

# Regional/Washington County Waste Management Master Plan 2005 - 2024



Poster Designed by Students in Mr. Olson's 6<sup>th</sup> Grade Class  
Afton-Lakeland School, 2001

**Washington**  
  
**County**

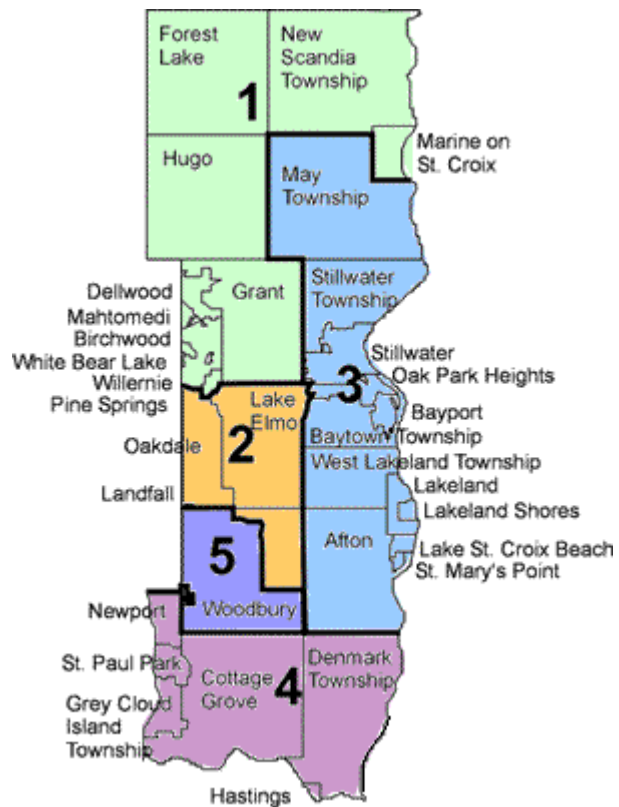
*Prepared by Washington County  
Department of Public Health and Environment  
[www.co.washington.mn.us/publichealth](http://www.co.washington.mn.us/publichealth)*

Adopted by the Washington County Board of Commissioners on November 23, 2004



**2004 Washington County Board of Commissioners  
Washington County, Minnesota**

- District 1 - Dennis C. Hegberg**
- District 2 - Bill Pulkrabek**
- District 3 - Nile L. Kriesel**
- District 4 - Myra Peterson, Vice Chair**
- District 5 - Dick Stafford, Chair**



# Acknowledgments

The Washington County Board of Commissioners and the Department of Public Health and Environment would like to thank the members of the county's Waste Management Planning Group for their contribution to the revision of the Washington County Waste Management Master Plan. The members provided invaluable input that helped shape the framework for waste management in the next five years.

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District 3	Don Scheel
District 4	Nicole Hernandez
District 5	Richard Kveton

### Local Government Representatives

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Stillwater Township	Karen Richtman
City of Lake Elmo	Chuck Dillerud

### Waste Industry Representatives

Tennis Sanitation	Willie Tennis
BFI	Craig Seim
Forest Lake Sanitation	Donna Prahl

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The Washington County Waste Management Master Plan supplements the Regional Solid Waste Master Plan 2005 – 2024, which was adopted by the Solid Waste Management Coordinating Board on September 22, 2004. The Regional Solid Waste Master Plan 2005-2024 is available on-line at [www.swmcb.org](http://www.swmcb.org).

BOARD OF COUNTY COMMISSIONERS  
WASHINGTON COUNTY, MINNESOTA

RESOLUTION NO. 2004-135

DATE November 23, 2004  
MOTION  
BY COMMISSIONER Stafford

DEPARTMENT \_\_\_\_\_  
SECONDED BY  
COMMISSIONER Hegberg

Regional/Washington County Waste Management Master Plan

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

WHEREAS, the Metropolitan Solid Waste Management Policy Plan, adopted by the Minnesota Office of Environmental Assistance on January 15, 2004 and approved by the Solid Waste Management Coordinating Board on November 19, 2003, provides the framework for the county waste management planning in the metropolitan region; and

WHEREAS, the Solid Waste Management Coordinating Board joint powers agreement specified the preparation of one waste management master plan document for the six member counties in the region; and

WHEREAS, Washington County, as an active member of the Solid Waste Management Coordinating Board, participated in the preparation and review of the Regional Solid Waste Master Plan, along with the other five member counties of Anoka, Carver Dakota, Hennepin and Ramsey; and

WHEREAS, the County Board established a Waste Management Planning Group to aid in the preparation of the County's master plan, per Minn. Stat. 473.803, subd. 4; and

WHEREAS, in preparing its master plan, the County also received input from representatives of cities, townships, and solid waste haulers; and

WHEREAS, the Solid Waste Management Coordinating Board adopted the Regional Solid Waste Master Plan, 2004-2025, September 22, 2004; and

WHEREAS, the Washington County Waste Management Master Plan contains new initiatives that require additional staff resources to develop and implement strategies; and

WHEREAS, the Washington County Waste Management Master Plan is an amalgam of the Regional Master Plan and sections specific to Washington County;

NOW, THEREFORE, BE IT RESOLVED, the Washington County Board of Commissioners adopts the Regional/Washington County Waste Management Master Plan proposed by the Washington County Department of Public Health and authorizes the Department of Public Health and Environmental to submit the Plan to the Solid Waste Management Coordinating Board, in order to amalgamate Washington County's document with those of the other member counties for submittal to the Minnesota Office of Environmental Assistance Director for review and approval;

BE IT FURTHER RESOLVED, the Washington County Board of Commissioners approves the additional resource allocation of 1 FTE in the 2005 budget of the Department of Public Health and Environment for waste management program purposes.

ATTEST:   
COUNTY ADMINISTRATOR

  
CHAIRMAN, COUNTY BOARD

	YES	NO
HEGBERG	<u>X</u>	_____
KRIESEL	<u>X</u>	_____
PETERSON	<u>X</u>	_____
PULKRABEK	<u>X</u>	_____
STAFFORD	<u>X</u>	_____

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## Executive Summary

The purpose of the 2005 – 2024 Washington County Waste Management Master Plan is to guide waste management activities through the next five years, while establishing waste projections for the next 20 years. This revised plan replaces the 1999 – 2017 Waste Management Master Plan.

The Washington County Waste Management Master Plan supplements the Regional Solid Waste Master Plan adopted by the Solid Waste Management Coordinating Board (SWMCB) on September 22, 2004. The intent of the Regional Solid Waste Master Plan is to work towards a common vision and goals as a region of the six metropolitan counties through the SWMCB. The county's plan identifies specific opportunities and challenges pertinent to Washington County and includes county specific strategies to address them.

Chapter II of the Waste Management Plan includes the county's vision, mission, and waste management policies approved by the Washington County Board of Commissioners.

The county's current waste management system is described in Chapter III. The county has a variety of programs designed to effectively manage the growing waste stream, however, despite the success of these programs, the county will need to address the estimated 2 percent per year growth rate in waste generation that is projected over the next 20 years. Waste generation in the county is estimated to grow from 229,380 tons in 2005 to 334,320 tons in 2024. Strategies have been developed for each waste management category in the Waste Management Master Plan to better address this projected growth.

Chapter IV describes how the county will assist the region in achieving regional waste management outcomes and county specific opportunities and challenges. For example, the county will need to focus on:

- the residential ban on CRTs,
- managing an increasing HHW stream,
- increasing commercial activity in waste reduction, recycling and food waste management,
- addressing processing options after 2007,
- managing wastes in a market driven system where the least cost option is preferred over the most environmentally sustainable option, and
- educating generators of the responsibility of wastes created, and importance of proper management to prevent future liability.

The plan includes strategies to invigorate waste reduction, recycling, and organics management in the commercial sector, and in multi-family housing units; includes a plan to build a county environmental center to help residents better manage household hazardous wastes and other problem materials; and includes strategies in providing leadership, outreach and facilitation with cities/towns on waste management issues and activities. The plan includes greater emphasis on the county taking the lead in reducing the volume and toxicity of waste generated from its own operations and encouraging other public entities to do the same. The plan also addresses the need for an increased emphasis on public education and information for residents and commercial generators in all areas of waste management, and the county will develop a strategic communications and education plan.

# **Chapter I: Introduction, Plan Preparation, and Public Participation**

The metropolitan counties are required by the Minnesota Waste Management Act, Minnesota Statute 473.803, to revise their waste management plan, following the Minnesota Office of Environmental Assistance's adoption of the Metropolitan Solid Waste Management Policy Plan (Policy Plan). Development of the Policy Plan was a joint effort between the Office of Environmental Assistance (OEA) and the Solid Waste Management Coordinating Board (SWMCB). The SWMCB adopted the Policy Plan on November 19, 2003. In agreement with the OEA, the SWMCB prepared a regional Waste Management Master Plan containing regional outcomes, regional strategies, and county supporting initiatives, which was adopted by the SWMCB on September 22, 2004. The individual SWMCB member counties (Anoka, Carver, Dakota, Hennepin, Ramsey and Washington) prepared specific county strategies to implement each one's county Waste Management Master Plan. Washington County's Waste Management Master Plan was adopted by the Washington County Board of Commissioners on November 23, 2004 and submitted to the SWMCB on December 9, 2004. The SWMCB combined each county's specific strategies with the regional elements, and submitted the Regional/County Solid Waste Master Plan (Master Plan) to the OEA.

The Washington County Waste Management Master Plan 2005 - 2020 replaces the Washington County Waste Management Master Plan 1999-2017 adopted by the Washington County Board of Commissioners in February 1999. This new plan guides waste management activities through the next five years, while establishing waste projections for the next 20 years. The next revision of the Waste Management Master Plan is scheduled for 2010.

## **Public Participation**

The Washington County Waste Management Master Plan was prepared by staff from the Washington County Department of Public Health and Environment, with direct input from Washington County's Waste Management Planning Group (WMPG), formed for the purpose of the Waste Management Master Plan revision. The WMPG met four times during 2004 to learn about the current waste management system and provide input into the county's Waste Management Master Plan goals, key issues and challenges. The WMPG was comprised of representatives from cities, townships, the waste industry, the state, and a resident from each county commissioner district. The county held a meeting with city and township staff on November 10, 2004 to receive input on the Waste Management Master Plan. On October 21, 2004, the county sent a mailing to solid waste haulers serving the county, requesting comments on the Waste Management Master Plan. The county web site also listed information on the Waste Management Master Plan throughout the development process. A County Board workshop was held on November 2, 2004, with Board adoption of the Waste Management Master Plan on November 23, 2004.

## **Chapter II: Vision and Goals**

### **Washington County's Mission**

“To provide quality public services in a cost-effective manner through innovation, leadership and the cooperation of dedicated people.”

### **Department of Public Health and Environment's Mission**

“To protect, promote, and improve our community's health, environment, safety, and well being. To involve people in improving the quality of life and the environment in Washington County through education, applied research and the resources of the University of Minnesota. In seeking to fulfill this mission, the department strives to be a leader and innovator working in partnership with our communities to achieve optimal health status for Washington County residents.”

### **Washington County's Waste Management Policies**

The policies establish the role and direction of county efforts in the waste management system. The policies help to ensure that waste management services are available and accessible to all residents, businesses and institutions. The policies also emphasize prevention of future environmental and financial liabilities.

#### **Overall Policies**

1. Washington County recognizes the preference of waste reduction in the waste management hierarchy. The county affirms the ongoing need for an integrated solid waste management system appropriate to the characteristics of the waste stream, following the state's order of preference (“hierarchy”):
  - a. waste reduction and reuse;
  - b. waste recycling;
  - c. composting of yard waste and food waste;
  - d. resource recovery through mixed municipal solid waste composting or incineration; and;
  - e. land disposal.
2. The county waste program is part of a comprehensive system which uses strategies of coordination, cooperation and collaboration, as appropriate with other governmental entities and the private sector.
3. Preference is given to the private sector undertaking waste management activities to the extent this is compatible with the ability of the county and its municipalities to comply with state mandates and policies.
4. Education about sound environmental practices related to waste management is a key element of developing and maintaining a sustainable community.
5. The county will provide environmentally responsible leadership by showing awareness of environmental consequences in its actions and by seeking to protect land, air, water and other natural resources and the public health.



# Chapter III: Description of the Waste Management System

## A. Introduction

Washington County is required by state law to produce a waste management master plan that details how it will implement the goals, policies and objectives outlined in the *Metropolitan Solid Waste Management Policy Plan 2004-2023*. The following section describes the county’s existing waste management system, programs and activities to manage this system, and the financial management of these programs.

### General Description of the County

Washington County, located on the eastern edge of Minnesota, is one of seven Twin Cities metropolitan area counties. The county has a diverse economy with a strong commercial and manufacturing base. The City of Stillwater, along the St. Croix River, serves as the county seat. The county is comprised of 423 square miles, and the 2003 population estimate for the county was 213,395. This ranked the county as fifth out of the 87 Minnesota counties for population, housing 4 percent of the state’s population and 8 percent of the Twin Cities metropolitan area’s population. The county’s population is expected to reach 285,260 by the year 2020 and 337,090 by the year 2030.

