Product stewardship
- Private sector initiative

### C. The Solid Waste Management Hierarchy

The solid waste management hierarchy focuses efforts at the top, where environmental benefits are most significant. A benefits “gap” is depicted between the upper end of the hierarchy (source reduction, reuse, recycling, and organics recovery) and the lower end (resource recovery and landfilling). Throughout the Regional Master Plan, the SWMCB will refer to the solid waste management hierarchy and the Region’s belief that solid waste should be managed at the highest possible level on the hierarchy (*2010 Metropolitan Solid Waste Policy Plan page 2*):

**State of Minnesota Solid Waste Management Hierarchy of Preferred Management Practice**



### D. Policy Plan Objectives and Policies

The following objectives and policies within the Policy Plan provide a foundation from which Regional Master Plan strategies are developed (*2010 Metropolitan Solid Waste Policy Plan pages 7-9*):

***Goal 1: Protect and conserve. Manage waste in a manner that will protect the environment and public health, reduce greenhouse gas emissions, and conserve energy and natural resources.***

**Policy 1:** Reduce greenhouse gases and conserve energy and resources. Reduce greenhouse gas emissions and promote energy and resource conservation through integrated solid waste management.

**Policy 2:** Promote toxicity reduction. Reduce the hazardous character of waste and assure proper management of hazardous waste.

**Policy 3:** Promote renewable energy and conservation. Promote actions that conserve energy, and will encourage the use of renewable energy, which includes recovering energy from waste.

**Policy 4:** Manage waste now. Manage solid waste in a manner that will minimize environmental, financial, and public health burdens on future generations.

**Policy 5:** Protect public health. Ensure public health is protected by reducing waste, recycling and composting (or other organics management) a majority of the waste, and through the proper disposal of what remains.

**Goal 2. Integrate the parts. Manage waste in an integrated waste management system in accordance with the hierarchy to minimize landfilling, while emphasizing reducing waste generation and toxicity and increasing reuse, recycling, and source-separated organic waste management.**

**Policy 6:** Support the waste management hierarchy. Manage waste in accordance with the preferred methods in the waste management hierarchy.

**Policy 7:** Implement regional waste management goals. Manage solid waste in accordance with the numerical targets identified in the Metropolitan System Plan, Part Three.

**Policy 8:** Hold parties accountable for results. Whether public or private, hold the operators of any solid waste system segment responsible for meeting the goals of this Plan.

**Goal 3. Manage waste cost-effectively and internalize future costs. Manage waste in a cost-effective manner that maximizes environmental benefits and minimizes long-term financial liability and be priced to provide incentives that encourage waste to be managed as high as possible on the waste hierarchy.**

**Policy 9:** Promote efficiencies and cost effectiveness and reduce environmental costs. Promote efficiencies and cost effectiveness and reduce environmental costs in the delivery of integrated solid waste

management services, including minimizing risk and managing for long-term care of landfills.

**Policy 10:** *Promote effective governance. Promote governance of solid waste management that results in the implementation of the WMA, resulting in: pollution prevention and decreased land disposal; the fair allocation of costs and liabilities; the efficient provision of services; the promotion of innovation; the fostering of private initiative and new technologies; and the provision of services that meet the diverse needs within the region.*

**Goal 4. Share responsibility. Allocate responsibility and costs for the environmentally sound management of waste equitably among those who use or benefit from the system, including producers, retailers, consumers, government, citizens, and the waste industry.**

**Policy 11:** *Promote generator and producer responsibility. Generators and product producers share responsibility for waste produced, and costs for waste disposal should be borne in the present by producers and generators and not deferred to future generations.*

**Policy 12:** *Drive better waste management through incentives, visible costs and effective pricing signals. Provide incentives for waste reduction and recycling, separate management of organic wastes, and resource recovery through pricing of solid waste management services. Costs should be visible to, and understandable by those paying for system services.*

## Description of the Existing System

### A. Introduction

This section of the Regional Master Plan provides a current description of waste management in the SWMCB Region. Sources of data and information include the 2010 SWMCB Data Report, 2009 Annual Results Report (Annual Report) and the 2010-2030 Metropolitan Solid Waste Management Policy Plan (Policy Plan). The Annual Report can be viewed at [www.swmcb.org](http://www.swmcb.org), and contains detailed existing system descriptions, data, graphs, and charts for toxicity reduction, recycling, processing, landfilling, non-MSW, and hazardous waste management, consolidated for the Region. **Annual Report data is referenced as "Region."** The Policy Plan can be found at [www.pca.state.mn.us](http://www.pca.state.mn.us). Policy Plan data is referenced as the **"metropolitan area"** because it combines the Region with data from Scott County.

### B. Detailed Description of Existing System

The waste management infrastructure in the Region is comprised of private and public entities that collect, transport, recycle, compost, recover, and landfill materials generated by residents, businesses, and institutions. The Region licenses approximately 240 waste hauling businesses, operating about 1,600 vehicles to collect and transport Municipal Solid Waste (MSW). Waste haulers that collect and transport non-MSW, recycling or organic wastes are not regionally licensed. Collection services are generally provided to residents in two ways: by subscription, in which a resident contracts with an individual hauler for service, or by municipal contract. There are no county-organized collection services for the non-residential sector, although some small businesses have access to smaller, organized collection programs. In all instances Minn. Stat. §115A requires waste haulers to provide volume-based pricing services to customers. Finally, after collection, MSW is delivered to a transfer facility or directly to a solid waste recycling, composting, processing, or disposal facility.

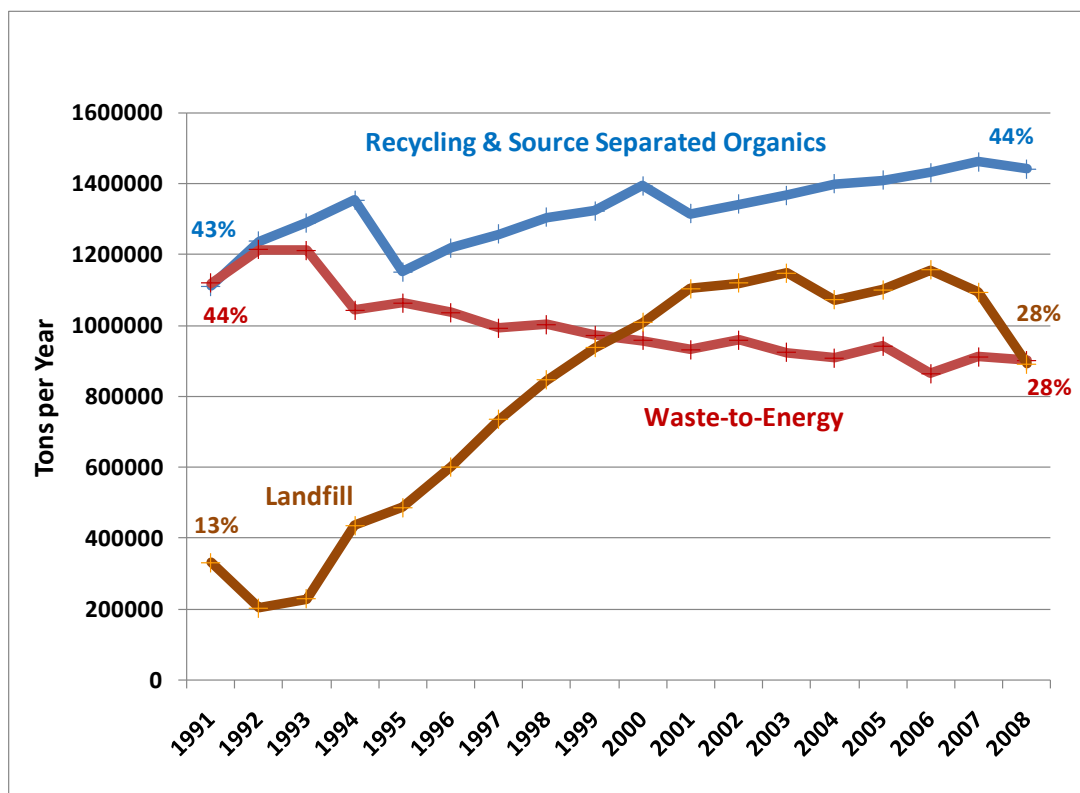
The charts and descriptions found on pages 16-19 detail the various aspects and trends associated with **the Region's solid waste management system:**

