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## Part 1: Summary and overview

In 1980, when the Minnesota Waste Management Act was passed, at least nine out of every ten tons of waste went straight to 140 landfills and nearly 200 illegal open dumps. These waste deposits were often located in low areas such as excavated gravel pits. Any pollutants passed easily into drinking water. It was not unusual for operators of open dumps to burn the waste to reduce the volume, emitting air pollutants often inhaled by nearby residents. For these reasons, Minnesotans organized to oppose indiscriminate waste burial and burning, and supported passage of the Waste Management Act.

Minnesotans have accomplished much since 1980. We have built a robust and integrated system for solid waste management with well-managed facilities for recycling, energy generation, and disposal. But despite this, progress has stalled during this decade, and much work is needed in the years to come.

Since passage of the Waste Management Act, new threats to Minnesota's environment and public health and perhaps new opportunities for our economy have emerged. In the 2007 session, the Governor and Legislature, with broad support from Minnesotans, addressed the need for more renewable energy and cutting greenhouse gas emissions. As a sign of renewed support for waste abatement activities at the local level, during the 2006 Session, the Governor and Legislature restored the previous baseline level of \$14 million for SCORE integrated waste management programs. The change took effect in the fiscal year 2007-2008 biennium.

The MPCA considered the direction of this report based on the following factors:

- Long-standing Waste Management Act hierarchy of preferred waste management.
- Risks to Minnesotans' public health, way of life, and environment.
- Public, legislative, and executive desires to assign high priority to renewable energy and the need to address global climate change without delay.
- Completing unfinished business from previous solid waste policy reports and the MPCA's Strategic Plan.

While there are many worthy policy issues that could be addressed in this report, and that have been featured in previous years, the MPCA decided to focus the 2007 Solid Waste Policy Report on renewable energy, energy conservation, and the need for cuts in greenhouse-gas emissions. To those ends, during four months of meetings with stakeholders, MPCA leaders and staff asked each group to suggest how the elements of the waste management hierarchy, when applied to specific materials in specific parts of Minnesota, could gain ground in a cost-effective manner. MPCA's discussions with a broad array of solid waste stakeholders across the state reaffirmed great interest in tackling these needs without delay.

Common themes appearing at these meetings were:

- While there was hearty disagreement on exactly how best to achieve these goals, there was agreement
  on the broad goals of greenhouse gas cuts and energy gains. The consensus was that these are timely,
  even urgent, themes. The Waste Management Act fits with these goals generally but actions can be
  directed better to make sound decisions with specific materials in specific regions.
- Source reduction and reuse have not received the attention or financial support that recycling and waste-to-energy incineration have gotten.
- Given Minnesota's government structure, action on improved waste management would need the full cooperation of counties and cities, but their budgets are stretched and their financial situation isn't likely to improve in the near future.

- The current state law on local control of waste (districting, designation, and organized collection) is outdated and needs a fresh look given the U.S. Supreme Court decision in *United Haulers Association, Inc. v. Oneida-Herkimer Solid Waste Management Authority*.
- Government shouldn't mandate large increases in recycling collections without verifying markets and the infrastructure for collection and transportation. When seeking more materials for recycling or energy, look first to materials with solid markets and good energy/greenhouse gas results.
- Counties want SCORE payments to "catch up" and are willing to talk about incentive programs and new SCORE goals that fit with local conditions. If the state wants higher performance in the waste hierarchy, the state would have to increase its involvement.

Following is a summary of subjects identified by the MPCA in Part 3 as deserving attention:

- An early attempt at product stewardship for telephone-book recycling did not work as intended, because costs have been borne mostly by counties and cities rather than the businesses that produce such phone books.
- Recyclable beverage containers, and in particular aluminum containers, offer excellent potential for energy gains and greenhouse gas reductions.
- Much of the solid waste being generated by businesses, multifamily housing, and institutions is recyclable, but not being recycled. One area mentioned often was the need for convenient "away from home" recycling opportunities.
- Backyard burning of garbage is still a common practice in dozens of counties, and the health risks from this practice are significant.
- Plastic bags are a persistent problem at facilities that compost organic matter into soil amendment and
  that rely on bagged organic material for their inputs. Non-compostable plastic film raises costs at
  these facilities and cuts the value of the compost.
- There are opportunities for improvements in the integrated waste management system in regions with large amounts of waste, providing "economies of scale." The combination of methods should be worked out in a stakeholder process in coordination with the communities having that available waste, and in light of recommendations on waste management from the Minnesota Climate Change Advisory Group (MCCAG).
- That stakeholder process can also offer a plan on restructuring the SCORE program, its targets, and its incentives for better results.

MPCA distributed a draft solid waste policy report in December 2007, laying out options in these "need" areas, and offering initial recommendations. Staff collected comments over a five-week comment period. MPCA also made 12 short meeting slots available to stakeholder groups that wanted to meet with the MPCA commissioner personally. All meeting slots were filled, and the list covered a wide range of representatives from neighborhoods, cities, counties, recyclers, waste haulers, business trade associations, and manufacturers. Stakeholder responses to the draft are attached as Appendix D. The MPCA made changes to some of its draft recommendations after the stakeholder comments.

It is timely and fortunate for policy work that the Minnesota Climate Change Advisory Group (MCCAG) in its deliberations highlighted the upper part of the waste management hierarchy and called for major gains on source reduction, recycling, and organics recovery, while providing the means to document specific and measurable benefits from specific activities such as metal recycling. While the waste management hierarchy has been in existence for decades, there have been many disagreements about the benefits of specific actions in specific regions. This is part of the reason that initiatives to move large

amounts of waste "up" the hierarchy (including the Vision 2015 Process, the Waste Management Act Examination Advisory Committee, and the state Solid Waste Advisory Committee) did not reverse a pattern of stagnation that became apparent in 2000. The statewide recycling rate has remained flat despite rising commodity prices that, it would seem, would have drawn far more recyclables into factories for use as raw materials. Further, the rate of waste-to-energy processing has dropped. The bottom line: landfilling has grown significantly both in tonnage and rate.

The MPCA is seeking safe and cost-effective ways to end that long stagnation. Making the point that the energy and climate-change issues are here to stay, the Legislature and Governor signed into law several major directives during the 2007 legislative session. These directives, which are now linking up with state and provincial efforts across the Upper Midwest, have long time horizons, even out to 2050. The goals are very ambitious but can be met if action begins right away. These include a target to cut emissions of climate-warming gases from Minnesota, along with per capita fossil fuel use, each by 15 percent by 2015. More extreme changes from "business as usual" will follow in subsequent decades.

The recycling and waste-to-energy industry is comparatively mature, with much investment and infrastructure now in place that could handle larger tonnages of material. Currently, Minnesota recovers about 47 trillion BTUs of energy from its municipal waste through recycling, organics recovery, combustion in WTE plants, and landfill gas-to-energy. Still more energy is saved "upstream" through solid-waste source reduction and reuse. As the saying goes, "the cheapest megawatt was the one we didn't buy."

Once the savings can be made plain, Minnesotans should realize they no longer have the luxury of producing so much solid waste and then throwing away the energy contained in millions of tons of it every year. The MPCA believes that an improved waste system in Minnesota will be able to raise its annual energy capture by 50 percent, or even more, in the process of achieving the MCCAG greenhouse-gas emission cuts.

## Part 2: Background

## The state's Solid Waste Policy Report

This is the tenth biennial *Solid Waste Policy Report* to the Minnesota Legislature. The Waste Management Act requires the Commissioner of the Minnesota Pollution Control Agency (MPCA) to submit the report every two years to the Minnesota Legislature, Minn. Stat. § 115A.411 (2000). The purpose of this report under the act is to:

- Summarize the current status of solid waste management in Minnesota.
- Evaluate the extent and effectiveness of programs in accomplishing state policies and goals.
- Identify issues requiring further research and action, and make recommendations for establishing or modifying the state's solid waste management policies and programs.

State waste management policy is based on the Waste Management Act, Minn. Stat. § 115A as amended. Full versions of the state statutes, session laws, and rules can be found online on the Minnesota State Legislature web site: www.leg.state.mn.us/leg/statutes.htm.

In 1980 the Minnesota Legislature enacted the original Waste Management Act and stated its purpose in Minn. Stat. § 115A.02, which was to:

- (a) protect the state's land. air, water and other natural resources and the public health by improving waste management in the state to serve the following purposes:
  - 1. reduction in the amount and toxicity of waste generated;
  - 2. separation and recovery of materials and energy from waste;
  - 3. reduction in indiscriminate dependence on disposal of waste;
  - 4. coordination of solid waste management among political subdivisions; and
  - 5. orderly and deliberate development and financial security of waste facilities including disposal facilities.
- (b) The waste management goal of the state is to foster an integrated waste management system in a manner appropriate to the characteristics of the waste stream and thereby protect the state's land, air, water and other natural resources and the public health. The following waste management practices are in the order of preference:
  - 1. waste reduction and reuse;
  - waste recycling;
  - 3. composting of yard waste and food waste;
  - resource recovery through mixed municipal solid waste composting or incineration;
  - 5. land disposal which produces no measurable methane gas or which involves the retrieval of methane gas as a fuel for the production of energy to be used on-site or for sale; and
  - 6. land disposal which produces measurable methane and which does not involve the retrieval of methane gas as a fuel for the production of energy to be used on-site or for sale.

## Municipal solid waste generation and management

The *Report on 2006 SCORE Programs* (see Appendix A for full report) summarizes information submitted by all 87 counties and the Western Lake Superior Sanitary District on waste management efforts, including waste reduction activities, recycling, household hazardous waste programs, and problem materials collection.

The Minnesota Pollution Control Agency (MPCA) uses this information to calculate the state's recycling rates and the cost of managing municipal solid waste and recycling, and to detail trends in waste generation and disposal. While data collection began in 1989, the MPCA typically uses calendar year 1991 as a baseline for trend analysis. Further information and database access for the SCORE Program is available on the MPCA's Web site at www.pca.state.mn.us/score.

#### Waste generation: Quantities and trends

Since 1989, Minnesota's municipal solid waste (MSW) generation has grown year by year. This growth is reflected in both the total amount of MSW generated and in the per capita figures (total waste generated divided by the state's population).

Minnesota total MSW generation totaled 6,100,748 tons in 2006. Notably, this is only a 0.4 percent increase over the previous year, which is less than population growth. In 2006, the Minnesota per capita waste generation rate dropped slightly (-0.11 percent) from 2005, for a per capita generation of 1.166 tons. (The MPCA calculates the amount of waste that the "average" Minnesotan creates each year in an attempt to separate the effects of population growth from individual consumption patterns.) This per capita drop is a fairly recent trend; the MPCA flagged the development two years ago in the previous policy report. Because most years have been seeing waste increases in both per capita and total generation, this change is likely being driven by economics. Waste generation generally decreases during times of economic stress and increases during an economic upsurge.

Meanwhile Minnesota's population continues to grow. In 2006, Minnesota's population increased to 5,231,106, only a 0.5 percent increase. In the last five years, Minnesota's population increased approximately 55,000 per year; however in 2006, the population increased by 26,000.

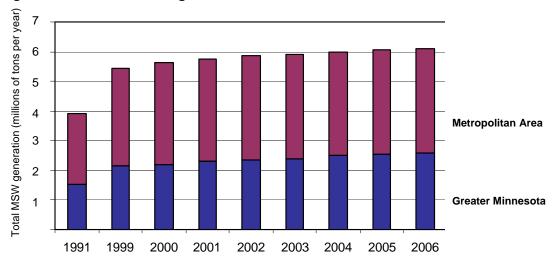


Figure 1: Minnesota's MSW generation

#### Overall trends in waste disposal

Waste management in Minnesota is guided by a hierarchy that prioritizes waste reduction, recycling, composting, and energy recovery. From 2005 to 2006:

- The statewide recycling rate (including credits for yard waste recycling and waste reduction efforts) increased by 0.2 percentage points to 48.7 percent. The state's base recycling rate rose to approximately 41.4 percent.
- MSW composting increased by 1 percent—to 17,912 tons in 2006.
- Waste-to-energy decreased by 6.7 percent (84,000 tons) to 1,161,066 tons. This was 19% of the total municipal solid waste stream. Facility downtime for improvements appears to account for some of the decrease, since permitted capacity remains the same.
- The amount of waste sent to landfills, the least-preferred disposal option, increased by 75,000 tons or 3.6 percent to 2,200,457 tons. That is more than a third of all municipal waste in Minnesota. Despite the fact that it is the least-preferred option, landfilling has become the dominant method in Minnesota for disposing of the discards that missed out on reuse, recycling, or composting.
- County estimates of on-site disposal (on-site dumping and burning) decreased by almost 3 percent (more than 2,000 tons) to 76,586 tons.

#### Recycling

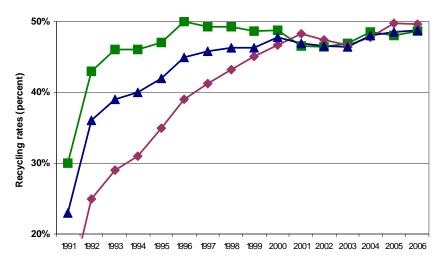
Minnesota's recycling programs are among the nation's most successful, reflecting the strong local and state investment and public participation. In 2006, recycling programs collected over 2.5 million tons of recyclable materials (paper, metals, glass, plastic, food, problem materials, etc.)—an increase of over 43,000 tons, or 1.7 percent, from 2005.

In 2006, Minnesota's recycling rate (including credits for yard waste recycling and waste reduction efforts) increased by 0.2 percentage points to 48.7 percent. The state's base recycling rate is approximately 41.4 percent, an increase of nearly half of a percentage point. (The base recycling rate is a more accurate measure of progress as it is the actual percentage of materials recycled and does not include the additional source reduction and yard waste credits.) While this growth reflects the significant state, local, and industry investment in our recycling system, as well as strong material markets, evidence suggests much more could be done to recover the millions of tons of discarded recyclable and organic material still disposed of each year.

This increase in rates should not obscure the fact that Minnesotans failed to separate and recycle 1.3 million tons of otherwise marketable material. Had it been recovered instead of disposed of, it would have been worth \$312 million. One surprising fact is that, despite higher market prices for paper, plastic, and metal, there has been a drop in the total amount of paper, plastic, and metal being recycled compared to 2005. This indicates that the willingness of Minnesotans and some businesses to recycle does not appear to be strongly linked with market signals.

In 2006, for the first time, source-separated compostable organics counted toward recycling. Of the total 179,043 tons of organics recycled, 166,966 tons were recovered as food to animals (food waste that is fed to livestock), 4,427 tons were recovered as food to people (food recovered for people through food banks), and the remaining 7,650 tons consisted of source-separated compostables.

Figure 2: Minnesota's recycling progress



Since the SCORE legislation was enacted in 1989, Minnesota's statewide recycling rate has climbed by over 25 percentage points.

In 2006, recycling programs in Minnesota collected over 2.5 million tons of recyclable materials (paper, metal, glass, plastic, food, source-separated organics, problem materials, and more), an increase from 2005 of 1.7%.

48.6% Metropolitan Area
49.7% Greater Minnesota
48.7% Statewide

#### **Out-of-state waste flow**

Compared to 2005, there was a decrease of 72,000 tons (-9 percent) in the amount of mixed MSW leaving Minnesota for disposal, down to 740,269 tons. While many factors may have contributed to this decline in out-of-state waste flow (facility locations, hauling companies in operation, existing contracts, surcharges and tip fees, and gas prices), increasing state surcharges from Wisconsin and rising transportation costs likely have had the most impact. Most of the exported waste goes to landfills.

Table 1: Mixed municipal solid waste leaving Minnesota, 2006

Destination state	Tons			
Wisconsin	467,538			
North Dakota	103,384			
South Dakota	1,405			
lowa	167,941			

#### County and state funding

Minnesota registers one of the best recycling rates in the nation due to the level of participation by its residents and businesses, along with comprehensive recycling programs at the township, city, and county levels—programs funded by local government (\$42 million) and state revenues (\$12.5 million). In 2006, Minnesota counties spent over \$54.5 million for SCORE-related programs, an increase of about \$300,000 (0.6 percent) from 2005.

Notably, the Legislature and Governor took action in the 2006 legislative session to restore SCORE funds to previous levels, to \$14 million. Discussed later in this report is the possibility of using additional funding to create incentives to reward measurable performance. Together with the SCORE spending, this could affirm the state's renewed commitment to recycling and offer counties the ability to restore environmentally beneficial programs. A well-crafted incentive approach could also enhance Minnesota's ability to remove additional materials that will bring energy and economic benefits for the state.

#### **County funding**

Each county is required to match the funding from the Legislature with a local contribution of at least 25 percent. In 2006, counties continued to exceed this match, spending over \$42 million of county funds toward SCORE-related activities. Since SCORE reports are based on county activity, additional funds not reported here were spent by other local units of government, such as cities and townships. This went for SCORE-type programs such as recycling, household hazardous waste, and waste education.

Counties' financial resources have not kept pace with inflation. Rural recycling programs, in particular, face growing challenges to collect materials and deliver them to markets. Meanwhile counties are aware that million of tons of recyclables that could be separated from the waste stream for recycling are being lost to disposal facilities.

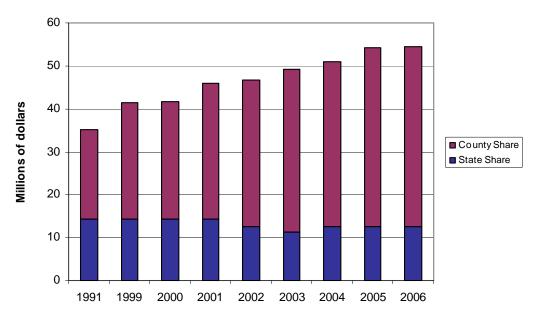


Figure 3: County and state expenditures

Note: The 2007-2008 state's share went up due to a Governor-recommended increase in SCORE funding (from \$12.5 to \$14 million); county share data is not yet available.

## Part 3: Near-term policy needs

The MPCA laid out five policy areas in Part 3 of the policy report comment draft. The policy discussions in the comment draft of December 21 were intended to provide stakeholders with a range of options that MPCA considered, along with MPCA's opinion of how they compared in light of the overall goals of increasing the state's renewable energy and reducing its greenhouse gas emissions. MPCA also provided its draft recommendations on each area, and a summary of its reasoning. MPCA invited stakeholders to provide opinions and information on each topic.

Based on comments that came back over the five-week comment period, the following summarizes MPCA's initial recommendation and then its final recommendation in each area, provides a short summary of stakeholder remarks, and adds a short discussion on implementation and follow-up needs.

# Policy Area 3A: The statutory plan of product stewardship for telephone directories is not working.

#### Statement of need

The MPCA is promoting strategies to reduce the distribution of unwanted directories as well as increasing the recycling of phone directories in Minnesota. Beginning in 1992, state law (Minn. Stat. § 115A.951) imposed a disposal ban on such directories and required the directory publishers to provide for the collection and recycling of directories. The law also required reports from the publishers to the state detailing their recycling activities. However, the reporting remains incomplete with only 24 companies filing reports with the agency in the most recent year (2006), and local governments have been left bearing much of the responsibility to collect and recycle telephone directories.

Given the low level of recycling for telephone directories combined with lack of compliance with the statute, it is clear that current state law is not sufficient to promote an effective approach to the recycling of telephone directories.

The obligations for telephone directory publishers under the current statute are:

- 1. Provide for the collection and delivery to a recycler of waste telephone directories.
- 2. Inform recipients of directories of the collection system.
- 3. Submit a report to the agency by August 1 of each year that specifies the percentage of distributed directories collected as waste directories by distribution area and the locations where the waste directories were delivered for recycling and that verifies that the directories have been recycled.

Telephone directories remain a problem for recycling managers because the most common practice for residents and businesses is either to discard the books in mixed municipal solid waste or place them into county-supported recycling programs. The root of the problem appears to be unclear statutory wording that has prevented effective enforcement of the law. A proliferation of telephone directory publishers has worsened the enforcement problem.

