

Solid Waste Management Coordinating Board

Annual Progress Report

2000

Approved: May 23, 2001

Solid Waste Management Coordinating Board

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SUMMARY

I. INTRODUCTION

The Regional Solid Waste Master Plan ("Master Plan"), adopted December 1998, sets forth a plan that will guide the region for twenty years, with a focus on the planning period of 1998-2003. The Plan incorporates an innovative planning approach, a joint vision and an emphasis on performance measurement. The Plan establishes regional outcomes, strategies to be implemented by the counties acting collectively as the SWMCB, and specific outcomes negotiated with each of the six member counties. Regional and county outcomes address:

- source reduction
- toxicity reduction
- recycling
- processing
- landfilling
- nonMSW management

The purpose of this Report is to summarize the progress of the region in meeting its regional outcomes and the progress of each county in achieving its county negotiated outcomes (CNO's). This report summarizes the second year of work and progress under the new Regional Solid Waste Master Plan.

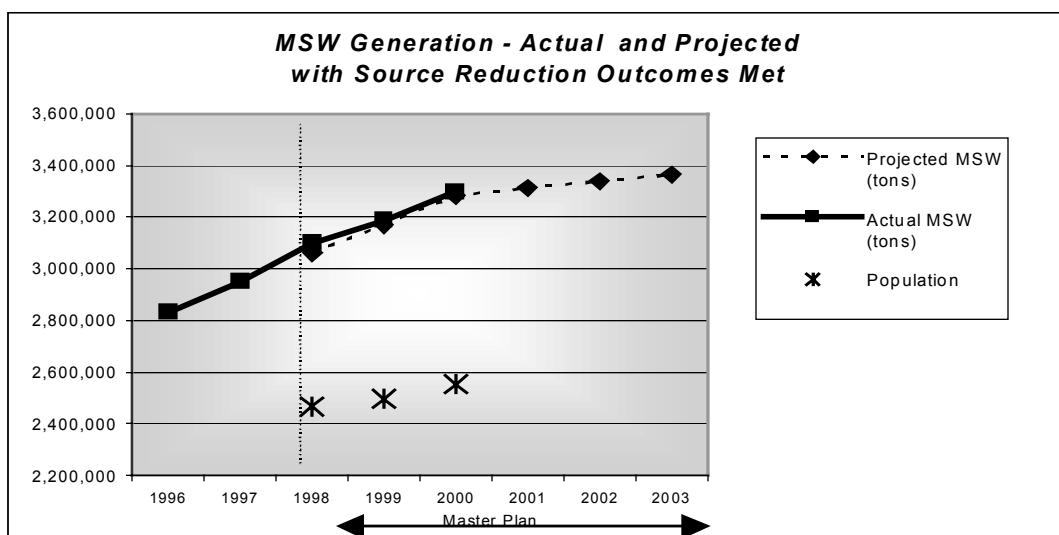
In 1998, the SWMCB prepared a Baseline Report that reflected the point from which progress on outcomes will be measured. The 1999 Results Report and this 2000 Results Report document progress achieved towards the SWMCB Regional Outcomes. Data sources include county SCORE / Certification reports, program data, 1999 waste composition study and surveys of the business and residential sectors. This 2000 Report also includes a summary of activities and outcomes on CNOs.

II. 2000 RESULTS

Measurable progress was achieved in several areas, including increased recycling tonnage and increased collection of household hazardous wastes. In 2000, the waste stream grew to 3,297,586 tons. This tonnage exceeds the Master Plan's projected tonnage, resulting in 14,000 tons more than projected. However, the Master Plan projection was based on 1998 Metropolitan Council population estimates. The 2000 Census data showed the population grew faster than projected. In fact, there are 25,000 more people in the region in 2000 than projected in the Master Plan, thus creating more growth in the MSW stream than projected. The increase in the per capita generation rate in the SWMCB region has slowed significantly since 1998. In 2000, the per capita tonnage was 1.29 tons, an increase from 1.28 in 1999. This represents less than a one percent increase. Landfilling continued to increase, while the percentage of waste processed decreased.

Growth in Total MSW Managed (tons)

1996	1997	1998	1999	2000	2003 (Outcome)
2,830,771	2,949,967	3,098,373	3,187,524	3,297,586	3,364,000

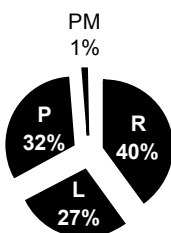


Source: Regional Solid Waste Master Plan Waste Growth Programs: Waste Growth Scenario (Appendix A)

The region manages the waste generated by three primary waste management practices, recycling, processing and landfilling, as depicted below. A small percentage of MSW is problem materials that are managed in a manner other than recycling.

MSW Managed in 2000 (tons - not including problem materials)

Recycling (R)	Landfilling (L)	Processing (P)
1,327,726	888,423	1,051,878



- While the percent of MSW recycled remained at about 48% (including 5% yard waste and 3% source reduction credits), the tonnage of materials recycled increased over 1999 by 59,000 tons.
- Total of Unprocessed MSW landfilled increased by 61,000 tons over 1999.
- Net tons of MSW processed decreased by 16,000 tons.
- Appendix B shows the detail on how MSW was managed in 2000.
- Through recycling and processing the region avoided 23 acres of landfill space in 2000. (Assuming a 100' deep landfill.)

Toxicity Reduction

Participation in household hazardous waste programs grew 2.0% in 2000. However, the total pounds collected grew 4.5%. Cost per vehicle increased from \$52.49 in 1999 to \$54.42 in 2000. The region served nearly 15,000 vehicles in 2000, collecting 8.1 million pounds of household hazardous waste.

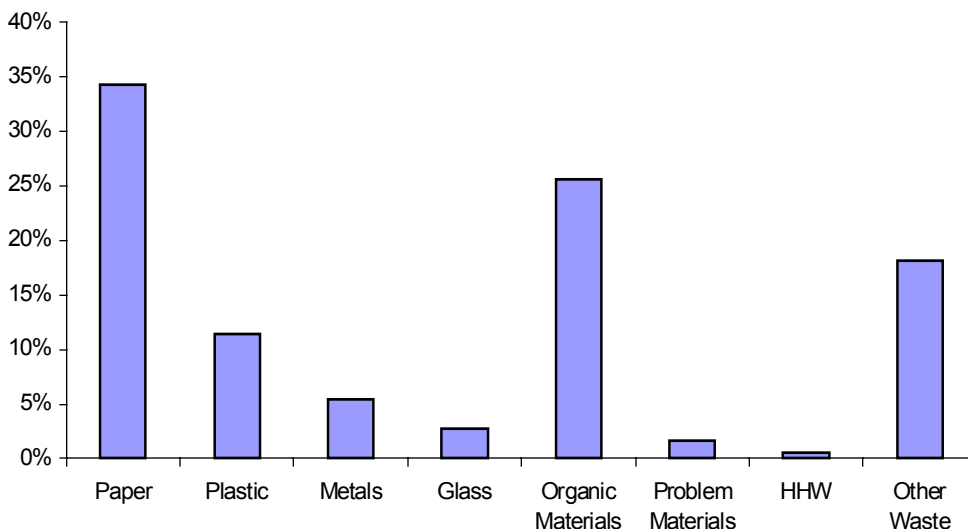
The region continues to operate a regional hauler licensing program, issuing 243 base licenses and 608 operating licenses for the 2000-2001 license year.