### Solid Waste Management after Collection

Management Method (% of total)	2010 Amount (in tons)
<b>Recycling + Organics Recovery</b> (40% + 4% = 44%)	1,344,267
<b>Processing</b> (28%)	862,290
<b>Landfilled</b> (28%)	846,319
<b>TOTAL</b>	<b>3,057,332</b>

(2010 SWMCB Data Report)

### Solid Waste Management Trends since 1991



(2010-2030 Metropolitan Solid Waste Policy Plan page 5)

## **Waste and Toxicity Reduction**

Source reduction (also referred to as waste reduction) is the highest priority for managing waste in the solid waste management hierarchy. Source reduction is difficult to measure, but it is typically defined by the change in tons of waste generated per capita. MSW tons per capita decreased since the last update to the Regional Master Plan, from 1.26 in 2005 to 1.09 in 2010.

Toxicity reduction is the process of reducing the amount and degree of hazardous materials in the waste stream to limit environmental and public health risks. The Region promotes reduction of wastes with hazardous characteristics, and provides for reciprocal use of household hazardous waste collection programs. Each metropolitan area county has at least one year-round site for the collection of household hazardous waste (HHW), which is augmented with seasonal, temporary, satellite, or special one-day collections. Since 2005, participation at the Region's HHW facilities has increased by 44%, serving 245,602 vehicles in 2010. The top three collected materials by weight were consumer electronics at 51% of total pounds collected, latex paint at 18% and motor oil and filters at 8%. The Region provides for Hazardous Waste Operations and Emergency Response training for county inspectors and maintains a Very Small Quantity Generator (VSQG) database. Metropolitan county staff inspect, train, and license hazardous waste generators and regulate in accordance with federal Resource Conservation and Recovery Act (RCRA) standards, and use the VSQG database to track hazardous waste manifests.

## **Recycling**

In 2010, the Region's **recycling rate** was at 40% (not including SCORE source reduction and yard waste credits). Recycling programs in the Region consist of curbside collection, event recycling days or one day events and drop-off sites, and include recycling services for both single-family and multi-family housing. Curbside recycling programs are provided by haulers through contracts with municipalities, or are provided by subscription service under licensing conditions of municipalities. Regional outreach, education and infrastructure efforts have been targeted primarily at the residential sector in the past two decades. Many businesses have recycling programs, and Minn. Stat. §115A.151 requires public entities to have containers for at least three recyclable materials from their operations.

There are five privately-owned and operated Material Recovery Facilities (MRFs) serving the Region. Materials accepted at the MRFs vary, but commonly include: paper/fiber, glass bottles, metals and plastic bottles. The private sector, municipalities, and counties provide numerous public drop-off locations for one or more types of recyclables.

## **Yard Waste**

Minn. Stat. §115A.931 prohibits yard waste from being mixed with MSW, but yard waste can be collected by MSW haulers using separate collection vehicles or by special yard waste collectors, such as lawn services. Public and private collection sites are also available for residents to drop off yard waste, and there are over 40 yard waste sites currently serving the Region. The MPCA estimates that roughly 500,000 cubic yards of yard waste is managed in the metropolitan area through yard waste composting programs. Unlike many areas in the country, wood waste is not currently included in the calculation of yard waste collected for the Region. The SWMCB will therefore work with the MPCA to include yard waste in future performance measures so as to better reflect overall organics diversion activity within the Region and improve the ability of the Region to compare its progress to other areas across the country.

## **Organics Recovery**

In 2010, 4% of the total MSW managed was through source separated organics (SSO) composting programs. Over the past five years, the number of SSO composting programs has risen. At least ten school districts, seven institutions, approximately 35 businesses, and four cities offer SSO composting programs. This does not include the many food-to-people and food-to-animal feed programs that also increase organics diversion. Two permitted organics composting facilities are located within the Region. One fully permitted SSO composting facility is located in Dakota County and a yard waste and organics composting facility with a pilot project permit from the MPCA is located in Carver County. A third facility was recently opened on tribal land in Scott County. All of the facilities are operated by private vendors.

## **Resource Recovery (Waste to Energy)**

Four MSW resource recovery facilities serve the Region, with 28% (862,290 tons) of the **Region's** total MSW delivered to resource recovery facilities in 2010.

The Hennepin Energy Resource Center (HERC) in Minneapolis uses mass-burn technology to produce steam for district heating and to generate electricity. Ferrous metal is then recovered for recycling from the resultant ash. Hennepin County owns HERC and contracts for its operations. To date the facility has been permitted by the MPCA to burn 365,000 tons annually but has a design capacity of approximately 405,000 tons per year.

The Ramsey/Washington County Resource Recovery Facility located in Newport converts MSW into refuse-derived fuel (RDF). The facility is



privately-owned and operated. The MSW is delivered, shredded, and separated into three waste streams: RDF, recyclable metal and residue. The RDF is transported for combustion to Xcel Energy power plants in Red Wing and Mankato, where it is then burned to generate electricity. The ferrous and non-ferrous metals are recycled, and the residue is landfilled. **The facility's** permitted capacity is 500,000 tons per year. RDF is used at the Wilmarth Xcel Energy facility and at the Xcel Energy facility in Red Wing.

The Elk River Resource Processing Plant and the Elk River Energy Recovery Station facilities are an RDF processing facility and electrical generation power plant owned and operated by Great River Energy (GRE). The Elk River Resource Processing Plant processes up to 400,000 tons per year of MSW into RDF. **The power plant's** maximum RDF capacity is 300,000 tons per year, and while most of the energy is used by GRE, in the past, RDF from Elk River has also been sent to the **Xcel Energy's** Wilmarth facility. Currently, Anoka, Hennepin and Sherburne counties have separate service agreements with GRE. GRE has delivery agreements with the individual private haulers.