Although the state has not conducted a statewide waste composition study since 2000, individual sorts at facilities indicate that Minnesotans are still discarding thousands of directories in mixed MSW despite the statutory ban on such disposal. A waste composition study conducted in 2007 at the Hennepin Energy Recovery Company WTE facility in Minneapolis showed that telephone books made up 3.8 percent of the trash delivered, despite the longstanding statutory ban prohibiting Minnesotans from dumping their phone

books in trash cans. Even without a statewide waste-composition sort (last conducted in 2000), this study confirms that the disposal ban and recycling mandates are not working.

The MPCA estimates that close to 13,000 tons of phone books were distributed in Minnesota during 2006. Because less than 15 percent of these phone books were recycled, at least 85 percent went to waste-to-energy plants or into a landfill. The trend is troubling because the recycling rate has dropped from 2003, when 35 percent were recycled. As of 2006, directory publishers reported to the state that 111 tons of phone directories were received for recycling.

Meanwhile, county programs handled 1,462 tons of phone directories for recycling in 2006. In short, the counties have been picking up recycling costs that the legislature directed telephone directory manufacturers to assume, and the trend is increasing.

#### MPCA's proposed outcome

The MPCA is examining strategies to promote a 50 percent reduction of phone directories distributed in the state and to reach a minimum 80 percent recycling rate for phone directories in Minnesota. The MPCA estimates that, as of 2003, the per capita generation of telephone directories in Minnesota is five pounds, totaling 13,000 tons. Reaching the target rates would reduce 6,500 tons and keep an additional 5,200 tons per year out of the disposal stream. This is consistent with the Minnesota Climate Change Advisory Group, which called for leveling out per capita waste generation by 2020 and then cutting it 3 percent by 2025.

#### What the MPCA proposed in the draft report

In the draft report, the MPCA recommended an opt-in option as the most effective means of achieving the proposed outcome. The MPCA evaluated several other options including an opt-out, but given the oversight necessary for a successful program, determined the opt-in as more desirable.

#### Summary of stakeholder responses

The comments received from stakeholders were basically split into two categories—those favoring more aggressive action and those opposed to the recommendation. Several commenters remarked that given phone books' relatively small representation in the waste stream, the MPCA should focus on higher-volume materials.

The arguments against the proposed policies were that it would hurt local small businesses, hinder residents from receiving important information needed to make educated purchasing decisions, an opt-in system would be difficult and costly to implement, and claims that the current practice is working well. The telephone directory publishers would like the opportunity to implement some voluntary guidelines, including an opt-out component.

Several entities supported the recommendation. Local units of government, in particular, offered comments on the cost of collecting and recycling telephone directories and that an opt-in component placed responsibility of the product back on the telephone directory publishers and distributors.

#### **MPCA's recommendation**

The MPCA proposes that the Legislature clarify and strengthen the obligations of telephone directory publishers to fulfill their recycling obligations under Minn. Stat. § 115A.951 and further require the directory publishers to change their distribution practice. Instead of dropping directories off at every address, publishers would drop them off only at addresses where residents had responded to an offer and had actually requested such directories. MPCA recognizes that some Minnesota residents do not have

access to the Internet or other sources of electronic information and would work with directory publishers to ensure that the directories are available to residents who express a desire for them.

This would be a new step for states. North Carolina, New Mexico, and New York introduced legislation in 2007 to provide residents a method of opting-out from receiving phone book directories. The North Carolina legislation would require directory publishers to provide residents with the option to stop delivery of directories by signing up on a "do not receive" registry. The New Mexico bill would prohibit a for-profit business from distributing a local telephone directory to a resident who has notified the business that they no longer wish to receive the directory. Both North Carolina and New Mexico put the burden of publishing the opt-out on the telephone directory publisher. The New York bill authorized local government to establish a registry for residents that do not want to receive telephone directories from other providers besides their provider. While no state has yet proposed an opt-in plan, in North Carolina, AT&T proposed to stop publishing its white pages directory in the cities of Charlotte and Raleigh. Instead, they would have made the directories available by CD-ROM or web. This was not instituted.

Considerable environmental savings would occur with the implementation of an opt-in system for phone books. Based on tonnages and recovery rates summarized in the statement of need section, if 1,022,000 Minnesotans did not receive phone books (based on the percentage of Minnesotans that have registered with the "do not call" registry), the state would save the equivalent of 14,007 metric tons of CO<sub>2</sub>E (a measure of global warming potential) and 101.6 billion BTUs per year.

#### Implementation and follow-up

The statutory change could be implemented within one year of enactment. Telephone directory publishers would be responsible for administering the "opt-in" provision. To carry that out, they would solicit customers interested in receiving a directory through telephone billing statements or other means of communication. The MPCA is aware that some segments of the community are interested in receiving directories and do not have access to other means of directory information so that a public education and outreach effort would need to be implemented. The statutory changes would not require additional MPCA staff for implementation.

Policy Area 3B: The current recycling system is missing major energy and greenhouse gas reduction opportunities with beverage containers, starting with aluminum cans.

#### Statement of need

The original SCORE program made it a priority to raise the recycling rates of aluminum, plastic, and glass containers that are recyclable. Despite 17 years of that broad-based program, and despite improving markets, Minnesota recycling rates remain well below those of the highest-performing states. For instance, the container recycling rate is 61 percent in California and 97 percent in Michigan.

Despite experimentation with different waste-separation technologies, public education, and market development, recycling is still highly dependent on the willingness of Minnesotans to "source separate" the beverage containers at their homes and businesses, and on the ability of collection programs to get them to end markets. It is a striking fact that high market prices for the materials in recent years has not raised the recycling rates. This has prompted the MPCA to look at new strategies that could significantly increase the recycling rate for beverage containers.

The unacceptably low recycling rate for aluminum, which has persisted despite rising commodity prices, is disappointing because aluminum is an extremely valuable metal to recycle and every indication is that

it will remain so. The reason for giving aluminum attention is not only the massive amount of energy that is embedded in the lost metal, and its problem when burned, but also the fact that markets statewide are ready and willing to absorb such cans today. The importance of getting aluminum cans into recycling bins rather than garbage cans is not a new issue; the MPCA and Minnesota Office of Waste Management flagged aluminum's "lost-can problem" 16 years ago, as part of its Problem Materials Plan Part 1.

Aluminum is a problem material when sent to waste-to-energy plants, particularly the larger mass-burn units, where the metal melts and fouls air injectors and other combustion equipment. This adds downtime for equipment maintenance, according to operators. When waste combustors are down for maintenance, the garbage they otherwise would process must be bypassed to landfills in Minnesota and other states, where neither raw materials nor energy can be recovered from cans and bottles.

Following are MPCA's corrected estimates for the tonnage of current recycled and currently discarded beverage containers.

Table 2: Beverage containers in Minnesota, 2006

	Tons re	ecycled	Tons disposed available for recycling			
Beverage containers	Low range	High range	Low range	High range		
Aluminum	33,564	41,689	20,272	30, 407		
PET	3,605	16,960	23,651	27,409		
HDPE	3,310	11,800	16,893	23,650		
Glass	79,771	125,231	64,195	81,087		

Taking the mean of these figures as to discards not currently being captured, the greenhouse gas and energy savings from increasing the recycling of beverage containers, aluminum in particular, would be significant. They underscore the agency's focus on this component of MSW in its draft.

Table 3: Energy and greenhouse gas benefits of recycling beverage containers at projected 80 percent recycling rate, 2006

	Greenhouse gas savings C0₂ equivalent (in tons)	Energy savings (BTUs)
Aluminum containers	740,289	9.6 trillion
PET plastic containers	44,488	611 billion
HDPE plastic containers	31,273	378 billion
Glass containers	39,134	350 billion
Total	855,184	10.9 trillion

For the purposes of energy comparisons, a unit train carrying 15,000 tons of western coal has a heat value of 270 billion BTUs, so the total energy captured by recycling beverage containers at an 80 percent rate is about equal to that carried by 40 unit trains per year. Aluminum is energy-intensive to manufacture from virgin bauxite so recycled aluminum cans represent the vast majority of this energy: 9.6 trillion BTUs out of 11 trillion BTUs total. Stated another way, boosting aluminum recycling would go far in meeting the MPCA's strategic plan goal of raising renewable energy by 5 trillion BTUs per year. As is stated in the summary, the MPCA believes Minnesotans no longer have the luxury of wasting such a valuable resource.

#### MPCA's proposed target for action

The MPCA proposes that 80 percent of beverage containers should be recycled by 2012.

#### MPCA's draft recommendation

MPCA looked at several options and suggested a ban on putting beverage containers into garbage cans, beginning with aluminum and broadening the ban later to plastic and glass. Though stakeholders often labeled it a "landfill ban," it would have applied to all disposed waste, including that sent to WTE plants.

The state of Minnesota has employed disposal bans only sparingly for wastes that are nontoxic, for reasons usually associated with saving landfill space or encouraging resource conservation. Among the few "resource-oriented" bans in Minnesota are laws banning telephone books (see Policy 3A) and yard waste from trash cans.

By contrast, some states such as Wisconsin began banning cans and other recyclables from landfills in communities without recycling programs, and North Carolina is implementing a combination of bans and producer responsibility. In Wisconsin, the landfill bans, combined with market building and local recycling targets, raised the statewide recycling rate from 16 percent to 36 percent. Other jurisdictions such as Seattle have used "recyclable bans" backed up by warnings and citations, but only in coordination with a much broader program.

#### Stakeholder responses

Stakeholders mostly opposed the idea of basing a new statewide policy on a disposal ban targeted at the millions of beverage containers now going into trash bags. Some questioned the wisdom of targeting these in particular, saying that other materials such as tin cans are of equal importance, or that only a broadband approach like SCORE would work. There was general agreement that local governments would find it difficult to enforce a container ban, and that enforcement targeting the haulers of garbage, landfills, or WTE plants would be impractical and unfair if attempted (garbage-truck drivers commonly use mechanical equipment to pick up and dump carts so would not see cans and bottles being trashed even if they could see inside the trash bags). Even those who said bans might be an avenue pointed out barriers.

Some recyclers favored the alternative of container deposit, noting that the states with the highest container recycling rates use such measures, and explaining they would get redemption value of cans and bottles not returned or redeemed. But most businesses and trade associations argued strongly against any form of container deposit, advocating for more education, more business assistance (e.g. RecycleBank<sup>TM</sup>, Message in a Bottle<sup>TM</sup>) and more SCORE money to local governments instead. They also pointed out that public entities have been lagging in certain recycling requirements. Some of the business stakeholders asked that Part 3B be eliminated entirely.

The subject of data reliability received a good deal of attention, one concern being weaknesses in reporting methods in several key areas. There was also a brisk debate about how much beverage metal, glass, and plastic really was being recycled in Minnesota and how much was being discarded.

The MPCA staff rechecked its figures and made changes in PET and aluminum. Still, it is intriguing that a two-fold difference remains between the MPCA's figure for total aluminum-can generation and that of the beverage industry's consultant. Some of the difference may lie with different methodology and data sources: the MPCA relies on recycler reports and on measurements of the waste stream; it has not relied on market-share estimates for Minnesota consumption compared to U.S. totals.

#### MPCA's final recommendation

As a whole, the comments received on the draft solid waste policy report did not support MPCA's recommendation for a disposal ban for beverage containers. However, the MPCA feels strongly that recycling rates for beverage containers, especially aluminum, need to be increased significantly.

The agency recommends the establishment of a goal to recycle 80 percent of beverage containers by January 1, 2012.

The MPCA recommends that a new subdivision be added to the "opportunity to recycle" section of the Waste Management Act, which would require any business or group that sells or provides beverages in single-use beverage containers to provide an opportunity to recycle that container at the point of sale or distribution. The law would not mandate recycling, but rather see that access to recycling bins is convenient.

This new section would also require that public events and festivals provide the opportunity to recycle. By requiring all businesses and events that sell beverages to provide recycling for beverage containers, Minnesota would make "away from home" recycling convenient and easily accessible and make the achievement of the Part 3B goals more likely.

In order to support progress toward reaching the goal, the agency intends to pursue a voluntary product stewardship agreement with the beverage industry to arrange for the recycling of beverage containers and to ensure an 80 percent recycling rate of these containers by 2012. The components of the agreement may include expanded collection opportunities, enhanced outreach and education, and innovative incentive programs (e.g. RecycleBank<sup>TM</sup>).

MPCA wants to be clear that it will be keeping a close watch on the recycling performance of beverage containers and aluminum cans in particular. This is because aluminum when recycled has great positives for the environment but when disposed of is a major loss of energy and greenhouse gas benefits.

The agency will monitor progress toward meeting the 80 percent goal through information gathering from recycling and disposal facilities, along with a statewide waste composition study in 2011. This composition study will provide detailed percentages of the discard waste stream including aluminum cans as well as other beverage container material types. These percentages can then be applied to the total mixed MSW tonnage to produce a tonnage of cans not being recycled in a given year. The tonnage of aluminum cans being sent to landfills and WTE plants should be no more than 20 percent of Minnesota's share of nationwide aluminum can usage that year.

If the benchmark indicates that progress is not satisfactory toward the 80 percent goal, the MPCA will recommend stronger action be taken. In such a case, the agency will recommend one of the following options to the Legislature:

- **Option 1:** A producer responsibility program for the collection and recycling of beverage containers. Such a program would place the financial and programmatic responsibility on beverage producers to attain the 80 percent recycling rate.
- Option 2: A traditional container deposit program.
- **Option 3:** A disposal ban on beverage containers that bears in mind the need for enforceability and fairness.

# Policy Area 3C: Current pricing and management practices are holding back non-residential recycling.

#### Statement of need

Approximately 55 percent of the municipal solid waste stream is generated by institutional, public, and private business establishments.

The Waste Management Act presently requires counties and cities of a minimum size to provide their residents an "opportunity to recycle." The current language does not lay any requirements for action other than in the residential sector, so business establishments are not covered. (Note: some cities have acted on their own to boost business and institutional recycling, under ordinance powers. Bloomington, Minnesota, is one such city, and other examples can be found across the county including Austin, Texas, and Seattle, Washington.) Cities have taken an interest as part of recycling programs because business establishments have an uneven record of providing the opportunity to recycle for employees, tenants, and customers. By comparison, providing curbside service or drop-off sites for residents has been much easier. For the most part business recycling has been driven by price signals that must compete with many other daily demands. Ideally, businesses as well as residents would have a clear economic reason to separate recyclables rather than simply dispose of all their waste, but to date no Minnesota policy has been able to work through the complexities of commercial waste and recycling-collection contracts.

Besides economic hurdles, some businesses (particularly the smaller ones) report logistical constraints, including floor space and employee time. The floor-space problem is sometimes tied to the lessor's use of the building.

#### MPCA's proposed target for action

MPCA estimates that the commercial sector is disposing of 715,000 tons of readily recyclable material annually, not counting organics. (This figure presumes that of the estimated 1,300,000 tons of recyclables mixed into garbage going to landfills and WTE plants, about 55 percent originates from the non-residential sector.) The MPCA believes that the recovery of an additional 25 percent of available recyclables (179,000 tons per year) is a viable target. If captured for recycling in 2006, this material would have had a commodity value of \$43 million—providing an economic boost to Minnesota's recycling sector—and an embedded energy content of 10 trillion BTUs.

#### What the MPCA proposed in the draft report

The MPCA proposed two actions. One was extending the "transparent pricing" language in Minn. Stat. § 115A.93 Subd.3(c), to include all customers rather than only residents. This was intended to support local efforts to impose mandatory business recycling by changing the price signals in favor of recycling compared to disposal only.

A second action proposed amending Minn. Stat. § 115A.552 Subd.4, the "opportunity to recycle" requirement. The amendment would require all building owners, building managers, and building operators who contract for waste management for the building, facility, or business to provide the opportunity to recycle at the building. The opportunity to recycle would be for employees, tenants, and customers. Public buildings and events would be obligated to provide the opportunity to recycle. By requiring all buildings and events to provide recycling, Minnesota would make "away from home" recycling convenient and easily accessible.

#### **Summary of stakeholder responses**

In general, stakeholders agreed that businesses in Minnesota were wasting enough recyclable material that attention was timely, but MPCA proposals brought some opposition. Many stakeholders agreed that "away from home" locations remain a major challenge for capturing recyclables "on the go" and that much work remained to provide convenient recycling at public events and public buildings.

The MPCA heard a broad reaction that the pricing of commercial waste and recycling services is so complicated and varies so much depending on type and size of business, that the state "transparent pricing" statute now applying to residents' waste services cannot be easily extended to business practices in the manner that MPCA proposed. Stated another way: while market signals can be persuasive in motivating participants, there might be other ways to go about it. Haulers were strongly opposed to any state role governing how waste or recycling contracts are set up in the business sector. Some businesses urged the MPCA to spend its efforts on boosting residential recycling with incentives like the RecycleBank<sup>TM</sup> and Message in a Bottle<sup>TM</sup> and set any added business requirements aside.

The stakeholder reaction about "mandatory recycling" or "business opportunity to recycle" was mixed and somewhat more supportive, and included many questions about how it would be applied and enforced. Some stakeholders objected to any added cost on Minnesota employers. Counties and cities were unified in saying the MPCA should not propose any plan on business recycling (or assume enforcement of such requirements) that would add unfunded requirements onto counties or cities; the local governments said any added recycling efforts would have to come from the businesses themselves.

#### MPCA's final recommendation

The MPCA does not recommend changes to the pricing statute, Minn. Stat. §115A.93 Subd.3(c), at this time. More information is needed about current pricing of garbage and recycling services, and how they might better fit with environmental consequences such as those calculated under the WARM tool. WARM stands for the WAste Reduction Model, a publicly available spreadsheet that is coordinated by U.S. EPA. It allows people to assess their local waste management options in terms of energy savings and greenhouse gas emissions. It allows some user inputs as to local conditions (facilities to choose from, and distances thereto) and allows them to define a baseline condition for their vicinity (e.g. disposal of most waste in a given year in a basic lined landfill, with minimal recycling). Once that baseline is spelled out, they can run the same waste tonnages through a spreadsheet with more elaborate management methods such as source reduction, aggressive recycling, and a waste-to-energy plant.

The MPCA's recommendation is to build upon the "opportunity to recycle" concept in Minn. Stat. § 115A.552 Subd.4, the "opportunity to recycle" requirement, to take effect January 2010.

MPCA recommends that the wording be changed to require all building owners and operators over a certain size (namely, buildings that house more than 10 people) and businesses above a certain size (namely, those that employ more than 10 people) to provide the opportunity to recycle. This would provide recycling opportunities for employees, tenants, and customers. The implementation duty would be placed on businesses and building owners. Most strip-malls and retail stores now have recycling of old corrugated containers by a commercial service. Taking additional material would mean an upgrade of the service provided. Markets are readily available to absorb more of the commonly recycled materials.

A major education campaign to inform business and building owners about these changes would be coordinated by the MPCA in partnership with the Minnesota Chamber of Commerce, counties, cities, and other groups. The campaign would also be used to publicize existing state and local facility recycling requirements now in Minn. Stat. § 115A.151. That law already requires the state, cities, counties, schools, and other local units of government to provide recycling containers for at least three recyclable materials.

Policy Area 3D: Contamination from non-compostable plastic bags is a problem when composting organic materials.

#### Statement of need

Minnesota law banned the disposal of all yard waste in landfills by 1992. From that point forward, yard waste has been delivered to yard waste composting facilities around the state. Most of the yard waste is collected in plastic polyethylene bags that are not compostable in the compost process. As the yard waste is processed, the polyethylene (PE) bags shred into pieces that become a contaminant in the finished compost.

Polyethylene plastic film from non-degradable bags continues to be the most troublesome contaminant in finished compost. Compost facilities receiving non-biodegradable bags find that they must screen finished compost up to three times to remove the shreds of PE plastic to make the finished compost marketable. This extra screening results in significant additional costs (\$3 to \$5 per ton) compared to a system that does not have to deal with this contaminant. Further, even with the extra processing costs being carried by the facilities, some shreds and bits of plastic remain in the material all the way through final use. This reduces potential markets, and it significantly lowers the price that can be charged for the finished product.

#### MPCA's proposed outcome

That finished compost is free of bits of non-compostable plastic bags, thereby increasing the market value of the finished compost.