There are 9,805 licensed hazardous waste generators in the region.

III. BASELINE RESEARCH

Waste Composition Study

In 1999, the SWMCB, OEA and MPCA conducted a waste composition study to determine the types of waste that comprise the waste stream. This information is critical to measuring results in the areas of source reduction and recycling, and also provides useful information to further shape solid waste programs. The following chart shows the relative amounts of waste types disposed of by metropolitan waste generators.



For further detail, see the table on the next page, which shows that the waste targeted in the Master Plan - food waste, OCC, pallets, and office paper - comprise significant percentages of the MSW stream.

MATERIALS IN MSW – BY WEIGHT METROPOLITAN REGION		
Material	Quantity (in tons)	
	Low	High
Food Waste – Residential	105,900	116,000
Uncoated OCC-recyclable – ICI	84,500	93,900
Mixed Paper-nonrecyclable – Residential	79,200	87,100
Wood Pallets – ICI	65,500	72,700
Miscellaneous – Residential	61,700	67,900
Mixed Paper-nonrecyclable – ICI	60,500	67,200
Mixed Paper-recyclable – Residential	58,900	64,800
Household Bulky Items – Residential	58,900	64,800
Other Plastics-noncontainers – ICI	55,500	61,700
Mixed Paper – recyclable – ICI	50,600	56,200
ONP – Residential	48,800	53,700
Other Plastics-noncontainers – Residential	36,800	40,500
Diapers – Residential	35,900	39,500
High-grade Officer Paper – ICI	34,800	38,700
Miscellaneous – ICI	34,800	38,700
Treated Wood – ICI	34,000	37,800
Uncoated OCC-recyclable – Residential	32,200	35,500
Treated Wood – Residential	31,300	34,400
Boxboard – Residential	29,500	32,400
TOTAL	1,088,800	1,202,900

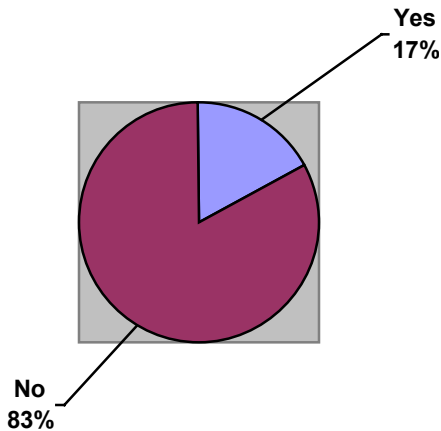
The ranges in tonnages reflect a range in the estimated tons of the waste stream that are residential versus commercial/industrial/institutional, per the Waste Composition Study.

IV. SURVEY OF BUSINESSES

According to a recent survey conducted, businesses in the region cite a variety of barriers that keep their business from recycling more of its trash. Over one quarter (27%) of surveyed companies stated there were no barriers to keeping them from doing more recycling. For the 342 companies that identified barriers, 'available storage space' was the most frequently cited (42%) reason for keeping the company from doing more to recycle trash. Reported barriers to trash reduction:

Barrier	To recycling	To trash reduction
Available storage	42%	31%
Added time	30%	29%
Lack of service from hauler	30%	20%
Available staff	27%	25%
Not priority	25%	24%
Added cost	21%	20%
Low staff participation	18%	18%
Low management support	10%	11%
Other	8%	6%

For about one-third of all companies (33%) there were no reported barriers to both recycling and trash reduction.



When asked if they know where their trash is disposed of once it leaves their business site, businesses responded as follows:

- 17% said yes
- 83% said no

V. CITIZEN SURVEY

Intermediate Source Reduction Outcome #7 in the Regional Solid Waste Management is “By 2003, 50% of the region’s households and businesses will be able to identify five specific source reduction activities they have practiced within the past 12 months.”

In 2000, the SWMCB conducted a survey of citizens to develop a baseline for this outcome. The chart below shows the responses. Overall, respondents report that they are already performing an average of over seven activities, with 97% performing three activities. 86% of the respondents reported doing five or more activities in the past year.

Please tell whether or not you, personally, or anyone in your household has performed any of the following waste reduction activities during the past 12 months.	Total 384
Purchased products made with recycled materials	93%
Used a reusable mug instead of disposable cups.	90%
Sold or donated items to a thrift store, garage sale or second-hand store.	87%
Packed your lunch in a reusable container.	80%
Left grass clippings on your lawn.	79%
Used self serve bins at the grocery or hardware store	66%
Purchased one product over others, primarily because it had a better lifetime warranty	64%
Instead of purchasing something that you would have seldomly used, you rented or borrowed it.	62%

Intermediate Toxicity Reduction Outcome #2 states “By 2003, 50% of households, businesses, and government entities will be able to identify three actions they have taken within the last twelve months to reduce the amount of toxic/hazardous materials purchased or to properly dispose of materials that contain toxic/hazardous materials.” 40% of the respondents said they had done 5 or more toxicity reduction activities in the past year.

Please tell which of the following specific actions or steps you have taken in your during the past 12 months to reduce your use of toxic or hazardous chemicals.	Total 384
Read labels on products to see if they are hazardous.	80%
Used pump sprays instead of aerosols.	79%
Used water-based latex paint instead of oil-based paint.	83%
Reduced the number of times you used weed killer on your lawn or garden.	59%
Switched to less hazardous cleaning products.	55%
Applied weed killer to only selected areas of your lawn, rather than covered it completely.	54%
Purchased a non-mercury, digital thermometer.	28%

The survey also asked residents if they had received information on where their garbage goes after it leaves the curbside and who they thought was responsible for the garbage after the hauler has collected it. Despite the statutory requirement that all haulers notify their customers where the garbage goes, only one quarter of the respondents (26%) claimed that they had received information from their haulers. The overwhelming majority of those who got the information (85%) read it. However, when compared to the total sample, less than a quarter of the respondents (22%) read that information.

Responses to the question of who has responsibility for the garbage after it is collected by a hauler are shown below.

Once your hauler has collected your garbage, who is responsible for any environmental damage at the disposal facility? READ. SELECT ONE.	Total 384
The facility owner	35%
The facility operator	13%
Yourself	12%
The hauler	10%
Don't know	30%

VI. SUMMARY OF STATUS OF CNO'S

The following table summarizes the status of county negotiated outcomes (CNO's). Highlights and challenges identified through county reports on their CNO progress are included at the end of each section of this report. Counties continue to make progress, though most CNO's are not yet completed. The planning period for the CNO's in the Master Plan ends in 2003.