The Red Wing Resource Recovery Facility is owned and operated by the City of Red Wing. Select haulers from Dakota County deliver MSW to the facility for processing. **The facility's permitted capacity** is 27,000 tons per year. Incinerated waste is used at the Xcel Energy facility in Red Wing.

## Land Disposal

In 2010, approximately 28 percent of the Region's **MSW was** landfilled (846,319 tons). Residential waste contributed 55 percent of landfill disposal, while non-residential waste contributed the remaining 45 percent. Of the total MSW landfilled, 92% was delivered to in-state landfills, while 8% was delivered to Wisconsin and Iowa locations. There are two MSW landfills located in the Region; both are located in Dakota County. These landfills are privately owned and operated and both have methane recovery systems. Other landfills serving the Region include those located in Elk River, Glencoe and, as previously mentioned, Western Wisconsin and Northern Iowa.

## Non-MSW Management

Non-MSW includes non-hazardous industrial waste, construction and demolition debris (C&D), materials banned from disposal with MSW, non-hazardous industrial waste, non-hazardous infectious waste, and many other waste streams that are not MSW or are otherwise defined or regulated as hazardous waste. Nine non-MSW facilities serve the metropolitan area, including four non-MSW landfills in Dakota County. In 2009, the Region generated nearly 1.9 million tons of non-MSW.

## C. Waste Forecast

Over the past decade, the Region has consistently generated about 3.3 million tons of MSW per year. Beginning in 2007, waste generation decreased from 3.4 million tons to 3.1 million tons in 2010 – most likely due to the state and national economic recession that slowed consumer purchasing. However, the Region expects continued population and employment growth over the next 20 years, and this combination will likely result in increased waste generation. It is estimated that the system will have to manage approximately 4.5 million tons of waste per year by 2020. During the time period of 2010 through 2030, the MPCA forecasts that a total of 79 million tons of MSW will be generated in the metropolitan area.

## D. Challenges

The Policy Plan identifies challenges in metropolitan area waste management, including forecasted increases in waste generation, increased per capita growth rates, increased land disposal and decreased resource recovery. For the first time, the Policy Plan included numerical objectives in five-year increments for the metropolitan area to attain. These objectives focused on the following categories: Source reduction/reuse; Recycling; Organics recovery; Resource recovery; and Land disposal.

The chart below depicts the Policy Plan's percent of total MSW objectives for 2010-2030:

Management Strategy	2010 Region Actual	2015 State Objective	2020 State Objective	2025 State Objective	2030 State Objective
<b>Source Reduction &amp; Reuse</b>	-	1-2%	2-4%	3-5%	4-6%
<b>Recycling</b>	40%	45-48%	47-51%	49-54%	54-60%
<b>Organics</b>	4%	3-6%	4-8%	6-12%	9-15%
<b>Resource Recovery</b>	28%	32-34%	32-33%	30-31%	28-24%
<b>Landfilled</b>	28%	20%	17%	15%	9%

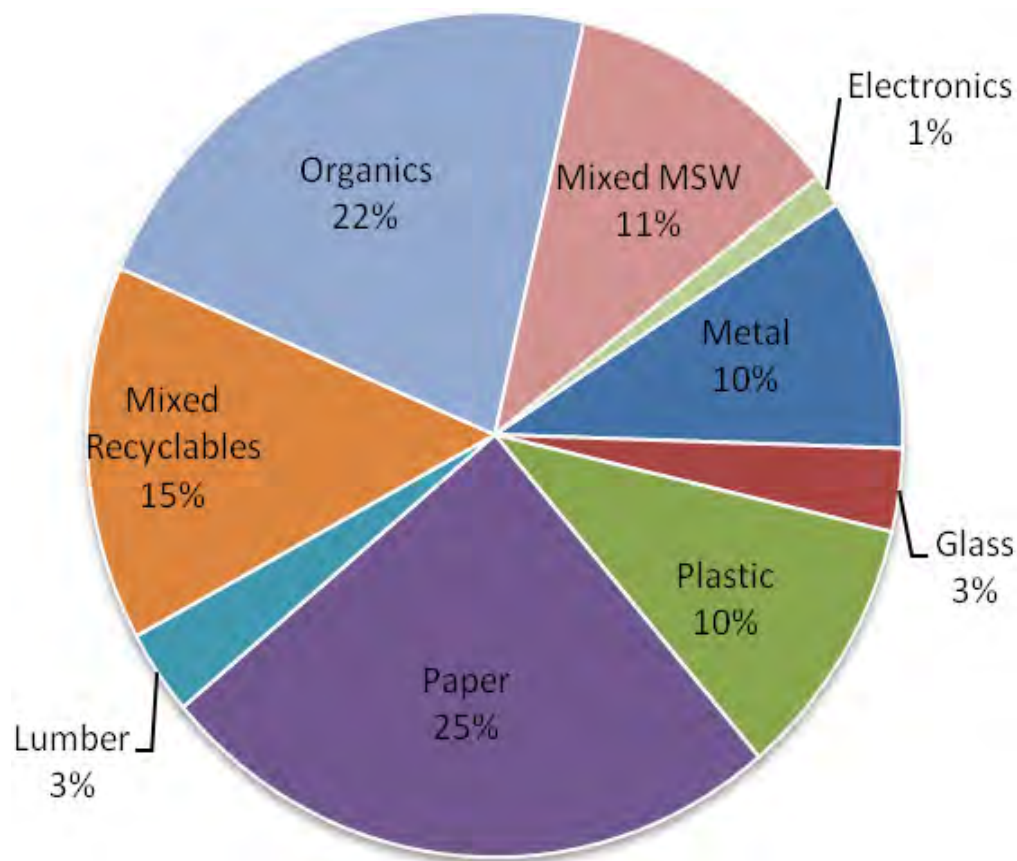
*(2010 Regional Data Presentation to the SWMCB. June 22, 2011.)  
Note: Recycling does not reflect source reduction and yard waste credits*

Achieving these Policy Plan objectives will require all solid waste stakeholders to develop new solid waste strategies. The Policy Plan recognizes the need for new ideas, suggesting that the Region define future expectations, outline roles and responsibilities, and verify performance to reach the state objectives.

## E. Opportunities

In 1999, the SWMCB and the MPCA conducted a waste composition study to analyze MSW deposited at landfills and resource recovery facilities. In 2009, the results of the 1999 study were combined with waste composition studies at three resource recovery facilities. The studies show no significant changes in waste composition over the past decade. Figure 3 identifies MSW composition for the metropolitan area.

**Metropolitan Area MSW Composition**



*(2010 Metropolitan Solid Waste Policy Plan, page 25)*

The studies do, however, continue to demonstrate that there are opportunities for material recovery prior to land disposal. The Policy Plan identifies potential strategies for increased material recovery, with a strong emphasis on non-residential recycling and organics recovery. The Policy Plan also supports the use and expansion of existing tools to move waste management up the solid waste management hierarchy and to better hold stakeholders accountable. These tools include education, licenses, ordinances, and contracts. The MPCA has committed to supporting legislative initiatives for extended producer responsibility/product stewardship, fully enforcing existing processing and public entities laws, restricting land disposal capacity as part of certificate of need decisions, and providing research, support and technical assistance that provides the foundation from which local governments can successfully operate.