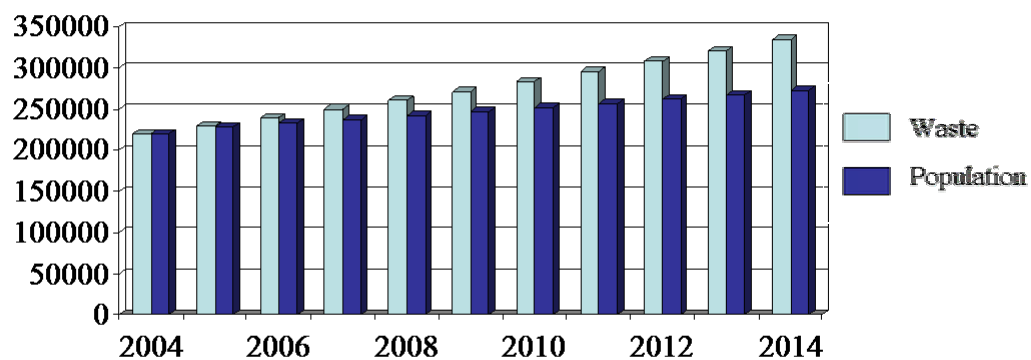
According to the 2000 census, the median household income of county residents was \$66,305, and the median age for both genders in the county was 35.1 years. In December 2003, 121,707 county residents participated in the labor force. The number of jobs located in the county in December 2003 was 117,269. The average unemployment rate for the county in 2003 was 3.7 percent, well below the state average of 4.9 percent and the U.S. average of 5.9 percent.

## B. Waste Generation and Collection

### MSW Waste Generation

MSW (municipal solid waste) generation is calculated from records of waste deliveries to the Ramsey/Washington County Resource Recovery Facility (Resource Recovery Facility) in Newport, and reports from other solid waste facilities serving the metropolitan area. The county projects an annual growth rate in the county’s MSW stream of 2 percent through the year 2023. Figure 1.1 shows the predicted increase in MSW and population. As population grows in the county, the amount of MSW generated is expected to increase. The MSW stream is projected to grow from 229,380 tons in 2005 to over 334,320 tons in 2014.

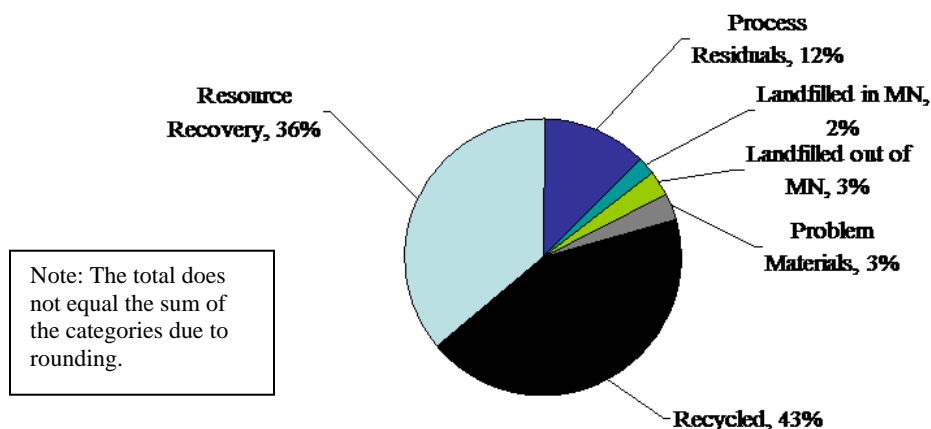
Figure 1.1: Projected Growth in MSW Stream



Based on Met Council 2004 population forecasts and 2% per capita waste growth

The county reported 195,311 tons of MSW managed in 2003. Figure 1.2 shows the breakdown of waste managed from both residential and commercial generators in the county in 2003. The figure indicates that over 43 percent of the waste was recycled, 36 percent processed and used for energy and 17 percent landfilled.

**Figure 1.2: Waste Management in 2003**



### **Waste Collection**

Washington County Solid Waste Ordinance #114 requires that all commercial solid waste haulers operating in the county be licensed by the county. Licensing is accomplished through a joint regional licensing program with the SWMCB.

The Regional Hauler Licensing Program operates in order to simplify the licensing process and eliminate duplicate applications to each county. To obtain an operating license, a hauler submits one application to the county in which the hauler is based. In 2003, the county licensed 23 base solid waste haulers, and 107 additional operating licenses to haulers, based in other counties, to collect solid waste. The county does not require a license for the collection and transportation of non-MSW, recycling, or organic waste haulers.

For MSW collection, residents in 10 of the 32 communities in the county are served by one exclusive hauler where the city or township contracts or arranges for the service on behalf of the residents. The remaining 22 communities have open MSW collection, in which waste generators choose their own hauler for service. See Appendix A for a map identifying each city/town's MSW collection system.

For recycling collection, 22 communities have contracted service, while the rest have open recycling collection. Currently, one hauler offers single-sort recycling, an emerging program since the last Waste Management Master Plan. Single-sort recycling is where all recyclables are placed together in one collection cart. Commercial recycling collection services throughout the county are open, and businesses select their own hauler for recycling or MSW collection service. See Appendix B for a map identifying each city/town's recycling collection system.

Seventeen municipalities in the county also issue hauler licenses to better manage truck traffic, maintain certain hours of hauler operation, and ensure recycling collection. Specifically, municipalities with open recycling rely on hauler licensing arrangements to ensure recycling collection is offered with trash collection.

MSW collected in the county is hauled to the Resource Recovery Facility in Newport (by a hauler who has a service delivery agreement with the county), to a solid waste transfer station, or to a land disposal facility. Currently, the county does not have any operational land disposal facilities. The county's only transfer station licensed to accept MSW is privately owned by Tennis Sanitation, located in St. Paul Park.

# 1. Toxicity Reduction

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

## County Leadership

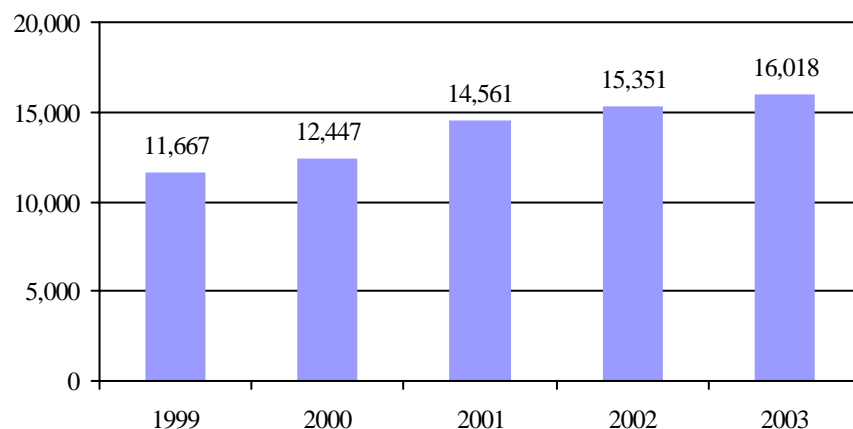
The county has made significant efforts to lead by example and demonstrate ways to reduce the toxicity of waste generated in county operations in order to encourage others to do the same.

- As part of the county’s policy on Environmentally Preferable Purchasing, the county developed a system for researching and selecting less toxic cleaners used in county operations, both in facilities operations and in individual offices.
- The county also developed and implemented an Integrated Pest Management System to manage pests using fewer or no chemicals. The county developed guidelines directing departments to use less toxic alternatives to pesticides, where applicable, in county buildings and on county property.
- The county put in place a system to ensure proper management of computer equipment. All computer equipment is either designated for reuse by the Computers for Schools Program in Bayport or is sent to a recycler for proper management.

## Household Hazardous Waste (HHW) Program

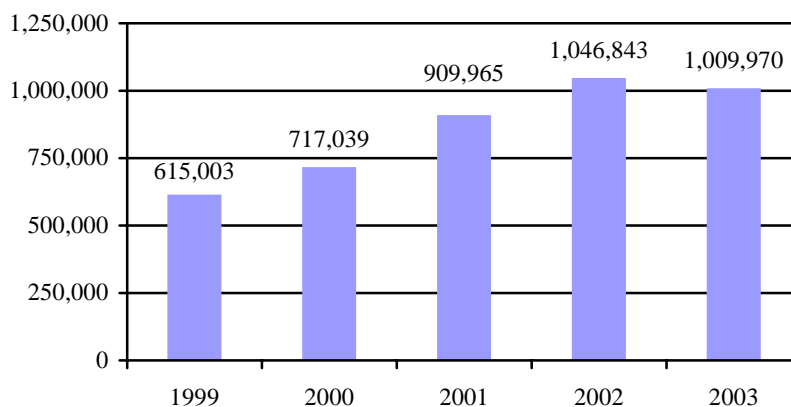
A total of 16,018 county households participated in the HHW program in 2003. This was a 4 percent increase in participation from 2002, and a 448 percent increase since the permanent facility was opened in 1994. Of those households participating in 2003, 13,960 were served at the permanent, year-round facility in Oakdale, with the remaining 2,058 households served at one of the one-day collection events held in Cottage Grove, Forest Lake, Hugo, Lake St. Croix Beach, New Scandia Township or Stillwater. Through a reciprocal use agreement, an additional 1,118 households properly disposed of their HHW by delivering their waste to a participating county facility located in Anoka, Carver, Dakota, Hennepin or Ramsey County. Figure 1.3 shows the increase in participation over the last five years.

**Figure 1.3: HHW Participants**



A total of 1,009,970 pounds (505 tons) of waste was collected and managed in 2003, a 3.5 percent reduction in waste volume from 2002. This reduction in waste volume reported can be attributed to improved waste management methods, such as packaging efficiencies, increased bulking of liquids, and more waste being categorized as solid waste. Over 82 percent (836,620 pounds) of the waste was recycled. Recycled waste includes latex paint, used oil, fluorescent bulbs, oil filters, antifreeze, batteries, fuel from solvents and gasoline, driveway sealants, oil paint, and paint-related materials. Over 15 percent (89,274 pounds) were reused through a free product reuse program at the Oakdale facility, saving the county money in disposal fees. Reuse products include latex and oil paint, paint related materials, aerosol products, household cleaners, and some automotive products. Only 8.6 percent (87,076 pounds) of the total waste collected was disposed of through hazardous waste incineration including items such as pesticides and other poisons. Less than 1 percent (3,631 pounds), which was primarily asbestos waste, was sent to a hazardous waste landfill. Figure 1.4 shows the amount of waste collected from 1999-2003.

**Figure 1.4: Pounds of HHW Collected**



Residents in the county have other options available to them for proper disposal of hazardous/toxic materials. They include: 1) recycling consumer electronics, such as televisions and computers, at several privately-operated recovery operations, 2) drop-off programs at retail locations for Ni-cad and button batteries, 3) lead-acid motor vehicle battery take-back programs at any lead-acid battery retail location, 4) motor oil collection at dozens of service stations and other privately-operated vehicle service establishments, 5) drop-off programs for fluorescent lamps at local retail stores, and 6) recycling of major appliances, such as dishwashers, refrigerators and air conditioners, at several privately-operated recovery operations.

### **HHW Agreements**

The county currently contracts with Heritage Environmental Services for the operation of the HHW facility in Oakdale and the one-day collection events.

The HHW program also has agreements with a number of companies for the direct management of various wastes. These include Xcel Energy/Mercury Technology of Minnesota for fluorescent bulbs, Loe's Oil for waste oil and oil filters, and All Fire Test for propane cylinders.

Due to increasing participation and demand for HHW services, the county is in the planning phase to construct an environmental center. This new center will include HHW collection services, and may also include or host other services such as recycling drop off or problem material management. The lease with the current HHW facility expires in 2008.

### **Small Business Hazardous Waste Collection Program**

The county offers a collection program to help businesses that generate small amounts of hazardous waste. The program was implemented in 1997 through the county's HHW agreement with the state, and approved by the County Board of Commissioners. The hazardous waste is commingled with HHW and manifested for disposal. The cost of the program is funded by a fee charged to the generator prior to disposal of the waste at the facility, and covers disposal costs, labor, and administrative time. Since 1997, 168 businesses have participated in the program. In 2003, 31 businesses participated, and 6,563 pounds of hazardous waste was collected through the program.

### **Regulation of Commercial Hazardous Waste**

The county has operated a commercial hazardous waste regulation program since 1985 and is mandated by state statute MS 473.811 subd.5 to regulate and enforce state and local hazardous waste rules. Washington County Ordinance #166 was adopted in accordance with the state statute. Any business or non-household entity that generates hazardous waste is termed a *Hazardous Waste Generator*, and must comply with these regulations. The regulations are designed to be protective of public health and the environment, and focus on preventing hazardous waste releases or exposure.

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

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

In 2003, there were 12 LQGs, 31 SQGs, and 483 VSQGs in the county, totaling 526 generators.

All hazardous waste generators in the county are required to have a license. To obtain a license, hazardous waste generators must submit an annual report and management plan for each regulated waste generated. The plan must identify the quantity of waste produced, how the waste is managed, and where the waste is disposed. Each plan is reviewed by staff to ensure proper management.

Violations of the hazardous waste rules are addressed using a variety of enforcement methods, such as written orders, administrative or civil sanctions, or criminal complaints. The county may coordinate with the Minnesota Pollution Control Agency (MPCA) and the United States Environmental Protection Agency (EPA) on enforcement situations. In 2003, 16 enforcement actions for continued non-compliance were necessary. Twenty-eight complaints from the community were investigated and resolved.

The county also provides technical assistance to help businesses comply with hazardous waste regulations. This includes on-site consultation during an inspection, training, coordinating with other metro counties, or providing fact sheets or other information on proper management of wastes.