#### What the MPCA proposed in the draft report

The agency proposed a state law that would require that any bag used to collect yard waste be biodegradable/compostable. This law would require that the materials that bags are manufactured from meet the ASTM D 6400 specifications. The ASTM D 6400 specification is recognized by the composting industry as the technical standard that biodegradable/compostable bags should meet.

Minnesota compost facilities collected 674,336 cubic yards of yard waste for composting. One-fifth of the volume, or 134,867 cubic yards, was lost as a side effect of removing non-biodegradable bags and shreds. If this law were passed, the capture rate of this material would increase to 100 percent. In addition, there would be no need to screen the PE from the finished product, which would significantly reduce the burning of diesel fuels, resulting in less air pollutants, such as particulates and savings in GHG emissions. Finally, 100 percent of the finished product would be more attractive and diversify the options for marketing, likely resulting in an increase in the sale price of the finished compost. The use of biodegradable/compostable bags would decrease facility operational costs and increase the sale price of the finished compost. These two factors would strengthen the economic viability of compost facilities. In addition, this would jump start the industry manufacturing biodegradable/compostable products. Those products are more sustainable and have a smaller carbon footprint than the non-compostable PE bag.

Paper and biodegradable/compostable plastic bags are commercially available that meet the ASTM D 6400 standard. They are commonly sold at supermarkets, hardware stores, and retail stores, including Home Depot, Menards, Wal-Mart and, Target. The degradable plastic bag is more expensive than the standard non-degradable polyethylene yard waste bag.

The pure polyethylene bags are made from fossil fuels. Biodegradable/compostable plastic bags are made of a blend of petroleum and plant-based materials. Staff discussions with industry representatives suggest that the cost of biodegradable/compostable bags would decrease as the market grew, because economies of scale would be triggered. Durable paper bags are also commercially available.

Using a biodegradable/compostable bag has the potential to boost an industry that produces a more sustainable product. Currently, most biodegradable bags are some combination of biodegradable materials, like corn or soybeans, and petroleum.

#### Summary of stakeholder responses

There were 21 comments from stakeholders regarding composting and compostable bags. Fourteen of those comments were on composting in general, 13 of which supported composting in a general way, commenting on the need for a greater effort by the agency in: 1) implementing composting in the backyard and at commercial facilities, 2) funding compost collection programs, and 3) forward composting over waste to energy.

Eight of the 21 comments were supportive of the requirement that bags used for the collection of yard waste be compostable. Two of the commenters felt that consumers would have a difficult time distinguishing the compostable bag from the non-compostable bag and suggested that perhaps all bags in the state should be compostable, eliminating the consumer confusion.

Overall, stakeholders were very supportive of placing greater emphasis on composting of organic materials source separated from the MSW waste stream. The majority of stakeholder comments were supportive of requiring the use of compostable bags for the collection of organic materials.

#### **MPCA's recommendation**

The agency recommends supporting legislation introduced to require that when a bag is used to collect yard waste that bag be compostable. This should not prohibit the use of rolling tote containers or the ability of facilities to require the customer to debag their materials and take the bag with them off-site. An implementation date of March 29, 2009, is recommended. This date would allow enough lead time to have sufficient biodegradable bags on retail shelves for the entire season. The state and local collectors would also need time to implement a public education campaigns to raise awareness of the change.

# Policy Area 3E: Open burning of farm and household garbage has persisted, despite risks.

#### Statement of need

Minnesota law made backyard garbage burning illegal for all people in the mid 1980s though many restrictions through law and rule made backyard garbage burning illegal for most beginning in 1969. Soon after the 1980s ban, the Legislature added a major exemption to Minn. Stat. § 17.135 that allowed farmers in particular to burn or bury their wastes on-site, unless their county took action to pass a resolution stating that garbage service was reasonably available countywide. As a result, the practice remains in wide use, and stakeholders have continued to highlight the problem in policy reports and public meetings. Minn. Stat. §§ 88.171 and 17.135 are the two major statutes that deal with backyard garbage burning. Minn. Stat. § 88.171 mainly details prohibited materials (which include most of what makes up modern MSW) and Minn. Stat. §17.135 discusses issues relating to backyard garbage burning for farmers.

Because backyard garbage burning is considered a personal liberty issue to some residents, this has made adopting resolutions politically difficult in some counties. The result is that only 28 Minnesota counties and the Western Lake Superior Sanitary District have such resolutions in place; this leaves 59 counties that allow open burning. Previously the number of counties that banned open burning was 29, so the practice of open burning appears to be growing geographically rather than shrinking. Few permanent programs have been put in place to stop this practice. The proliferation of wood and corn stoves for home heating (due in large part to rising fuel prices) also indicates the need for vigilance. Though the stoves are

not advertised for this purpose, other materials, including garbage and pesticide-treated wood or seed, are sometimes burned.

A 2005 statewide study of backyard garbage burning showed that 45 percent of rural residents still burn waste on-site. Annual county SCORE surveys used in conjunction with other state and national studies estimate that up to 250,000 tons may be burned on-site in Minnesota every year, posing potentially significant health risks to many Minnesotans. According to the U.S. EPA's Dioxin Inventory, backyard garbage burning is the number one source of dioxin in the U.S.—more than all other known sources combined —and one burn barrel can produce as much dioxin as a 200 ton per day waste combustor. Another public risk is wildfire: Minnesota DNR estimates that over 40 percent of the state's wildfires are caused by backyard garbage and related debris-burning.

To estimate the potential health risks from exposure to air emissions from open burning, MPCA conducted an evaluation of the available emissions data and consulted with the Minnesota Department of Health. The evaluation suggests that exposure to air emissions from open burning could be at, or approaching, levels of health concern—particularly for susceptible populations. Several of the pollutants emitted are persistent in the environment, and they accumulate in the food chain. Exposures of potential concern may occur through inhalation and ingestion. High exposures to these chemicals have been associated with acute and chronic adverse health effects, ranging from respiratory irritation to asthma exacerbation and cancer. Susceptible populations, such as children, the elderly, people with compromised immune systems, and people with respiratory and cardiovascular diseases, may be especially at risk.

The MPCA's evaluation included only some of the risks associated with open burning emissions, and therefore, actual risks may be higher than estimated. Given the available information and the relatively large contribution of toxic air emissions from open burning in Minnesota, the MPCA, in consultation with Minnesota Department of Health, has concluded that further action is warranted to protect public health.

#### MPCA's proposed outcome

That there be no open burning of farm or household garbage after 2010, with any county-approved exemptions expiring before 2012. Further, that cities having a population over 5,000 ensure that citizens' solid waste is collected and managed.

#### What the MPCA proposed in the draft report

End backyard garbage burning (burn barrels, fire pits, stoves, etc.) by 2010, with preparations. That is, leading up to and following the ban, the state would provide technical, educational, and grant assistance to counties and local units of government to educate the public and reduce the number of people who dispose of their wastes on-site. In addition, MPCA recommended a temporary exemption process for counties with gaps in service or drop-site options. To be eligible for the temporary exemption, MPCA recommended that counties would detail what portions of that county have gaps in service or disposal options, which resources would be needed to address those gaps, and how long it would take.

#### Summary of stakeholder responses

Most stakeholders who replied to this proposal were supportive of a ban on all backyard garbage burning, including some from rural Minnesota and some from the commercial sector. Some stakeholders said that since local bans are difficult to enforce, a statewide ban would make things clearer, though a ban by itself would likely do little good. They also listed needs in advance, including public education, preparing enforcement resources at the state and local level, and provision of reasonably convenient disposal options. Some pointed out that state aid would be needed to help set up convenient rural waste drop-sites and in other cases, to work with local haulers to ensure reasonable coverage for all residents.

The farmer exemption allows some farmers to burn or bury their wastes on-site, but some stakeholders warned that the definition of "farmer" has caused problems: Why can one person burn while their neighbor cannot? Further even if a person fits the "farmer" criteria under Minn. Stat. § 17.135, there is no known way to burn mixed waste in an open fire in a "pollution-free manner" as stipulated by statute. Stakeholders said that although Minn. Stat. § 17.135 allows counties to pass a local resolution banning all backyard garbage burning, many counties are hesitant or unable to do it because of local political pressures, and a clearer statewide law is needed if we are serious about changing this behavior.

MPCA notes that the opinion favoring a law change to bring an end to open burning was not unanimous among all local governments that responded; the Association of Minnesota Counties' list of positions did not articulate support for a law change.

#### **MPCA's recommendation**

- 1. End backyard garbage burning (burn barrels, fire pits, stoves, etc.) by 2010.
- Continue to provide technical, educational, and grant assistance to counties and local units of government to educate the public and reduce the number of people who dispose of their wastes onsite.
- 3. Allow a two-year temporary exemption process (after the 2010 ban date) for specific counties who apply to address gaps in service or drop-site options, enforcement, and educational efforts. To be eligible for the temporary exemption, counties would need to detail what portions of the county have gaps in service or disposal options, what resources would be needed to address those gaps, and how long it would take.

Since the late 1990s, the MPCA has provided technical assistance to local governments to reduce backyard garbage burning. While a rising number of counties have provided residents with information about the dangers of backyard garbage burning, and while the MPCA has provided limited support to programs such as Chisago County's Burn Barrel Buy-Back program, these efforts have not reduced backyard garbage burning statewide. During the 18 months of the MPCA's statewide Burn Barrel Reduction Campaign, over 28 counties have become involved in local education and reduction efforts funded by state and local dollars but more engagement at the household and farm level is needed in addition to clear and consistent state laws. Following are implementation suggestions from counties and field staff at the MPCA.

#### Implementation and follow-up

For a garbage-burning ban to work, convenient options for waste must be available. Depending on the region, these could include recycling, composting, waste-to-energy combustion, transfer stations, dropsites, and landfills because many live in rural areas without convenient solid waste collection services or where collection prices are very high. Without targeted assistance, local education and reduction initiatives, and compliance, Minnesota could see more illegal dumping.

One method has been to raise the money needed through county property tax service charges to cover the cost of canister operations, so that residents who drop off their garbage in public canisters do not have an "out of pocket" cost. These canisters typically are located on well-used routes of travel. One is St. Louis County, which maintains 17 canister sites for residents to drop off their solid waste.

Continued technical support, educational resources, and financial assistance would be needed in addition to a well-crafted law. Without locally crafted burn-barrel reduction initiatives that stress education, incentives, infrastructure, and enforcement, it is likely a statewide ban would fail.

In addition to providing technical and educational assistance and resources, the MPCA would need to work with counties and local units of government to assess what parts of the state would need the most assistance, where pollution is of the highest priority, determine associated implementation costs, and work with counties to lay out a plan to address specific barriers. Continued grant assistance or other financial support such as loans may also be needed. MPCA solid waste enforcement staff will be available to assist county solid waste staff, DNR conservation officers, and other local or regional enforcement staff on enforcement actions.

## Part 4: A Solutions-oriented stakeholder process

Minnesota has the opportunity and the need to make significant progress in how waste is managed, particularly in regions of the state where economies of scale exist. These advances should be guided by energy saved and greenhouse gas emissions cut, and should be crafted to strengthen rather than weaken the state's economy. Actions must be environmentally sound, cost-effective, and measurable.

To this end, the MPCA plans to convene a multi-stakeholder group that will focus its attention on how to reach greenhouse gas-reduction targets for the solid waste sector as laid out in the Minnesota Climate Change Advisory Group (MCCAG) in February 2008. This group must also consider the state's long-standing waste management hierarchy, and give consideration to the profound implications of the U.S. Supreme Court's *Oneida* decision.

The MPCA is optimistic that by focusing on high-waste regions of Minnesota, by sitting down to study today's system and making recommendations on how it can be dramatically improved, the stakeholder group can find an affordable way to reach the MCCAG goals of cutting greenhouse gas emissions by 75 million metric tons of carbon-dioxide equivalent beyond the current level of effort. MPCA believes that attention to changes in the existing statewide SCORE program will be part of the solution.

MPCA believes the stakeholder group can get underway this spring and have initial products ready for the 2009 legislative session. It was encouraging to have many stakeholders come forward to contribute their time and information as part of the group process to come. The executive branch is willing to propose a charter and process for the group, and suggests the following considerations.

Because the state's fiscal ability to take on new initiatives is uncertain, the MPCA believes that the stakeholder group should in its deliberations keep in mind two alternative financial scenarios, and prepare a set of recommendations keyed to each alternative assumption.

- Scenario A: Assume that the state will be able to provide significant extra funding, whether by appropriation, dedicated revenue from waste taxes, or bonding. State additional spending would be high and the need for additional private investment would be low. The group would propose how to allocate that for the best return.
- Scenario B: Alternatively, assume state economic conditions such that no significant increase in state funding, in any form, is available. Any additional spending from the state, therefore, would be low and the need for additional private investment in infrastructure would be high. The group should propose how a non-state-subsidized system might achieve MCCAG's greenhouse gas reduction target.

## The Minnesota Climate Change Action Goal

The Minnesota Climate Change Advisory Group proposed that Minnesotans reduce their total solid waste generation per person by three percent starting 2020 and divert 75 percent of MSW from disposal using recycling and organics recovery. Altogether, the advisory group concluded that additional efforts at all levels of the waste management sector could cut greenhouse gas emissions by 75 million metric tons of CO<sub>2</sub> equivalent, measured cumulatively through 2025, and after subtracting overlaps. The MPCA believes the 75 million metric ton target is a good target<sup>1</sup> that the state should aim for.

<sup>&</sup>lt;sup>1</sup> This is the cumulative target for MTCO<sub>2</sub>E avoidance covering the period 2008-2025 for sectors AFW-7 and AFW-8, beyond "business as usual" efforts, based on the cumulative total in Table 65, Appendix I, as of February 11, 2008, page 124. This is the total for both sectors after overlaps are removed. Please note that all MCCAG figures are subject to change during public input and final review by CCS members.

MPCA is optimistic that the gains in source reduction, recycling, and organics can be achieved by 2025, but it will require looking beyond municipal solid waste to construction, demolition and industrial waste as well.

Even if Minnesota achieves waste-recovery levels as planned in 2025, there will still remain 2.2 million tons of mixed municipal solid waste that year that will need landfill or WTE capacity, plus a substantial quantity of residuals from waste processing facilities. One reason for the substantial tonnage is the projected population growth for Minnesota.

## Views on waste-to-energy

There are many ways that energy could be recovered from the non-recycled, non-composted remainder of commercial and residential garbage, called "mixed municipal solid waste," but only two methods are operating in Minnesota on a commercial scale: waste-to-energy combustion (WTE) and capturing landfill gas for energy. Of the two, WTE certainly attracted the most citizen opposition during the comment period on the draft report. It also attracted comments from local governments and businesses, many favoring it as preferable to landfilling.

#### Stakeholder views on WTE, offered during the comment period

Stakeholders presented a range of views to the MPCA (see also Appendix D for their comments), summarized briefly as follows:

- 1. Air quality Dozens of citizens in Minneapolis and Saint Paul wrote to express concerns about emissions from waste-to-energy facilities. They were concerned with the health effect of ambient air already, feared the bioaccumulation of contaminants such as dioxin, and did not want additional air pollutants from waste combustion. Some argued that landfilling of mixed waste was safer than any form of combustion. They argued for solar and wind power instead, and for natural-gas combustion in situations where fossil fuel was needed.
- 2. Impact on recycling and organics recovery Some environmental and citizen groups expressed concern about the effect that WTE facilities can have on waste reduction and recycling. The primary concern was that once the investment is made and a facility is built it must be fed waste on a "put or pay" basis to meet its debt service and operating costs. This appetite can be a disincentive for the state to pursue recycling as earnestly as it should. These representatives said all waste should fit into reuse, recycling, and organics-recovery systems, and there should be nothing left for either landfills or WTE to handle. Another group of stakeholders said that while true "zero waste" would be ideal, no large governmental system in Europe or elsewhere has achieved it and cited MCCAG's assumption for 2025 that 25 percent of municipal solid waste would escape recycling and composting and need some form of disposal.
- 3. **Funding** Some were concerned that WTE is too costly per ton of waste, and the same money would have a better benefit if directed to reuse, reduction, recycling, and composting. But others cited recent experience in Europe, where dozens of new WTE plants are projected to start operation by 2012.
- 4. **Timing** Some counties and businesses said the state should firm up and expand the use of WTE, arguing that now is a critical time to move forward. They saw value in WTE for power and heating, reduced use of coal for energy generation, reducing the environmental consequences of landfilling, and as a profitable business.
- 5. Renewable energy status On one hand, some environmental and citizen groups expressed plans to challenge the current legal status of solid waste-to-energy as a renewable energy source in Minnesota. On the other hand, some counties and businesses took the opposite position and urged MPCA to continue to take a strong stand in favor of the current renewable status for WTE.

There was agreement on both sides about the need for a clear answer to one question: what is the MPCA's position on waste-to-energy in the context of the state's solid waste management hierarchy?

#### MPCA's view on the role of waste-to-energy

The MPCA agrees that it cannot be silent on such a high-profile issue, particularly following the Supreme Court's decision in *Oneida* and following landmark legislation in 2007 on the urgency of building up renewable energy sources and cutting down greenhouse gases. In fact, MPCA believes that Minnesotans can no longer afford to discard the energy embodied in solid waste.

After reflecting on the stakeholder responses, the MPCA offers the following point of view on the five subjects listed above.

**Air quality:** The MPCA agrees that as a general matter ambient air quality is of more concern in highly urbanized areas of Minnesota than in other areas. However, urbanized areas in Minnesota generally have better air quality than urbanized areas in the rest of the country. The MPCA, local governments, businesses, and citizens should pay closer attention to the wisdom of permitting any new sources of air pollution especially in urban areas which already have numerous sources of air pollution. We should work on solutions to lower the total load of air contaminants, and that should include emissions from cars and trucks.

Impact on recycling and organics recovery: The MPCA looked into concerns about WTE plants interfering with Minnesota's recycling and organics potential. The stated concern was that such plants usually require some form of "put or pay" commitments that guarantee a given daily tonnage of garbage to the WTE plants, before investors will commit capital; and that the locked-in tonnages will discourage materials that are burnable from going to recycling or composting. While the concern is reasonable and must be addressed, it is not inevitable that WTE hinders the recycling effort. Rather, residential recycling rates have typically been higher in communities with contractual commitments to WTE facilities than those without WTE. It is worthy of note that the highest waste-diversion achiever in the European Union is the Netherlands, which recycles and composts 65 percent of its waste but also sends 30 percent of its waste to combustion.

One reason for this counter-intuitive state of affairs may be that committing to WTE plants has persuaded those communities to pay attention to their waste rather than relying on distant landfills that are "out of sight, and out of mind." For example, those that operate WTE plants look for ways to keep metal and glass out of combustion chambers, because metals, such as aluminum that melts to slag steal heat from the furnace, interfere with furnace equipment and then add to the tonnage of ash that must be managed at considerable expense. One proven way to divert that metal and glass is source-separated recycling, which keeps the materials out of mixed municipal solid waste, maintaining its value as a marketable commodity.

Even if Minnesota achieves MCCAG's most optimistic reduction and recovery scenario in 2025, rising considerably above "business as usual" achievements already institutionalized, the quantity of mixed municipal solid waste left behind and destined for either WTE or landfills is still quite large, totaling 2.2 million tons per year in 2025. The MPCA recommends that waste growth be handled by means other than disposal.

**Funding:** Regarding the costliness of WTE plants, it is true that such plants are expensive to build up front, and can cost at least three times as much per ton as the tip fee at a large landfill, due in part to the high cost of air pollution control equipment. But this is only part of the picture. First, two business groups have said that private investment could be available to provide capital costs. Second, the cost per household can be as little as a few dollars per month, or even the same cost per household, if best-practice collection and hauling methods are used to bring down collection costs. Third, the cost to build a plant might be offset if market prices for fossil energy rise faster than they have historically.

**Timing:** Whether pursuing additional WTE is worth the effort to a given local government or group of governments could hinge on the community's opinions about the best way to pursue the legislative goals laid out in 2007, their judgment about the best means to achieve more renewable energy and to reduce greenhouse gas emissions, and also their opinions about the long-term risks of putting chemically and biologically active materials into landfills, however well designed they may be. Some communities that have taken charge of their citizens' waste under state statutes have said that WTE combustion is desirable because it can lower their long-term financial risk of being tied to landfills that might encounter problems in the future.