# Regional Coordination

## Cost and Finance

### A. Introduction

In 1980, the Minnesota Legislature enacted the Waste Management Act, established the solid waste management hierarchy of preferred waste management practices and required counties to manage solid waste in order to protect public health and the environment. The Legislature also clearly established a preference for the private provision of waste management services, as well as a preference that the costs of the waste management system be made visible to the consumer. Over time, the Legislature adopted a variety of laws related to the financing of the system, including SCORE taxes, landfill surcharges, public subsidies of recycling, designation, waste management service charges and county authority to issue bonds. The purpose of these laws is to provide the financial tools necessary to pay the costs of meeting the public objectives of protecting public health, a cleaner environment, and resource conservation.

As the regional waste management system developed over the last 30 years, costs increased and the methods of financing changed. Waste generators now pay for waste management services in a variety of ways, ranging from direct payments to private providers, to state taxes or local charges that indirectly pay for other services. Publicly funded services are also financed in a variety of ways, mostly independently created and administered at the local level. There is no regional solid waste charge, but counties contribute funds to operate the SWMCB due to the collective belief that regional coordination has and will continue to improve solid waste management outcomes.

### B. Cost and Finance Principles

This Regional Master Plan emphasizes the need to focus the limited public resources that are available on regional solid waste management priorities. This work must be achieved within a market-driven system and should strive to reduce reliance on public subsidies and local property taxes whenever possible. The following cost and finance principles will be used by the SWMCB as it considers future region-wide financing issues:

- Public and private pricing policies should create incentives for generators to manage solid waste as high as possible on the solid waste management hierarchy;
- The solid waste management system and each of its components should account for the full costs of managing waste, including risk management, long-term care, and environmental costs;

- The costs of waste disposal should be borne by current waste generators and not deferred to future generations;
- Manufacturers, retailers and consumers should assume greater responsibility for the cost of collecting, transporting, and managing products at the end of their useful lives;
- The roles and responsibilities of local governments in achieving the Region's solid waste management objectives are impacted not only by short and long-term financial implications, but also by state laws and a regional commitment to environmental protection; and
- A larger state funding role is needed to reach all solid waste management objectives in the Policy Plan.

### **C. Regional Strategies**

#### **The SWMCB will:**

1. Research other cost and finance mechanisms, including a regional financing model, and specifically identify how those mechanisms could improve solid waste management, if Policy Plan objectives are not met.

#### **In partnership with the MPCA, the SWMCB will:**

2. Identify and secure the revenue sources that provide adequate and long-term funding for the Region; and
3. Engage other solid waste stakeholders to evaluate billing and contracting associated with waste and recycling collection so as to assess how incentives can be leveraged to increase recycling and organics recovery.

# Regional Coordination

## Governance

### A. Introduction

Since 1991, counties in the metropolitan area have collaborated on solid waste management through a joint powers agreement (JPA). The JPA that created the Solid Waste Management Coordinating Board has been amended several times during its two decade existence, and each time it has been amended with the intent of improving the coordination of county solid waste management efforts within the Region. Today, the specific, stated purpose of the SWMCB is to increase the efficiency and environmental effectiveness of solid waste management across multiple county jurisdictions, primarily through coordinated communication and outreach, policy development and collaborative activities.

Like the counties that continue to recognize a need for regional coordination, the MPCA emphasizes the importance of regional governance in managing solid waste in the Policy Plan. Under its objectives and policies, the MPCA includes the following statement regarding governance:

***Policy 10: Promote effective governance. Promote governance of solid waste management that results in the implementation of the WMA [Waste Management Act], resulting in: pollution prevention and decreased land disposal; the fair allocation of costs and liabilities; the efficient provision of services; the promotion of innovation; the fostering of private initiative and new technologies; and the provision of services that meet the diverse needs within the Region (2010 Metropolitan Solid Waste Policy Plan, page 10).***

While governance by itself cannot achieve the aggressive objectives established by the MPCA, the SWMCB agrees that effective regional governance is a component of achieving solid waste management success. The SWMCB spent 2010 - 2011 completing a governance analysis in preparation of the Regional Master Plan update at the end of 2011. During its analysis, the SWMCB:

- Analyzed the extensive research and case studies prepared by Dakota County regarding regional solid waste systems in North America and specifically focused on the governance and financial components of those systems;
- Participated in a strategic development process and workshop facilitated by the University of Minnesota that examined both the form and functions of the SWMCB; and



- Individually interviewed a majority of SWMCB commissioners to garner their ideas regarding the form and function of SWMCB in the present and how to best prepare the organization for the future.

The SWMCB asserts that solid waste management success in the Region should be judged on whether the solid waste objectives outlined in the Policy Plan are achieved. Effective regional governance is therefore a necessary—but not sufficient—condition of a successfully managed region. The SWMCB believes that there are solid waste management improvements that can be achieved under the current governance model. Therefore it is important that the State and Region first focus on functional improvements (i.e. increased organics recovery and recycling). Finally, as has been the case for two decades, the counties are able to adjust the SWMCB JPA to address changes in form if such changes are ultimately deemed necessary to enhance solid waste management effectiveness.

## B. Regional Governance Principles

As indicated in the previous section, the SWMCB will continually assess whether the JPA enables the counties to effectively carry out their waste management responsibilities by referencing the following governance principles:

- ***Efficiency and Effectiveness:*** Counties are required by state law to engage in waste management, and will work jointly through the SWMCB to carry out activities that increase the efficiency and effectiveness of county efforts;
- ***Accountability:*** Counties are accountable to the MPCA through their individual solid waste master plans, and the counties shall then hold one another accountable through the SWMCB JPA. The counties, through their individual plans and through the SWMCB, will identify the specific methods to hold others in the Region accountable. The Performance Measurement chapter of this Regional Master Plan discusses how SWMCB will continually review and critically evaluate performance;
- ***Support of the Solid Waste Management Hierarchy:*** The Region's governance will be structured so as to implement and support initiatives that move management of waste up the solid waste management hierarchy;
- ***Support of the Private Sector:*** The Region's governance structure will advance the State's solid waste management objectives through efforts that recognize the Region's market-based approach to solid waste management; and



- ***Continual Improvement:*** On an ongoing basis, the SWMCB will evaluate its governance model and will examine and modify the current governance structure, as necessary, to meet the Region's **solid waste objectives**.

## **C. Regional Strategies**

### **The SWMCB will:**

1. Provide waste management leadership in the Region by serving as a forum for policy discussions, conducting research and evaluation studies and developing Regional programs in partnership with the State, other public entities and the waste industry;
2. Evaluate changes to its joint powers agreement that are necessary for implementation of Master Plan strategies; and
3. Continue to evaluate governance options if Policy Plan objectives are not met.

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# Regional Coordination

## Measurement and Accountability

### A. Introduction

Measuring solid waste results is integral to the success of the Region's solid waste management system. The SWMCB, in partnership with the MPCA, is committed to collecting robust solid waste data that enables policymakers to devise strategies that result in the Region achieving the solid waste management objectives outlined in the Policy Plan. Without improved measurement data, it will be impossible for the State and Region to fully assess the effectiveness of Master Plan Regional **Strategies and the Region's** waste management system.