County	CNO's to be reported on in 2001			Total
	Completed (this period)	CNO's in progress and on schedule	CNO's with no progress or substantially behind schedule	
Anoka	0	20	3	23
Carver	9	23	8	40
Dakota	5	51	1	57
Hennepin	1	31	2	34
Ramsey	1	22	0	23
Washington	4	20	1	25

SOURCE REDUCTION

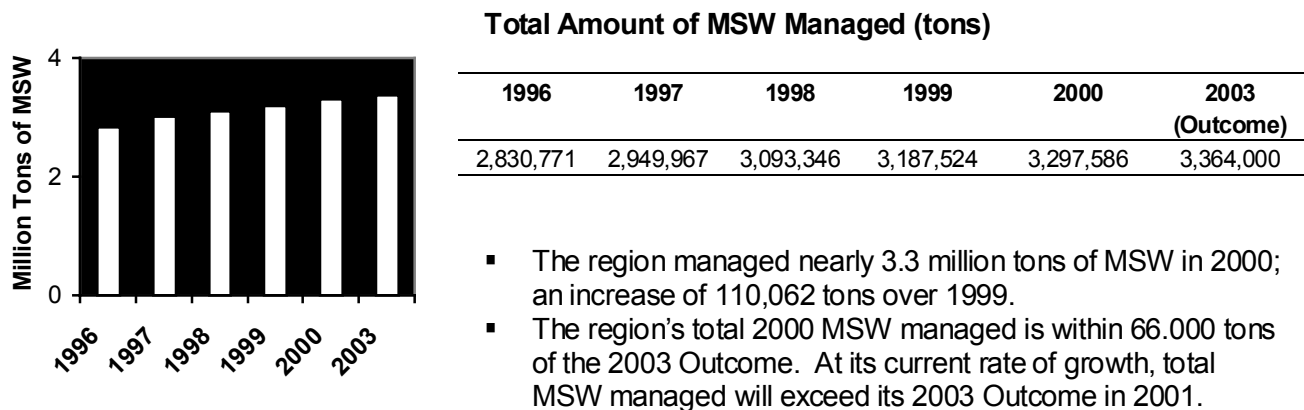
PRINCIPAL OUTCOME: From 2005 through 2017, per capita and per employee MSW generation rates will be no higher than the 1999 rates.

I. INTRODUCTION

Source reduction, often called waste reduction or waste prevention, is the highest priority for managing waste at the national, state and regional levels. The need for the reduction priority is clear. Waste generation continues to grow and the costs of managing the growth in the waste stream will be significant. If the waste is reduced at the source, these management costs will be avoided.

II. 2000 SOURCE REDUCTION RESULTS

A. TOTAL MUNICIPAL SOLID WASTE (MSW) MANAGEMENT



About the Indicator

Total MSW managed includes tons managed through recycling, problem materials managed, processing and landfilling. It does not include yard waste. Counties report data that they track through municipal recycling reports, solid waste facility reports, and other sources. Appendix B shows a breakdown of county-specific MSW management, including recycling, processing, and landfilling.

B. MUNICIPAL SOLID WASTE (MSW) MANAGEMENT PER CAPITA

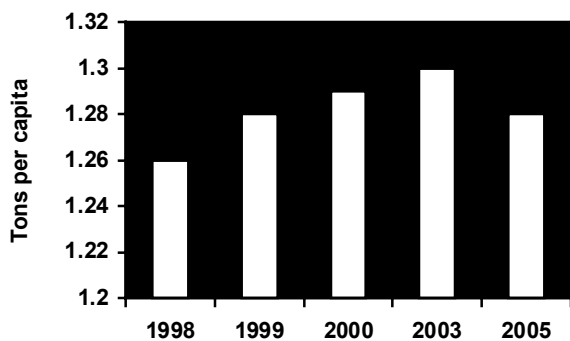
As the following table shows, waste generation continues to grow at a rate that exceeds population growth in the metropolitan area. Due to the challenges associated with achieving waste reduction and time needed to influence changes that would result in waste reduction, the Master Plan called for a gradual increase in the per capita and per employee rate until 2002, when the rate should begin to decline to the 1999 rates by 2005.

Total Population and Amount of MSW Managed Per Person and Per Employee (tons)

	1996	1997	1998	1999	2000	2003 (Outcome)
Tons Managed	2,830,771	2,949,967	3,098,373	3,187,524	3,297,586	3,364,000*
Percent Increase in Tons	–	4.2%	5.0%	2.9%	3.5%	
Population	2,411,311	2,440,110	2,468,761	2,493,400	2,552,558	2,586,498
Employment	1,397,678	1,421,956	1,446,647	1,468,300	Pending New Census Data	1,547,563
Residential Tons Per Person	.53	.54	.56	.58	.58	.59
Commercial Tons Per Employee	1.11	1.14	1.18	1.19	Pending New Census Data	1.19
Total Tons Per Capita	1.17	1.21	1.26	1.28	1.29	1.30
Percent Increase in Per Capita	–	3.4%	4.1%	1.6%	0.80%	

Source: County SCORE and Certification Reports; 1998 Metropolitan Council Population and Employment Projections for 1998 and 1999 and 2003 population and employment. 2000 population is from the 2000 Census.

*2003 and future tonnage outcomes are impacted by revised population and employment data. It may be useful to re-evaluate the waste growth projections.



Tons Per Capita Managed

- 2000 Census Data showed 25,558 more people in the region than the Master Plan projected. Assuming a 2000 per capita rate of 1.29, this would account for 33,000 tons more MSW in 2000 than was planned for in the Master Plan and is solely a result of population exceeding projections.
- The Master Plan planned for a gradual increase in the per capita and per employee rate during 1999-2002. The peak per capita and per employee rate was projected to occur in 2002-2003, followed by a decline to 1999 per capita and per employee rates by 2005.

About the Indicator

The MSW stream, including recyclables, was estimated to be comprised of 45% residential waste and 55% commercial waste during the development of the Master Plan Waste Generation Projection. Appendix B shows a breakdown of county specific MSW management, as well as a breakdown of processing and landfilling practices.

III. SOURCE REDUCTION REGIONAL ACTIVITIES

The region focused its source reduction efforts on the Master Plan targets of office paper, commercial packaging waste, reuse and food waste. Additionally, emphasis was placed on government serving as a leader for waste reduction. Accomplishments are presented below.

- Through the Earth Action Challenge, the SWMCB developed campaign materials and incentives for counties to use in promoting waste reduction within government buildings.
- Developed the *Environmentally Preferable Purchasing Guide* for Government Purchasers to meet the Master Plan outcomes that call for public entities to purchase environmentally preferable products. The Guide was distributed to state, county, city and school district purchasers and posted at www.swmcb.org.
- Conducted transport packaging demonstration projects with Anderson Windows and Pearsons Candy. The results will be used in 2001 to encourage other businesses to implement transport packaging reduction.
- Initiated office paper reduction demonstration projects with Agribank and Cities Management. The results will be used to develop an approach to implementing office paper waste reduction region wide.
- Developed a model municipal ordinance for backyard food waste composting to eliminate barriers to backyard food waste composting.
- Supported the OEA's media campaign on source reduction.

IV. SOURCE REDUCTION CNO HIGHLIGHTS AND CHALLENGES

This section shows progress on a sample of county negotiated outcomes. A summary of the status of CNOs is included on page 7 of this report.