Renewable energy status: The MPCA supports the continued status of WTE as a renewable fuel under the state's renewable energy standard as passed in 2007. Any plastic that goes into a landfill is energy wasted, since no landfill extracts methane from PET or polyethylene. Further, WTE has some advantages to the power grid: most waste is generated near the centers of population, which is also where the bulk of energy demand is located. In other words, electricity produced near centers of population reduces the need to add power lines to reach distant generating stations. WTE plants serve as baseload, "must run" plants in today's dispatching system and therefore complement wind power, which has a larger ultimate power potential but varies according to weather. Further, WTE plants with "combined heat and power" can produce process heat for factories, which is not practical for either wind turbines or solar cells.

**Conclusion:** The MPCA supports all aspects of the state's long-standing waste management hierarchy. That hierarchy emphasizes the economic and environmental benefits of reduction, reuse, and recycling on the upper end, and it also recognizes the need to extract all possible energy and materials from mixed waste that arrives at the bottom end. No technology yet developed on a commercial scale has been able to extract as much resource value from waste as the combination of aggressive waste reduction and source separation of marketable recyclables, combined with a state-of-the-art waste-to-energy plant.

In summary, MPCA's position is that WTE continues to play an important role in large-scale waste management. WTE should keep its status as a renewable energy under state statutes. The MPCA has benchmarked with the world's best achievers in solid waste management and does not find an inherent conflict between WTE and recycling, even at the highest rates of recycling achieved by states and nations. Minnesota has included WTE in its waste-management mix since the 1980s and its recycling performance is well above average for the United States and is on par with Germany. The pace-setter is the Netherlands, which landfills only 5 percent of its waste, compared to Minnesota, which landfills 36 percent. If the Netherlands is taken as one example of how a region with both rural and urban populations allocated efforts within its waste management hierarchy, Minnesota still has good opportunities to move waste up from landfilling. (The Netherlands adopted its hierarchy in 1979, called Lansink's Ladder.)<sup>2</sup>

As Olmsted County has recognized in the management of its solid waste system, most recently going through an elaborate public process to double the capacity of its baseload WTE plant in Rochester, Minnesotans no longer have the luxury of wastefulness.

2007 Solid Waste Policy Report

<sup>&</sup>lt;sup>2</sup> Lansink's Ladder has these rungs, in order of decreasing preference:

<sup>1.</sup> Prevention

<sup>2.</sup> Design for prevention and design for beneficial use

<sup>3.</sup> Product recycling (reuse)

<sup>4.</sup> Material recycling

<sup>5.</sup> Recovery for use as fuel

<sup>6.</sup> Disposal by incineration

<sup>7.</sup> Disposal to landfill

## Background material for the stakeholder process

Several recent developments have given Minnesota's solid waste a new profile, both in the high-waste regions as well as statewide in connection with the broad recycling opportunities program called SCORE. The Solid Waste Implementation Group should seek out ways in which Minnesota can be a leader among the states and take into account 1) the opportunity created by the *Oneida* decision, focusing on geographic regions with significant concentrations of waste, and 2) the opportunity offered by state greenhouse gas and energy legislation (as fleshed out by the Minnesota Climate Change Advisory Group) to build on the SCORE program. The group should identify valid and measurable criteria so that participants can measure environmental performance versus cost and risk.

## Opportunity No. 1: Build on regions with enough solid waste to provide economies of scale, given changes in the legal landscape.

The United States Supreme Court issued a major decision on April 30, 2007. In *United Haulers Association, Inc. v. Oneida-Herkimer Solid Waste Management Authority*, the court reinstated the ability of local governments to enact properly crafted solid-waste flow control (sometimes known as waste designation or waste assurance) ordinances. In light of that decision, local units of government are asking how they should proceed. The decision opens up new possibilities for achieving a high level of performance in the solid waste system, but the resolution will mean balancing different points of view. A thorough and inclusive dialogue is needed.

Because integrated waste management systems have historically needed economies of scale, counties and groups of counties with high concentrations of waste were the first to study the *Oneida* decision. Geographic areas that account for more than 70 percent of the waste generated in Minnesota are:

- Twin Cities area: All or portions of Anoka, Carver, Dakota, Hennepin, Ramsey, Scott, Washington, and Wright Counties.
- St. Cloud area: All or portions of Benton, Sherburne, and Stearns Counties.
- **Duluth area**: A zone of populated or commercialized area extending into counties centered around the Western Lake Superior Sanitary District.
- Rochester area: All of Dodge and Olmsted Counties.

The potential benefits of focusing on the opportunities presented by *Oneida* in regions with a concentration of available waste could include:

- 1. Economies of scale and efficiencies gained by consolidating urban waste programs.
- 2. Competitiveness gained in contracting for private waste management services.
- 3. Improved risk sharing ability based upon a region, rather than individual local jurisdictions.
- 4. A larger voice to market programs and educate local citizens.
- 5. Increased ability to reduce waste at the source of generation.
- 6. An increase in control and available resources to reduce toxics in the waste stream.
- 7. Ability to maximize the resource value of the waste generated, including not only municipal solid waste but also construction, demolition and industrial waste.
- 8. Improved ability to implement flow control designation by mirroring the governance structure reflected in the recent U.S. Supreme Court decision, *United Haulers Association, Inc. v. Oneida-Herkimer Solid Waste Management Authority*.

## Opportunity No. 2: Pull the statewide SCORE program out of stagnation, using the twin factors of raising energy and cutting greenhouse gas emissions

With the establishment of the SCORE program (Governor's Select Committee on Recycling and the Environment) in 1989, Minnesota has seen dramatic improvement in local programs such as recycling and the management of household hazardous waste. State and local funding, expansion of local infrastructure, minimal recycling service requirements and recycling goals, have all been instrumental to the success of the SCORE program to date.

Even so, progress on moving waste up the hierarchy hit a plateau not long after the SCORE program passed. Minnesota's 17-year-old SCORE program has stalled and in some cases retreated. SCORE recycling goals have not been updated since the mid-1990s, many local recycling programs have been paired down or eliminated altogether, and the statewide recycling rate has not significantly climbed since 1995. Meanwhile much recyclable material is being lost into trash cans: at least 40 percent of garbage could be recycled if businesses and residents sorted it for collection. It is time to re-think the current SCORE measurement and goals, and create new, performance-based incentives.

The purposes of rebuilding the current SCORE program would be:

- 1. Increase recovery of recyclable materials: 40 percent of what we currently "throw away" is estimated to be recoverable recyclables and another 30 percent is estimated to be recoverable organic materials.
- 2. Reduce greenhouse gas emissions while increasing renewable energy production and conservation. Look for ways to document such improvements and connect them to incentives now being crafted at the state and regional level.
- 3. Increase participation by citizens, businesses, and local governments.
- 4. Improve the accuracy and usability of recycling data collected. This will lead to improved trend analysis and better planning.
- 5. Provide new incentives for local governments that will encourage the development of new approaches attuned to county and city needs.

#### Focusing on regions with high concentrations of waste

How Minnesota should proceed to rebuild a waste management system around energy and climate change in light of the *Oneida* decision will require further research and lengthy stakeholder discussions in the coming months. The MPCA proposes that the multi-stakeholder group explore alternatives to solid waste management in Minnesota, and report back to the Legislature. This diverse stakeholder group could include representatives from state and local government, environmental groups, trade associations, citizen groups, and the private sector.

During MPCA's discussions with stakeholders from June through October 2007 about geographic areas with high concentrations of waste, the following issues were identified as needing attention.

- 1. The ability to develop and operate waste management systems that further the state's objectives with respect to the waste management hierarchy, greenhouse gas emission reduction, and new energy generation. One suggestion has been to enable and create a new solid waste local authority, bounded according to regional "waste sheds" in which much tonnage is now going to landfilling. This provides economies of scale.
- 2. In concurrence with suggestions from our stakeholders, the establishment of performance standards that would be a binding commitment for waste reduction, recycling, and organics recovery to ensure that emphasis is given to the higher end of the waste management hierarchy. The Olmsted County

program is one of the best examples that can be drawn upon to illustrate commitments to the upper end of the hierarchy. The county very deliberately set out to optimize the upper end of the hierarchy (reduction, recycling, composting, household hazardous waste management) and achieve certain environmental goals, including greenhouse gas emission reductions. The county's approach proved very effective and the requisite public support was obtained.

- 3. Life-cycle tools and risk analysis should be used in the process of assessing the appropriate mix of waste management options.
- 4. Necessary funding, including user fees from waste generators and possibly capturing additional funds from the Solid Waste Tax, in addition to an expanded Capital Assistance Grant Program, and other new sources of funds for development costs.
- 5. Financial incentives from utilities to engage in waste-to-energy, such as renewable energy credits.
- 6. The need for financial efficiency, which could include waste flow designation and organized collection, if necessary, to achieve recycling, organic recovery, and energy production results that cannot be achieved through the marketplace.
- 7. Ability to manage both mixed municipal solid waste and construction and demolition waste.
- 8. Ability to form mutually beneficial public/private partnerships with the state of Minnesota, municipalities, utilities, and nonprofit and for-profit companies involved in the management of waste.
- 9. A robust public information and waste education campaign so the public can be a knowledgeable participant in the management of waste, including proper management of household hazardous waste.

#### A new approach for SCORE is needed statewide

During MPCA's discussions with stakeholders from June through October 2007 about the SCORE program and how to get off the plateau of flat recycling rates, the following possibilities were identified as deserving discussion. Running throughout the conversation must be this question: how can per capita source reduction, recycling, and organic diversion rates be raised to levels never achieved by Minnesota under the long-standing SCORE program? The group's solutions could resolve some of the pressing needs identified in Parts 3A, 3B, and 3C, such as away-from-home recycling and small-business recycling.

- 1. Additional funds could be disbursed based upon measurable performance that leads to increased recovery and new, innovative programs (this would revisit the "Incentive-Based SCORE Recommendations" to the Legislature [2005]).
- 2. The need to update the old 35 percent and 50 percent statutory recycling goals and consider an overall "diversion" goal that incorporates the top levels of the hierarchy, not just recycling.
- 3. Give the counties credit for efforts in waste reduction, organics management, problem materials management, and resource recovery.
- 4. Streamline and expand the reporting process with consideration given to the addition of household hazardous waste and the reporting of all wastes (e.g. construction and demolition), not just municipal solid waste, in order to minimize year-to-year reporting inconsistencies.
- 5. Reconsider the current policy that provides an additional 8 percent credit to counties for yard waste and waste reduction activities, in addition to documented recycling figures. This is confusing and not tied to measured performance. Still, the current policy points to the need for an alternative to inspire county residents to reduce waste at the source and to keep yard waste out of trash cans.
- 6. Promote regional reporting to improve data quality and promote the benefits of regional partnerships, such as improved marketing power and cost reductions through economies of scale.

## Part 5: Technical work to come

The MPCA has a number of additional technical recommendations for action that will be pursued administratively with input from stakeholders, apart from the stakeholder process described in Part 4:

- Discussions with the U.S. EPA on how to build a module onto its environmental calculators (such as the WARM tool) so that Minnesota and other states can document the energy and GHG benefits of upper-hierarchy actions for tradable credit markets (such as reduction, reuse, and recycling).
- An ongoing "sensitivity analysis" regarding climate change and energy factors, so that decision makers are provided the latest information on actions having the highest effects and the lowest costs.
- Gather benchmarking information about large systems that are close enough to Minnesota conditions (e.g., having both rural and urban populations and having a comparable mix of service and industrial sectors) that they can serve as a model to guide and inspire changes to the system.
- Build a working knowledge of carbon trading and global climate change, and assess the role in carbon
  exchanges for waste management methods such as recycling that are higher on the waste management
  hierarchy.
- Develop better information regarding generation and management of non-MSW materials, in particular, construction, industrial and demolition wastes (CD&I wastes).
- Continue to evaluate the pros and cons of organized collection, in light of full-cost accounting and energy and GHG factors.
- Prepare an updated waste reduction strategy for Minnesota, in light of experiences with product stewardship and related efforts to date.
- Explore the role of product stewardship to cope with problem materials identified by solid waste operators and with products most risky to public health and the environment.
- Assist in developing more thorough life-cycle information about the full range of organics recovery methods.
- With county partners, continue to study the feasibility of collecting and composting yard wastes and food wastes together.
- Engage stakeholders in discussions regarding future legislation regarding local authorities, waste designation, organized collection, SCORE goals, and use of the Solid Waste Management Tax to create performance-based incentives.
- Find opportunities to advance landfill-gas recovery for flaring and, in particular, energy recovery. Measure and report on the actual emissions of greenhouse gases from actual landfills so that LandGEM and other models may be adjusted to Minnesota conditions based on peer reviewed data.

## Appendix A. Report on 2006 SCORE Programs

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The MPCA is reducing printing and mailing costs by using the Internet to distribute reports and information to a wider audience. For additional information on recycling, waste prevention, and waste management, check out the SCORE Web site: http://www.pca.state.mn.us/score

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## Introduction

In 1989, based on recommendations of the Governor's Select Committee on Recycling and the Environment (SCORE), the Legislature adopted comprehensive legislation to launch Minnesota's statewide recycling efforts in earnest. This set of laws, commonly referred to as SCORE, initiated a stable source of state funding for recycling programs, as well as waste reduction and the improved management of household hazardous wastes and problem materials. SCORE legislation and grant dollars, along with funding from counties and local government provide the basis for long-term, flexible programs.

This *Report on 2006 SCORE Programs* summarizes information submitted by all 87 counties and the Western Lake Superior Sanitary District on waste management efforts, including waste reduction activities, recycling, household hazardous waste programs, and problem materials collection.

The Minnesota Pollution Control Agency (MPCA) uses this information to calculate the state's recycling rates and the cost of managing waste and recycling, and to detail trends in waste generation and disposal. While data collection began in 1989, the MPCA typically uses calendar year 1991 as a baseline for trend analysis. In 1991, counties began collecting data on a calendar year basis, instead of a fiscal year basis, and by that point, data collection and format had greatly improved, making the quality of the data that much better.

This report and information on the SCORE Program are available on the MPCA's Web site at http://www.pca.state.mn.us/score.

Every other year, the MPCA expands on the annual Report on SCORE Programs and makes solid waste policy recommendations to the Legislature in the form of a solid waste policy report. The 2006 Solid Waste Policy Report highlights policy recommendations and discusses other subsequent recommendations. See <a href="http://www.pca.state.mn.us">http://www.pca.state.mn.us</a> for more details.

## **MSW Generation in Minnesota**

Since 1989, Minnesota has shown a steady growth in municipal solid waste (MSW) generation. This growth is reflected in both the total amount of MSW generated and in the per capita figures (total waste generated divided by the state's population). During the robust years of 1994 to 1998, Minnesota saw a 4.62 percent increase in MSW generation and a 3.4 percent increase in per capita generation. In 1999, those rates began to slow during a downturn in the economy. After an increase in 2005 of nearly 2 percent, 2006 MSW generation growth slowed to an all-time low—increasing just 0.4 percent. Per capita generation of MSW remained roughly the same (1.167 tons in 2005 and 1.166 tons in 2006).

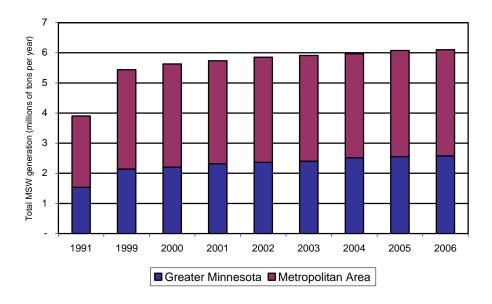
Mixed MSW is defined by statute as "garbage, refuse, and other solid waste from residential, commercial, industrial, and community activities that the generator of the waste aggregates for collection." It includes common materials found in household and commercial garbage, such as packaging materials, containers, food discards, and other compostable materials, plastic, paper, etc. MSW does *not* include auto hulks, street sweepings, ash, construction debris, mining waste, sludge, tree and agricultural wastes, tires, lead acid batteries, motor and vehicle fluids and filters, and other materials collected, processed, and disposed of as separate waste streams (Minn. Stat. § 115A.03, subd. 20). MSW *does* include wastes recycled, discarded (including tons sent to disposal and resource recovery facilities), tons disposed of on-site (burn barrels or farm dumps), and problem materials not recycled (PMNR).

#### Totals and trends

Minnesota MSW generation totaled 6,100,748 tons in 2006, a slight increase from 2005's 6,076,789. Statewide, this represents only a 0.4 percent increase over the previous year. Greater Minnesota accounted for 42 percent of the state's MSW generation, and the seven-county Metropolitan Area accounted for 58 percent in 2006.

Since 1991, MSW generation has grown on average by 3 percent per year. After the period of biggest growth (1989-1997), the average increase in MSW generation over the last nine years dropped to 2 percent (1998-2006) and just over 1 percent over each of the past four years (2003-2006). While improvement in waste reduction efforts may account for some decline, waste generation generally decreases during times of economic recession and increases during an economic upsurge.

**Figure 1: Minnesota MSW Generation** 



Total generation: 6,100,748 tons

For 2005 – 2006 the amount of MSW generated in Minnesota increased by 0.4%, while population increased by 0.5%.

	1991	1999	2000	2001	2002	2003	2004	2005	2006	Changes 2005-06
Greater Minnesota	1.54	2.14	2.21	2.32	2.37	2.41	2.53	2.56	2.58	1%
Metropolitan Area	2.37	3.30	3.42	3.42	3.49	3.51	3.45	3.52	3.52	0.0
Minnesota	3.90	5.44	5.63	5.74	5.86	5.92	5.98	6.09	6.10	0.4%

Figures in millions of tons. For full data for 1991-2006, refer to Appendices

## On-site and problem materials not recycled

On-site disposal of MSW, either burning or burying, has been a practice used for generations and still is being used. Although it is against the law for most people, some farmers are allowed to burn or bury their household garbage, under existing Minn. Stat. §§ 88.171 and 17.135.

In the 2006 SCORE survey, counties estimate that 1.3 percent of the total waste generated is disposed of onsite. This number may be conservative. According to a 2005 study of backyard garbage burning in Minnesota, 45 percent (estimated at a minimum of 920,000 people) of rural residents statewide still burn or bury on-site. This presents a significant health and environmental threat to all Minnesotans. U.S. Environmental Protection Agency (EPA) research shows that burn barrels are the primary source of dioxin in the United States. Just one burn barrel can produce as much or more than a full-scale municipal waste combustor burning 200 tons per day (*Inventory of Sources of Dioxin in the U.S.*, March 2001).

"Problem materials not recycled" (PMNR) makes up 2 percent of the total MSW generation. PMNR includes five materials that have been banned from disposal in Minnesota (vehicle batteries, tires, major appliances, motor oil, and oil filters). The PMNR number is that portion of the materials that is not recycled, but is assumed to be disposed of somewhere, legally or not, as they are banned from MSW disposal facilities. It is assumed that they are not being counted in landfill or incinerator tonnages.

#### Per capita MSW generation

The MPCA calculates the amount of waste that the "average" Minnesotan creates each year in an attempt to understand if waste growth is coming primarily from an increase in population or increases in consumption.

In 2006, the Minnesota per capita rate decreased insignificantly (-0.11 percent from 2005) to 1.166 tons per person (2,332 pounds/person/year). This is consistent with the small increases seen in MSW generation (0.4%) and with Minnesota's economy. In looking at greater Minnesota versus the Metro Area per capita rate, we find that the greater Minnesota per capita rate is 1.07 tons (2,140 pounds/person/year), an increase of approximately 0.37 percent from 2005. In comparison, the Metro Area per capita rate is 1.249 tons (2,498 pounds/person/year), a decrease of 0.44 percent from 2005. Greater Minnesota per capita rate has increased steadily since 1991. However, the Metro Area began to see a decrease beginning in 2001.