SWMCB believes that all successful solid waste measurement and accountability strategies will recognize the following principles:

- Data measurement, collection and reporting consistency will enable the State and Region to identify the most promising opportunities for system improvements and the expansion of solid waste management best practices;
- The flow of solid waste and the generators that produce it do not neatly fit within city and county jurisdictional lines;
- Non-residential generators will produce more timely and reliable data if they are required to submit identical data one time and to one entity;
- Consistent solid waste data must be available to the State so that it can construct meaningful policies that address the long-term solid waste issues of highest priority;
- When possible, counties should focus their resources on the creation of programmatic solid waste management efforts that are informed by the use of data that is consistent statewide and fits within a solid waste regulatory framework that is imposed by the State; and
- State, regional and local entities should be held accountable for the roles and responsibilities that **they are expected to fulfill within Minnesota's solid waste** management system.

The ***SWMCB Joint Powers Agreement***, effective July 1, 1998, states that the SWMCB shall systematically evaluate the progress of the Region and each county in achieving the outcomes articulated in the Regional Master Plan.

## **B. Measuring Regional Progress on Achieving Solid Waste Management Objectives**

Solid waste progress will ultimately be benchmarked against the objectives outlined in the 2030 Solid Waste Management Policy Plan, and those objectives will therefore serve as the outcomes by which SWMCB and its member counties will be held accountable. SWMCB will also regularly analyze available solid waste data to produce solid waste reports that compare the Region's **current progress to the** regional solid waste management objectives in the Policy Plan.

It is through this constant analysis that future regulatory, policy and communication priorities will be identified and specific strategies included in the annual workplan to guide programmatic implementation. Instead of attempting to measure and track data across a wide array of solid waste subcategories that ultimately are not the outcomes by which the Region will be assessed, the SWMCB will focus the 2011 Regional Master Plan on the macro objectives that will be the standards that determine regional success. This focus will will prioritize data collection and management efforts and enable the SWMCB and MPCA to focus more attention on the creation of critical data collection and measurement methods that are needed to fully assess future regional solid waste management progress.

## **C. Measurement of County Specific Strategies**

In order to highlight the regional focus of the 2011 Regional Solid Waste Master Plan and streamline the submission of information to the MPCA, County Specific Initiatives (CSI's) **were removed from the Regional Master Plan**, and specific county strategies are instead being housed in **the SWMCB member counties' individual Master Plans** that must be submitted concurrently with the Regional Master Plan. Per the requirements of the SWMCB JPA, counties will continue to collectively review their county-specific strategies on an annual basis at a SWMCB meeting and identify specific tasks and results that each county will attempt to achieve in the year ahead. It is expected that both qualitative and quantitative measures of progress will identify how county strategies are contributing to the achievement of **SWMCB's objectives identified in this Regional Master Plan**.

## **D. Regional Strategies**

### **The SWMCB will:**

1. Evaluate and enhance current measurement and reporting tools (i.e. ReTRAC);
2. Support county development of individual performance measures so long as the measures provide data that integrates with other counties and enables the Region to benchmark progress on solid waste objectives;

3. Develop performance measures that track progress toward the achievement of the Region's **recycling, organics** recovery, processing and reuse objectives included within the State's **2030 Solid Waste Policy Plan**;
4. Annually report to the MPCA regarding progress in meeting the Policy Plan objectives, including challenges and opportunities for future improvement; and
5. Encourage the inclusion of yard waste in any calculation of organics recovery for the Region.

**In partnership with the MPCA, the SWMCB will:**

6. Support full measurement of State, Regional and individual county waste management progress so as to improve overall accountability and better identify when changes to the current system are required;
7. Support the MPCA as it expands facility permitting and the reporting of solid waste data;
8. Align SCORE and other data so that it is consistent and aligns with the **integrated reporting recommendations in the MPCA's SCORE revamp report**;
9. Continue providing data to the MPCA so that it can measure source reduction and reuse at the state level and determine the effectiveness of pilot projects and other new strategies; and
10. Rely on the MPCA to evaluate and update Policy Plan objectives, as necessary, based on updated solid waste data.

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# Regional Strategies

## Source Reduction and Reuse

### A. Introduction

The Policy Plan stresses the need to manage waste to maximize environmental benefits. A source reduction and reuse objective of 4-6% has been established for 2030. This is an aggressive objective that will require strong MPCA leadership, with support and local leadership from counties and municipalities from around the state.

A key public policy related to source reduction is product stewardship. Product stewardship, also known as extended producer responsibility (EPR), spreads responsibility for products at the end of their useful life among manufacturers, distributors, retailers and users. Product stewardship solutions can result in less waste being produced, and will be important in meeting the source reduction and reuse Policy Plan objective. This Regional Master Plan calls for the Region to foster product stewardship approaches to the management of difficult to manage waste. The Region will promote product stewardship framework legislation and support producer responsibility initiatives in order to reduce the expense and burden of collection currently borne by government.

Government is a large consumer of goods and services and generates large quantities of waste. Both the Policy Plan and the Regional Master Plan emphasize that government will lead by example, take environmental factors into consideration when making purchases and collaborate to share knowledge, experience, and technical expertise regarding environmentally preferable practices. The counties will continue participating in cooperative purchasing and seek to expand the availability and utilization of green products in their own operations and throughout residential and non-residential sectors within the Region.

Progress toward the source reduction and reuse Policy Plan objective will require improved data measurement. Standard methodology for measuring source reduction and reuse needs to be developed by the State to ensure that source reduction activities in one county be tracked in a way that is consistent with other counties. The Region will therefore depend upon the MPCA to develop that methodology and will provide local government input and data, when possible, to ensure the development process is a successful one.

## **B. Regional Strategies**

### **The SWMCB will:**

1. Provide product stewardship leadership in the Region by serving as a forum for policy discussions, conducting outreach with public entities, and raising general awareness about the product stewardship/extended producer responsibility model;
2. Develop and expand reduction and reuse efforts throughout the Region through programs such as the Reuse Alliance;
3. Provide assistance to counties to increase the purchasing of environmentally preferable products through cooperative purchasing contracts; and
4. Share knowledge, best practices, and technical expertise regarding environmentally preferable practices among public entities.

### **In partnership with the MPCA, the SWMCB will:**

5. Develop a statewide policy for product stewardship and support related product stewardship legislation;
6. **Support the MPCA's new and ongoing efforts to develop and expand** reduction and reuse efforts throughout the Region;
7. Support MPCA efforts to develop and implement a measurement tool for source reduction and reuse; and
8. Expand the available list of environmentally preferable products contained within cooperative purchasing contracts.



# Regional Strategies

## Toxicity Reduction

### A. Introduction

Reducing the toxicity of the waste stream is important in order to effectively protect public health and the environment. The most effective way to reduce the toxicity of waste is to redesign products to use less toxic components or to recover toxic components before they enter the waste stream, but sometimes toxic products must be used and then disposed of appropriately. In these instances, the waste containing toxic or hazardous components should be removed from the MSW waste stream and properly managed.