### **Regulation of Hazardous Waste Facilities**

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

## **Other Activities**

Mercury Reduction in Schools – As an initiative of the Ramsey/Washington County Resource Recovery Project Board, the county partnered with the MPCA to work with schools in identifying and removing mercury-containing items and providing non-toxic alternatives. Over 80 public and non-public schools in the county have either completed the program or are in progress.

Electronics Collection - In 2000, in a joint effort with Best Buy in Woodbury, the county helped collect consumer electronics from residents. About 44,300 pounds of material was collected at this event, and 583 residents participated.

Thermometer Exchange - In 1999, the HHW program initiated a mercury thermometer exchange program through the county public health nurses. Mercury thermometers continue to be collected by nurses during their home visits with clients and are exchanged for digital alternatives. The exchange is also available at the HHW facility, and at the county's one-day collection events.

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

## **2. Waste Reduction**

Waste reduction is the most preferred waste management method in the waste management hierarchy. Public education and information are the county's primary waste reduction activities, targeting households, businesses, and institutions with waste reduction messages. The county has strived to provide leadership in waste reduction by establishing waste reduction practices in county operations.

### **County Leadership**

The county has made significant efforts to lead by example and demonstrate methods to reduce waste in county operations in order to encourage others to reduce waste generated. Efforts have focused on procuring environmentally preferable products and seeking methods to reduce the amount of waste generated.

The following waste reduction initiatives implemented in county operations are listed below:

- The "Cut the Waste!" Program was implemented to reduce waste in county offices. Offices implemented activities such as duplex (double-sided) copying and printing, using reusable drinking mugs, and editing "junk mail" lists.
- Monthly reminders are e-mailed to staff on recycling and waste reduction activities.
- The county invested in fitting selected existing laser printers with duplexers.
- The county has set purchasing standards for computer equipment to purchase future printers with duplex capabilities.
- The County Board of Commissioners passed a resolution directing staff to select less-toxic products and to choose products that generate less waste.
- Employees increasingly use e-mail documents instead of paper copies.
- The County Board of Commissioners approved a resolution to use recycled-content latex paint in future building and remodeling projects.

## **Other Activities**

Free Market – In April 2001, the county contracted with Eureka Recycling to make available to county residents the “Free Market”. The Free Market is an on-line, interactive website listing service for residential materials exchange. Residents are able to give or get reusable goods, free of charge, to reduce the amount of reusable and durable goods being discarded as waste. Since the Free Market service began, residents have exchanged over 330,000 pounds of appliances, furniture, building materials, and other items.

Grocery Store Project - The county has identified strategies to reduce and recycle solid waste from grocery stores and conducted an organics (food waste management) demonstration project with Rainbow Foods and Kowalski’s. The project evaluated the stores’ solid waste management activities and recommended options for managing organics.

School Waste Reduction/Recycling Project - The county implemented a paper reuse and recycling program at a local school and conducted waste reduction presentations in conjunction with recycling to schools, and trained youth to teach waste reduction practices to other youth.

License Center Pilot Project - The county conducted an office paper reduction pilot project with a county license center, identifying ways to reduce paper, and implemented paper reduction activities in the remaining county license centers.

Business Assistance - The county provides a variety of services to businesses to assist in waste reduction and recycling. These include contracting with consultants to assist restaurants and food service providers with reducing food waste, encouraging food waste recycling, and distributing informational/educational materials to a variety of businesses.

## **3. Recycling**

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

### **County Leadership**

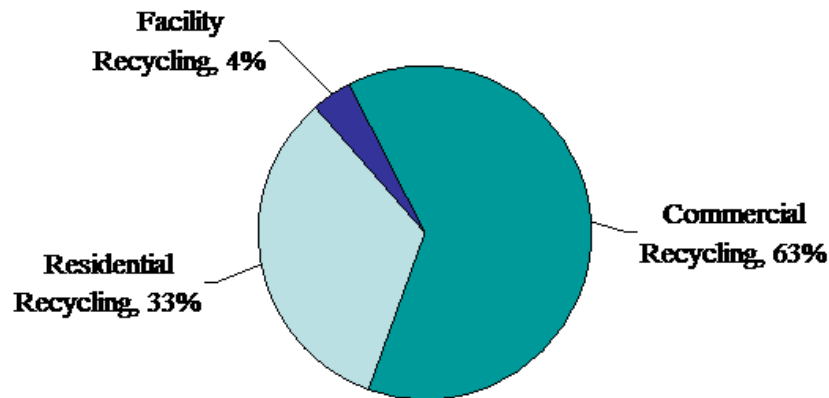
The county has had an in-house office recycling program since 1989. In 2000, an agreement was made with the State of Minnesota’s recycling program allowing county office to recycle additional types of materials such as hard and soft-covered books, bright colored paper, glossy brochures, hanging file folders and paper ream wrappers. Offices can also recycle white/pastel papers, mixed papers, cans, glass and plastic bottles. The program has expanded to include recycling of Tyvek® envelopes, ink jet printer cartridges, CDs, videotapes, floppy disks, transparency film, and computer equipment. The county has had substantial increases in recycling each year due to the additional types of material that can be recycled, and due to the increased education and promotion of the program internally. In 2003, the county recycled 180.7 tons of material, a 66 percent increase from 1999.

## **Residential Recycling**

Cities/towns are responsible for establishing and maintaining residential recycling programs. The county provides technical and financial assistance to aid these programs. Curbside collection occurs in all 32 cities/towns in the county, and all either require that collection service be offered by trash collectors as a condition of receiving a waste hauling license, or the local government has a contract with one recycler to provide collection service.

In 2003, approximately 43 percent of total waste generated in the county was recycled. Figure 1.5 shows the sources of recycling in 2003.

**Figure 1.5: Sources of Recycling in 2003**



A residential curbside recycling grant program has been established to assist cities/towns with recycling program expenses. The level of funding provides a base amount to cover administrative and basic recycling program expenses, and a second tier of funding is targeted to specific projects. A third tier, incentive funding, is available for county-directed projects such as multi-family recycling and business assistance.

In order to receive funding from the county, communities must include newspaper, beverage cans, tin cans, glass jars and bottles, corrugated cardboard, and magazines in their curbside collection and multi-family recycling programs. Most programs also accept plastic bottles, junk mail, boxboard and telephone books as part of the collection. Some programs collect textiles, motor oil, and automobile batteries.

## **Commercial Recycling**

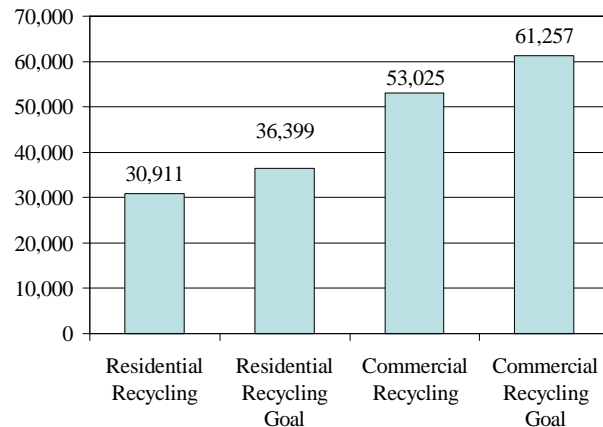
Recycling by businesses is difficult to measure and is estimated. Recovery of materials for recycling from the commercial sector may be the greatest opportunity to increase recycling. In the commercial sector, recyclables are collected by private waste haulers and delivered to private material recovery facilities to be processed and marketed.

Most large retail businesses, such as grocery and discount stores recycle cardboard, which is shown to be the largest volume material in the commercial waste stream. Many businesses, such as restaurants and bars, recycle cardboard, glass, metal cans, and some also recycle food waste. Many small commercial and service businesses are recycling office paper.



While the county has a mature recycling program, in order to meet the state’s waste management goals, the county must increase recycling efforts among residents and the commercial sector. Figure 1.6 below shows the gap that still exists in achieving the state’s 50 percent recycling goal. In 2003, residential recycling fell short 5,488 tons, and recycling in the commercial sector was short 8,232 tons from the recycling goal.

**Figure 1.6: Residential and Commercial Recycling Amounts in 2003**



### **Drop-off Reuse/Recycling Opportunities**

In addition to curbside recycling opportunities, three drop-off sites exist within the county: Stone Soup Thrift Store in Cottage Grove, Goodwill Retail Store in Stillwater, and Family Pathways Thrift Store in Forest Lake. These three stores accept donated clothing and household items, and resell them. An additional drop-off site located at the Oakdale Public Works, accepts the materials typically collected in curbside recycling programs, but does not accept clothing or household items. Of the 25,394 tons of material collected in the residential recycling programs in 2003, 3,219 tons were from the drop-off sites.

The county helps fund these drop-off reuse/recycling opportunities through a grants program.

### **Food Waste/Organics Management**

The development of the more volume-based County Environmental Charge (CEC), and the county’s ongoing work with grocery stores has led to an increase in the amount of food/organic waste being recycled. In 2003 and 2004, Ramsey and Washington Counties worked jointly through the Ramsey/Washington Resource Recovery Project Board to provide outreach services and increased information to organic-rich businesses and institutions. The Project Board contracted with a consultant who provided extensive outreach services to schools, hospitals, and institutional cafeterias. Services have focused on food waste since it is: 1) easy to understand and to separate from garbage, and 2) has the greatest cost savings, because food waste is heavy, wet and dense material, and most waste management costs are based on the weight of the waste.

### **Yard Waste**

Minnesota Statute ' 115A.931 prohibits yard waste from being placed with municipal solid waste or being disposed of in landfills or resource recovery facilities except for the purpose of reuse, composting, or co-composting.

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

The county offers technical assistance on yard waste management to residents and cities/towns. Currently, six communities and two private companies operate community compost sites in the county. Some communities have implemented fee systems to help cover site costs. Sites are located in Cottage Grove, Forest Lake, Hugo, Marine on St Croix, Newport, St Paul Park, Woodbury and Stillwater.

### **Other Activities**

Recycling Database - The county developed a recycling database to collect, manage and report city and township recycling information.

Multi-family Tool-kit - The county participated in a project with Eureka Recycling to develop a tool-kit to increase recycling in multi-family units.

Residential Backyard Composting Program - The county has promoted residential composting of food and yard waste through promotion of backyard composting bin distribution events. Over the last five years, ten compost bin distribution events were held in the communities of Newport, Woodbury, Oakdale, Cottage Grove, White Bear Lake, Forest Lake, Stillwater, and Oak Park Heights. More than 6,000 compost bins have been distributed to county residents at these events. As part of a regional effort, residents were able to participate in events across the metro area. Surveys show that 80 percent of these participants compost both food and yard waste since purchasing residential compost bins.

## **4. Processing/Resource Recovery**

The Ramsey/Washington County Resource Recovery Facility located in Newport processes MSW into refuse-derived fuel (RDF). The facility began operations in July 1987. At the facility, waste is mechanically processed into a fuel that is used by Xcel Energy to produce electricity at power plants in Red Wing and Mankato. During the waste processing, ferrous metals and aluminum are separated and recovered for recycling.

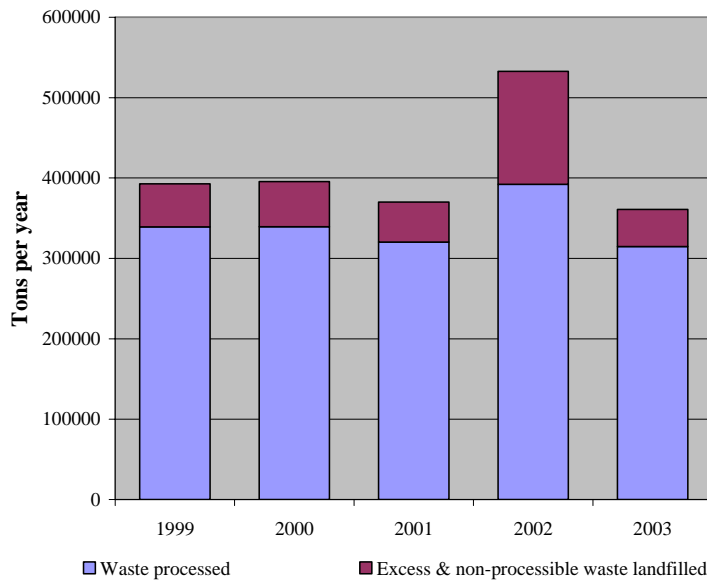
Washington and Ramsey Counties entered into a joint powers agreement to jointly administer a 20 year Service Agreement with NSP, now NRG Energy, Inc., for resource recovery services. The counties jointly administer the service agreement through the Ramsey/Washington County Resource Recovery Project (Project). The Project Board is composed of five Ramsey County Commissioners, three Washington County Commissioners, and a representative from the City of Newport. The Project Board employs staff to oversee the Service Agreement on a day-to-day basis. A Joint Staff Committee, comprised of Ramsey County, Washington County and Project staff, jointly manage the Project.

The Service Agreement established that NRG will provide waste processing services over a twenty-year period, and that the counties will assure a flow of waste to the facility in order to generate revenue.

In July 2007, the existing 20 year contract will expire. The average cost to process a ton of waste is \$68/ton. A variety of methods have been used in the past 16 years to ensure waste delivery to the facility. Until 1994, all haulers were required to deliver all MSW collected in the county to the facility. In 1994 the U.S. Supreme Court ruled that local government cannot decide or designate where garbage should be disposed. Since 1994, the county ensured waste delivery through waste delivery agreements with haulers and reducing the price charged to deliver waste to the facility.

Figure 1.7 shows how waste from Ramsey and Washington Counties was managed at the facility from 1999-2003.