Highlights

- **Anoka:** Promoted the purchase of products made with recyclables at county employee Office Products Fair, annually budgeted \$25,000 for Waste Reduction Grants and promoted waste reduction in the employee countywide newsletter. A survey of public education effectiveness was completed in September of 2000, the Shop Used First Guide was judged to be very or somewhat valuable by 82% of those receiving it.
- **Dakota:** Creation and implementation of the Dakota Environmental Review Team; a team of county senior management members dedicated to implement strategies to achieve regional and county negotiated outcomes. They have provided leadership in a wide array of activities including paper reduction (e.g., redesigned county letterhead).
- **Hennepin:** Hennepin kicked off a waste and toxicity reduction public education media campaign which included revamping the web page, literature and visitor center displays to highlight waste reduction. The County also participated in a Waste Free Fridays partnership with the Uptown Association and the OEA which included waste reduction initiatives at the Uptown Art Fair and at local businesses. The County's Business Waste Reduction Program produced a promotional video, held a food waste seminar for chefs-in-training, and recognized four businesses for their waste reduction achievements.
- **Ramsey:** Ramsey and Washington Counties, through the Ramsey/Washington County Resource Recovery Project, provided funds to Second Harvest, primarily to purchase an

additional truck. As a result, there was a 23% increase in pounds of food waste diverted in 2000 as compared with 1999. The number of donors increased by 47%.

- **Carver:** Budgeted \$13,000 for compost bins. 612 bins distributed in 2000.

Challenges

- **Hennepin:** The biggest challenge facing the Business Waste Reduction Program is convincing businesses to implement the suggested Waste Reduction Activities.
- **Ramsey:** Some barriers to increasing reduction/recycling of office paper include: most generators of office paper are small establishments, many do not have control over trash/recycling service, storage space issues, and electronic communication has led to more instead of less paper generation.
- **Carver:** Lack of staff resources to institute program for reduction of commercial packaging from Carver County's light industrial facilities.

REDUCTION IN TOXIC/HAZARDOUS CHARACTER OF WASTE

PRINCIPAL OUTCOME 1: By 2003, the toxic/hazardous character of MSW will be reduced.

PRINCIPAL OUTCOME 2: By 2017, manufacturers and retailers will take responsibility for consumer products that contain toxic or hazardous components when the product becomes waste.

I. INTRODUCTION

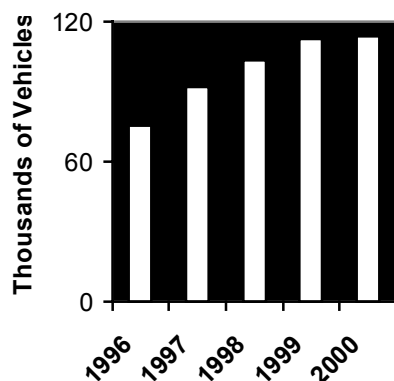
The Metropolitan Solid Waste Management Policy Plan requires the region to give source reduction and the reduction of toxic/hazardous waste the highest priority in planning for and development of the regional solid waste management system (Policy 5.1.2.1). The Regional Solid Waste Master Plan includes implementation strategies to support achievement of outcomes, including:

- Emphasis on product stewardship to shift responsibility for managing products with toxic/hazardous components to manufacturers and retailers.
- Continued collection and management of household hazardous waste (HHW) that is not being managed through private sector initiatives.
- Increased coordination of hazardous waste regulatory activities including education and technical assistance.
- Strengthened regional and State collaborations through the Reciprocal Use Program and MPCA HHW Contract.

II. 2000 REDUCTION IN TOXIC/HAZARDOUS CHARACTER OF WASTE RESULTS DATA

A. HOUSEHOLD HAZARDOUS WASTE (HHW) PROGRAM PARTICIPATION

Total Vehicles Served at HHW Sites



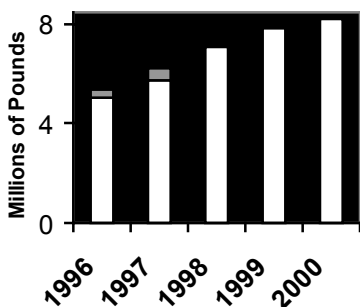
1996	1997	1998	1999	2000
75,475	92,143	103,425	112,523	114,831

- The number of vehicles served at HHW facilities in the six county region increased 2.0% between 1999 and 2000, and has increased by 52% since 1996.
- Reciprocal use grew from 3,363 vehicles in 1999 to 3,976 in 2000, a 15.4 % increase.
- In addition to providing a needed service to residents, HHW drop-off locations provided an opportunity to provide information to residents about purchasing decisions and waste management practices.
- The SWMCB designed a new HHW brochure to create a consistent message across the region.

About the Indicator

Vehicles served represents a general indication of the level of participation in HHW programs. Counties also estimate number of households served based on information provided by participants. In 2000, 114,831 vehicles represented 136,081 households served, or about 13% of the number of households in the region.

B. AMOUNT OF HHW COLLECTED



Total Amount of HHW Managed (Pounds)

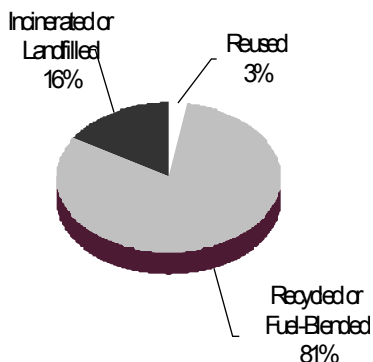
1996	1997	1998	1999	2000
5,065,695	6,242,833	7,101,565	7,785,998	8,151,141

- Pounds of material collected increased nearly 5% from 1999 to 2000. (Excludes paint cans, represented by shaded areas in graph.)
- Pounds of materials collected has increased by 61% since 1996. (Excludes paint cans, represented by shaded areas in graph.)
- Consumer electronics, flammable solvents, and propane cylinders experienced the largest increase in pounds managed in 2000. See Appendix C for more detail.
- Oil paint, dry cell and lithium batteries, and asbestos experienced the largest decrease in pounds managed in 2000.
- Consumer electronics is the fastest growing HHW stream. The increase in consumer electronics collected (374,900 pounds) accounts for the increase in total pounds of HHW collected in 2000. Consumer electronics collected through municipal or private collections are not reflected in this report.

About the Indicator

Some wastes are weighed, such as batteries, but many of the waste streams are measured with volume measures such as gallons or drums. These volume measures are converted to pounds so that a total figure can be calculated and trends assessed. Conversion factors are based on actual samples of wastes collected at metropolitan program sites.

C. HOW HHW WAS MANAGED

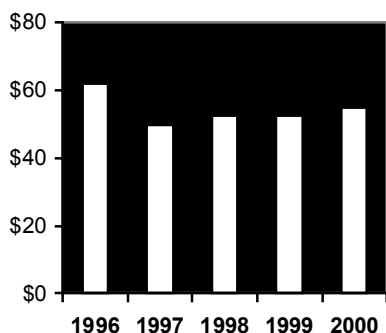


- In accordance with Minnesota's waste management hierarchy, most HHW collected was recycled or fuel-blended. In addition, reuse shelves provide a popular service to residents while maintaining the value of products that would otherwise become waste. Wastes that cannot be reused, recycled or fuel-blended are managed at hazardous waste incinerators or landfills.
- Percent reused, recycled or fuel blended and percent landfilled or incinerated has remained constant since 1998.