Before turning its focus to the management of toxic waste, the Regional Master Plan calls for an initial focus to be on preventing the toxic waste from even being created. The Master Plan calls upon residents and businesses to use fewer products containing toxic and hazardous components, reduce the amount of the product used, and properly manage products containing toxic or hazardous materials. The Region will develop appropriate communication tools to assist the counties in carrying these messages to the community, and additional information about specific communication strategies can be found in the Regional Master Plan's "Communication and Outreach" section.

A regional effort to foster product stewardship, meaning that all parties involved in designing, manufacturing, selling, and using a product take responsibility for the life-cycle environmental impacts of that product, will also prove effective from a cost, public health and environmental perspective. However, consistent with a key theme throughout the Regional Master Plan, greater private sector involvement and reduced dependence on government subsidization is needed to enhance product stewardship in the years ahead.

Finally, in addition to communication tools and encouraging greater product stewardship, the Region will continue to use a variety of compliance strategies, including coordinating certain aspects of hazardous waste regulation, to assure the proper management of toxic and hazardous waste by regulated entities. The counties will also continue to offer a regional HHW collection system through a reciprocal use agreement.

### B. Regional Strategies

#### The SWMCB will:

1. Maintain the reciprocal use agreement for HHW collection services;

2. Evaluate cooperative purchasing efforts that provide for more efficient operation of county HHW programs;
3. Assist member counties in HHW system planning by coordinating an evaluation of driving distances as a measure of convenience, to determine if gaps exist in the availability of HHW programs;
4. Coordinate discussions about elements of county regulatory compliance strategies, including licensing, inspection, consultation and enforcement, to ensure that hazardous waste is properly managed throughout the Region; and
5. Evaluate emerging issues related to hazardous waste, such as proper management of pharmaceutical waste.

**In partnership with the MPCA, the SWMCB will:**

9. Monitor product use that may affect the level of toxic/hazardous materials in the waste stream and coordinate with the MPCA to identify solutions to reduce the toxicity of waste;
10. Develop a statewide policy for product stewardship and support related product stewardship legislation that addresses problem materials and products with toxic and hazardous components; and
11. Develop household hazardous waste disposal contracts that provide for cost-effective and environmentally preferable recycling and disposal options for county-collected household hazardous waste.

# Regional Strategies

## Recycling

### A. Introduction

Recycling is a significant component of the Region's **solid waste management** system. The Policy Plan strongly emphasizes recycling, establishing an objective that 60% of all MSW should be recycled in the Region by 2030. The plan repeatedly mentions the importance of recycling in managing waste as a resource because recycling offers the promise of reduced pollution, diminished demand for scarce natural resources, and state and regional economic growth potential. In 2010, the Region recycled 41% of all MSW (not including SCORE source reduction and yard waste credits).

The Region's **waste generation is expected to grow to an estimated** 4.5 million tons by 2030. The costs associated with managing this increased waste will be significant. Ultimately, the Regional Master Plan recognizes the magnitude of the challenging task facing the counties, and it is clear that the 60% recycling objective will not be accomplished without generators and service providers involved in future efforts to improve. SWMCB counties will therefore continue working with their partners to empower generators and service providers so that a collaborative effort maximizes the Region's **diversion of recyclable material** in the years ahead.

As previously mentioned, the SWMCB recognizes that meeting higher recycling objectives will be a challenge. New initiatives must be undertaken to achieve the 60% recycling objective by 2030. First, the development of new markets is extremely important. SWMCB counties believe that the MPCA is positioned to be the governmental entity that aggressively leads market development efforts while working closely with the private sector and the federal government. SWMCB and the counties will then provide policy and regulatory support to the MPCA as those new markets emerge. Second, the SWMCB believes that the private sector is best positioned to introduce new collection techniques and technology to ensure that recycling effectiveness is maximized. The SWMCB therefore looks forward to working with the private sector in coming years to help introduce new, effective technologies to the Region.

### B. Regional Strategies

#### The SWMCB will:

1. Share research, information, public policy tools and tactics for improving residential and non-residential recycling;
2. Develop model ordinances to encourage a consistent regulatory approach for recycling, as needed;

3. Evaluate and outline best management practices for “away-from-home” recycling, in locations such as parks, arenas, and public buildings as well as private businesses that serve the public;
4. Establish regional data reporting methods to guide recycling policy, including residential recycling for the Region, after identification by the MPCA of the appropriate entity for data development and collection;
5. Consider the development of programs targeted at the non-residential sector to increase recycling; and
6. Strengthen partnerships, through discussions and other opportunities, with service providers and recycling management facilities to identify improved recovery efforts and education needs.

**In partnership with the MPCA, the SWMCB will:**

7. Support state-led efforts to increase non-residential recycling through expanded policy efforts if Policy Plan objectives for recycling are not met using currently available policy tools;
8. Review the Policy Plan objectives following the receipt of improved data;
9. Support MPCA imposing mandatory separation goals for recyclable materials at transfer stations and landfills if the Policy Plan objectives for recycling are not met;
10. Support ordinances or legislation requiring entities that handle recyclables to report recycling rates to the State; and
11. Assist the MPCA in discussions on market development and participate in any activities emanating from those discussions.

# Regional Strategies

## Organics Recovery

### A. Introduction

Organics recovery in the Region includes the management of yard waste (leaves, grass, and other plant waste) and source-separated organic (SSO) materials that include food waste, food production by-products, produce and meat trimmings, plant waste, and soiled, non-recyclable paper. In 2010, changes to Minn. Stat. §115A.03 subdivision 25(a) added composting of **SSO's** to the definition of recycling.

There are a variety of technologies available to manage the Region's organic wastes, including residential backyard composting, food rescue, food donation, food to livestock feeding, food to livestock feed manufacturing and various forms of non-residential composting. There has also recently been interest in anaerobic digestion, and several projects are currently being explored within the Region, but the technology remains in the early stages of assessment at this time.

County, city, and private sector efforts have been successful in increasing the amount of organic wastes materials managed by a variety of methods in the Region, **and in 2010, 127,366 tons (26% of the Region's potential SSO) were diverted from the MSW waste stream.**

The significant growth in organics recovery throughout the Region is due to county technical assistance, education programs, promotion of already existing organics recovery services, and targeted financial incentives. The Region's **2010 level** of organics recovery, at 4%, already meets the Policy Plan system objective for organics recovery of 3-6% of total MSW by 2015. However, meeting future objectives (4-8% of total MSW in 2020 and 9-15% of total MSW by 2030) will require further changes in the waste management system. The counties and SWMCB will continue designing policies and programs in response to the State's **challenging** organics recovery objectives. Finally, it is also important to note that the SWMCB recognizes that: 1) private sector cooperation is needed to reach the 9-15% objective by 2030; and 2) yard waste should be included in performance measures for organic wastes to more accurately reflect ongoing efforts in the Region and align with how organics recovery is calculated in other regions around the country.