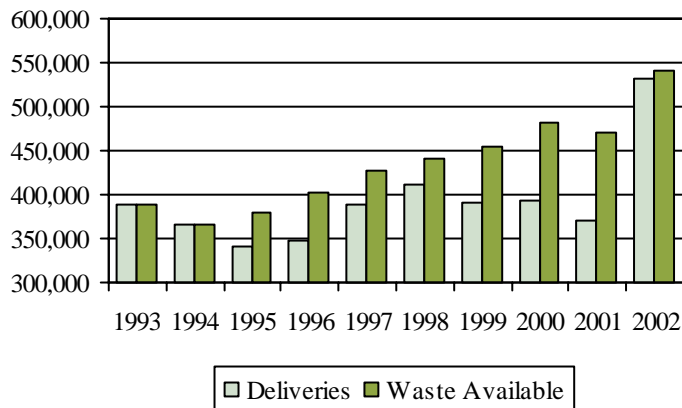
**Figure 1.7: Ramsey and Washington County Waste Managed at the Resource Recovery Facility in 2003**



Note: Figure 1.7 identifies landfilled tonnage to include excess/bypass and nonprocessible waste.

Figure 1.8 shows the amount of waste available from Ramsey and Washington Counties compared to the amount delivered to the Resource Recovery Facility in Newport. The tables show that deliveries to the facility have varied between 1992 and 2002. A number of factors have influenced deliveries including tipping fees charged, and hauler deliveries to out-of-state landfills. In 2002, the tipping fee was low, \$32/ton, and the counties were completing their study on public collection. At the same time, most of the haulers serving both counties decided to deliver all their waste to the Resource Recovery Facility in Newport. Since 2003, with long term contracts in place, the counties have been able to increase and stabilize deliveries from haulers.

**Figure 1.8: Waste Available Versus Waste Delivered To the Resource Recovery Facility**



In 2003, 360,734 tons of waste from Washington and Ramsey Counties were delivered to the Resource Recovery Facility in Newport. Seventy-five percent (75 percent) of the waste was processed into fuel, 3 percent was recovered as ferrous metal and recycled, and 22 percent was landfilled, because it could not be processed into fuel or recycled.

### **Other Activities**

Public Collection Study - In conjunction with Ramsey County, the county conducted an extensive study on public collection of MSW to address waste management and collection issues. The main issue addressed in the study was whether the county could arrange for the management of waste through contracts to meet environmental goals.

Some of the major conclusions from the study included:

- The public strongly supports managing waste in a manner that protects health and the environment.
- Public collection can be designed and implemented to address environmental, health and safety goals.
- The waste industry was vigorously opposed to public collection.

Some of the steps the county implemented as a result of the study included:

- Developing a hauler-based service fee or County Environmental Charge (CEC) in April 2003 to have a more volume-based fee for waste management services.
- Developing waste delivery agreements from 2003 to 2007.
- Deciding not to implement public collection at that time, but try to meet environmental goals through public/private partnerships, and if those efforts are not successful, direct the county to implement public collection.

## **5. Landfilling**

There are no operating MSW land disposal facilities in the county. In 2003, 11,374 tons of MSW from the county was delivered to landfills by private haulers. Waste was delivered to landfills in Central Disposal in Lake Mills, Iowa, Seven Mile Creek Landfill in Wisconsin, Rice Lake Disposal in Sarona, Wisconsin, Pine Bend Landfill, Elk River Landfill, and the Burnsville Landfill. These landfills are owned by private companies and individual solid waste haulers choose to transport the collected waste to a landfill.

Through the Ramsey/Washington County Resource Recovery Project, the counties have contracted for disposal of excess waste, non-processible waste and residue from the Resource Recovery Facility in Newport. Currently, the Burnsville Landfill owned by Waste Management, Inc. receives the waste. In 2003, 23,058 tons was delivered to the Burnsville Landfill from the Resource Recovery Facility in Newport.

## **6. NonMSW Management**

NonMSW is the term used to refer to types of waste that are not included in MSW or hazardous waste. Examples of nonMSW include construction/demolition debris, industrial waste, tree waste, street sweepings, and water treatment lime sludge. The following is a review of some of the nonMSW activities in the county.

## **County Leadership**

To better manage nonMSW generated in county operations, the county is:

- Incorporating sustainable or “green” building design guidelines into future building and remodeling projects.
- Licensing and inspecting nonMSW land disposal facilities in the county.
- Inventorying nonMSW generated by county departments.
- Ensuring proper management of nonMSW generated in county operations.

## **NonMSW Materials**

Construction debris - The majority of construction debris generated in the county is hauled to MSW landfills. Tennis Sanitation Transfer Station and the Resource Recovery Facility in Newport are facilities in the county that also handle small amounts of construction debris.

Demolition debris - Generators of demolition debris are often referred to the SKB Rich Valley Landfill in Inver Grove Heights. Demolition debris is not managed at the Resource Recovery Facility in Newport. Concrete and asphalt crushing operations, where the material is recycled, are not currently regulated by the county.

Industrial Waste - The county currently licenses two industrial waste land disposal facilities. The Allen S. King Ash Landfill located in the City of Oak Park Heights is utilized for the disposal of fly ash from the nearby generating plant. Black Diamond, located in the City of Woodbury, processes coal slag into fractions appropriate for use as blasting grit and for use on roofing shingles. The by-product of this process is slag fines.

Tree Waste – There are three sites in the county that accept tree waste; in the City of Cottage Grove, in the City of Woodbury, and Buberl Recycling and Composting located in the Baytown Township. In addition, the Buberl facility is licensed to manage treated and untreated wood. All of these facilities are open to the public.

Street Sweepings – Street sweepings are collected and screened. Litter is disposed of at a regulated disposal facility, and the screened fraction is used as clean fill in various projects, such as utilization as road base/road core.

Water Treatment Lime Sludge - Water treatment lime sludge is defined as a solid waste. It is applied to the land in the county by licensed companies to increase the pH where required for optimal crop growth by licensed companies.

## **7. Solid Waste Regulation**

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

In addition to enforcing state rules, the county enforces its own solid waste management ordinance. The ordinance establishes county specific standards pertaining to the management of solid waste. For example, the Ordinance sets standards for tree waste management facilities, land application sites, solid waste facilities, waste haulers, and for the County Environmental Charge.

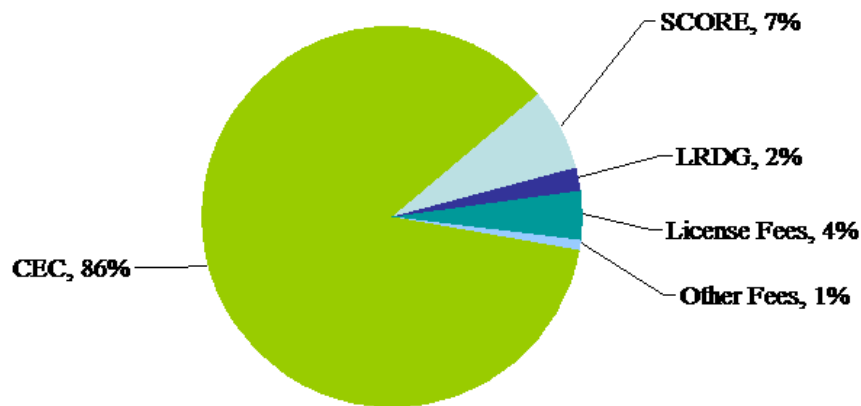
## 8. Cost and Finance

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

### Revenue

The primary sources of revenue for the county's solid waste programs are from the County Environmental Charge, state grants, and license fees from hazardous and solid waste regulation.

**Figure 1.9: 2004 Waste Program Budgeted Revenue**



#### *County Environmental Charge (CEC)*

In April 2003, the county implemented the County Environmental Charge as a method to collect funds for solid waste management programs such as household hazardous waste, recycling and resource recovery. Since 1989, funds for these programs were collected as a flat fee on the property tax statements, and did not provide incentives for waste generators to reduce or recycle the amount of waste they produced. The County Environmental Charge is collected by haulers as a percentage of the garbage bill, is more visible to generators, and provides an incentive to reduce waste and recycle. In 2003, the County Environmental Charge was 34.2 percent of the amount of the waste bill, and 39.5 percent in 2004. The rate is evaluated on an annual basis, and adjusted as needed. A \$3.00 per parcel charge remains on the property tax statement.

#### *SCORE and LRDG State Grants*

The county receives two grants: the SCORE (Select Committee on Recycling and the Environment) derived from the state solid waste management tax on waste management activities and the LRDG (Local Recycling Development Grant) funded by a surcharge on waste landfilled in the Metropolitan Area. About half of the SCORE funds go to fund HHW programs and about half goes to fund other waste management programs such as the recycling grants to cities/towns and the county's in-house waste management programs. LRDG funding is used for recycling grants to cities/towns.

#### *License Fees*

All direct costs associated with the solid and hazardous waste regulation programs, including licensing and inspections, enforcement of the regulations, ordinance amendments and rule changes, are covered by license fees that are paid by the solid waste haulers and the regulated companies.

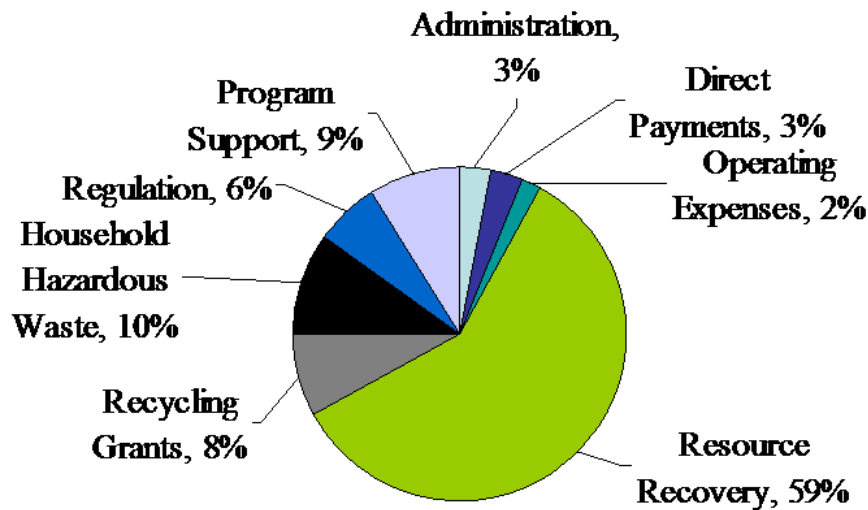
### *Other Fees*

The county has an agreement with Xcel Energy for reimbursing the cost of collecting fluorescent bulbs through the county's HHW program. The county participates, along with other metropolitan 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. The cost of the Small Business Hazardous Waste Collection Program for businesses that generate small amounts of hazardous waste is covered by the fees charged to the participating businesses.

### **Expenses**

The county's primary expenses for its waste management programs are resource recovery, household hazardous waste, and recycling grants to cities/towns.

**Figure 1.10: 2004 Waste Program Budgeted Expenses**



### *Resource Recovery*

The major expenditures in resource recovery services are the cost of subsidizing the tipping fee to ensure waste delivery to the Resource Recovery Facility in Newport. In 2004, this subsidy was approximately \$30 per ton or about \$4,100,000.

### *Household Hazardous Waste*

The HHW program expenses include operating the environmental center in Oakdale, and the one-day collection events. The majority of funds are for disposal and contract labor. The county has made great efforts to reduce the cost of managing HHW. The county continues to be among the lowest in cost per participant. In 1989, the average cost per household participating at a collection was \$95.00. In 2003, the average cost per household was less than \$40.

### *Recycling Grants*

These are payments to cities/towns for recycling programs and drop-off recycling centers.

### *Regulation*

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

### *Other Fees*

Administration – Include fees such as administrative and clerical support to waste management programs.

Direct Payments – Includes payments to support project initiatives such as school education, county in-house recycling and waste reduction efforts, and County Environmental Charge accounting and auditing.

Operating Expenses – Include costs such as office supplies, computers, and equipment for waste management programs

Program Support – Includes wages for staff to implement waste management programs.

## **9. Strategic Communication and Education**

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

Public education, including both informational and promotional activities, is an important component of the county’s waste management program.

Environmental Update - The county publishes the *Staying in Touch* newsletter in which the middle insert is the *Environmental Update*. This newsletter is currently published twice per year and provides residents and businesses with information regarding the county’s waste management programs, including yard waste composting, household hazardous waste reduction and disposal, hazardous waste management, waste reduction, and recycling.

Resource Recovery Project – County staff collaborates with Ramsey County and the Resource Recovery Project staff to publish and distribute *Trash Today*, a newsletter that addresses the integrated solid waste management system developed by the two counties. The newsletter is published twice yearly and is mailed to all addresses in Washington and Ramsey counties. The counties also collaborated in developing “Trash Trunks” used by schools and organizations to learn about the importance of processing and developed displays and written materials promoting the environmental benefits of an integrated waste management system.

School Presentations – The county has developed four school programs addressing the areas of product label reading, packaging reduction, recycling/recycled products, and storm drain stenciling and continues to provide these educational opportunities to schools, community groups and local organizations.

Funding for schools – The county provides funding to schools for classroom in-services and performances on waste reduction and recycling.



Recycled Products Kit - The county developed award winning recycled products kits that have been strategically distributed in the community to meet growing demands for information on recycling. The kits are hands-on learning stations for schools, businesses or community groups, and contain ten examples of products made from commonly recycled materials such as plastic lumber made from milk bottles, a notebook made from recycled office paper, and a doormat made from recycled tires.