Minnesota's population continues to grow. In 2006, Minnesota's population increased to 5,231,106 from 2005 population of 5,205,091, only a 0.5 percent increase—greater Minnesota by 0.6 percent and the Metro Area by 0.4 percent. In the last five years Minnesota's population increased approximately 55,000 per year; however in 2006 the population increased by 26,000. From 1991 to 2006, Minnesota's population grew 18.5 percent—greater Minnesota increased 14.9 percent and the Metro Area increased by 21.7 percent.

#### **Recycling and Waste Reduction**

Minnesota's recycling programs are among the nations most successful, reflecting the strong local and state investment and public participation. In 2006, Minnesota's recycling rate (including credits for yard waste recycling and waste reduction efforts) increased by 0.2 percentage points to 48.7 percent. The state's base recycling rate is approximately 41.4 percent, an increase of nearly half of a percentage point. The base recycling rate is a more accurate measure of progress as it the actual percentage of materials recycled and does not include the additional source reduction and yard waste credits. While this growth reflects the significant state, local, and industry investment in our recycling system, as well as strong material markets, evidence suggests much more could be done to recover the millions of tons of discarded recyclable and organic material still disposed of each year.

In 2006, 1.3 million tons of recyclable material remained in the waste stream, worth \$312 million. Market prices for paper, plastic, and metal were high in 2006; however, at the same time we saw a drop in paper, plastic, and metal being recycled from 2005: paper was down 1,491 tons, plastic was down 876 tons, and metal was down 72.6 tons. Minnesota residents do not see financial advantages to recycle more during times the recycling markets are high. Businesses that have large quantities of recyclables and their own means to collect and market them see financial advantages of recycling when recycling market prices are high. The majority of the small businesses, however, do not see the financial advantages, and at times, their haulers may offer financial incentives not to recycle.

In 2006, recycling programs collected over 2.5 million tons of recyclable materials (paper, metals, glass, plastic, food, problem materials, etc.)—an increase of over 43,000 tons, or 1.7 percent, from the previous year. Since the SCORE legislation was enacted in 1989, the tons of materials collected for recycling in Minnesota have more than tripled, and the statewide recycling rate has increased by more than 25 percentage points, moving from approximately 23 percent to 48.7 percent.

In 2006, for the first time, source-separated compostables counted toward recycling. Source-separated compostable materials are defined as mixed municipal solid waste that is:

- separated at the source by waste generators for the purpose of preparing it for use as compost.
- collected separately from other mixed municipal solid wastes.
- composed of food wastes, fish and animal waste, plant materials, diapers, sanitary products, and paper that is not recyclable.
- delivered to a facility to undergo controlled microbial degradation to yield a humus-like product.

A-5

Of the total 179,043 tons of organics recycled, 166,966 tons were recovered as food to animals (food waste that is fed to livestock), 4,427 tons were recovered as food to people (food recovered for people through food banks), and the remaining 7,650 tons consisted of source-separated compostables.

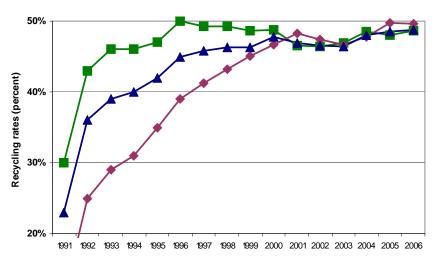


Figure 2: Minnesota's Recycling Progress

Since the SCORE legislation was enacted in 1989, Minnesota's statewide recycling rate has climbed by over 25 percentage points.

48.6% Metropolitan Area 49.7% Greater Minnesota

48.7% Statewide

In 2006, recycling programs in Minnesota collected over 2.5 million tons of recyclable materials (paper, metal, glass, plastic, food, source-separated organics, problem materials, and more), an increase from 2005 of 1.7%.

#### Electronic waste

Although the 2006 Legislature failed to pass the Electronic Waste Bill, the disposal ban of cathode-ray-tube-(CRT) containing products became effective July 1, 2006. The ban spurred counties and other entities to expand the number of collection options for waste electronics. According to the SCORE survey data, the amount of electronics collected has risen from 2000 to 2006 by 287 percent.

In 2006, 10,385 tons of electronics were recycled, and only four counties out of the 87 did not report recycled volumes. In the year 2000, only 2,686 tons of waste electronics were reported recycled with only 29 counties reporting recycling volumes. The greatest increase occurred between 2005 (7,027 tons were recycled) and 2006 (10,385 tons were recycled).

#### Source reduction

The MPCA works with Minnesota residents, schools, government, and other organizations to increase recycling, reduce waste generation, foster environmentally friendly purchasing practices, reduce the use of toxic cleaners, and conserve energy. The activities of two of these programs, Environmental Preferable Purchasing and the Healthy Sustainable Schools Project, are described here. Additional information on these programs and others can be obtained by going to <a href="http://www.pca.state.mn.us">http://www.pca.state.mn.us</a>.

#### **Environmentally preferable purchasing**

In 2006, environmentally preferable purchasing (EPP) workshops took place throughout Minnesota; including the northeast, southwest, and metro regions. These half-day workshops were tailored to the purchasing needs of workshop attendees—from office administrators to public works staff to fleet managers. Breakout sessions covered multiple areas, including office supply procurement, fleet and building maintenance, and EPP information for schools. Informational workshops such as these are great ways for local governments to jumpstart interest in EPP and get the word out to the different departmental purchasers and product users that need the information.

Future EPP projects include working with the Solid Waste Management Coordinating Board to update the comprehensive online EPP Guide (http://greenguardian.org). The MPCA encourages counties to model and share this new and updated resource next year as part of a more comprehensive program to increase EPP across the state of Minnesota. In regards to policy, state and federal governments have supported efforts to increase EPP on the local level by setting the example with the passage of state mandates [16B.121 and 16B.122 (1989)] and federal executive orders [EO 13423(2007)].

More information can be obtained through the Environmentally Preferable Purchasing Guide that can be found at <a href="http://greenguardian.com">http://greenguardian.com</a> or by contacting MPCA at 800-657-3864, <a href="http://www.pca.state.mn.us/epp">http://www.pca.state.mn.us/epp</a>.

#### **Healthy Sustainable Schools Project**

Under an EPA grant, the MPCA conducted a Healthy Sustainable Schools Project from 2004 to 2006. This project demonstrated that a dedicated coordinator and team in a school or district can make changes that benefit schools by enhancing student health and performance, attaining higher performing buildings, reducing environmental impacts, increasing attendance, reducing operating and maintenance costs, and increasing staff satisfaction.

Demonstrations were conducted in five districts with assistance from three coordinators: Houston K-12, Hutchinson High School, Becker High School, and the districts of Pine Point Elementary and Foley Schools. Eight school buildings were audited in many areas and the following results were achieved:

- Reduced energy costs of \$16,326 in two schools.
- Changed to less toxic cleaners in four schools.
- Added energy controls as the most common energy quick fix.
- Reduced paper use by moving to double-sided printing and copying.
- Changed to efficient T-8 lamps or reduced excessive lighting.
- Recycled more than 87 tons per year in two schools.
- Removed more than 6.87 pounds of mercury at four sites.
- Added vermi-composting or considering food to pigs for reducing waste costs.

Much greater waste reduction and recycling could be accomplished if these efforts were expanded across the state. School officials are encouraged to select from a variety of actions from the *Healthy Sustainable Schools Guide* to improve their facilities, while reducing labor and costs over time. To download the guide or for more information, visit <a href="http://www.healthyschools.state.mn.us">http://www.healthyschools.state.mn.us</a> or contact Project Coordinator Linda Countryman at 651-215-0269.

In the future, the MPCA plans to streamline agency assistance to schools by conducting surveys of superintendents and others to determine the most effective and efficient ways to help schools implement environmental practices.

#### Environmental and economic benefits of recycling

Recycling is important in Minnesota—both economically and environmentally. Minnesota's recycling manufacturers contribute an estimated \$2.98 billion to the state's economy; 9,000 manufacturing jobs are tied to companies using recycled material in their manufacturing processes. \$760 million in wages is related to recycling activities. In addition to the contributions of these value-added manufacturers, there is economic value related to collecting, processing, and marketing recyclables in Minnesota (which is supported by SCORE dollars).

Recycling's environmental benefits can be quantified using the National Recycling Coalition's (NRC) Environmental Benefits Calculator, based on tons of materials recycled, landfilled, and incinerated in Minnesota using the 2006 data submitted by its 87 counties and Western Lake Superior Sanitary District (WLSSD).

(For more information on recycling benefits, checkout the *Minnesota's Recycling Industries: Economic Activity Summary at* http://www.pca.state.mn.us/oea/market/economic.cfm and National Recycling Coalition at http://www.nrc-recycle.org.)

- By recycling 2.5 million tons, Minnesota reduced its greenhouse gas emissions by 1.7 million metric tons carbon equivalent compared to disposal. This is equal to taking nearly 1.3 million passenger cars off the road.
- By recycling, Minnesotans avoided the use of nearly 46 trillion BTUs of energy, which is equal to the energy use of almost 410,574 households.
- Recycling saves \$539 million in electricity use.
- By recycling 306,604 tons of steel in Minnesota, we saved a total of 616,274 tons of resources—383,255 tons of iron ore, 214,623 tons of coal, and 18,396 tons of limestone (http://www.recycle-steel.org).
- More than 6.8 million trees were saved by recycling over 503,150 tons of newsprint, mixed, and office paper in 2006 (http://www.conservatree.org).

#### **MSW Processing and Disposal**

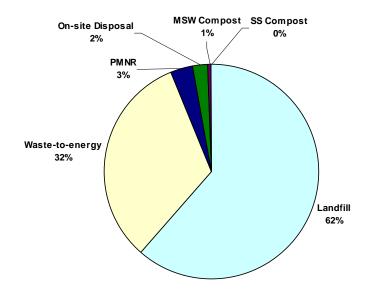
In Minnesota, waste is managed through four main methods: landfills, MSW composting, resource recovery facilities, and on-site disposal. In 2006, waste that was not recycled or prevented/reduced and, therefore, must be disposed of totaled nearly 3.6 million tons—a decrease of over 19,000 tons (-0.5 percent) from 2005. This number includes waste landfilled and processed, as well as estimates for on-site disposal and PMNR.

#### Trends in waste disposal

Waste management in Minnesota is guided by a hierarchy that prioritizes waste reduction, recycling, composting, and resource recovery. During 2006:

- MSW composting increased by 1 percent—from 17,742 tons in 2005 to 17,912 tons in 2006.
- On-site disposal (estimates from county staff on the level of on-site dumping and burning that occur) decreased by almost 3 percent (more than 2,000 tons) to 76,586 tons.
- Waste-to-energy (WTE) decreased by 6.7 percent (84,000 tons) to 1,161,066 tons. Facility down time for improvements accounted for some of the decrease since permitted capacity remains the same. At its peak in 1993, WTE handled 57 percent of the waste stream, but that share eroded to just 32 percent in 2006.

Figure 3: MSW Disposal and Processing in Minnesota, 2006



		Change 2005-06
Landfill	62.0%	3.6%
Waste-to-energy	32.0%	(6.7%)
PMNR (est.)	3.0%	(1.7%)
On-site Disposal (est.)	2.0%	(3.0%)
MSW Compost	1.0%	1.0%

Percentages of total waste disposal; excluding recycling. Decreases indicated by parentheses (x%).

• The amount of waste sent to landfills increased by 75,000 tons or 3.6 percent to 2,200,457 tons. Despite being the least-preferred option, landfilling has become the dominant disposal method in Minnesota (62 percent), more than double its share in 1993 (28 percent).

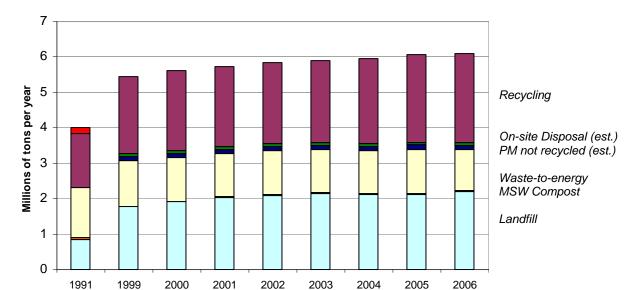


Figure 4: Trends in Minnesota Waste Management in Tons

										Change
	1991	1999	2000	2001	2002	2003	2004	2005	2006	2005-06
Source-separated Compost					0.004	0.005	0.01	0.01	0	(100%)
Recycling	1.2	2.18	2.27	2.27	2.29	2.32	2.42	2.49	2.52	1.7%
On-site Disposal (est.)		0.08	0.10	0.09	80.0	0.08	0.08	0.08	0.08	(3.0%)
PM not recycled (est.)		0.11	0.11	0.11	0.12	0.12	0.12	0.12	0.12	(1.7%)
Waste-to-Energy	1.41	1.28	1.23	1.22	1.26	1.23	1.21	1.24	1.16	(6.7%)
MSW Compost	0.07	0.02	0.01	0.01	0.01	0.01	0.01	0.02	0.02	1.0%
Landfill	.84	1.77	1.91	2.03	2.11	2.16	2.12	2.12	2.20	3.6%
Total	3.69	5.44	5.63	5.74	5.88	5.92	5.98	6.09	6.10	4.6%

Figures in millions of tons. PM = Problem Materials. Decreases indicated by parentheses (x%).

#### Out-of-state waste flow

In 2006, there was a decrease of 72,000 tons (-9 percent) in the amount of MSW leaving Minnesota—from 812,379 in 2005 to 740,269 tons in 2006. 2005 was the first time since 2002 that there was a decrease in the

amount of MSW leaving the state. While many factors may have contributed to this decline in out-of-state waste flow (facility locations, hauling companies in operation, existing contracts, surcharges and tip fees, and gas prices), increasing state surcharges from Wisconsin and rising transportation costs likely have had the most impact. The price of gasoline is probably the largest reason for the decline in MSW leaving Minnesota. Since 2003, gas prices have increased nearly 73 percent (from \$1.786 per gallon in 2003 to \$3.083 in 2006; http://tonto.eia.doe.gov/dnav/pet/hist/mg\_tt\_usw.htm).

MSW	leaving Minnesota
2001	671,954 tons
2002	614,002 tons
2003	702,131 tons
2004	850,204 tons
2005	812,380 tons
2006	740.269 tons

<sup>\*</sup> Unknown destination waste totals were only reported during the early years of SCORE (1989-1994).

Wisconsin received the majority of the 740,269 tons of waste going out-of-state. Iowa received 23 percent; North Dakota received 14 percent; and South Dakota received a fraction of a percent (0.2 percent).

Minnesota MSW going out-of-state

	2005	2006	Change in tons	Change in %
Wisconsin	519,875	467,538	(52,337)	-10 percent
North Dakota	87,684	103,384	15,701	18 percent
South Dakota	1,498	1,405	(93)	-6 percent
lowa	203,323	167,941	(35,382)	-17 percent

Of the total waste going out-of-state, 1.3 percent (9,544 tons) was taken to the NRG Facility in La Crosse, Wisconsin, privately owned by Xcel Energy. The remaining 98.7 percent (730,725 tons) was taken to landfills, of which 87 percent are privately owned and 13 percent are publicly owned. Five of Wisconsin's privately owned landfills received 404,960 tons, and two publicly owned landfills received 53,035 tons. In North Dakota, one privately-owned landfill received 61,731 tons and two publicly-owned landfills received 41,653 tons. In South Dakota, one publicly-owned landfill received 1,405 tons. In Iowa, three privately-owned landfills received 167,941 tons.

#### **Funding of SCORE Programs**

Minnesota boasts one of the best recycling rates in the nation due to the level of participation by our residents and businesses, along with comprehensive recycling programs at the township, city, and county levels—programs funded by local government and state revenues. In 2006, Minnesota counties spent over \$54.5 million for SCORE-related programs, an increase of about \$300,000 (0.6 percent) from 2005. Continued funding commitments from the Legislature and significant investments at the local level provide the funding for these programs.

#### State funding: SCORE block grants

From the inception of SCORE, state tax revenue has provided a long-standing funding source for recycling and waste reduction programs. Money from the state is passed on to the county level in the form of annual block grants. SCORE disbursement dollars had been consistently \$14.2 million per year, until 2002 when the Legislature cut SCORE block grant dollars by 10 percent, dropping the figure to \$12.6 million. To handle a budget shortfall in 2003, the governor enacted a one-time general revenue un-allotment, and available SCORE dollars fell further to \$11.2 million. This downward trend reversed beginning in 2004, when block grants rose to \$12.5 million. (Subsequently, in the 2007 Session, the Legislature and Governor took action to restore SCORE funds to the levels of 2002, or \$14 million per year.)

Within certain guidelines, counties have broad discretion in determining how to spend SCORE block grants and local matching funds, which gives them flexibility to develop programs that best meet local needs. The MPCA monitors the county use of SCORE grants to ensure the money is used to fund SCORE-eligible programs: source reduction, recycling, market development, management of problem materials, waste education, litter prevention, technical assistance to ensure proper solid waste management, and waste processing (Minn. Stat. § 115A.55).

Despite the economic value of the recycling industry to the state's economy, Minnesota's recycling infrastructure faces challenges. Some counties are dealing with budget reductions by closing down recycling centers or limiting the types of materials they collect. Plastic and glass recycling have been eliminated in some communities. Rural recycling programs, in particular, are facing more obstacles in getting materials to distant markets. The MPCA continues to explore ways to better support county recycling programs and secondary markets, recover more recyclable and organic material from the waste stream, and identify more opportunities to reduce, reuse, and recycle in the manufacturing and business sectors.

Restoring SCORE grant dollars to previous levels and looking into additional funding (incentive based) would show the state's renewed commitment to recycling and offer counties the ability to restore their reduced or cut programs. The additional funding would also enhance the ability to remove usable materials from the disposal system and capture energy and economic benefits for the state. While we will talk more about SCORE grant dollars in the *Report on 2007 SCORE Programs*, the Legislature did increase SCORE funds to previous levels, to \$14 million. For more information on state SCORE funding and recommendations for the 2008 legislative session, see the MPCA's 2007 Solid Waste Policy Report.

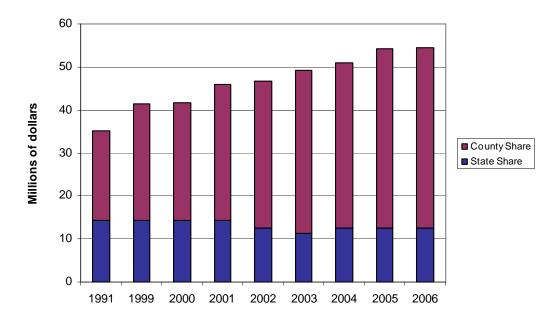


Figure 5: SCORE Expenditures (millions of dollars)

#### County funding

Between 1992 and 2006, overall SCORE expenditures have increased by 41 percent. These increases have been funded entirely at the local level by counties and cities through use of general revenue dollars, special assessments, or other sources of revenue. In 2006, a total of \$54.5 million was spent on SCORE expenditures. Greater Minnesota counties *increased* expenditures by \$1 million (3.4 percent) and the metro counties *decreased* their spending by \$750,000 (-3.1 percent) from 2005.

	1991	1999	2000	2001	2002	2003	2004	2005	2006	Change 2005-06
Greater Minnesota	14.4	23.0	23.1	25.8	26.7	29.5	28.5	30.22	31.25	3.4%
Metropolitan Area	20.8	18.4	18.6	20.2	19.9	19.7	22.6	24.06	23.35	(3.1%)
Total	35.2	41.4	41.7	46.0	46.7	49.1	51.1	54.28	54.60	0.6%

Decreases indicated by parentheses (x%). The annual SCORE survey includes only county spending; local units of government also fund programs for waste management, reduction, and recycling.

Each county is required to match the funding from the Legislature with a local contribution of at least 25 percent. In 2006, counties continued to exceed this match, spending over \$42 million of county funds toward SCORE-related activities. This investment is in addition to undocumented dollars spent by other local units of government, such as cities and townships on programs such as recycling, household hazardous waste, and waste education.

Counties continue to see their dollars not keeping up with inflation. Rural recycling programs, in particular, face growing challenges to collect materials and deliver them to markets. These challenges are seen by significantly reduced volumes of materials collected and its residents discouraged from recycling. Counties' declining dollars are not covering their existing recycling programs and have been hard pressed to expand their recycling programs. Counties are aware of the million of tons of recyclables remaining in the waste stream and of the missed economic and environmental benefits associated with recycling.