About the Indicator

Appendix C shows a breakdown of waste types collected and how each waste was managed.

D. PROGRAM COST PER VEHICLE



Program Cost Per Vehicle

1996	1997	1998	1999	2000
\$61.90	\$49.67	\$52.47	\$52.49	\$54.42

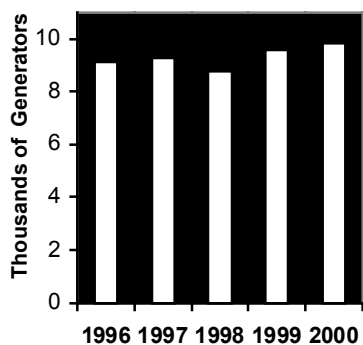
- Cost per vehicle increased about \$2.00 per vehicle between 1999 and 2000.
- Cost per vehicle still remains 14% lower than the 1996 rate.

About the Indicator

Cost per vehicle is the figure used by counties as the basis for reciprocal use charges. Costs reflected here are net of certain revenues such as donations, reimbursements, citizen fees, etc., which represent approximately 5% of total program costs.

Appendix C shows a breakdown of 1999 and 2000 costs.

E. LICENSED HAZARDOUS WASTE GENERATORS



Number of Licensed Hazardous Waste Generators

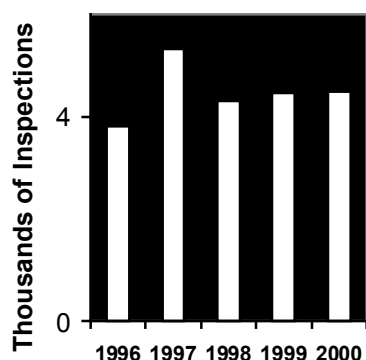
1996	1997	1998	1999	2000
9,099	9,260	8,773	9,591	9,805

- The number of licensed hazardous waste generators increased by 2.2% from 1999 to 2000 (the drop in licensed generators in 1998 resulted from the creation of a “minimal generator” category of low-risk generators who were required to register rather than maintain a license.)

About the Indicator

Appendix D shows a breakdown of large, small, and very small and minimal quantity generators licensed in the region.

F. HAZARDOUS WASTE INSPECTIONS



Number of Licensed Hazardous Waste Inspections

1996	1997	1998	1999	2000
3,785	5,315	4,252	4,460	4,471

- The number of inspections performed increased slightly from 1999 to 2000 (the drop in inspections from 1998 resulted from the change in licensing practices and also from a change in the method for accounting for inspections.)
- The number of licenses issued declined in 1998 primarily because of minimal generators shift to a registrant system, creating a decline in licenses issued.

About the Indicator

Appendix D shows a breakdown of inspections performed in the region.

III. REDUCTION IN TOXIC/HAZARDOUS CHARACTER OF WASTE REGIONAL ACTIVITIES.

CRTs and latex paint were two major areas of emphasis in 2000. Additionally, educational materials were developed to encourage residents to reduce the amount of HHW generated and properly dispose of HHW. Accomplishment included the following:

- A Latex Paint Task Force comprised of retailers, manufacturers, associations, and government developed recommendations to pursue a market-based approach to addressing latex paint. The goals included strengthening markets for recycled paint and improving the quality of feedstock of the manufacture of recycled paint.
- Through a partnership with the OEA, the SWMCB developed the CRT Task Force which was charged with increasing the recovery and recycling of electronic products containing CRTs. The resulting plan of action calls for public education addressing regulation barriers to increased recycling of CRTs, and support of the OEA's work on a multi-state initiative to further product stewardship efforts with retailers and manufacturers.
- Developed and distributed 10,000 regional HHW brochures promoting the proper management of HHW and the location of the HHW collection sites.

IV. TOXICITY REDUCTION CNO HIGHLIGHTS AND CHALLENGES

This section shows progress on a sample of county negotiated outcomes. A summary of the status of CNOs is included on page 7 of this report.

Highlights

- **Dakota:** Environmental Management staff reviewed 12 areas of chemical use and identified two where impacts on environment could be lessened.
- **Hennepin:** In 2000 there were 4,500 VSQG's licensed in Hennepin County and 110 participated in the County's VSQG collection program. In 2000 a number of hazardous waste fact sheets were added to the County's web site, and links were made to the MPCA's and MNTAP's web sites, where additional forms and fact sheets can be accessed.
- **Ramsey:** During 2000 Ramsey County thoroughly analyzed its hazardous waste fee system, resulting in a new fee schedule based on waste volume and risk, in part incorporating SWMCB guidelines. Inspections of hazardous waste generators are being conducted in accordance with the County's risk-based compliance effort, and a computer tracking system for inspections and enforcement has been developed. The County has also provided extensive training opportunities for generators and has provided information through various outreach efforts
- **Washington:** All electronic equipment containing CRT's generated by Washington County is being reused or recycled. In 2000, 3,159 pounds of electronics was recycled through an electronics recycler and 2,675 pounds of electronics was reused through Computers for Schools program. A partnership was developed with Washington County, Best Buy and Waste Management Asset Recovery Group to collect used electronics from consumers at the Best Buy store in Woodbury. The collection was very successful with nearly 600 residents bringing in 22 tons of used electronics.

Challenges

- **Carver:** Delay in opening of permanent HHW facility due to logistics problem.

RECYCLING

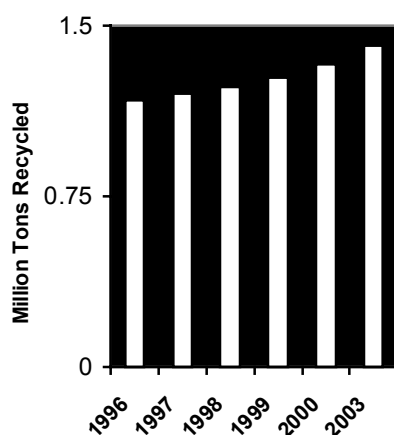
PRINCIPAL OUTCOME: Collectively, the region will achieve at least a 50% MSW recycling rate (including a 3% source reduction and 5% yard waste credit) every year, through 2003.

I. INTRODUCTION

Recycling is an integral component of the integrated waste management system and supports the Policy Plan goals of landfill abatement, resource conservation and generator responsibility.