Banned materials – The county will continue to provide information on materials banned from the MSW stream such as yard waste, tires, and appliances.

Printed information - Waste management messages are also distributed through fact sheets, flyers and brochures, such as the HHW brochure mailed to selected communities for promotion and various fact sheets distributed at the HHW facility.

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

HHW facility tours - The county conducts tours of the HHW facility throughout the year for schools and community groups.

On-line Residential Disposal Guide - The county developed the on-line Residential Disposal Guide which lists information for residents on how to properly dispose of many household wastes. The Guide is used to respond to demand from community inquires on waste management issues and provides specific county waste management information in partnership with the region's communication strategy and the Green Guardian campaign.

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

Business Assistance – The county provides businesses and institutions technical assistance and information on waste reduction, recycling, and hazardous waste management issues through telephone and on-site consultations, along with referrals to other service providers such as the Minnesota Exchange Service through the Minnesota Technical Assistance Program, Minnesota Waste Wise, and private recycling and waste collection companies. The *Resourceful Waste Management Guide* and other printed recycling and waste reduction materials are also distributed to businesses.

(Chapter 4 Divider Page)

# Chapter IV: County Policies, County Strategies Derived from Regional Strategies, County Supporting Initiatives and County Specific Strategies

## 1. Toxicity Reduction

### A. Introduction

Reducing the toxicity of waste is significant to reducing potential negative impacts to public health and the environment. Toxic materials such as pesticides, mercury-containing products, and certain cleaners pose a serious threat to public health if not managed properly.

In this next planning cycle, the county faces a number of opportunities and challenges in managing toxic materials and reducing the toxicity of waste. These include:

- Cathode Ray Tube (CRT) residential ban in July 2005 (includes televisions and computers).
- Construction of the county's new environmental center, and possible opportunities to manage additional wastes at the center.
- Growing need to properly manage problem materials, and avoid illegal dumping.
- Collection and management of increasing amounts of household hazardous wastes (HHW).
- Growing trend of consumer products containing toxic materials.
- Lack of knowledge among some residents about the county's HHW collection program.

The strategies developed address these opportunities and challenges. In addition, the county will lead by example in reducing the toxicity of the materials used and disposed of in county operations, and will encourage others to do the same.

## Policies

1. The county will provide leadership in the reduction of toxic/hazardous waste used in county facilities.
2. The county, with respect to regulated hazardous waste from business will:
  - a. Assure compliance with applicable laws related to the management of hazardous waste, as required by Minn. Stat. §473.811;
  - b. Provide information, technical assistance and consultation services to hazardous waste generators regarding the use and management of hazardous waste.
3. The county supports shifting responsibility from government to business for proper waste management of products that require separate management or are shown to cause environmental harm.
4. The county will continue to provide household hazardous waste (HHW) management services to its residents and contract with the private sector.
5. The county will ensure convenient opportunities are available to assist residents in managing toxic materials or problem materials.

6. The county will provide leadership by providing the community with appropriate information on environmental programs.

## County Strategies Derived from Regional Strategies

Regional Outcome #1, Strategy #3: The SWMCB and its **member counties** will work to integrate toxicity reduction messages into educational initiatives of other public entities, businesses and non-profit organizations, such as outreach efforts of public health departments.

Regional Outcome #1, Strategy #4: SWMCB **member counties** will lead by example in reducing the toxicity of MSW generated in county operations and will encourage other public entities to do the same.

Regional Outcome #2, Strategy #1 and Regional Outcome #3, Strategy #1: The SWMCB will develop consistent messages regarding purchasing decisions and waste management practices that promote toxicity reduction. The SWMCB and its **member counties** will disseminate these messages to consumers/generators and encourage public entities, businesses and non-profit organizations to do the same.

Regional Outcome #2, Strategy #3: On an annual basis, the SWMCB will develop public information messages targeting at least one toxic, hazardous, or problem material based on the greatest potential to reduce the toxicity of waste or improve the management of problem materials. The SWMCB and its **member counties** will disseminate these messages through regional and county media outlets, web sites, and publications.

Regional Outcome #2, Strategy #4: SWMCB **member counties** will continue to provide HHW collection and disposal options to residents and maintain reciprocal use agreements for HHW programs.

Regional Outcome #3, Strategy #2: On an annual basis, the SWMCB will select at least one business sector to be the focus of regional public information initiatives and regulatory collaboration, based on the greatest potential to reduce the toxicity of waste. The SWMCB **member counties** will target this business sector in county educational and regulatory initiatives.

Regional Outcome #3, Strategy #4: SWMCB **member counties** will continue to use a variety of compliance strategies, including education, consultation, technical assistance, licensing, inspection and enforcement, to assure that regulated solid and hazardous waste is properly managed.

Regional Outcome #4, Strategy #1: The SWMCB and its **member counties** will continue to work with others to propose and support product stewardship initiatives and legislation addressing products with toxic/hazardous components and problem materials.

Regional Outcome #4, Strategy #3: The SWMCB and its **member counties** will provide opportunities for public entities to learn more about procurement policies that foster product stewardship, such as requiring manufacturers to take back computers at the end of their useful lives.

Regional Outcome #5, Strategy #3: The SWMCB and its **member counties** will promote EPP, including the purchase of less toxic products and products containing reprocessed/recycled hazardous and special wastes.

Regional Outcome #5, Strategy #4: SWMCB **member counties** will lead by example by incorporating environmentally preferable purchasing principles, including product stewardship and the purchase of less toxic products, into purchasing contracts and will encourage other public entities to do the same.

## County Supporting Initiatives

Regional Outcome #1: Washington County will research and evaluate other household hazardous waste collection methods.

Regional Outcome #2: Ramsey and Washington Counties will work with public, private and non-profit entities to explore, and develop as appropriate, additional opportunities for collection of special waste, household hazardous wastes, and hazardous waste.

Regional Outcome #3: Ramsey and Washington Counties will work with schools to identify mercury-containing products and/or mercury-related wastes and other hazardous materials, provide non-hazardous alternatives to the products, and ensure proper disposal of the wastes.

## County Specific Strategies

1. Washington County will lead by example in reducing the toxicity of waste generated in county operations by:
  - annually selecting a product to research less toxic alternative and make the substitute if feasible or select a product or waste that can be reduced, reused or recycled;
  - monitoring its IPM program and make improvements as necessary.
2. Washington County will develop and facilitate a communication network to inform and initiate waste management opportunities with public entities.
3. Washington County will evaluate and make recommendations to the region on alternative residential household hazardous waste collection methods.
4. Washington County will take steps to address illegal dumping of waste by (a) creating partnerships with municipalities and haulers to provide increased opportunities for disposal of difficult materials, such as bulky items and by (b) working with haulers and municipalities to identify violators of local mandatory collection ordinances.
5. Washington County will research, develop, and implement an improved system to respond effectively and consistently to community inquiries.
6. Washington County will develop a marketing-based approach for its public education and information materials.
7. Washington County will continue to provide internal support to other county departments on environmental issues.
8. Washington County will utilize its existing communication system to inform county employees of household hazardous waste management.

9. Washington County will evaluate additional services or problem wastes that could be managed at the county environmental center.
10. Washington County will develop and implement a mercury program initiative to identify mercury-containing products and/or mercury-related wastes and other hazardous materials, and suggest/provide non-hazardous alternatives to the products and ensure proper disposal of the wastes.
11. Washington County will work with businesses that are not hazardous waste generators to reduce the toxicity of waste generated in their operations.
12. Washington County will leverage existing environmental health inspection programs to work with businesses to integrate waste reduction, recycling, toxicity reduction, and organic management methods within their business operations.
13. Washington County will develop and implement a plan to increase commercial/industrial waste management programs within businesses including toxicity reduction, waste reduction, recycling and organics management.

## 2. Waste Reduction, Reuse, and Recycling

### A. Introduction

Waste reduction, reuse and recycling are preferred methods for managing waste. Waste generation in the county is estimated to grow by 2 percent each year, and the cost to manage the increasing waste is significant. The most cost-effective way to manage this waste is to generate less, and slow the growth of the waste stream.

In addition, the county's level of recycling has not kept pace with the increasing waste stream, and the county is not meeting its recycling goal of 50%. Resources, such as paper, cans, glass, organics, are being thrown in the trash, instead of recycled into new products.

In this next planning cycle, the county faces a number of opportunities and challenges in increasing waste reduction, reuse and recycling of wastes among residents and commercial generators. These include:

- Needing to increase commercial activity in paper reduction, food waste management, material reuse and use of reusable transport packaging.
- Increasing reuse opportunities among residential and commercial generators.
- Engaging public entities in reducing, reusing and recycling of wastes generated from their operations.
- The decrease in the number of consumer products being manufactured for reuse or repair, and the increase in individually packaged servings of foods and beverages.
- Low recycling rates in the commercial sectors and in multi-family housing.
- A stagnant recycling rate that is not achieving the 50% recycling goal.

The strategies developed address these opportunities and challenges. In addition, the county will lead by example in reducing, reusing and recycling as much of the waste it generates, and encourage others to do the same.

## Policies

1. The county will provide leadership in source reduction activities through continuously improving its own operations and will encourage public entities to follow its practices.
2. Public education and information is the county's primary waste reduction activity, targeting households, businesses, and institutions with waste reduction messages.
3. The county will provide technical and financial assistance to facilitate waste reduction and recycling opportunities for residents.
4. Local units of government are the primary managers of residential recycling programs, including multi-family housing.
5. The county will provide leadership in recycling programs at all county facilities.
6. The county will provide increased leadership to cities/towns and schools through communication and facilitation.
7. Responsibility for public education on recycling issues will be shared and coordinated between the county, cities, and service providers.

8. The county will provide recycling education and technical assistance to the commercial sector.

## County Strategies Derived from Regional Strategies

Regional Outcome #1, Strategy # 1: SWMCB will develop consistent messages regarding purchasing decisions and waste management practices that promote reduction, reuse, recycling and environmentally preferable purchasing. The SWMCB and its **member counties** will disseminate these messages to consumers/generators and encourage public entities, businesses and non-profit organizations to duplicate these messages.

Regional Outcome #1, Strategy #3: Every two years the SWMCB will develop public information messages targeting at least one residential action for region wide waste reduction/reuse and/or recycling promotion, based on the greatest potential to reduce or recycle waste. The SWMCB and its **member counties** will disseminate these messages through regional and county web sites, media outlets and publications.

Regional Outcome #1, Strategy #4: Every two years the SWMCB will develop public information messages targeting at least one commercial material for region wide waste reduction/reuse and/or recycling promotion, based on the greatest potential to reduce or recycle waste. The SWMCB and its **member counties** will disseminate these messages through regional and county web sites, media outlets and publications.

Regional Outcome #1, Strategy #5: The SWMCB and its member counties will work to develop consistent messages that inform residents and businesses about how to recycle waste. And, the SWMCB and its **member counties** will increase recycling promotions in an effort to reinvigorate recycling.

Regional Outcome #1, Strategy # 8: The SWMCB and its **member counties** will work to integrate reduction, reuse and recycling messages into educational initiatives of other public entities, businesses, and non-profit organizations, such as outreach efforts of public health departments.

Regional Outcome #1, Strategy #9: SWMCB **member counties** will lead by example in reducing, reusing and recycling MSW in county operations and will encourage other public entities to do the same.

Regional Outcome #1, Strategy # 10: The SWMCB and its **member counties** will work with municipalities to identify strategies to enforce existing building code requirements that promote recycling so that municipalities may implement them.

Regional Outcome #3, Strategy # 3: The SWMCB and its **member counties** will promote EPP, including the purchase of less wasteful and recycled-content products.

Regional Outcome #3, Strategy #4: SWMCB **member counties** will lead by example in incorporating environmentally preferable purchasing principles, including product stewardship and the purchase of less wasteful and recycled content products, into purchasing contracts and will encourage other public entities to do the same.

Regional Outcome #5, Strategy #2: Using GreenGuardian.com and other regional and county web sites, media outlets, and publications, the SWMCB and its **member counties** will promote separate management of food waste by food rescue for people, rendering, and livestock feeding.



## County Supporting Initiatives

Regional Outcome #1: Ramsey and Washington Counties will examine the effectiveness of a hauler-based service charge on encouraging reduction and recycling.

Regional Outcome #1: Washington County will examine opportunities to partner with housing management companies or property owners of multi-family housing buildings in effort to increase recycling.

Regional Outcome #1: Washington County will work with municipalities and the region to ensure each resident and business has a contract for solid waste collection, unless an environmentally sound alternative is available.

Regional Outcome #5: Ramsey and Washington Counties will promote food waste and organic waste diversion, with preference for waste reduction and recycling.

## County Specific Strategies

1. Washington County will lead by example in reducing, reusing and recycling MSW in county operations by:
  - reviewing material generated and annually selecting a product or waste that can be reduced, reused or recycled;
  - organizing a regular educational event.
2. Washington County will develop and facilitate a communication network to inform and initiate waste management opportunities with public entities.
3. Washington County will encourage and support innovative projects implemented by cities and townships that will reinvigorate recycling.
4. Washington County will research, develop, and implement an improved system to respond effectively and consistently to community inquiries.
5. Washington County will develop a marketing-based approach for its public education and information materials.
6. Washington County will leverage existing environmental health inspection programs to work with businesses to integrate waste reduction, recycling, toxicity reduction, and organic management methods within their business operations.
7. Washington County will continue to promote the reuse of useable residential materials.
8. Washington County will develop and implement a plan to increase commercial/industrial waste management programs within businesses including toxicity reduction, waste reduction, recycling and organics management.
9. Washington County will study the feasibility to include small businesses that generate household quantities of recyclables on residential curbside collection routes.