In looking closer at how the decreasing dollars affect local staff and programs along with how the counties are obtaining the necessary dollars to pay for their programs, we looked at years prior to 2002, when the Legislature permanently reduced SCORE block grant dollars, to 2006.

In 2000, there were a total of 572 full-time equivalent (FTE) county, township and city staff people working on SCORE related activities compared to in 2006, 528 FTEs. This drop began in 2003 when the FTE went down to 540 FTE.

In looking closer at the counties' revenues as reported in "Revenues and Expenditures" in the SCORE survey report, it was found that during this same time period, 2000 to 2006, the counties had increased tipping fees, surcharges, and service fees to make up the lost revenue from SCORE and MPCA grants and to keep up with inflation. In 2006, SCORE disbursements were down 11 percent and MPCA grant dollars were down 23 percent from 2000. In response, general revenue (which is from county special assessments, levy, and property taxes) increased 115 percent, from \$3.3 million in 2000 to \$7.1 million in the year 2006.

Revenues received from material sales and other sources increased during this same time period. Material sales increased by 28 percent. In 2000, counties received \$3.6 million and, in 2006, \$4.6 million. The majority of this increase has been since 2003.

In comparison to the decrease in SCORE disbursements and grant dollars, MPCA funding to household hazardous waste (HHW) programs continued. In the year 2000, counties received \$428,790 from MPCA, in 2006, \$518,959. However, in 2006, dollars received for county HHW programs decreased from 2003's disbursement of \$600,661,or by 14 percent.

#### Appendix B. County SCORE reports for 2006

# County Survey Responses Finances: Revenues (part 1)

	CY2005				Processing	Land disposal
	revenue	Adjustment	General		facility	facility
County	carried over	to carryover	revenue	Service fee	tip fee	surcharge
Aitkin	\$126,812	0	\$184,173	\$700	\$31,166	\$0
Anoka	\$0	0	\$69,472	\$926,652	\$0	\$0
Becker	\$0	0	\$0	\$169,728	\$0	\$0
Beltrami	\$0	0	\$0	\$548,172	\$0	\$0
Benton	\$0	0	\$0	\$132,470	\$0	\$0
Big Stone	\$281	0	\$117,711	\$551	\$0	\$0
Blue Earth	\$0	0	\$127,682	\$0	\$0	\$0
Brown	\$1,999	0	\$0	\$305,663	\$0	\$0
Carlton	\$0	0	\$20,356	\$0	\$58,860	\$0
Carver	\$0	0	\$0	\$524,202	\$0	\$0
Cass	\$0	0	\$0	\$766,227	\$0	\$0
Chippewa	\$0	0	\$119,848	\$0	\$0	\$0
Chisago	\$36,074	0	\$0	\$76,209	\$0	\$0
Clay	\$189,664	0	\$0	\$472,024	\$0	\$0
Clearwater	\$0	0	\$0	\$47,079	\$0	\$0
Cook	\$0	0	\$187,017	\$0	\$0	\$0
Cottonwood	\$123,671	0	\$183,347	\$0	\$0	\$0
Crow Wing	\$0	0	\$503,626	\$0	\$74,275	\$0
Dakota	\$0	0	\$0	\$0	\$0	\$1,099,272
Dodge	\$27,947	0	\$153,825	\$0	\$23,965	\$0
Faribault	\$0	0	\$24,783	\$0	\$0	\$0
Fillmore	\$24,901	0	\$12,280	\$0	\$0	\$0
Freeborn	\$0	0	\$313,430	\$1,075	\$0	\$0
Goodhue	\$67,526	0	\$291,826	\$0	\$0	\$0
Grant	\$8,264	0	\$0	\$160,993	\$0	\$0
Hennepin	\$0	0	\$0	\$7,483,962	\$293,213	\$0
Houston	\$0	0	\$194,713	\$0	\$0	\$0
Hubbard	\$0	0	\$765,707	\$0	\$0	\$0
Isanti	\$101,730	0	\$20,657	\$0	\$0	\$0
Itasca	\$0	0	\$393,829	\$0	\$0	\$0
Jackson	\$98,729	0	\$27,849	\$0	\$0	\$0
Kanabec	\$87,918	0	\$12,270	\$0	\$0	\$0
Kandiyohi	\$0	0	\$0	\$253,691	\$0	\$0
Kittson	\$0	0	\$32,675	\$0	\$41,828	\$0
Koochiching	\$0	0	\$69,436	\$69,436	\$4,928	\$0
Lac qui Parle	\$68,318	0	\$20,294	\$0	\$0	\$0
Lake	(\$142,303)	142,303	\$76,495	\$0	\$6,273	\$0
Lake of The Woods	\$0	0	\$58,576	\$0	\$0	\$0
Le Sueur	\$0	0	\$107,478	\$0	\$0	\$0
Lincoln	\$54,664	0	\$49,609	\$9,236	\$0	\$0
Lyon	\$0	0	\$0	\$92,089	\$0	\$105,279
Mahnomen	\$40,372	0	\$12,270	\$0	\$0	\$0
Marshall	\$0	0	\$30,309	\$0	\$0	\$0
Martin	\$0	0	\$234,206	\$0	\$0	\$0
McLeod	\$0	0	\$0	\$0	\$151,010	\$670,484
Meeker	\$28,990	0	\$15,000	\$0	\$0	\$0
Mille Lacs	(\$3,639)	3,639	\$115,000	\$0	\$0	\$0

# County Survey Responses Finances: Revenues (part 1)

	CY2005				Processing	Land disposal
	revenue	Adjustment	General		facility	•
County	carried over	to carryover	revenue		tip fee	•
Mower	\$0	0	\$0	\$252,536	\$0	\$0
Murray	\$33,849	0	\$13,750	\$0	\$0	\$0
Nicollet	\$0	0	\$257,471	\$0	\$0	\$0
Nobles	\$121,499	0	\$14,870	\$175,877	\$0	\$159,8 <del>6</del> 1
Norman	\$0	0	\$12,270	\$0	\$0	\$0
Olmsted	(\$145,539)	145,539	\$0	\$0	\$475,274	\$0
Otter Tail	\$15,200 <sup>°</sup>	0	\$0	\$573,560	\$0	\$0
Pennington	\$0	0	\$12,270	\$0	\$0	\$0
Pine	(\$21,306)	0	\$120,867	\$0	\$0	\$0
Pipestone	\$0	0	\$123,016	\$0	\$0	\$0
Polk	\$107,661	0	\$0	\$265,586	\$0	\$0
Pope/Douglas	(\$17,277)	0	\$200,000	\$0	\$0	\$0
Ramsey	\$577,668	0	\$0	\$4,006,480	\$0	\$0
Red Lake	\$0	0	\$16,537	\$0	\$0	\$0
Redwood	\$0	0	\$0	\$204,701	\$0	\$0
Renville	\$110,870	0	\$183,530	\$0	\$19,622	\$0
Rice	(\$22,331)	22,331	\$0	\$415,652	\$0	\$0
Rock	(\$6,518)	6,518	\$62,459	\$0	\$0	\$0
Roseau	(\$64,856)	64,856	\$0	\$0	\$0	\$0
Scott	\$518,470	0	\$123,302	\$0	\$0	\$0
Sherburne	\$129,831	0	\$0	\$0	\$0	\$44,891
Sibley	\$0	0	\$128,974	\$0	\$0	\$0
St. Louis - partial	\$0	0	\$0	\$448,890	\$0	\$0
Stearns	\$79,243	0	\$83,556	\$119,174	\$0	\$0
Steele	\$0	0	\$0	\$315,887	\$0	\$0
Stevens	\$13,111	0	\$48,308	\$0	\$0	\$0
Swift	(\$12,581)	12,581	\$107,693	\$0	\$0	\$0
Todd	\$0	0	\$153,291	\$0	\$0	\$0
Traverse	(\$29,064)	29,064	\$12,270	\$0	\$0	\$0
Wabasha	(\$21,647)	21,647	\$92,042	\$0	\$0	\$0
Wadena	\$0	0	\$81,690	\$0	\$14,269	\$0
Waseca	\$0	0	\$0	\$139,982	\$0	\$0
Washington	\$0	0	\$0	\$779,575	\$0	\$0
Watonwan	\$353,691	0	\$12,981	\$131,012	\$0	\$0
Wilkin	\$0	0	\$0	\$67,795	\$0	\$0
Winona	\$34,458	0	\$632,202	\$0	\$0	\$0
WLSSD	\$0	0	\$0	\$1,090,648	\$372,316	\$0
Wright	\$615,654	0	\$29,907	\$23,998	\$0	\$116,666
Yellow Medicine	\$22,840	0	\$12,325	\$53,906	\$0	\$24,520
Motro Aros	\$707.400	<b>ው</b>	¢60.470	¢12 720 074	¢202.242	¢1 1/4 160
Metro Area Greater Minn.	\$707,499	\$0 \$449.479	\$69,472	\$13,720,871	\$293,213	\$1,144,163
	\$2,627,343	\$448,478 \$448,478	\$7,057,047 \$7,126,510	\$7,384,548 \$21,105,420	\$1,273,786	\$1,076,809
Minnesota	\$3,334,842	\$448,478	\$7,126,519	\$21,105,420	\$1,566,999	\$2,220,973

#### County Survey Responses Finances: Revenues (part 2)

	SCORE pass			Material		Total
County	through	Grants	HHW funding	sales	Other	Revenue
Aitkin	\$49,079	\$3,240	\$3,166	\$0	\$0	\$398,336
Anoka	\$716,189	\$139,879	\$0	\$1,949	\$142,593	\$1,996,733
Becker	\$70,915	\$0	\$38,056	\$314	\$0	\$279,013
Beltrami	\$94,614	\$0	\$8,107	\$0	\$0	\$650,893
Benton	\$85,238	<b>\$</b> 0	\$1,099	<b>\$</b> 0	\$14,530	\$233,337
Big Stone	\$49,079	<b>\$</b> 0	\$2,400	<b>\$</b> 0	\$0	\$170,021
Blue Earth	\$129,850	<b>\$</b> 0	\$50,415	<b>\$</b> 0	\$54,469	\$362,416
Brown	\$59,533	\$0	\$2,939	\$0	\$11,237	\$381,371
Carlton	\$75,545	\$12,048	\$6,547	\$0	\$0	\$173,356
Carver	\$185,738	\$88,774	\$0	\$6,318	\$132,160	\$937,192
Cass	\$63,799	\$0	\$7,247	\$0	\$0	\$837,273
Chippewa	\$49,079	\$0	\$2,400	<b>\$</b> 6	\$12,194	\$183,526
Chisago	\$108,943	\$4,971	\$21,422	\$3,165	\$25,799	\$276,582
Clay	\$119,076	\$0	\$11,340	\$0	\$9,106	\$801,209
Clearwater	\$49,079	\$0 \$0	\$5,664	\$0	\$0	\$101,822
Cook	\$49,079	\$0 \$0	\$0	\$53,353	\$0 \$0	\$289,448
Cottonwood	\$49,079	\$0 \$0	\$0	\$6,282	\$23,613	\$385,992
Crow Wing	\$133,162	\$0 \$0	\$9,831	\$0,282	\$0	\$720,894
Dakota	\$855,694	\$0 \$0	\$0	\$0 \$0	\$62,550	\$2,017,516
Dodge	\$49,079	\$0 \$0	\$2,011	\$148,028	\$21,602	\$426,457
Faribault	\$49,079	\$0 \$0	\$0	\$140,020	\$6,966	\$80,828
Fillmore	\$49,119	\$3,868	\$4,663	\$0 \$0	ψ0,900 \$0	\$94,831
Freeborn	\$71,158	\$3,000 \$0	\$8,431	\$1,416	\$0 \$0	\$395,510
Goodhue	\$71,136 \$51,196	\$0 \$0	\$14,600	\$1,410 \$155,566	\$0 \$0	\$580,715
Grant	\$49,079	\$0 \$0	\$14,000 \$0	\$133,300	\$9,080	\$227,416
Hennepin	\$2,555,482	\$300,045	\$22,940	\$513,248	\$162,438	\$11,331,328
Houston	\$49,079	\$300,043	\$3,256	\$174,516	\$6,690	\$428,254
Hubbard	\$49,079 \$49,079	\$0 \$0	\$3,230 \$3,366	\$174,510	\$0,090 \$0	\$818,152
	\$82,629	\$0 \$0	\$3,366 \$1,659	\$0 \$0	\$0 \$0	
Isanti		\$0 \$0	\$1,639 \$4,640	\$0 \$0	\$0 \$0	\$206,674 \$497,641
Itasca	\$99,172 \$40,070					
Jackson	\$49,079 \$40,070	\$0 \$0	\$0 \$0	\$0 \$00.4	\$5,760	\$181,417
Kanabec	\$49,079	\$0 \$0		\$884	\$0 \$102.770	\$150,150
Kandiyohi	\$92,295	\$0 \$0	\$58,678	\$374,163	\$102,779	\$881,606
Kittson	\$49,079 \$40,070	\$0 \$0	\$5,412 \$3,566	\$35,418	\$20,248	\$184,660
Koochiching	\$49,079 \$40,070	\$0 \$0	\$3,566 \$3,400	\$29,423	\$0 \$0	\$225,867
Lac qui Parle	\$49,079 \$433,000	\$0 \$4.744	\$2,400	\$0 \$24.507	\$0 \$4.200	\$140,092
Lake	\$122,698	\$4,711	\$4,918	\$21,507	\$1,280	\$237,882
Lake of The Woods	\$49,079	\$0 \$0	\$0 \$0.505	\$59,628	\$735	\$168,018
Le Sueur	\$61,510	\$0	\$2,535	\$27,438	\$16,078	\$215,039
Lincoln	\$49,079	\$11,187	\$0	\$0 \$0	\$375	\$174,151
Lyon	\$55,662	\$0	\$49,327	<b>\$</b> 0	\$20,282	\$322,639
Mahnomen	\$49,079	<b>\$</b> 0	\$2,788	\$0	\$0	\$104,509
Marshall	\$49,079	\$0 \$0	\$5,815	\$21,212	\$5,520	\$111,935
Martin	\$49,079	\$0	\$0	\$0	\$78,389	\$361,674
McLeod	\$81,107	\$328,392	\$11,365	\$353,895	\$28,418	\$1,624,670
Meeker	\$51,982	\$0	\$4,276	<b>\$</b> 0	\$404	\$100,652
Mille Lacs	\$56,359	\$0	\$2,247	\$0	\$0	\$173,606
Morrison	\$73,146	\$0	\$5,339	\$0	\$400,626	\$524,299
Mower	\$86,800	\$0	\$9,135	\$183,439	\$1,402	\$533,312
Murray	\$49,079	\$0	\$0	\$0	\$18,666	\$115,344

### County Survey Responses Finances: Revenues (part 2)

	SCORE pass			Material		Total
County	through	Grants	HHW funding	sales	Other	Revenue
Nicollet	\$69,701	\$0	\$5,146	\$0	\$10,632	\$342,950
Nobles	\$49,079	\$0	\$0	\$0	\$7,942	\$529,128
Norman	\$49,079	\$0	\$2,792	\$0	\$0	\$64,141
Olmsted	\$301,541	\$0	\$116,399	\$0	\$884,114	\$1,777,328
Otter Tail	\$130,644	\$0	\$35,705	\$678,063	\$32,661	\$1,465,833
Pennington	\$49,079	\$0	\$0	\$0	\$0	\$61,349
Pine	\$62,939	\$0	\$0	\$0	\$0	\$162,500
Pipestone	\$49,079	\$0	\$0	\$0	\$8,801	\$180,896
Polk	\$69,166	\$0	\$7,477	\$60,152	\$6,417	\$516,459
Pope/Douglas	\$126,706	\$0	\$12,231	\$0	\$500	\$322,160
Ramsey	\$1,147,699	\$171,619	\$0	\$0	\$62,984	\$5,966,450
Red Lake	\$49,079	\$0	\$5,337	\$2,437	\$0	\$73,390
Redwood	\$49,079	\$0	\$33,417	\$134,924	\$0	\$422,121
Renville	\$49,079	\$0	\$0	\$0	\$0	\$363,101
Rice	\$135,983	\$0	\$26,307	\$431,884	\$74,857	\$1,084,684
Rock	\$49,079	\$0	\$0	\$0	\$10,440	\$121,978
Roseau	\$49,079	\$0	\$6,294	\$28,053	\$4,611	\$88,037
Scott	\$254,555	\$0	\$0	\$0	\$0	\$896,327
Sherburne	\$179,565	\$0	\$3,102	\$0	\$3,113	\$360,502
Sibley	\$49,079	\$0	\$2,328	\$21,408	\$10,283	\$212,071
St. Louis - partial	\$209,997	\$7,390	\$18,402	\$401,338	\$7,040	\$1,093,057
Stearns	\$315,705	\$0	\$6,717	\$0	\$51,648	\$656,042
Steele	\$78,866	\$0	\$4,735	\$0	\$5,603	\$405,091
Stevens	\$49,079	\$0	\$0	\$0	\$140	\$110,638
Swift	\$49,079	\$0	\$2,400	\$114,307	\$0	\$273,479
Todd	\$54,866	\$0	\$5,025	\$96,877	\$0	\$310,059
Traverse	\$49,079	\$0	\$0	\$0	\$0	\$61,349
Wabasha	\$49,661	\$0	\$2,615	\$0	\$1,425	\$145,744
Wadena	\$49,079	\$0	\$2,828	\$235	\$5	\$148,106
Waseca	\$49,079	\$0	\$0	\$141,851	\$507	\$331,419
Washington	\$492,459	\$112,987	\$0	\$0	\$55,228	\$1,440,249
Watonwan	\$49,079	\$0	\$2,047	\$0	\$3,365	\$552,176
Wilkin	\$49,079	\$0	\$0	\$230,050	\$1,600	\$348,524
Winona	\$111,083	\$0	\$22,636	\$56,367	\$10,594	\$867,340
WLSSD	\$231,374	\$21,000	\$260,008	\$90,640	\$95,870	\$2,161,857
Wright	\$242,244	\$854	\$9,674	\$1,124	\$26,850	\$1,066,971
Yellow Medicine	\$49,079	\$0	\$0	\$0	\$1,355	\$164,025
Metro Area	\$6,132,826	\$813,304	\$26,042	\$521,515	\$621,065	\$24,049,969
Greater Minn.	\$6,383,699	\$397,661	\$971,579	\$4,139,360	\$2,153,508	\$33,913,820
Minnesota	\$12,516,525	\$1,210,965	\$997,621	\$4,660,875	\$2,774,574	\$57,963,789