II. 2000 RECYCLING RESULTS DATA

A. PERCENT OF MSW RECYCLED – COMMERCIAL AND RESIDENTIAL



Amount of MSW Recycled as a Percentage of Total MSW

	1996	1997	1998	1999	2000	2003 (Outcome)
Total Tons	1,168,747	1,203,525	1,231,525	1,268,614	1,327,726	1,413,000
Percent with credits	49.3%	48.8%	47.8%	47.8%	48.3%	50.0%
Percent without Credits	41.3%	40.8%	39.8%	39.8%	40.3%	42.0%

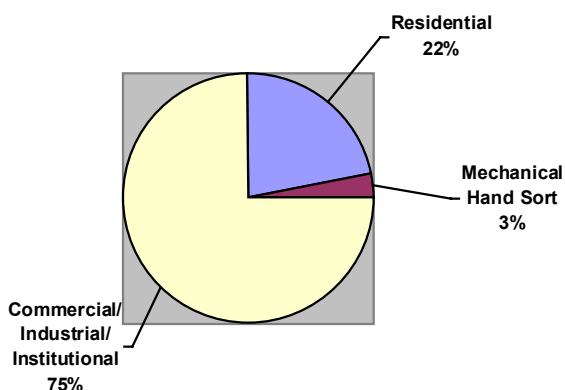
Source: County SCORE and Certification Reports.

- The percent of recycling peaked in 1995 and 1996; during 1997-1999 the region experienced a slight decrease in percent of material recycled. A slight rebound occurred in 2000.
- An additional 59,000 tons of recycling occurred in 2000 over 1999.
- In 2000, the region did not meet the principal outcome of achieving 50% recycling.

About the Indicator

Recycling percentage is calculated in two steps: first as a percentage of total MSW, then, counties are authorized by the Minnesota Office of Environmental Assistance to add a credit of up to 8% to the tonnage percentage if waste reduction and yard waste programs are in place.

B. PERCENT OF RECYCLING BY SECTOR



Percent of Recycling By Sector

Residential	Commercial	Mechanical/ Hand Sort
293,902	995,151	38,672

- Commercial/Industrial/Institutional recycling accounts for the majority (75 %) of the MSW recycled and in 2000 was 995,000 tons.
- Residential recycling accounts for 22% of the total MSW recycled and in 2000 was 294,000 tons.
- Mechanical Hand Sort recycling accounts for 3% of MSW recycled and in 2000 was 39,000 tons.

About the Indicator

Residential recycling includes residential curbside and municipal and private drop-off collections. Commercial recycling is commercial, industrial and institutional MSW. Mechanical Hand Sort includes recyclables that are delivered to the processing facilities or transfer stations. Mechanical Hand Sort recyclables are generated in both the residential and commercial sectors.

III. REGIONAL RECYCLING ACTIVITIES

Often reduction and recycling messages are compatible, therefore many of the SWMCB's recycling accomplishments and activities overlapped with the source reduction activities. These accomplishments are presented below.

- Initiated the Recycling Trends Research study that will present changes in manufacturing, packaging, retail and materials composition that may impact the quantity and quality of materials available for recycling in the region. (Final Report due June 2001)
- Incorporated recycling into the office paper and transport packaging demonstration projects described in the Source Reduction section of this report.

V. RECYCLING CNO HIGHLIGHTS AND CHALLENGES

This section shows progress on a sample of county negotiated outcomes. A summary of the status of CNOs is included on page 7 of this report.

Highlights

- **Dakota:** Creation and implementation of the Dakota Environmental Review Team (DERT). They provided leadership in a wide array of activities including implementing the Green Printing Guide.

- **Ramsey:** During 2000 municipal residential recycling programs in the County recovered 169 pounds of recyclables per person, a 4% increase over the 162 pounds figure of 1997. To help ensure long-term stability and increase performance for municipal recycling programs, the Ramsey County Board has taken two actions:
 - Created a \$500,000 Recycling Markets Support Fund, to be available for use by municipalities during poor recycling market conditions.
 - Hired a consultant to work during 2000-2001 with municipalities on recycling procurement, contracts, ordinances, and related matters.
- **Washington:** In house recycling rates increased by 27%, due to the implementation of the State of Minnesota's recycling program. The County recycled over 246,000 pounds of office paper, 33,000 pounds of OCC, 7,600 pounds of cans, glass and plastic and 68 pounds of miscellaneous for a total of 143.8 tons.
- **Hennepin:** Curbside recycling increased over 15 pounds per household and now amounts to 608 pounds per household per year. The County also awarded four Waste Abatement Incentive Grants to cities totaling \$85,000. The grants funded two multi-family recycling projects, a simple one-sort recycling pilot, and a toxicity reduction project targeted at parents of newborns.

Challenges

- **Dakota:** Maintaining recycling rate with continued rise in population.
- **Ramsey:** Barriers to increasing multi-family recycling: Some landlords do not want to participate, service is sometimes dropped due to contamination, some cities do not make provision of recycling to multi-family residents a high priority.
- **Carver:** No staff time to work with local zoning units to have space available for recycling containers.

PROCESSING

PRINCIPAL OUTCOME: By 2017, the region will process 65% of the MSW that has not been reduced or recycled.

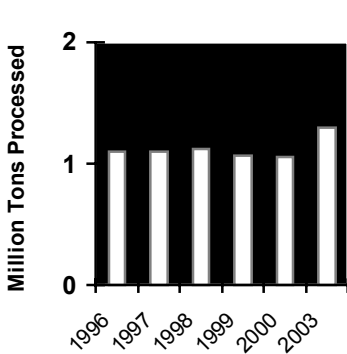
I. INTRODUCTION

The Policy Plan provides that it is the Policy of the region that all MSW that is not reduced or recycled will be processed to the extent feasible (Policy 5.3.2.1).

The region’s waste is processed at HERC, NRG Newport and NSP Elk River. Total permitted capacity at these three facilities is estimated to be 1,165,000 tons. In 2000, further analysis was completed and 11,000 tons of this capacity is being used for non-metro MSW. The amount of permitted capacity available to the region is therefore 1,154,000 tons. The percent of available capacity that is used at any point in time may fluctuate based on a variety of considerations, including markets.

II. 2000 PROCESSING RESULTS DATA

A. TONS OF MSW PROCESSED



Net Tons of MSW processed

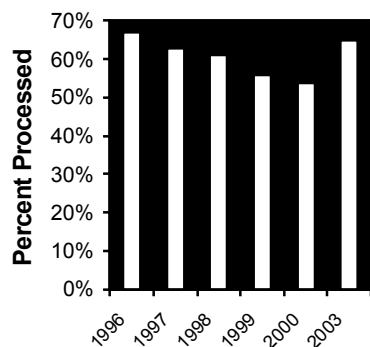
1996	1997	1998	1999	2000	2003 (Outcome)
1,102,975	1,102,852	1,118,031	1,068,26	1,051,878	1,323,500

- Net tons of MSW (see description below) processed decreased by 16,000 tons in 2000.
- Appendix B shows that total tons delivered to processing facilities in 2000 was 50,000 tons less than 1999. Deliveries to facilities in the 4th Quarter began to decline at some facilities.
- Total tons of MSW delivered for processing (excluding secondary) was 1,180,000 tons. This exceeded available capacity by 26,000 tons.

About the Indicator

Net tons of MSW are the tons of MSW delivered for processing that were actually processed. Net tons does not include excess and non-processible MSW waste that was delivered to processing facilities or transfer stations for processing, but because of capacity or other constraints, could not be processed. Appendix B shows a breakdown of county specific MSW management, as well as a breakdown of processing and landfilling practices.