## **B. Regional Strategies**

### **The SWMCB will:**

1. Share research, information, public policy tools and tactics regarding organics recovery;
2. Develop model ordinances to encourage a consistent regulatory approach for organics recovery, as needed;
3. Host discussions with the private sector on the development of organics recovery strategies and technologies;
4. Establish regional data reporting methods to guide organics recovery after identification by the MPCA of the appropriate entity for data development and collection;
5. Consider the development of programs targeted at the non-residential sector to increase organics recovery;
6. Analyze joint collection of yard waste and organics recovery from residential generators; and
7. Identify a range of financial and regulatory organics recovery tools available to counties, and hold discussions to identify opportunities for regional consistency.

### **In partnership with the MPCA, the SWMCB will:**

8. Support state-led policy efforts to increase non-residential organics collection and management as appropriate infrastructure develops, if policy plan objectives for organics recovery are not met using currently available policy tools;
9. Review the Policy Plan objectives following the receipt of improved data;
10. Support legislation requiring appropriate handlers of organic wastes to report organics recovery rates to the State; and
11. Work to include yard waste in performance measures for regional organics diversion.

# Regional Strategies

## Processing

### A. Introduction

Waste processing is an important element in the waste management system for waste that is not reduced, reused or recycled. By processing waste into energy, resource recovery facilities reduce landfilling and power residences and businesses throughout the Region. To manage waste in accordance with the solid waste management hierarchy, the SWMCB adopts processing as the preferred alternative to landfilling for MSW that is not otherwise reduced, reused or recycled. (Note: see the **Regional Master Plan's "Organics Recovery" section for specific strategies** regarding organics diversion).

In 1985, the Minnesota Legislature adopted a law requiring all MSW generated in the seven metropolitan counties that is not reduced, reused or recycled to be processed at a resource recovery facility. There are currently four resource recovery facilities serving the Region: the Hennepin Energy Recovery Center, the Newport Resource Recovery Facility, the Elk River Resource Processing Plant and Red Wing waste-to-energy facility.

The Policy Plan highlights the need to ensure that waste generated by public entities is processed in a method that is consistent with its highest identified use **per the State's solid waste management hierarchy. In response to that processing** requirement and future waste management objectives identified in the Policy Plan, **the MPCA and SWMCB agree that full utilization of the Region's waste processing** capacity is a key component in achieving those desired outcomes. Full utilization of capacity is important to the achievement of current and future objectives. This effort must be coordinated with other available policy and regulatory tools to be as effective as possible.

The MPCA and SWMCB acknowledge the need for MPCA to fully exercise its statutory authority to enforce Minn. Stat. §473.848; it is only through a combination of fully utilizing processing capacity and the exercise of statutory **enforcement authority for how waste is managed that the Region's future solid** waste management objectives will be fully achieved.

### B. Regional Strategies

#### The SWMCB will:

1. Address waste processing issues throughout the Region on an individual county or sub-regional basis;
2. Support a market-based approach regarding privately owned and operated

resource recovery facilities serving the Region, thus likely leading to the reduction or elimination of public subsidies;

3. Encourage its member counties, individually or jointly, to retain a first option to purchase RDF and processing facilities if, after termination of existing agreements, the facilities are to be closed or converted to a non-processing use; and
4. Support full utilization of design resource recovery capacity.

**In partnership with the MPCA, the SWMCB will:**

5. Ensure full compliance with Minn. Stat. §473.848 that requires MSW to be processed prior to land disposal;
6. **Support the MPCA's enforcement of Public Entities law; all individual county plans will include the requirement that Public Entities process MSW;**
7. Support current law that designates MSW and RDF as a source of renewable energy;
8. Monitor existing processing capacity and operations and consider proposals from the private sector for new processing options for the Region; and
9. Work to include yard waste, including wood waste used for the production of renewable energy, in performance measures for regional organics diversion.



# Regional Strategies

## Land Disposal

### A. Introduction

Landfills continue to play a role in the solid waste system for the metropolitan area. Although land disposal is the least preferred option in the solid waste management hierarchy, an integrated waste management system requires that some landfill capacity be available. The Policy Plan acknowledges that landfills are necessary and that landfill capacity is needed for waste that cannot be reduced, reused, recycled or processed. Newer technologies such as leachate recirculation, bioreactors, and landfill mining provide opportunities to improve landfill management, but need to first be evaluated and then designed in a manner that prevents negative environmental outcomes. Ultimately, conservation of landfill space and the use of new technologies should be encouraged, but only when they also provide for optimal environmental protection.

Landfills that serve the metropolitan area are privately owned and operated, with some of the landfills serving the Region located in neighboring states. Governments therefore specifically focus on the regulatory issues that govern landfilling; landfill design and operation in Minnesota is regulated by the MPCA, counties and cities. This Master Plan stresses the need for landfills to be designed and operated in an optimal manner while also recognizing that landfills as well as all other waste facilities' operations will need to be expanded or changed by 2030 to achieve Policy Plan objectives.

*Note: In this section of the Master Plan, the term "landfilling" refers to MSW landfills only.*

### B. Regional Strategies

#### **The SWMCB will:**

1. Regionally support individual county use of a variety of compliance strategies including licensing, inspection and enforcement to ensure that regulated solid waste is properly managed in landfills throughout the Region.

**In partnership with the MPCA, the SWMCB will:**

2. Support MPCA initiatives to document landfill air emissions and the long-term impacts and costs of landfilling to support future policy decisions;
3. **Monitor existing landfills' capacity;**
4. Encourage the MPCA to adopt a requirement for landfills and transfer stations to conduct waste characterization studies to identify opportunities to divert waste; and
5. Engage the waste industry to improve waste diversion opportunities at waste facilities.

# Regional Strategies

## Non-MSW Management

### A. Introduction

Non-municipal solid waste (MSW) generally consists of three major components: construction, demolition and industrial waste. The Region is served by nine landfills that accept these waste streams. At present, these landfills have approximately 25 million cubic yards of remaining capacity.

The Region has invested significant resources in characterizing and researching non-MSW management so that more accurate data can be incorporated into SWMCB policy and program developments. This Master Plan therefore continues to recognize the need to further improve data regarding non-MSW management.

In addition to gathering improved data, the Metropolitan Solid Waste Management Policy Plan recognizes the need for new or expanded non-MSW market development, specifically targeting clean and mixed biomass, tear-off asphalt shingles and wallboard. For example, some SWMCB member counties have already seen significant savings from the recycling of shingles into asphalt paving projects, and the Region and state stand to benefit from both a budgetary and environmental perspective if shingle recycling can become more pervasive.

The Regional Master Plan's non-MSW strategies focus on increasing the reduction, reuse, recycling and processing of non-MSW through means that are consistent with the solid waste management hierarchy.

### B. Regional Strategies

#### **The SWMCB will:**

1. Strongly encourage all member counties to include alternative bid pricing requirements whenever hot mix asphalt or asphalt paving services are purchased so as to increase shingle recycling;
2. Develop model language for county projects requiring that construction and demolition waste be reused and recycled to the greatest extent possible; and
3. Develop and promote initiatives that enhance non-MSW recycling and management in the Region, including assisting counties in evaluating the incorporation of the MPCA's pre-demolition inspection rule into local ordinances.