#### County Survey Responses Finances: Revenue summary

	Adjusted CY2005	CY2006	Total	
County	Revenue (carried over)	Revenue	Revenue	
Aitkin	\$126,812	\$271,524	\$398,336	
Anoka	\$0	\$1,996,733	\$1,996,733	
Becker	\$0	\$279,013	\$279,013	
Beltrami	\$0	\$650,893	\$650,893	
Benton	\$0	\$233,337	\$233,337	
Big Stone	\$281	\$169,740	\$170,021	
Blue Earth	\$0	\$362,416	\$362,416	
Brown	\$1,999	\$379,372	\$381,371	
Carlton	\$0	\$173,356	\$173,356	
Carver	\$0	\$937,192	\$937,192	
Cass	\$0	\$837,273	\$837,273	
Chippewa	\$0	\$183,526	\$183,526	
Chisago	\$36,074	\$240,509	\$276,582	
Clay	\$189,664	\$611,546	\$801,209	
Clearwater	\$0	\$101,822	\$101,822	
Cook	\$0	\$289,448	\$289,448	
Cottonwood	\$123,671	\$262,321	\$385,992	
Crow Wing	\$0	\$720,894	\$720,894	
Dakota	\$0	\$2,017,516	\$2,017,516	
Dodge	\$27,947	\$398,511	\$426,457	
Faribault	\$0	\$80,828	\$80,828	
Fillmore				
	\$24,901	\$69,930 \$305,540	\$94,831	
Freeborn	\$0 \$67.536	\$395,510 \$543,488	\$395,510	
Goodhue	\$67,526	\$513,188 \$340,453	\$580,715	
Grant	\$8,264	\$219,152	\$227,416	
Hennepin	\$0	\$11,331,328	\$11,331,328	
Houston	\$0	\$428,254	\$428,254	
Hubbard	\$0	\$818,152	\$818,152	
Isanti	\$101,730	\$104,945	\$206,674	
Itasca	\$0	\$497,641	\$497,641	
Jackson	\$98,729	\$82,688	\$181,417	
Kanabec	\$87,918	\$62,232	\$150,150	
Kandiyohi	\$0	\$881,606	\$881,606	
Kittson	\$0	\$184,660	\$184,660	
Koochiching	\$0	\$225,867	\$225,867	
Lac qui Parle	\$68,318	\$71,773	\$140,092	
Lake	\$0	\$237,882	\$237,882	
Lake of The Woods	\$0	\$168,018	\$168,018	
Le Sueur	\$0	\$215,039	\$215,039	
Lincoln	\$54,664	\$119,487	\$174,151	
Lyon	\$0	\$322,639	\$322,639	
Mahnomen	\$40,372	\$64,137	\$104,509	
Marshall	\$0	\$111,935	\$111,935	
Martin	\$0	\$361,674	\$361,674	
McLeod	\$0	\$1,624,670	\$1,624,670	
Meeker	\$28,990	\$71,662	\$100,652	
Mille Lacs	\$0	\$173,606	\$173,606	
Morrison	\$0	\$524,299	\$524,299	

#### County Survey Responses Finances: Revenue summary

	Adjusted CY2005	CY2006	Total
County	Revenue (carried over)	Revenue	Revenue
Mower	\$0	\$533,312	\$533,312
Murray	\$33,849	\$81,495	\$115,344
Nicollet	\$0	\$342,950	\$342,950
Nobles	\$121,499	\$407,629	\$529,128
Norman	\$0	\$64,141	\$64,141
Olmsted	\$0	\$1,777,328	\$1,777,328
Otter Tail	\$15,200	\$1,450,633	\$1,465,833
Pennington	\$0	\$61,349	\$61,349
Pine	(\$21,306)	\$183,806	\$162,500
Pipestone	\$0	\$180,896	\$180,896
Polk	\$107,661	\$408,798	\$516,459
Pope/Douglas	(\$17,277)	\$339,437	\$322,160
Ramsey	\$577,668	\$5,388,782	\$5,966,450
Red Lake	\$0	\$73,390	\$73,390
Redwood	\$0	\$422,121	\$422,121
Renville	\$110,870	\$252,231	\$363,101
Rice	\$0	\$1,084,684	\$1,084,684
Rock	\$0	\$121,978	\$121,978
Roseau	\$0	\$88,037	\$88,037
Scott	\$518,470	\$377,857	\$896,327
Sherburne	\$129,831	\$230,671	\$360,502
Sibley	\$0	\$212,071	\$212,071
St. Louis - partial	\$0	\$1,093,057	\$1,093,057
Stearns	\$79,2 <b>4</b> 3	\$576,799	\$656,042
Steele	\$0	\$405,091	\$405,091
Stevens	\$13,111	\$97,527	\$110,638
Swift	\$0	\$273,479	\$273,479
Todd	\$0	\$310,059	\$310,059
Traverse	\$0	\$61,349	\$61,349
Wabasha	\$0	\$145,744	\$145,744
Wadena	\$0	\$148,106	\$148,106
Waseca	\$0	\$331,419	\$331,419
Washington	\$0	\$1,440,249	\$1,440,249
Watonwan	\$353,691	\$198,485	\$552,176
Wilkin	\$0	\$348,524	\$348,524
Winona	\$34,458	\$832,882	\$867,340
WLSSD	\$0	\$2,161,857	\$2,161,857
Wright	\$615,654	\$451,317	\$1,066,971
Yellow Medicine	\$22,840	\$141,185	\$164,025
Metro Area	\$707,499	\$23,342,471	\$24,049,969
Greater Minn.	\$3,075,822	\$30,837,998	\$33,913,820
Minnesota	\$3,783,320	\$54,180,469	\$57,963,789

### County Survey Responses Finances: Expenditures by program area (part 1)

County Aitkin Anoka	Planning & administration \$134,918 \$550,346	Recycling \$106,640	Yard waste	problem materials	Source reduction
Aitkin Anoka	\$134,918 \$550,346			materiais	
Anoka	\$550,346	\$10h.h40	Ф.Г.О.О.		
		•	\$500	\$30,734	\$200
D I		\$22,857	\$77,341	\$407,972	\$19,606
Becker	\$181,721	\$128,745	\$15,458	\$74,095	\$0
Beltrami	\$0	\$390,620	\$0	\$278,871	\$0
Benton	\$102,598	\$167	\$2,000	\$53,380	\$0
Big Stone	\$46,840	\$122,345	\$0	\$8,731	\$0
Blue Earth	\$64,861	\$160,985	\$0	\$90,395	\$0
Brown	\$32,019	\$299,693	\$0	\$43,983	\$0
Carlton	\$56,301	\$93,902	\$3,030	\$62,328	\$0
Carver	\$323,759	\$62,097	\$118,399	\$344,601	\$2,488
Cass	\$106,257	\$618,401	\$6,171	\$100,238	\$0
Chippewa	\$27,753	\$123,320	\$0	\$30,970	\$0
Chisago	\$105,680	\$62,691	\$0	\$72,423	\$0
Clay	\$201,981	\$262,293	\$29,458	\$81,021	\$0
Clearwater	\$25,293	\$46,925	\$1,202	\$26,918	\$0
Cook	\$203,729	\$75,916	\$0	\$9,385	\$0
Cottonwood	\$147,113	\$93,597	\$0	\$11,902	\$0
Crow Wing	\$172,187	\$25,850	\$23,138	\$221,661	\$0
Dakota	\$860,033	\$29,778	\$0	\$731,482	\$0
Dodge	\$24,231	\$241,602	\$18,851	\$34,139	\$18,851
Faribault	\$20,882	\$22,562	\$0	\$4,536	\$232
Fillmore	\$13,609	\$47,497	\$0	\$22,543	\$0
Freeborn	\$82,327	\$292,914	\$343	\$13,009	<b>\$</b> 0
Goodhue	\$328,252	\$281,803	\$0	\$34,973	<b>\$</b> 0
Grant	\$0	\$175,909	\$0	\$27,891	<b>\$</b> 0
Hennepin	\$1,774,666	\$1,299,951	\$22,288	\$5,064,042	\$149,235
Houston	\$19,583	\$401,385	\$0	\$6,485	\$0
Hubbard	\$79,259	\$573,597	\$1,546	\$145,600	\$0
Isanti	\$51,765	\$39,923	\$0	\$9,660	\$0
Itasca	\$108,945	\$321,121	<b>\$</b> 0	\$63,832	\$0
Jackson	\$30,203	\$19,035	\$0	\$13,277	\$0
Kanabec	\$7,758	\$59,915	\$0	\$3,595	<b>\$</b> 0
Kandiyohi	\$246,556	\$495,212	\$0	\$139,838	\$0 \$0
Kittson	\$30,732	\$0	\$0	\$1,030	\$0 \$0
Koochiching	\$104,734	\$84,505	\$5,850	\$22,769	\$0 \$0
Lac qui Parle	\$33,451	\$49,500	\$5,650 \$0	\$13,127	\$0 \$0
Lake	\$83,040	\$127,592	\$9,340	\$22,887	\$0 \$0
Lake of The Woods	\$83,040 \$2,770	•	\$9,340 \$1,066		\$0 \$0
	. ,	\$139,108 \$48,705		\$22,321 \$50,357	
Le Sueur	\$51,056 \$48,043	\$48,795	\$0 \$0	\$59,257	\$0 \$0
Lincoln	\$48,012	\$54,216	\$0 \$0	\$6,736	\$0 \$5,737
Lyon	\$44,303	\$99,131	\$0 \$0	\$130,262	\$5,737
Mahnomen	\$42,124	\$8,610	\$0 \$0	\$17,925	\$0 \$0
Marshall	\$24,697	\$0	\$0 \$105	\$9,383	\$0
Martin	\$30,682	\$182,510	\$165	\$67,911	\$264
McLeod	\$292,856	\$1,003,423	\$26,512	\$113,917	\$0
Meeker	\$12,100	\$20,646	\$0	\$23,084	\$0
Mille Lacs	\$57,160	\$100,688	\$0	\$9,142	\$0
Morrison	\$46,178	\$125,739	\$17,058	\$245,471	\$0

# County Survey Responses Finances: Expenditures by program area (part 1)

				HHW and	
	Planning &			problem	Source
County	administration	Recycling	Yard waste	materials	reduction
Mower	\$96,211	\$424,737	\$0	\$6,105	\$0
Murray	\$47,169	\$25,060	\$0	\$1,973	\$0
Nicollet	\$54,701	\$169,606	\$0	\$75,952	\$0
Nobles	\$90,159	\$199,349	\$0	\$66,365	\$0
Norman	\$17,008	\$40,107	\$0	\$8,663	\$0
Olmsted	\$69,477	\$928,921	\$170,293	\$413,434	\$130,062
Otter Tail	\$617,884	\$500,039	\$3,420	\$243,114	\$6,283
Pennington	\$0	\$35,186	\$0	\$7,201	\$0
Pine	\$36,882	\$107,198	\$500	\$1,400	\$0
Pipestone	\$22,007	\$151,838	\$0	\$2,705	\$0
Polk	\$29,654	\$217,644	\$3,825	\$59,273	\$0
Pope/Douglas	\$160,888	\$122,726	\$0	\$29,849	\$0
Ramsey	\$2,317,367	\$96,817	\$1,282,821	\$416,196	\$0
Red Lake	\$14,821	\$53,494	\$0	\$4,808	\$0
Redwood	\$209,458	\$306,595	\$0	\$8,364	\$3,300
Renville	\$62,073	\$170,406	\$0	\$7,663	\$0
Rice	\$516,119	\$507,193	\$37,000	\$132,188	\$500
Rock	\$50,792	\$48,232	\$2,011	\$12,407	\$700
Roseau	\$14,116	\$0	\$0	\$24,334	\$0
Scott	\$151,522	\$0	\$0	\$91,538	\$0
Sherburne	\$4,188	\$25,577	\$2,198	\$40,083	\$0
Sibley	\$43,250	\$35,004	\$0	\$51,798	\$0
St. Louis - partial	\$142,656	\$688,687	\$0	\$209,406	\$16,390
Stearns	\$147,943	\$48,345	\$14,220	\$137,768	\$34,220
Steele	\$102,690	\$260,838	\$0	\$17,899	\$0
Stevens	\$42,947	\$29,341	\$950	\$15,247	\$0
Swift	\$185,268	\$77,580	\$2,425	\$11,514	\$740
Todd	\$118,657	\$155,043	\$1,500	\$27,056	\$1,300
Traverse	\$53,640	\$31,234	\$0	\$6,881	\$0
Wabasha	\$56,077	\$75,072	\$0	\$14,595	\$0
Wadena	\$22,519	\$102,386	\$0	\$26,563	\$0
Waseca	\$84,647	\$200,403	\$202	\$44,397	\$0
Washington	\$261,594	\$33,132	\$0	\$633,678	\$9,549
Watonwan	\$12,071	\$110,460	\$0	\$10,639	\$0
Wilkin	\$36,735	\$265,386	\$3,610	\$39,596	\$2,300
Winona	\$237,139	\$540,689	\$0	\$61,734	\$0
WLSSD	\$758,881	\$281,517	\$168,400	\$601,259	\$0
Wright	\$30,331	\$24,560	\$14,824	\$149,652	\$0
Yellow Medicine	\$2,989	\$77,005	\$0	\$3,980	\$0
Metro Area	\$6,091,954	\$1,570,209	\$1,503,046	\$7,638,055	\$180,878
Greater Minn.	\$7,865,896	\$14,640,909	\$584,868	\$5,108,953	\$221,079
Minnesota	\$13,957,850	\$16,211,118	\$2,087,914	\$12,747,008	\$401,957

### County Survey Responses Finances: Expenditures by program area (part 2)

		Market	Litter	County grants to other local units of
County	Education	development	prevention	government
Aitkin	\$4,576	\$0	\$0	\$0
Anoka	\$126,083	\$0	\$0	\$712,928
Becker	\$8,410	\$0	\$7,500	\$58,250
Beltrami	\$0	\$0	\$0	\$0
Benton	\$25,300	\$0	\$0	\$49,892
Big Stone	\$868	\$0	\$0	\$0
Blue Earth	\$44,717	\$0	\$1,459	\$0
Brown	\$5,676	\$0	\$0	\$0
Carlton	\$1,982	\$0	\$0	\$14,956
Carver	\$8,495	\$0	\$3,475	\$73,878
Cass	\$6,206	\$0	\$0	\$0
Chippewa	\$1,483	\$0	\$0	\$0
Chisago	\$19,591	<b>\$</b> 0	\$0	\$0
Clay	\$25,327	\$0	\$0 \$0	\$0
Clearwater	\$1,484	\$0	\$0	\$0
Cook	\$418	\$0 \$0	\$0 \$0	\$0 \$0
Cottonwood	\$3,201	\$0 \$0	\$0 \$0	\$0 \$0
Crow Wing	\$20,168	\$0 \$0	\$35,290	\$222,600
Dakota	\$302,830	\$0 \$0	\$35,290 \$0	\$93,393
	\$302,830 \$27,971	\$900	\$0 \$0	\$93,393 \$0
Dodge Faribault		\$900 \$0		
	\$1,536	·	\$354	\$30,689
Fillmore	\$8,947	\$0 \$0	\$0 \$0	\$0 \$0
Freeborn	\$14,548	\$0 \$0	\$0 \$0	\$0 \$0
Goodhue	\$5,283	\$0 \$0	\$0 \$0	\$0
Grant	\$0	\$0	\$0 \$0	\$0
Hennepin	\$259,356	\$31,013	\$0 \$0	\$2,730,777
Houston	\$800	\$0	\$0	\$0
Hubbard	\$16,900	\$0	\$300	\$950
Isanti	\$0	\$0	\$0	\$0
Itasca	\$3,742	\$0	\$0	\$0
Jackson	\$7,919	\$0	\$0	\$0
Kanabec	\$1,785	\$0	\$201	\$0
Kandiyohi	\$0	\$0	\$0	\$0
Kittson	\$0	\$0	\$0	\$152,898
Koochiching	\$7,848	\$0	\$160	\$0
Lac qui Parle	\$3,519	\$0	\$0	\$0
Lake	\$4,221	\$0	\$0	\$0
Lake of The Woods	\$2,753	\$0	\$0	\$0
Le Sueur	\$40,787	\$0	\$0	\$15,144
Lincoln	\$3,804	\$0	\$64	\$0
Lyon	\$43,206	\$0	\$0	\$0
Mahnomen	\$1,469	\$0	\$0	\$0
Marshall	\$0	\$0	\$0	\$77,855
Martin	\$5,816	\$0	\$3 <b>7</b> 5	\$10,989
McLeod	\$74,584	\$0	\$0	\$113,379
Meeker	\$22,649	\$0	\$0	\$3,016
Mille Lacs	\$0	\$0	\$0	\$0
Morrison	\$3,625	\$0	\$0	\$86,228

# County Survey Responses Finances: Expenditures by program area (part 2)

				County grants to
		Market	Litter	other local units of
County			prevention	government
Mower	\$6,259	\$0	\$0	\$0
Murray	\$3,971	\$0	\$0	\$1,155
Nicollet	\$42,691	\$0	\$0	\$0
Nobles	\$7,208	\$0	\$0	\$0
Norman	\$1,266	\$0	\$0	\$0
Olmsted	\$188,908	\$0	\$0	\$0
Otter Tail	\$77,248	\$0	\$2,645	\$0
Pennington	\$0	\$0	\$0	\$0
Pine	\$17,362	\$0	\$17,252	\$0
Pipestone	\$4,347	\$0	\$0	\$0
Polk	\$13,937	\$0	\$0	\$15,000
Pope/Douglas	\$16,734	\$0	\$0	\$0
Ramsey	\$314,942	\$0	\$0	\$968,276
Red Lake	\$266	\$0	\$0	\$0
Redwood	\$8,663	\$0	\$0	\$0
Renville	\$3,088	\$0	\$0	\$0
Rice	\$17,300	\$1,820	\$100	\$0
Rock	\$8,707	\$0	\$0	\$0
Roseau	\$0	\$0	\$0	\$87,837
Scott	\$39,208	\$0	\$0	\$0
Sherburne	\$40,388	\$5,550	\$0	\$96,351
Sibley	\$32,908	\$0	\$0	\$49,110
St. Louis - partial	\$35,918	\$0	\$0	\$0
Stearns	\$42,198	\$14,220	\$14,220	\$141,595
Steele	\$23,664	\$0	\$0	\$0
Stevens	\$3,499	\$0	\$0	\$0
Swift	\$5,029	\$0	\$0	\$0
Todd	\$6,503	\$0	\$0	\$0
Traverse	\$542	\$0	\$0	\$4,000
Wabasha	\$0	\$0	\$0	\$0
Wadena	\$675	\$0 \$0	\$0 \$0	\$0 \$0
Waseca	\$1,770	\$0 \$0	\$0 \$0	\$0 \$0
Washington	\$147,470	\$0 \$0	\$0 \$0	\$354,826
Watonwan	\$3,254	\$0 \$0	\$0 \$0	\$354,820 \$0
Wilkin	\$898	\$0 \$0	\$0 \$0	\$0 \$0
Winona	\$6,210	\$0 \$0	\$0 \$0	\$0 \$0
WLSSD		•	\$18,047	
Wright	\$249,813 \$11,343	\$3,355 \$0	\$10,047 \$0	\$80,585 \$209,006
Yellow Medicine	\$6,356	\$0 \$0	\$0 \$0	\$209,000 \$0
renow Medicine	φυ,330	φυ	φυ	φυ
Metro Area	\$1,199,564	\$36,563	\$3,475	\$5,030,429
Greater Minn.	\$1,360,863	\$20,295	\$97,966	\$1,425,133
Minnesota	\$2,560,426	\$56,858	\$101,441	\$6,455,562

## **County Survey Responses** Finances: Balance Sheet

County	Total Revenues	Total Expenditures	Balance
Aitkin	\$398,336	\$277,569	\$120,767
Anoka	\$1,996,733	\$1,917,133	\$79,600
Becker	\$279,013	\$474,178	(\$195,165)
Beltrami	\$650,893	\$669,491	(\$18,598)
Benton	\$233,337	\$233,337	\$0
Big Stone	\$170,021	\$178,784	(\$8,763)
Blue Earth	\$362,416	\$362,416	(\$0)
Brown	\$381,371	\$381,371	(\$0)
Carlton	\$173,356	\$232,498	(\$59,142)
Carver	\$937,192	\$937,192	\$0
Cass	\$837,273	\$837,273	\$0
Chippewa	\$183,526	\$183,526	\$0
Chisago	\$276,582	\$260,384	\$16,198
Clay	\$801,209	\$600,080	\$201,130
Clearwater	\$101,822	\$101,822	(\$0)
Cook	\$289,448	\$289,448	\$0
Cottonwood	\$385,992	\$255,813	\$130,179
Crow Wing	\$720,894	\$720,894	\$0
Dakota	\$2,017,516	\$2,017,516	\$0
Dodge	\$426,457	\$366,544	\$59,914
Faribault	\$80,828	\$80,791	\$37
Fillmore	\$94,831	\$92,596	\$2,234
Freeborn	\$395,510	\$403,141	(\$7,631)
Goodhue	\$580,715	\$650,310	(\$69,596)
Grant	\$227,416	\$203,800	\$23,616
Hennepin	\$11,331,328	\$11,331,328	\$0
Houston	\$428,254	\$428,254	(\$0)
Hubbard	\$818,152	\$818,152	\$0
Isanti	\$206,674	\$101,348	\$105,327
Itasca	\$497,641	\$497,641	\$0
Jackson	\$181,417	\$70,433	\$110,984
Kanabec	\$150,150	\$73,254	\$76,896
Kandiyohi	\$881,606	\$881,606	\$0,090
Kittson	\$184,660	\$184,660	\$0 \$0
Koochiching	\$225,867	\$225,867	\$0 \$40.405
Lac qui Parle	\$140,092	\$99,597	\$40,495
Lake	\$237,882	\$247,080	(\$9,198)
Lake of The Woods	\$168,018	\$168,018	\$0 (\$0)
Le Sueur	\$215,039	\$215,039	(\$0)
Lincoln	\$174,151	\$112,832	\$61,319
Lyon	\$322,639	\$322,639	\$0
Mahnomen	\$104,509	\$70,128	\$34,381
Marshall	\$111,935	\$111,935	(\$0)
Martin	\$361,674	\$298,712	\$62,962
McLeod	\$1,624,670	\$1,624,670	(\$0)
Meeker	\$100,652	\$81,494	\$19,158
Mille Lacs	\$173,606	\$166,990	\$6,616
Morrison	\$524,299	\$524,299	\$0
Mower	\$533,312	\$533,312	\$0