(Section 3 Divider Page)

## 3. Processing

### A. Introduction

Processing is the next level on the waste management hierarchy to manage waste that cannot be reduced, reused, or recycled, and is preferred over landfilling. For the county, the primary processing technology has been waste-to-energy. In particular, waste that is processed in the county occurs at the Ramsey/Washington County Resource Recovery Facility in Newport, which processes MSW into refuse-derived fuel (RDF).

Minnesota Statute 473.803 requires metropolitan counties to plan and implement activities to meet the state's policy for solid waste management. Overall, local governments are responsible for ensuring that solid waste generated in their jurisdictions is managed in an environmentally and economically sound manner that protects public health and safety. Solid waste management is grounded in the need to safeguard the environment, conserve and recover material and energy resources, and protect public health and safety. Counties are accountable to the public to successfully plan and implement activities to meet the state policy and the corresponding goals established in the Plan.

In this next planning cycle, the county faces a number of opportunities and challenges to ensure processing opportunities for waste generated in the county. These include:

- The county's contract with NRG-Newport expiring in 2007, mid-way through the next planning period.
- Processing exists in a market driven system where waste is managed in the least cost option.
- MSW generation in the county is growing each year.
- Few residents understand the importance of processing as a component of the waste management system.
- Waste managed by processing costs more than landfilling.
- Few generators see the direct responsibility of wastes created, and the importance of proper management to prevent future liability.

The strategies developed address these opportunities and challenges. In addition, the county will lead by example in properly managing its wastes by ensuring waste generated in county operations is processed, rather than landfilled, and will encourage other public entities to do the same.

## Policies

1. The county continues to affirm processing of waste into energy or by composting as the preferred mixed municipal solid waste management strategies (over landfilling) for waste that is not reduced or recycled.
2. The county will support a merchant approach at the Resource Recovery Facility in Newport upon termination of the Service Agreement, consistent with the regional strategy. As part of the merchant operation, the county will seek to assure:
  - a. Waste haulers that serve the county will have access to the facility,
  - b. Public entity waste will be accepted at the lowest price offered at the facility,
  - c. The facility will be maintained as a resource recovery facility for the purpose of recovering materials and energy from the waste,

- d. Should NRG or its successor decide to no longer use the facility to process waste, the county may consider exercising its right of first refusal, under the service agreement, to purchase the facility and operate it as a resource recovery facility.
3. The county supports a variety of waste processing methods for waste that is not reduced or recycled. These methods include the proven RDF (refuse-derived fuel) technology at the Resource Recovery Facility in Newport.

## County Strategies Derived from Regional Strategies

Regional Outcome #1, Strategy #3: SWMCB **member counties** will manage wastes generated by the county in accordance with the Policy Plan, the Master Plan and state law, and will work with public entities so that their waste is managed in the same manner.

Regional Outcome #3, Strategy #4: The SWMCB and its **member counties** will work with public entities and private industry so that waste is delivered to the processing facility best suited to manage it.

Regional Outcome #4, Strategy #1: The SWMCB and its **member counties** will encourage public institutions and food production and service industries to reduce, reuse, recycle or compost food waste and/or organic materials by providing such entities with technical information and assistance.

## County Supporting Initiatives

Regional Outcome #1: Ramsey and Washington Counties will work to optimize the amount of MSW delivered to and processed at its contracted resource recovery facility until the end of the contract.

Regional Outcome #4: Ramsey and Washington Counties will promote food waste and organic waste diversion, with preference for waste reduction and recycling.

## County Specific Strategies

1. Until termination of the service agreement for the Resource Recovery Facility in Newport, the county will continue to coordinate resource recovery activities with Ramsey County.
2. The county will work with Ramsey County on future waste processing issues, such as monitoring merchant operations and exploring new processing opportunities.
3. Until termination of the service agreement for the Resource Recovery Facility in Newport, the county will work with Ramsey County to devote resources to identify and manage other waste streams from processing that can be more appropriately reduced, recycled, or composted.
4. The county will work with Ramsey County through the Ramsey/Washington County Resource Recovery Project to enhance education to residents and businesses.
5. The county will work with public entities to ensure MSW is delivered to a processing facility.

## 4. Landfilling

### A. Introduction

Although there are no active landfills in the county, 5 percent of waste generated in the county was directly delivered to landfills in 2003. Landfills will continue to play a part of any integrated waste management system.

In this next planning cycle, the county faces a number of opportunities and challenges to ensure wastes are managed according to the waste management hierarchy. These include:

- Landfilling is an inexpensive waste management option, is at the bottom of the waste management hierarchy, and is part of the system for those wastes that cannot be reduced, reused, recycled or processed.
- New landfill technologies are available.
- Generators need to take responsibility of wastes created, and ensure proper management to prevent future liability.
- It is difficult to create additional landfill capacity (NIMBY).
- The amount of waste not processed increases the amount landfilled.

The strategies developed address these opportunities and challenges. In addition, the county will lead by example in ensuring as much of the waste generated in county operations is reduced, reused, recycled or processed, and encourage other public entities to do the same.

### Policies

1. The county will ensure that all MSW generated by county activities is processed, and require all public entities to process MSW generated as a result of their activities.

### County Strategies Derived from Regional Strategies

Regional Outcome #1, Strategy #4: SWMCB **member counties** will continue to use a variety of compliance strategies, including education, consultation, technical assistance licensing, inspection and enforcement, to assure that regulated solid waste is properly managed.

Regional Outcome #4, Strategy #3: SWMCB **member counties** will use responsible waste management principles when arranging for the landfilling of waste and encourage public entities within its county to do the same.

### County Supporting Initiatives

Regional Outcome #1: Ramsey and Washington Counties will continue to evaluate bioreactors and landfill leachate recirculation as possible technologies to manage solid waste.

# County Specific Strategies

1. If landfilling is necessary, Washington County will give preference to disposal at landfills that maximize aspects of resource recovery.

## 5. NonMSW

### A. Introduction

NonMSW is a broad category of wastes which primarily consists of construction, demolition and industrial waste. For the purpose of the Waste Management Master Plan, nonMSW includes, but is not limited to, CRTs, treated wood, asbestos, and residential fuel tanks. The exact volume of nonMSW is not known, but the amount being landfilled is significant, and could be equal to the amount of MSW landfilled.

In this next planning cycle, the county faces a number of opportunities and challenges in properly managing nonMSW. These include:

- Little incentive to reduce or recycle nonMSW rather than landfill.
- Few construction and demolition waste disposal options.
- NonMSW is managed in a market-driven system.
- Needing to increase activity in waste reduction, reuse and recycling of nonMSW by the construction and demolition sectors.
- Perception that sustainable building is more expensive than standard building procedures.

The strategies developed address these opportunities and challenges. In addition, the county will lead by example by incorporating sustainable building guidelines into its own building procedures, and find ways to reduce, reuse, or recycle waste material generated from county building projects, and encourage other public entities to do the same.

## Policies

1. The county will provide leadership by ensuring proper management of nonMSW at county facilities.
2. The private sector is primarily responsible for providing management facilities for nonMSW.
3. The county will provide technical assistance and information and licensing or regulation, as needed.

## County Strategies Derived from Regional Strategies

Regional Outcome #1, Strategy #1: The SWMCB and its **member counties** will support research initiatives of the state, trade associations, and other organizations pursuing the beneficial reuse of nonMSW, including, but not limited to, post-consumer shingles, MSW ash, coal ash, sewage sludge ash, street sweepings, and foundry sand, in road construction projects.

Regional Outcome #1, Strategy #2: The SWMCB and its **member counties** will promote the beneficial reuse of nonMSW materials as specified in the MPCA solid waste utilization rules.

Regional Outcome #1, Strategy #4: Every two years, the SWMCB and its **member counties**, working with the private sector, will target an industrial, construction, and/or demolition waste material for region-wide waste reduction, reuse, recycling or processing promotions based on market availability to recover the material and greatest potential to impact the nonMSW stream.

Regional Outcome #1, Strategy #5: The SWMCB, its **member counties**, and the state, will promote and support facilities for reuse, recycling and processing of wood waste as an alternative to open burning and indiscriminate land disposal.

Regional Outcome #1, Strategy #6: The SWMC and its **member counties** will promote options for proper disposal of nonMSW materials that cannot be reduced, reused, recycled or processed.

Regional Outcome #1, Strategy #8: SWMCB **member counties** will lead by example in reducing, reusing and recycling nonMSW in county operations and will encourage other public entities to do the same.

Regional Outcome #1, Strategy #9: SWMCB **member counties** will continue to use a variety of compliance strategies, including education, consultation, technical assistance, licensing, inspection and enforcement, to assure that regulated nonMSW is properly managed.

Regional Outcome #3, Strategy #3: SWMCB **member counties** will work to incorporate sustainable building principles into planning, designing, and construction contracts for government and government sponsored buildings, including assessing the potential for reduction, reuse and recycling and/or processing of materials in county deconstruction and remodeling projects and will encourage other public entities to do the same.

## County Specific Strategies

1. Washington County will incorporate sustainable building guidelines into its building procedures for future building and remodeling projects and will encourage other public entities to do the same.
2. Washington County will develop and facilitate a communication network to inform and initiate waste management opportunities with public entities.
3. Washington County will incorporate energy conservation into existing and new building plans.
4. Washington County will evaluate the appropriate level of regulation for land application of byproducts or other waste materials.



## 6. Regulation

### A. Introduction

The county's Regulatory Program consists of several major components: licensing and inspection of solid waste haulers, solid waste facilities, hazardous waste generators, and hazardous waste facilities, complaint investigations, technical assistance, consultations, and referrals. Regulation is one of the tools used by the county to achieve maximum landfill abatement and protection of public health and the environment.

In this next planning cycle, the county faces some challenges to ensure regulatory services are adequately provided. One of these challenges is ensuring commercial solid waste haulers, solid waste facilities, hazardous waste generators and hazardous waste facilities are properly licensed as the county's commercial sector continues to grow. The county also continues to keep its generators, haulers, and facilities informed of new and existing regulations, and provide training to ensure waste is properly managed.

In this next planning cycle, the county faces a number of opportunities and challenges in the area of solid and hazardous waste regulation. These include:

- Raising awareness that the regulation program is a groundwater protection activity.
- Coordinating with other metropolitan counties and the state on consistent application of regulations.
- Monitoring federal and state rulemaking for impact on county ordinances.

The strategies developed address these opportunities and challenges. In addition, the county will lead by example in providing assistance on hazardous waste and other environmental issues to county departments, and assist in the proper management of abandoned waste on county right-of-ways.

## Policies

1. The county, through its Department of Public Health and Environment, will regulate and enforce waste activities under the authorization of Minnesota Statute.

## County Specific Strategies

1. Washington County will continue to regulate solid waste management activities, including, but not limited to, MSW haulers, land disposal facilities, waste processing facilities, transfer stations, land application and solid waste storage.
2. Washington County will continue to investigate complaints regarding improper solid waste management.
3. Washington County will maintain the unlicensed land disposal facilities (open dump) data base, use the Global Positioning System (GPS) as needed to these sites and Geographic Information System (GIS) to provide information, and address active dump sites on a complaint basis.
4. Washington County will determine the appropriate level of regulation for salvage yards.
5. Washington County will continue to assess training needs of generators and provide targeted training programs and address other issues as needed.

6. Washington County will continue to provide the Small Business Hazardous Waste Collection Program.
7. Washington County will evaluate very small quantity hazardous waste generators for appropriate levels of regulation.
8. Washington County will evaluate the level of inspection frequency, and the level of service delivery of hazardous waste generators.
9. Washington County will continue to identify and report improper discharge into Individual Sewage Treatment Systems (ISTS).
10. Washington County will continue to participate in the dry cleaning workgroup to develop and coordinate best management practices for drycleaners.

# 7. Cost and Finance

## A. Introduction

The county's mission is to provide quality public services in a cost-effective manner through innovation, leadership and the cooperation of dedicated people. Over the last 20 years, waste management costs have increased, and the method of financing has shifted. What was once paid directly by the generator now is being subsidized by local government. Local governments have imposed waste management service charges to help pay some of that cost.

## Policies

1. Washington County will make effective use of public resources and allocate costs equitably to waste generators, while assuring maximum environmental protection.
2. Waste management costs should be visible, based on volume, and be paid directly by the generator.
3. Washington County will continue to use the County Environmental Charge (CEC) as a funding tool.
4. Washington County will continue to support state investments in programs relating to public education, reuse, recycling and processing, including SCORE, LRDG and the processing credit.

## County Specific Strategies

1. Washington County will evaluate the County Environmental Charge (CEC) for possible application to nonMSW.
2. Washington County will fund waste regulation programs primarily by licensing fees.
3. Washington County will fund the Small Business Assistance Program by fees paid by the participating generator.

(Section 8 Divider Page)

## **8. Strategic Communication and Education**

### **A. Introduction**

Educating the public on waste management issues and distributing information on waste management options is a key component to effectively managing waste. Without the knowledge, generators do not have the complete set of tools to “do the right thing”, and properly manage wastes. In addition, county educational and informational materials compete with commercial advertisements and promotions to get the attention of residential and commercial generators. The county also needs to educate the public about waste management issues in a high-tech and fast-paced world.