PERCENT OF AVAILABLE WASTE PROCESSED



Percent of available waste processed

1996	1997	1998	1999	2000	2003 (Outcome)
67%	63%	61%	56%	54%	65%

- The amount of waste available for processing continues to grow. The percent of available waste processed continues to decline and will continue to decline without additional processing capacity or if the region is unable to attract waste to the processing facilities.

About the Indicator

This percentage reflects the amount of waste available for processing (processed and landfilled waste) that was actually processed. Appendix B shows a breakdown of county specific MSW management, as well as a breakdown of processing and landfilling practices.

III. REGIONAL PROCESSING ACTIVITIES

The SWMCB is in the process of developing a long-term processing implementation plan. Late in 2000, the focus changed to working on attracting sufficient waste to the processing facilities in order to fill the current capacity and meet the counties' contractually guaranteed deliveries. This focus continues. In preparation for the development of the processing implementation plan, the SWMCB completed the research projects presented below.

- Regional system technical evaluation of HERC, the RDF facilities, co-firing with coal and densifying RDF.
- Identification of short-term options of increasing processing capacity.
- Technical review for processing source-separated materials at existing facilities.

IV. PROCESSING CNO HIGHLIGHTS AND CHALLENGES

This section shows progress on a sample of county negotiated outcomes. A summary of the status of CNOs is included on page 7 of this report.

Highlights

- **Anoka:** Anoka County processing capacity was fully utilized in 2000.
- **Carver:** Continue to offer a subsidy or financial incentive for processing. Contract with private sector to compost organic waste generated at public entities in the County. Contract with SKB to accept Public Entities waste as a part of a pilot project. 240 yards of organic waste has been collected at Chaska Middle School for first quarter 2000. Active contract with Hennepin County to deliver waste for processing at HERC or Elk River RRF.
- **Dakota:** Reviewed and approved the repair of an ash cell liner by Safety-Kleen Landfill.

Challenges

- **Hennepin:** As a result of changes in the waste industry it is becoming more and more difficult to secure the needed waste for processing at HERC and ERRRF.
- **Ramsey/Washington:** Consolidation in the waste management industry, resulting in vertical integration in the ownership of hauling, transfer stations, and landfills, and consequently lower costs for long-distance hauling and landfilling, presents increasing challenges in achieving this CNO. BFI, the largest hauler in the two counties, has agreed to comply with its long-term waste delivery agreement through 2001, but has not made commitments after that. Four other major haulers have contracted to deliver only a portion of their waste. Available tools for assuring a waste supply are limited.
- **Ramsey:** Despite extensive education efforts, County surveys indicate 87% of residents and 67% of businesses still do not know where their MSW goes.

LANDFILLING

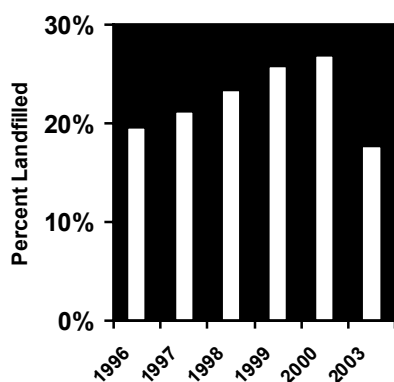
PRINCIPAL OUTCOME: Capacity for MSW will be available in sanitary landfills through the year 2017 for MSW that cannot be reduced, recycled, or processed.

I. INTRODUCTION

Landfills have a role in the integrated solid waste management system and sufficient capacity is needed for waste that cannot be reduced, recycled or processed. The Policy Plan recognizes that the private sector has primary responsibility for the delivery of landfilling services (Policy 5.4.2.2). The region's role will be that of system assessment.

II. 2000 REGIONAL LANDFILLING DATA

A. AMOUNT OF MSW LANDFILLED



Amount of MSW landfilled

Material	1996	1997	1998	1999	2000	2003 (Outcome)
In-State	188,379	197,722	347,153	346,973	419,594	N/A
Out-of-State	264,482	254,596	256,968	314,830	337,954	N/A
Excess and Non-processibles	103,354	172,734	119,433	165,130	130,875	N/A
Total	556,215	625,052	723,554	826,933	888,423	599,500
% of total MSW Landfilled	19.6%	21.2%	23.4%	25.9%	27.0%	17.8%

Source: Landfill tonnage is reported by private landfills, transfer stations and haulers.

- Landfilling has grown 62% since 1996. The region landfilled 332,000 tons more than it did in 1996.
- In 2000, the region landfilled 61,000 more tons than in 1999, an increase of 7%.
- Unprocessed MSW landfilled in Minnesota increased from 347,000 tons in 1999 to 420,000 tons in 2000; an increase of 21%.
- Unprocessed MSW landfilled out of Minnesota increased from 315,000 in 1999 to 338,000 in 2000; an increase of 7%.
- Excess and non-processible waste delivered to a processing facility, and then later landfilled, decreased from 165,000 tons in 1999 to 131,000 tons in 2000; a decrease of 20%.
- With recycling and processing generally flat, the growth in MSW is handled through an increase in landfilling.

About the Indicator

Excess and non-processibles are wastes that were delivered to the processing facility or transfer station, but were not able to be processed due to capacity constraints or other operational issues.

III. REGIONAL LANDFILLING ACTIVITIES

There are approximately 22 million cubic yards of remaining, permitted MSW landfill capacity in the five private landfills in or near the metro area (Burnsville (WM) and Pine Bend (BFI) in Dakota County, Elk River (WM) in Sherburne County, Spruce Ridge (WM) in McLeod County, Forest City Road (Superior) in Wright County). Current usage rates (including metro and non-metro MSW (including residue from MSW processing facilities) plus industrial waste) are roughly 3.2 million cubic yards per year.

There are approximately 47 million cubic yards of remaining, permitted MSW capacity in the two out-of-state landfills where most metro waste sent out of state is being taken (Central Disposal in Lake Mills, Iowa (Waste Management) and Seven-Mile Creek near Eau Claire (Superior). Additional capacity is available in other out-of-state landfills.

There are no current formal MSW capacity expansion requests.

IV. LANDFILLING CNO HIGHLIGHTS AND CHALLENGES

This section shows progress on a sample of county negotiated outcomes. A summary of the status of CNOs is included on page 7 of this report.

Highlights

- **Washington:** There are no public entities in Washington County that use landfills for waste disposal.

Challenges

- **Dakota:** Decreased state programmatic assistance leading to increased workloads on county staff.

SOLID WASTE REGULATION

PRINCIPAL OUTCOME: The Master Plan does not contain an outcome for solid waste regulation.

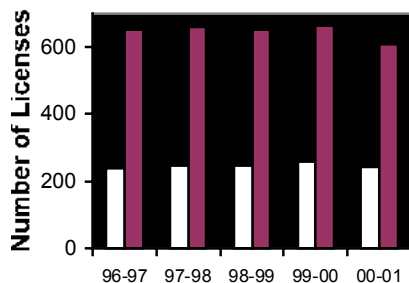
I. INTRODUCTION

The Policy Plan indicates that an integrated solid waste management system requires responsible solid waste collection practices that protect the public health, safety and welfare. The State, region, counties, cities, towns, waste collectors and waste generators should work together on solid waste collection issues (Policy 5.6.2.1). To that end, the metropolitan counties, through the SWMCB regional hauler licensing program, regulate the collection and transportation of MSW within and between member counties.