**In partnership with the MPCA, the SWMCB will:**

4. Work to streamline data collection for non-MSW waste;
5. Support initiatives that establish statewide non-MSW diversion objectives;
6. Work to develop a consistent definition and application for "beneficial use";
7. Support the private sector in expanding market development for recycled non-MSW, and beneficial uses for non-MSW materials such as clean and mixed biomass, tear-off asphalt shingles and wallboard; and
8. Encourage the MPCA to utilize landfill and transfer station permitting authority to require separation of non-MSW prior to land disposal.

# Regional Strategies

## Regulation

### A. Introduction

The metropolitan counties are required by state law to regulate solid and hazardous waste. Each county has developed ordinances and Master Plans to define the steps that will be taken to affirm that solid and hazardous waste generators and facilities are regulated, that waste is managed in accordance with federal, state and local requirements and that the objectives of the Master Plan are met. The ordinances also specify the enforcement actions that may be used to gain compliance.

***Note: For additional information regarding specific solid waste regulations within each SWMCB member county, please consult the individual county Master Plans that are being submitted concurrently with the Regional Master Plan.***

The SWMCB does not have regulatory authority on behalf of its member counties, and previous editions of the Regional Master Plan therefore did not include any specific solid waste regulation strategies. However, with some of the available state and regional solid waste management regulatory tools not being fully utilized and a desire by SWMCB to expand some regulatory efforts throughout the Region, SWMCB opted to include regional and partnership strategies for regulation in the 2011 Regional Master Plan for the first time.

### B. Regional Hauler Licensing

Established in 1995, the regional hauler licensing program was designed so the metropolitan counties can, through a collaborative effort, issue mixed municipal solid waste hauler collection and transportation licenses. The program provides for the issuance of one base license by the county in which the hauler is based and an operating license by each county in which a hauler operates. The base license provisions, including insurance requirements, fees, hauler application form and license year, are consistent throughout the Region. The SWMCB establishes the requirements for the application process and encourages uniform enforcement guidelines be carried out by the counties. However, the counties are the regulatory authorities responsible for licensing haulers and enforcing licensing requirements.

### C. Hazardous Waste Licensing

Each metropolitan county licenses and inspects hazardous waste generators and facilities pursuant to hazardous waste ordinances. Because of the differences in population, priorities, and resources, the number of licenses issued and inspections conducted varies among the counties. For instance, some counties have adopted

minimal generator registration requirements and others require a full license for all generators. Similarly, some counties inspect all licensees and others have a risk-based system for determining which companies to inspect. Whenever possible, the metropolitan counties attempt to be consistent in application of licensing programs, as this helps avoid confusion for companies with locations in more than one county or that move from one county to another.

## D. County Ordinances

Minn. Stat. §473.811 requires that each metropolitan county have ordinances that regulate solid and hazardous waste. Counties must license hazardous waste generators and both solid and hazardous waste collection and processing facilities. Solid and hazardous waste facilities that are covered by the ordinances must be in compliance with the requirements of the county ordinances, state rules and the Policy Plan. Therefore, county ordinances describe the licensing requirements and enforcement tools that may be used to obtain compliance.

Hazardous waste ordinances must embody and be consistent with state rules. When state rules are changed, counties must modify their ordinances accordingly and submit the changes to the State for approval within 120 days. Hazardous waste ordinances may be more stringent than state rules as long as they do not impede the implementation of state rules. The metropolitan counties have worked together through the SWMCB during the past twenty years to develop ordinances that are consistent with one another and with state rules. When state rules are changed, the metropolitan counties meet to discuss the changes and to coordinate ordinance modifications.

*Note: For additional information regarding specific solid waste ordinances within each SWMCB member county, please consult the individual county Master Plans that are being submitted concurrently with the Regional Master Plan.*

## B. Regional Strategies

### The SWMCB will:

1. Continue coordination of existing regulatory initiatives, such as the Very Small Quantity Generator (VSQG) database and health care and hazardous waste project;
2. Explore the expansion of regional hauler licensing to include non-MSW, recycling, and organics collection services; and
3. **Evaluate each county's regulatory tools and identify opportunities for regional consistency in application that results in solid waste being managed at the highest level possible on the solid waste management hierarchy.**

**In partnership with the MPCA, the SWMCB will:**

4. Support full MPCA enforcement of existing statutes that include processing (Minn. Stat. §473.848) and public entities law;
5. Identify state and regional solid waste priorities that focus future regulatory efforts;
6. Continue coordinating enforcement actions so as to maximize state and local resources; and
7. Support increased state efforts to improve recycling, organics recovery and processing through strategies such as disposal bans or generator requirements when Policy Plan objectives are not being met using currently available regulatory tools.

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# Regional Strategies

## Communications and Outreach

### A. Introduction

The SWMCB has coordinated communications and outreach initiatives to enhance and complement county and regional programs and regulatory efforts since the creation of the SWMCB in 1991. The communications and outreach efforts seek to raise awareness and change behavior among residential and non-residential waste generators in the Region so that solid and hazardous waste is managed in ways that are consistent with county and regional plans. **The SWMCB's communication and outreach efforts are designed to complement county efforts.** All communication efforts are aligned with the solid waste management hierarchy, which emphasizes source and toxicity reduction, recycling, organics and resource recovery over sending waste to landfills.

**To raise awareness and encourage behavior change, the SWMCB's communications and outreach efforts focus on developing and delivering consistent messages and educational materials using a variety of tools and media.** Messages and materials are disseminated through regional partnerships, which are an important way to leverage resources and effectively reach a wide variety of audiences. Ultimately, **the SWMCB's communications and outreach efforts will continue to empower residential and non-residential waste generators to make informed decisions about source and toxicity reduction, recycling, composting and resource recovery over sending waste to landfills.**

### B. Regional Strategies

#### **The SWMCB will:**

1. Seek new and strengthen current partnerships with public entities, community organizations, businesses, the waste industry and others to develop and deliver communication and outreach programs;
2. Update and support RethinkRecycling.com as a centralized source of information for waste generators in the Region;
3. Develop and disseminate consistent and effective messages that complement county efforts and empower residential, non-residential, and governmental waste generators to implement successful solid waste management programs;

4. Develop and implement regional outreach methods for solid waste-related messages. Outreach methods may include SWMCB-printed materials, print and television media, and social media and other forms of communication;
5. Provide educational, financial, and technical support to community-based organizations through programs such as Community POWER for the purposes of incorporating solid waste management best practices and education into community activities; and
6. Target a significant portion of the Region's **communications and outreach** efforts at non-residential recycling and organics recovery, currently the two solid waste policy issues of highest priority for the Region.

**In Partnership with the MPCA, SWMCB will:**

7. Work to integrate state, regional and local communications planning and tools in order to efficiently utilize public funds. SWMCB will provide opportunities for MPCA staff to participate in communication strategy planning and will participate in MPCA communications planning when invited. In addition, SWMCB will promote MPCA materials in the Region and encourage the MPCA to promote the use of SWMCB communications materials to statewide partners.