In this next planning cycle, the county faces a number of opportunities and challenges in educating and informing both residential and commercial generators on waste management. These include:

- Education materials and information competes with advertisements and market promotions.
- Residents and businesses need more and better access to waste management information.
- The community wants additional opportunities for sharing and receiving waste management information.

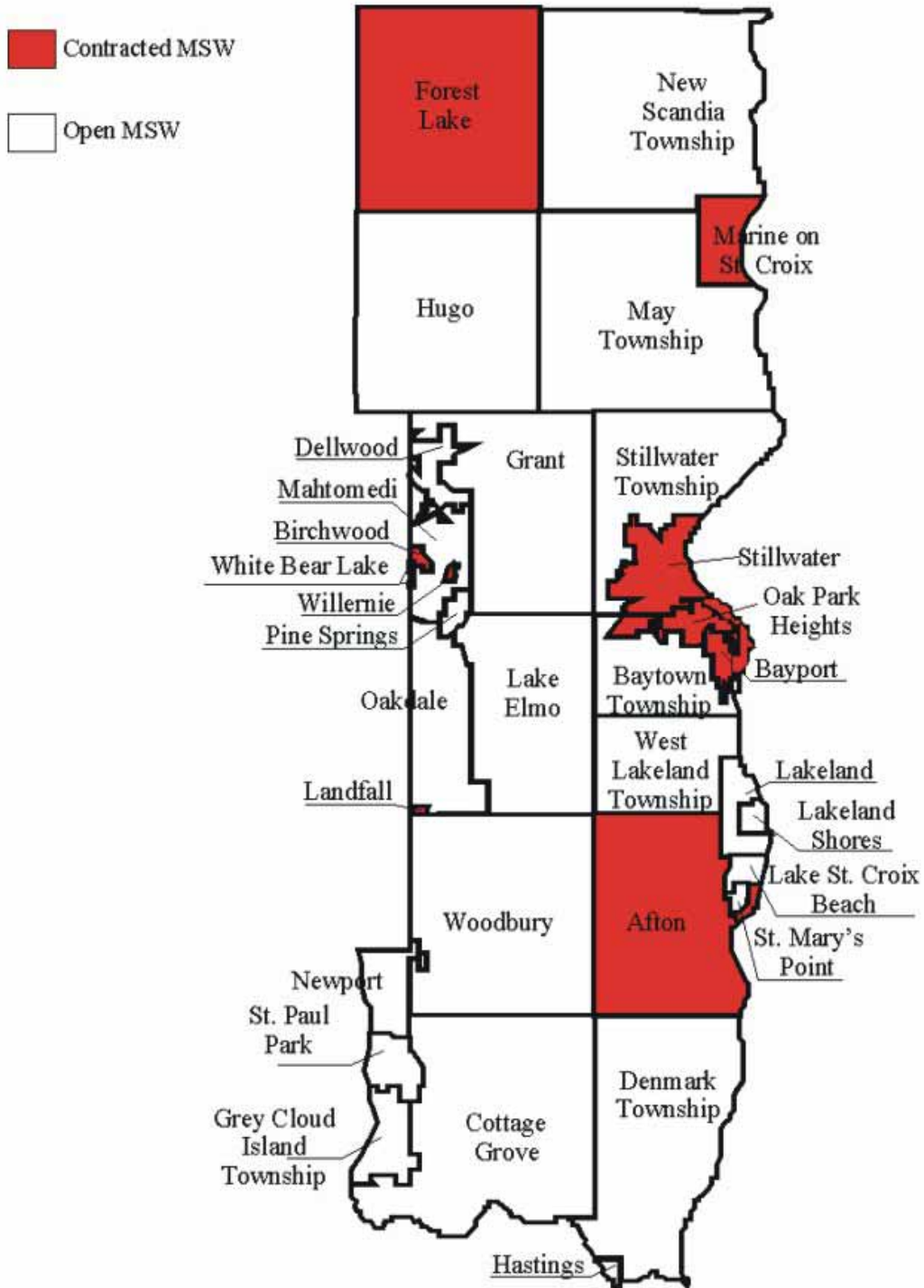
The county realizes the need for an increase emphasis on public education and information for its residents and commercial generators in all areas of the waste management master plan. In addition, the county will lead by example in actively educating its employees about waste management issues both in county operations and in homes.

### **County Specific Strategies**

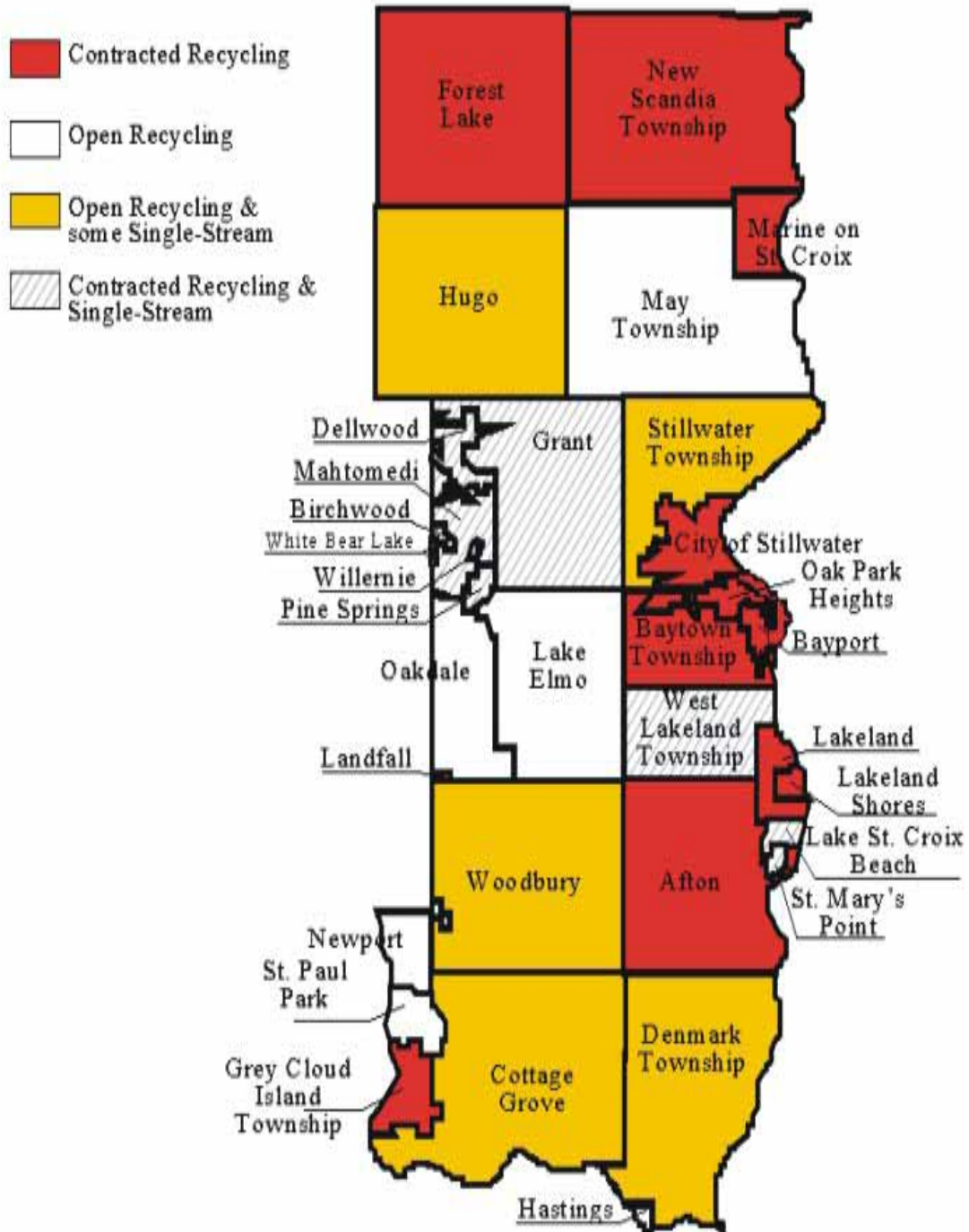
1. Washington County will evaluate current educational and promotional waste management activities, and develop an integrated communications plan.
2. Washington County will develop and facilitate a communication network to inform and initiate waste management opportunities with public entities.
3. Washington County will research, develop, and implement an improved system to respond effectively and consistently to community inquiries.
4. Washington County will develop a marketing-based approach for its public education and information materials.
5. Washington County will utilize its existing communication system to inform county employees of household hazardous waste management.
6. The county will work with Ramsey County through the Ramsey/Washington County Resource Recovery Project to enhance education to residents and businesses.

(Appendix A Divider Page)

## Appendix A: County Cities/Towns by MSW Collection Type



## Appendix B: County Cities/Towns by Recycling Collection Type





## **Appendix C: Major Milestones and Other Significant Events/Activities in Washington County Waste Management History**

- 1967      Landfill: Counties are given the authority to establish and operate sanitary landfills by the state legislature.
- 1969      Ordinances: County enacts first solid waste ordinance to regulate solid waste activities including open dumping, waste collection, and transportation, disposal at waste facilities, and termination of waste facility operations.
- Landfill: County has one permitted landfill, Lake Jane in the City of Lake Elmo, which is operated in partnership with Ramsey County. First to be permitted by the MPCA, is designated as SW-1, and is hailed as a model for solid waste disposal. One solid waste transfer station is also permitted, in Grant Township. The county, working with Ramsey County, attempts to locate additional landfills within the county during the 1970's.
- 1975      Landfill: Lake Jane Landfill closed.
- 1977-78   Landfill: Monitoring wells are installed in Lake Jane Landfill.
- 1978-82   Processing: Saint Paul receives EPA grant to explore waste-to-energy as an energy conservation tool and identifies 3M campus as a market for steam for a waste-to-energy plant; Ramsey County became involved. Best sites for waste-to-energy plant serving 3M were in the City of Lake Elmo. The county becomes involved.
- 1979      Solid Waste Advisory Committee is created in the county to assist in solid waste management tasks.
- 1980      Minnesota Legislature passes the Waste Management Act. In addition to other requirements, it requires each metropolitan area county to locate five potential landfill sites, to prepare a waste abatement proposal, and to prepare a Solid Waste Management Master Plan. The law made counties responsible for waste management planning and meeting mandates, therefore Saint Paul drops out of waste-to-energy process.
- Toxicity Reduction, Ordinances: County Board adopts Hazardous Waste Management Ordinance establishing standards relating to 1) identification of hazardous waste, 2) the labeling and classification of hazardous waste 3) the collection, storage, transportation, processing, and disposal of hazardous waste, and 4) other matters necessary for the public health, welfare and safety.
- 1981      Landfill: Groundwater pollution problems first detected in the monitoring wells at Lake Jane Landfill, and the pollution soon spread to adjacent residential wells. Groundwater contaminants of most concern included several solvents, classified as volatile organic compounds. In order to remove the volatile organics, and to control the growing plume of groundwater contamination, a well and spray irrigation system was constructed.
- 1982      Responsibility for solid waste management is transferred from the County Public Works Department to the Planning Department.

- Landfill: The county starts the landfill siting process which was required by the 1980 Waste Management Act.
- Recycling: Multi-material recycling center (LARC) is formed to serve residents in Forest Lake, Hugo and Forest Lake Township.
- Processing: Resource Recovery Project Board is established with commissioners from each county and a single representative from Newport as part of Joint Power Agreement between Ramsey and Washington Counties.
- 1982-84 Processing: Counties decide to pursue refused-derived-fuel (RDF) technology before mass-burn technology. Counties examine procurement, ownership, financing and waste assurance issues, before embarking on a staged procurement process. RFQ's issued and two vendors qualified to submit proposals – NSP and Aenco Cargill. Competitive negotiations result in two final proposals; NSP is selected when Aenco cannot guarantee a market for the RDF.
- 1983 Responsibility for solid waste management is transferred from the county's Planning Department to the Public Health Department.
- Landfill: The county concludes the landfill siting process which results in one potential landfill location in Lake Elmo, known as Site G.
- 1984 County Board adopts the first Solid Waste Management Master Plan.
- Processing: Washington and Ramsey Counties and NSP sign Design and Construction Agreement, and a Service Agreement (Counties would assure a supply of waste and payment for processing; NSP would assure that the waste would be processed into RDF and be used).
- Yard Waste: County Board approves program to encourage the composting of yard wastes. The county operates 2 sites, one in Forest Lake and Woodbury.
- Recycling: Scandia Recycling Center is established to serve New Scandia Township, Marine on St Croix, and May Township.
- 1985 Ordinances: County Solid Waste Management Ordinance amended and called the "Designation Ordinance" (Ordinance 47) which establishes powers, duties, regulations, and standards for the designation of a facility to receive all solid waste from residential and nonresidential sources in Washington County which are disposed of within the borders of Minnesota. A second county ordinance (Ordinance 49) is amended which enables the county to impose a service charge for solid waste management services. This second ordinance was not implemented until the Resource Recovery Facility is in operation.
- Recycling: No residential curbside recycling programs; four multiple material drop-off recycling centers; and less than 2% residential recycling.
- Toxicity Reduction: No HHW collections in the county. MPCA funds 9 HHW collections in the state in late 1985. County implements hazardous waste regulation program.
- Processing: No MSW processing; 100 percent land disposal of MSW.
- Yard Waste: County operates 4 compost sites, Forest Lake, Woodbury, Lake Elmo and Cottage Grove.