The Regional Hauler Licensing Program which began in 1995 provides for the issuance of one base license by the county in which the hauler is based and an operating license by each county in which a hauler operates. The base license provisions, including insurance requirements, fees, hauler application form and license year, are consistent throughout the region. Each county involved in the regional hauler licensing program has individual authority to enforce licensing requirements and/or take action against a hauler violating such requirements.

II. 2000 SOLID WASTE REGULATION RESULTS DATA

A. REGIONAL HAULER LICENSES ISSUED



Number Of Base And Operating Licenses Issued

	1996-97	1997-98	1998-99	1999-2000	2000-2001
Base	238	247	245	259	243
Operating	652	657	650	661	608

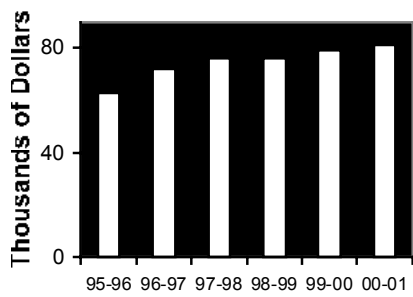
Source: SWMCB Regional Hauler License Program Annual Reports.

- The number of base and operating licenses issued decreased in 2000.
- The license year begins on July 1 and ends on June 30.
- Consolidation of waste haulers continued to occur, thus resulting in a reduction of base licenses. Appendix E shows a summary of the waste industry consolidation.

About the Indicator

The number of licenses issued changes throughout the year. Though applications for the following license year are due May 1 of each year, licenses are also issued upon request throughout the year because new haulers enter the market, mergers and acquisitions occur and requests for changes to the hauler's area of operation are made. Self haulers are also included in the license data. The indicator represents the number of haulers licenses in August of each year.

B. LICENSE FEES COLLECTED



License Fees Collected

1995-96	1996-97	1997-98	1998-99	1999-2000	2000-2001
\$62,950	\$72,350	\$76,150	\$76,100	\$79,650	\$80,650

Source: SWMCB Regional Hauler License Program Annual Reports.

- License fees collected increased by \$1000 for the 2000/2001 license period.
- 1,613 trucks are licensed in the region.
- Though there are fewer haulers in 2000 than 1999, the number of licensed trucks in the region increased by 20 trucks.

About the Indicator

The fees collected do not include late application fees.

Haulers are charged a fee of \$50 per truck for each truck they license. The fee has not changed since the program began in 1995.

NonMSW MANAGEMENT

PRINCIPAL OUTCOME: By 2003, the region will see an increase in the reduction, reuse, recycling or processing of nonMSW to preserve landfill capacity as a resource.

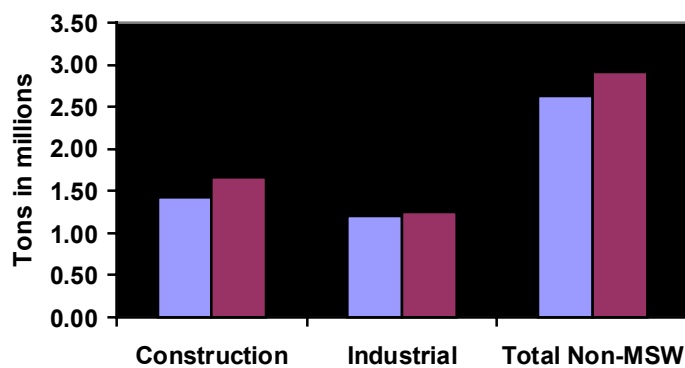
I. INTRODUCTION

The 1998-2017 Master Plan recognized that nonMSW should receive greater attention in regional planning efforts than it has in prior periods. In order to develop nonMSW policies and programs, however, it will be necessary to collect data, evaluate environmental impacts and regulatory issues, and identify best management practices. For this reason, collection and analysis of better data on nonMSW is a major focus of SWMCB work in this area.

II. NonMSW MANAGEMENT RESULTS DATA

A. QUANTITIES OF NonMSW MANAGED AT SELECT FACILITIES IN 1999 (tons)

In 2000, the SWMCB NonMSW Task Force collected data on construction/demolition waste and industrial waste managed at select facilities in 1999. These facilities included construction/demolition and industrial landfills located in or near the metro area. See Appendix F for a complete list of facilities included in this report.



Quantity of MSW Managed

	1998	1999
Construction and Demolition Waste	1,421,017	1,670,769
Industrial Waste	1,204,895	1,253,338
Non-MSW	2,625,912	2,924,107

- 99% of the waste delivered to the select facilities was landfilled.
- The amount of construction/demolition waste managed at select facilities increased 15% between 1998 and 1999.
- The amount of industrial waste managed at select facilities increased 4% between 1998 and 1999.
- The total amount of nonMSW managed at select facilities increased 10% between 1998 and 1999.

About the Indicator

NonMSW data is derived from analyzing annual facility reports to the Minnesota Pollution Control Agency (MPCA). See Appendix G for a list of data collection issues that should be considered when using this data for policy and program developments.

III. REGIONAL NonMSW MANAGEMENT ACTIVITIES

In 2000, the SWMCB focused its nonMSW management activities on gathering data on the quantity and quality of nonMSW generated and on promoting sustainable building design. Specific accomplishments are presented below.

- Identified quantities of nonMSW managed a select facilities.
- Conducted a nonMSW characterization study that identified the largest components of the construction and demolition waste stream.
- Developed a single nonMSW data collection form to be used throughout the region, thereby streamlining the nonMSW data collection process.
- Initiated two sustainable building design demonstration projects: the Carver County Special Waste Facility and the Ramsey County Law Enforcement Center.

IV. NonMSW CNO HIGHLIGHTS AND CHALLENGES

This section shows progress on a sample of county negotiated outcomes. A summary of the status of CNOs is included on page 7 of this report.

Highlights

- **Anoka:** A county non-MSW work group with representatives from Highway, Parks, Library and Property Management was convened. A list of materials was identified, current management methods were discussed. Strategies to reduce and reuse will be developed in 2001.
- **Dakota:** County Board adopted design, construction, sustainability standards; standards being applied to two county projects. Burnsville increased reclamation of metals and soils from C&D landfills.
- **Hennepin:** The County provided \$50,000 in funding to the Green Institute to recover usable goods from 28 deconstruction projects and the recovered material was valued at over \$93,000. Recovered items included cabinets, doors, decks, floors, lighting, and other wood products.
- **Carver:** Board approved a \$25,000 pilot project for construction waste processing program. Change bid process to require contractors to commit to where practical, recovery and recycling of specific building materials. Develop resolution. County Board passed resolution requiring all county generated construction and wood waste be processed and not landfilled.

Challenges

- **Anoka:** Behind schedule in completing evaluation and implementation of sustainable architectural guidelines.