- 1985-86 Recycling: County implements a grant program in for cities and towns interested in developing recycling programs. Two drop-off recycling programs were funded in Forest Lake and in New Scandia Township.
- Processing: Ramsey, Washington, and Dakota Counties negotiate a draft joint powers agreement for a three-way project to build a refuse derived fuel facility, but Dakota County withdraws from the Project.
- 1985-87 Processing: Construction of the Resource Recovery Facility occurs. Counties attempt to negotiate contracts with waste haulers for voluntary waste delivery; negotiations result in five contracts with small haulers.
- 1987 Processing: Resource Recovery Facility is accepted by Washington/Ramsey Counties and begins operation July 13, 1987. The twenty year term of the Service Agreement begins. Counties implement Designation Ordinance #47, putting flow control into effect. Counties agree to subsidize tipping fee at facility to phase in over several years the higher cost of processing.
- Waste Reduction & Recycling: CLIMB Theatre performs first TRASH play in the county to school-age children. Goodwill starts operating 3 drop-off stations for recycling in addition to collecting household items.
- 1988 Waste Reduction & Recycling: Adoption of county recycling implementation strategy for residential and commercial recycling. Conserving Classroom curriculum is developed by the Resource Recovery Project. First residential curbside recycling collection implemented.
- Processing: Both counties developed and adopted a waste management service charge (WMSC) ordinance. The charge, collected on property tax statements, was established to raise funds needed for processing costs. Collection of the WMSC became effective in 1989.
- 1989 In-house: County implements its in-house office recycling program. In 1990, 44 tons of material is recycled.
- Processing: County's Waste Management Service Charge (WMSC) is \$23.70 per parcel. Residential and non-residential fee charged on improved parcels in the county.
- Toxicity Reduction: County conducts first HHW collection in Cottage Grove.
- Solid Waste Management Coordinating Board (SWMCB) taskforce is established.
- 1989-90 Select Committee on Recycling and the Environment (SCORE) legislation is enacted, which now provides funds for recycling and HHW programs.
- Waste Reduction & Recycling: Curbside recycling programs begin in the county.
- 1990 Waste Reduction & Recycling: County begins offering presentations to schools on reduction, reuse and recycling. County assists schools with establishing in-house recycling programs. Additional city/township curbside recycling programs begin.

- Processing: Counties phase out use of WMSCs for resource recovery. The WMSC is still used for recycling and waste reduction programs and HHW programs. Waste generators are paying the full cost of waste processing, around \$67.00/ton to the hauler, through the hauler bill.
- Toxicity Reduction: County conducts 5 HHW events with participation of more than 2,400 households.
- 1991 Waste Reduction & Recycling: 97 percent of county cities/towns have curbside recycling programs; 6 multiple material drop-off recycling centers; and approximately 31 percent of total MSW is recycled. County initiates waste reduction and recycling special grants program up to \$5000 per project. CLIMB presents to 2,313 students during the 1990-91 school year and 3,237 students during the 1991-92 school year. SMART waste reduction campaign is developed by the Minnesota Office of Environmental Assistance. County adapts the SMART materials to develop a SMART classroom activity using packaging examples. Statewide What a Waste curriculum developed and distributed to all schools. Some elements (i.e. Garbage Pizza, worksheet from Product Label Reading exercise) adapted for use in county schools.
- Yard Waste: Seven yard waste compost sites in operation.
- Processing: 81 percent processing of delivered MSW into RDF; 31 percent of delivered MSW land disposed.
- Toxicity Reduction: Waste Act requires counties to develop a HHW plan. County plan for permanent HHW collection is developed.
- Landfill: Public water supply is installed to serve residential area near Lake Jane Landfill.
- 1992 Yard Waste: Operation of county compost sites passed onto cities/towns. County provides only technical assistance.
- 1993 Processing: A lawsuit, Waste Systems v. Fairbault and Martin Counties, brought by a waste hauler, is decided in federal court, and strikes down those counties' flow control ordinances. Service Agreement amended transfers NSP assets to NRG Energy, Inc, a wholly owned, non-regulated subsidiary of NSP. Several haulers begin to threaten to take Ramsey/Washington County waste to landfills outside of Minnesota. In response, the Project Board and county boards decide to reduce the tipping fee at the facility, but to collect the difference through a hauler-collected service charge, called the Resource Recovery Service Charge (RRSC). In April, the RRSC is implemented. The tipping fee reduced from \$66.79/ton to \$50.00/ton on Jan 1. Counties use reserve funds to pay part of the cost of processing Jan – Mar. The RRSC funds are used after that. In May, the U.S. Supreme Court rules in Carbone v Clarkstown that local flow control ordinances are unconstitutional.
- Toxicity Reduction: Permanent HHW facility is constructed.
- SWMCB becomes a joint powers board with membership from seven metropolitan counties including Washington County.

1994 Processing: Counties decide to discontinue using RRSC, and shift to WMSCs collected on tax statements. Beginning in 1995, generators would pay full cost of the waste processing with part of the cost on their hauler bill and part of the cost through the WMSC, collected on property tax statements.

Toxicity Reduction: Permanent HHW facility opens.

Waste Reduction & Recycling, Toxicity Reduction: First issue of *Environmental Update* newsletter is published, coinciding with opening of year-round household hazardous waste facility. Presentations are given to school groups – 115 groups, 3,183 participants.

1995 Processing: In May, Project Board reviews processing options for the counties. Options included: short term-status quo (leave the tipping fee at \$50/ton and reduce tipping fee with hauler contracts), mid-term status quo- (reduce tipping fee with hauler contracts, terminate the service Agreement, and go to a “market-based” facility), and long term (go to a “zero tipping fee”, pursue organized collection, and regionalize the facility). Counties and NRG attempt to negotiate changes to the Service Agreement, and counties meet with haulers. In July, Project Board terminates negotiations with NRG, after parties are unable to reach an agreement. In September, the Project Board accepts a proposal from NRG on the concept of a “merchant facility”. Later in the year, NRG withdraws the merchant facility concept.

Toxicity Reduction and Waste Reduction & Recycling: Product Label Reading developed as a classroom activity. No Waste Lunch Kit program begins in sewing classes at Stillwater Junior High School.

County Board approves amendment to the SWMCB joint powers agreement to establish a regional hauler license program.

1996 Processing: During March and April, waste haulers warn of sending waste, en-masse to out-of-state landfills. The counties negotiate contracts with haulers for waste delivery at \$38 per ton through 1996, with option to renew for one year (Washington County) or two years (Ramsey County) under the same terms. In May, each county board hold workshops to review options financial issues, issues related to the tipping fee, general solid waste policy matters, and long term waste assurance. Direction from Board includes negotiating contracts with haulers, and seeking a dollar-for-dollar match from NRG

Waste Reduction & Recycling: Trash Trunks are developed through resource recovery project office. Science Museum residencies begin in So. Washington County schools as part of Ashland Refinery settlement

Waste Reduction & Recycling, HHW: County provides education and technical assistance for the planning, building, and display of “eco-friendly” home in Lake Elmo shown in the Parade of Homes.

Waste Reduction & Recycling: No Waste Lunch Kit program begins with sewing classes at Southwest JHS and Central JHS in Forest Lake

1997 Waste Reduction & Recycling: Science Museum residencies continue in So. Washington Co. Schools America Recycles Day comes to Minnesota. A “Recycled Product Hunt” is implemented at Target Greatland in Woodbury. County presents 97 recycling, waste reduction and HHW programs to over 2,700 students and adults through school and community programs and trains 40 students to peer trainers in the area of waste education. Special events such as school open houses, community celebrations and an America Recycles Day program are held in 8 communities reaching an additional 1,900 people.

In-house: County in-house recycling program recycles 92 tons of material.

Processing: Ramsey/Washington Resource Recovery Project begins publishing the *Trash Today* newsletter collaboration with Ramsey County.

Toxicity Reduction: Very Small Quantity Generator (VSQG) pilot program begins through the county’s HHW agreement with the state.

1997-98 Processing: Waste haulers in Ramsey and Washington Counties are under contract for delivery of waste to the Resource Recovery Facility at \$38 per ton.

1998 Processing: In June, Project Board finance committee sees increasing cost of waste processing, and recommends to Project Board that long term costs be addressed. During July through October, Project Board, in considering the 1999 budget, requests NRG to make available its operating costs, so both parties can work together to address long term costs. NRG refuses. Project directs its staff and consultants to prepare an estimate of NRG’s operating costs. In October, Ramsey County Board directs that negotiations be started with NRG for the purpose of reducing the cost of processing to taxpayers. Washington County Board does the same. Project Board authorizes negotiations on October 29, seeking agreement by the end of 1998. During November through December, negotiations with NRG Energy, Inc continue, with agreement reached in principle on December 28 to reduce several costs in the Service Agreement. This will save about \$1.2 million per year, or about \$2.86 per ton) in the 1999 budget. Both parties agree in concept to consider longer term changes and cost reductions, beginning in 1999.

Waste Reduction & Recycling: Develop Recycling Products Display and matching activity for volunteers to staff at community and school events. County coordinates the Friday Family Fun night at Maplewood Mall, Recycled Product Hunt at Target Greatland in Woodbury for America Recycles Day.

Toxicity Reduction: VSQG program is implemented.

1999 Processing: Project Board directs a consultant to evaluate wastes at the Resource Recovery Facility and identify those that could be diverted to recycling. The Project funded purchase of a refrigerated truck for the Second Harvest Food Bank for its people-to-people food program. The Project and counties negotiate waste delivery agreements with waste haulers for delivery in 2000, 2001 and 2002. Several hauling companies did not agree to deliver all waste. During the year, consolidation in the waste industry resulted in diversion of waste to landfills by haulers.

- Waste Reduction & Recycling: Recycled Products Kits are developed for county and presented to America Recycles Day Education Committee as a possible state-wide project. Nineteen kits are assembled. Summer Stretch is conducted at Como Zoo Day Camps. County assists Forest Lake Consumer Education teachers in writing waste reduction and recycling components into the curriculum to meet a graduation standard.
- 2000 Processing: Consultant reports on alternate technologies in two reports, one describing other technologies, and another examining issues related to building a combustion facility in the vicinity of the Resource Recovery Facility. Project Board approves a one year community outreach program with a contract with Washington County providing a staff person. Counties agree to keep the tipping fee at \$38 per ton, after exploring an increase in the tipping fee. Trend in tipping fees is downward, and haulers could transport and landfill waste from the counties at \$18-22 per ton. At the end of the year, Superior Services, Vasko Rubbish, and Red Arrow decide to landfill a portion of their waste, reducing the projected 2001 deliveries to 350,000 tons.
- Waste Reduction & Recycling: Seventy Recycled Products Kits are assembled for distribution statewide. Summer Stretch is conducted at Como Zoo Day Camps. Graduation standards are adopted with waste-specific curriculum in three school districts: Stillwater, Forest Lake, and Oakdale. County presents information to seventy-three classes and 2,174 students to help meet the standards.
- In-house: County enters into a Joint Powers Agreement with the State of Minnesota for the recycling of the county's waste office paper, cardboard, cans, glass and plastic containers.
- 2001 Processing: In January, BFI is in breach of its landfill contract and waste delivery agreement by diverting about 200 tons per day of waste to its Pine Bend landfill. Project appears to be close to falling short of 280,800 tons per year commitment to NRG, with projected deliveries of 255,000 tons.
- In-house: County implements in-house waste reduction program called Cut the Waste!.
- Waste Reduction & Recycling: Summer Stretch is conducted at Carver Lake Park Day Camps. Free Market and Take It Back Programs become available in county. County receives a RAM Public Service Award for the Recycled Products Kit (over 200 distributed statewide).
- Waste Reduction & Recycling: Staff present 83 recycling, waste reduction, resource recovery, and HHW programs to over 2,600 students and adults through school and community program. Over ninety students are trained to peer educators in the area of waste reduction special events such as school open houses, community celebrations, and resource recovery facility tours reached an additional 5,000 people. Recycled products kits are loaned to 31 businesses and community organizations. Over 2,000 people receive information on buying recycled products through use of these kits.
- In-house: County Board adopts resolution approving the county's purchase and use of recycled content paint.
- Toxicity Reduction: HHW participation increased 17 percent from 2000 to 2001, with 14,561 households using a collection site in 2001.

2002 Processing: Public Collection is studied. County Board gives direction to implement a more volume-based County Environmental Charge (CEC), implement long term waste delivery contracts, work with cities on recycling, address illegal dumping, increase public awareness on waste issues, create increased opportunities for organics, HHW and problem materials, and not implement public collection at this time if system moves towards goals using other methods. County Board approves 2003-2007 all waste and specific tonnage waste delivery agreements. 2003 CEC rate is established at 34.2%, beginning in April 2003, and to maintain a \$3 parcel charge.

*Environmental Update merged with Staying in Touch newsletter.*

Waste Reduction & Recycling: CLIMB introduces a new play, FLASHBACK, to audiences in the county and performs to 3,654 students. Summer Stretch is conducted in senior housing building with a recycling and junk mail focus. Get-caught recycling! provides television and newspaper coverage. Trash Trunks are updated: five new learning activities developed. First city in the county implements single-stream recycling.

In-house: County supplemented its Joint Powers Agreement with the State of Minnesota for the recycling of the county's confidential waste paper.

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

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

In-house: County develops formal IPM guidelines for county buildings and grounds. County passes resolution on Environmentally Preferable Purchasing for county purchasing. In 2003, 180.7 tons of material was recycled. This includes white/pastel paper and mixed paper, cans, glass and plastic, cardboard, Tyvek® envelopes, transparency film, CDs, videotapes, floppy disks, cassette tapes, computer equipment and electronics, pallets and shrink wrap.

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

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

County completes the third county waste management master plan.