## **County Survey Responses** Finances: Balance Sheet

County	Total Revenues	Total Expenditures	Balance
Murray	\$115,344	\$79,328	\$36,016
Nicollet	\$342,950	\$342,950	\$0
Nobles	\$529,128	\$363,081	\$166,047
Norman	\$64,141	\$67,044	(\$2,903)
Olmsted	\$1,777,328	\$1,901,095	(\$123,767)
Otter Tail	\$1,465,833	\$1,450,633	\$15,200
Pennington	\$61,349	\$42,387	\$18,962
Pine	\$162,500	\$180,594	(\$18,094)
Pipestone	\$180,896	\$180,896	\$0
Polk	\$516,459	\$339,333	\$177,126
Pope/Douglas	\$322,160	\$330,197	(\$8,037)
Ramsey	\$5,966,450	\$5,396,419	\$570,031
Red Lake	\$73,390	\$73,390	\$0
Redwood	\$422,121	\$536,380	(\$114,259)
Renville	\$363,101	\$243,230	\$119,871
Rice	\$1,084,684	\$1,212,220	(\$127,536)
Rock	\$121,978	\$122,849	(\$871)
Roseau	\$88,037	\$126,287	(\$38,250)
Scott	\$896,327	\$282,268	\$614,059
Sherburne	\$360,502	\$214,335	\$146,166
Sibley	\$212,071	\$212,071	(\$0)
St. Louis - partial	\$1,093,057	\$1,093,057	\$0
Stearns	\$656,042	\$594,729	\$61,313
Steele	\$405,091	\$405,091	\$0
Stevens	\$110,638	\$91,984	\$18,654
Swift	\$273,479	\$282,556	(\$9,077)
Todd	\$310,059	\$310,059	\$0
Traverse	\$61,349	\$96,297	(\$34,948)
Wabasha	\$145,744	\$145,744	\$0
Wadena	\$148,106	\$152,142	(\$4,036)
Waseca	\$331,419	\$331,419	\$0
Washington	\$1,440,249	\$1,440,249	\$0
Watonwan	\$552,176	\$136,423	\$415,753
Wilkin	\$348,524	\$348,524	\$0
Winona	\$867,340	\$845,772	\$21,568
WLSSD	\$2,161,857	\$2,161,857	\$0
Wright	\$1,066,971	\$439,717	\$627,253
Yellow Medicine	\$164,025	\$90,330	\$73,695
Metro Area	\$24,049,969	\$23,254,172	\$795,797
Greater Minn.	\$33,913,820	\$31,325,961	\$2,587,859
Minnesota	\$57,963,789	\$54,580,133	\$3,383,656

### County Survey Responses Paper collected for recycling (tons)

County	Computer	Corrugated	-		Newsprint	Office	Other	Phone	Total
	paper		catalog	paper		paper	paper	book	Paper
Aitkin	0		0	386	0	0	0	0	947
Anoka	2	38,921	515	23,666	15,626	300	6,014	33	85,077
Becker	1,184	7,755	93	1,069	1,629	60	0	10	11,800
Beltrami	41	3,342	23	914	116	66	41	5	4,548
Benton	0	1,854	12,469	15	730	92	810	5	15,975
Big Stone	0	229	0	230	0	0	0	0	460
Blue Earth	0	17,880	1,670	7,914	5,344	521	0	0	33,329
Brown	0	4,352	0	7,532	996	12	1,861	0	14,752
Carlton	0	1,891	92	687	535	0	3	0	3,208
Carver	0	7,609	119	11,732	755	1,603	465	1	22,285
Cass	0	3,030	59	106	3,670	181	0	0	7,047
Chippewa	0	1,272	6	50	452	1	0	0	1,782
Chisago	0	2,350	0	2,387	0	285	0	25	5,046
Clay	0	3,210	131	310	999	291	0	23	4,964
Clearwater	0	227	0	65	0	0	0	2	294
Cook	0	465	134	0	118	38	0	0	754
Cottonwood	0	1,108	23	0	182	23	0	0	1,336
Crow Wing	0	5,041	133	10,109	1,437	10	0	29	16,759
Dakota	0	14,189	126	34,805	12,435	3,863	2,900	3	68,321
Dodge	0	862	92	903	0	0,000	9	0	1,865
Faribault	0	2,467	0	1,923	0	0	0	0	4,390
Fillmore	0	233	136	72	529	36	0	0	1,006
Freeborn	0	5,080	191	2,397	2	0	0	0	7,670
Goodhue	0	4,232	248	2,999	883	1,168	0	0	9,529
Grant	0	154	27	2,333	125	24	0	0	330
Hennepin	0	35,532	4,371	33,409	49,078	9,441	1,601	176	133,607
Houston	0	224	4,571	144	231	0	0	0	600
Hubbard	0	2,011	0	0	571	101	0	0	2,683
Isanti	0	2,580	2	1	568	0	0	9	3,161
Itasca	20	2,946	62	2,655	1,290	202	0	0	7,175
Jackson	0	1,361	02	•	362	95	0	0	1,818
Kanabec				0	146		_		649
	0	503	0	0		0 168	0	0	
Kandiyohi	0	3,836	345	371 4	747		60	14	5,541
Kittson	0	102	6			4	0	1	219
Koochiching	0	1,469	43	272	100	19	0	0	1,903
Lac qui Parle	0	382	0	0	189	19	9	0	599
Lake	0	485	93	88	253	57	0	0	976
Lake of The									
Woods	0	96	0	0	0	0	0	0	96
Le Sueur	0	1,606	0	324	290	79	0	0	2,299
Lincoln	0	101	0	26	201	30	0	0	358
Lyon	0	3,635	0	691	50	12	0	0	4,388
Mahnomen	0	104	8	54	0	0	0	0	165
Marshall	0	82	1	35	124	5	0	1	248
Martin	0	6,239	0	3,501	0	0	0	0	9,740
McLeod	0	3,089	1	18	150	272	87	0	3,615
Meeker	0	1,080	11	280	57	81	0	0	1,509
Mille Lacs	0	886	0	216	0	0	0	0	1,102

## County Survey Responses: Paper collected for recycling (tons)

County	-	Corrugated			Newsprint	Office	Other	Phone	Total
	paper		catalog	paper		paper	paper	book	Paper
Morrison	0	2,657	106	0	335	1,095	0	0	4,193
Mower	221	5,213	114	0	1,008	240	0	4	6,800
Murray	0	493	23	46	463	196	0	0	1,221
Nicollet	0	2,241	0	8,740	67	286	0	0	11,334
Nobles	0	3,863	0	0	369	929	0	0	5,161
Norman	0	67	0	0	41	0	0	2	110
Olmsted	0	12,301	100	3,651	3,129	1,066	9,236	25	29,509
Otter Tail	0	4,362	103	179	1,345	244	0	0	6,233
Pennington	0	1,372	44	0	207	113	0	20	1,756
Pine	0	1,126	0	1,482	0	0	0	0	2,608
Pipestone	0	889	0	0	304	0	0	0	1,193
Polk	0	2,023	0	0	481	48	0	7	2,559
Pope/Douglas	0	10,113	291	205	1,420	0	0	0	12,029
Ramsey	0	5,735	1,565	13,889	20,366	9	2,108	688	44,359
Red Lake	0	12	9	0	69	3	0	0	93
Redwood	98	2,223	182	217	367	245	0	15	3,347
Renville	0	285	4	253	438	0	0	0	980
Rice	0	7,787	0	0	2,348	0	0	29	10,164
Rock	0	597	0	0	231	41	0	0	868
Roseau	0	2,078	28	0	162	140	0	0	2,408
Scott	0	19,854	447	13,068	3,729	26	296	0	37,421
Sherburne	0	2,547	223	1,383	2,452	45	47	216	6,914
Sibley	0	493	0	332	93	5	0	0	924
St. Louis -									
partial	0	5,406	0	4,040	229	37	0	0	9,712
Stearns	0	11,432	10,441	4,947	3,000	2,390	116	54	32,379
Steele	0	3,051	29	1,900	0	14	1,944	0	6,939
Stevens	0	364	12	20	163	10	0	5	574
Swift	29	650	65	0	468	111	0	2	1,325
Todd	0	1,484	0	15,357	183	0	0	0	17,024
Traverse	0	104	22	0	84	16	0	0	226
Wabasha	0	4,686	40	0	757	68	0	0	5,551
Wadena	0	270	0	26	0	0	0	0	296
Waseca	0	2,487	89	1,975	213	30,231	147	0	35,142
Washington	0	16,146	503	15,280	21,960	13,183	0	60	67,133
Watonwan	0	840	0	0	1,108	1	0	0	1,948
Wilkin	0	381	17	0	257	13	0	0	668
Winona	0	7,297	0	383	5,428	0	0	0	13,108
WLSSD	0	12,855	649	13,244	1,021	1,416	726	0	29,910
Wright	4	8,348	15	14	3,192	5	0	0	11,578
Yellow		-,-	_		,	_	-	-	,
Medicine	0	580	24	195	64	16	0	0	880
Metro Area	2	120,678	7,422	134,163	122,673	28,445	13,135	1,177	427,695
Greater MN	1,597	240,697	28,954	119,023	55,952	42,954	15,345	285	504,806
Minnesota	1,600	361,375	36,375	253,186	178,625	71,399	28,480	1,462	932,501

#### County Survey Responses Metal collected for recycling (tons)

County	Aluminum	Co-mingled	Other ferrous	Steel/tin	Total
			& non-ferrous	cans	Metal
Aitkin	124	0	549	37	710
Anoka	555	639	33,375	641	35,210
Becker	49	118	0	0	166
Beltrami	101	0	740	475	1,316
Benton	1,816	175	10,014	64	12,069
Big Stone	58	0	239	39	337
Blue Earth	6,165	4,050	3,912	1,188	15,315
Brown	174	1,696	1,435	130	3,435
Carlton	207	0	6	164	377
Carver	61	253	3,932	399	4,646
Cass	94	1,076	44	48	1,262
Chippewa	10	26	0	53	89
Chisago	353	0	616	152	1,120
Clay	46	0	134	76	256
Clearwater	22	13	446	0	481
Cook	20	0	307	36	363
Cottonwood	9	0	226	38	273
Crow Wing	155	0	8,369	303	8,827
Dakota	1,423	9,857	11,478	249	23,006
Dodge	29	0	2,259	52	2,340
Faribault	167	406	424	0	997
Fillmore	30	0	36	122	188
Freeborn	552	2,750	0	2,358	5,659
Goodhue	172	639	61	228	1,100
Grant	12	0	10	21	42
Hennepin	4,521	1,831	46,251	1,709	54,311
Houston	186	0	588	66	840
Hubbard	1,031	0	971	93	2,094
Isanti	631	169	131	1,614	2,546
Itasca	85	105	1,340	140	1,670
Jackson	61	0	235	78	374
Kanabec	0	87	0	22	109
Kandiyohi	222	4	0	90	316
Kittson	9	60	43	0	111
Koochiching	78	0	735	25	838
Lac qui Parle	37	0	269	333	639
Lake	23	24	561	42	650
Lake of The Woods	13	0	479	12	504
Le Sueur	24	262	2,265	159	2,710
Lincoln	3	31	0	1	35
Lyon	130	3,493	7	189	3,818
Mahnomen	9	0	48	8	65
Marshall	2	55	175	0	232
Martin	1,200	2,364	3,300	0	6,864
McLeod	81	4	1,071	2	1,159
Meeker	84	60	711	5	860
Mille Lacs	0	106	0	0	106
Morrison	0	122	4,621	0	4,744

#### County Survey Responses Metal collected for recycling (tons)

County	Aluminum	Co-mingled	Other ferrous	Steel/tin	Total
•			& non-ferrous	cans	Metal
Mower	212	0	100	87	399
Murray	56	106	6	25	192
Nicollet	61	10	1,807	95	1,973
Nobles	117	154	0	0	271
Norman	19	0	596	98	713
Olmsted	456	404	8,304	2,007	11,171
Otter Tail	340	720	4,194	157	5,411
Pennington	0	84	0	0	84
Pine	0	823	983	0	1,806
Pipestone	25	0	96	36	156
Polk	265	0	2,515	256	3,036
Pope/Douglas	1,387	0	346	988	2,721
Ramsey	1,103	389	56,825	812	59,129
Red Lake	4	46	225	0	275
Redwood	610	0	3,025	60	3,695
Renville	0	45	76	580	701
Rice	474	30	1,724	560	2,788
Rock	26	0	2,607	39	2,673
Roseau	56	0	437	73	566
Scott	707	1,461	20,319	973	23,459
Sherburne	1,171	489	16,621	1,938	20,219
Sibley	8	0	251	194	452
St. Louis - partial	415	2,917	41,169	937	45,438
Stearns	1,298	771	31,076	736	33,880
Steele	66	0	136	357	559
Stevens	61	0	382	137	580
Swift	123	0	58	84	265
Todd	18	160	220	44	442
Traverse	23	0	44	13	80
Wabasha	64	4	103	324	495
Wadena	0	305	7,000	0	7,305
Waseca	178	0	1,025	31	1,234
Washington	1,992	275	5,000	895	8,161
Watonwan	37	0	0	64	100
Wilkin	57	0	66	9	132
Winona	836	200	3,931	0	4,967
WLSSD Wright	395 67	508 4	12,092 194	108 558	13,103 823
Wright Yellow Medicine		250	15	44	
i ellow iviedicine	4	230	15	44	313
Metro Area	10,826	13,732	173,482	6,642	204,682
Greater Minn.	22,738	26,895	192,494	18,135	260,263
Minnesota	33,564	40,627	365,977	24,778	464,946

## County Survey Responses Glass collected for recycling (tons)

County	Food & beverage	Other glass	Total Glass
Aitkin	186	0	186
Anoka	5,433	96	5,528
Becker	500	0	500
Beltrami	995	26	1,021
Benton	431	379	810
Big Stone	58	0	58
Blue Earth	785	0	785
Brown	443	0	443
Carlton	604	0	604
Carver	1,167	0	1,167
Cass	173	0	173
Chippewa	239	0	239
Chisago	791	0	791
Clay	466	0	466
Clearwater	0	0	0
Cook	138	0	138
Cottonwood	103	0	103
Crow Wing	931	0	931
Dakota	4,766	0	4,766
Dodge	247	440	686
Faribault	82	68	150
Fillmore	398	0	398
Freeborn	1,888	0	1,888
Goodhue	1,429	0	1,429
Grant	121	0	121
Hennepin	21,878	0	21,878
Houston	141	0	141
Hubbard	419	0	419
Isanti	187	0	187
Itasca	935	0	935
Jackson	159	0	159
Kanabec	57	0	57
Kandiyohi	344	0	344
Kittson	147	0	147
Koochiching	68	0	68
Lac qui Parle	122	0	122
Lake	507	0	507
Lake of The Woods	500	0	500
Le Sueur	0	184	184
Lincoln	55	0	55
Lyon	194	0	194
Mahnomen	31	0	31
Marshall	147	0	147
Martin			
McLeod	920 337	370	1,290 337
		0	
Meeker Millo Loop	183	0	183
Mille Lacs	137	0	137
Morrison	424	0	424
Mower	329	0	329

## County Survey Responses Glass collected for recycling (tons)

County	Food & beverage	Other glass	Total Glass
Murray	160	0	160
Nicollet	0	238	238
Nobles	203	0	203
Norman	67	0	67
Olmsted	1,349	1,099	2,449
Otter Tail	534	2	536
Pennington	11	0	11
Pine	507	0	507
Pipestone	141	0	141
Polk	192	0	192
Pope/Douglas	1,163	0	1,163
Ramsey	7,324	0	7,324
Red Lake	130	0	130
Redwood	309	0	309
Renville	177	0	177
Rice	649	3,820	4,469
Rock	0	0	0
Roseau	190	3,655	3,845
Scott	1,077	0	1,077
Sherburne	1,105	334	1,440
Sibley	0	210	210
St. Louis - partial	1,218	0	1,218
Stearns	2,108	1,125	3,234
Steele	553	30,455	31,008
Stevens	118	0	118
Swift	249	0	249
Todd	105	0	105
Traverse	30	0	30
Wabasha	351	0	351
Wadena	154	0	154
Waseca	220	0	220
Washington	3,354	0	3,354
Watonwan	297	0	297
Wilkin	52	0	52
Winona	758	0	758
WLSSD	3,196	0	3,196
Wright	917	0	917
Yellow Medicine	207	0	207
Metro Area	45,027	430	45,457
Greater Minn.	34,745	42,071	76,816
Minnesota	79,772	42,502	122,274
wiii ii ie sota	13,112	72,002	144,414

### County Survey Responses Plastic collected for recycling (tons)

County	Film	HDPE	Mixed	Other	PET	Polystyrene	Total
•	plastic		plastic	plastic		,,	Plastics
Aitkin	0	0	69	0	0	0	69
Anoka	155	357	1,200	68	443	0	2,224
Becker	0	0	107	0	0	0	107
Beltrami	0	0	0	0	0	0	0
Benton	18	177	32	105	39	0	371
Big Stone	0	1	39	0	0	0	40
Blue Earth	147	19	2,169	180	502	59	3,076
Brown	11	0	424	303	0	0	737
Carlton	0	0	158	0	0	0	158
Carver	0	0	1,210	0	0	0	1,210
Cass	0	0	54	0	0	0	54
Chippewa	10	2	72	0	0	38	121
Chisago	2	0	284	0	0	0	286
Clay	0	0	133	0	0	0	133
Clearwater	0	0	0	0	0	0	0
Cook	0	0	41	0	0	0	41
Cottonwood	0	5	43	0	0	0	47
Crow Wing	0	0	230	25	0	0	256
Dakota	39	0	3,496	0	0	0	3,535
Dodge	0	0	216	0	0	0	216
Faribault	2	3	222	0	0	0	227
Fillmore	0	47	0	0	35	0	82
Freeborn	0	0	944	0	0	0	944
Goodhue	0	105	55	0	92	0	252
Grant	0	0	28	0	0	0	28
Hennepin	0	106	14,101	0	216	0	14,423
Houston	0	0	145	1	0	0	146
Hubbard	0	0	105	0	0	0	105
Isanti	0	0	142	0	0	0	142
Itasca	0	39	288	0	47	0	374
Jackson	0	0	68	0	0	0	68
Kanabec	0	0	23	0	0	0	23
Kandiyohi	0	64	0	0	67	0	132
Kittson	0	1	18	0	6	0	26
Koochiching	0	10	0	0	38	0	48
Lac qui Parle	0	0	0	0	28	0	28
Lake	0	0	63	0	0	0	63
Lake of The Woods	0	0	6	0	0	0	6
Le Sueur	0	0	60	24	61	0	145
Lincoln	0	20	0	0	10	0	30
Lyon	0	0	131	0	0	0	131
Mahnomen	0	0	5	0	0	0	5
Marshall	0	3	25	0	1	0	29
Martin	6	12	766	0	0	0	784
McLeod	2,785	0	158	0	0	220	3,163
Meeker	0	52	0	0	0	0	52
Mille Lacs	0	0	39	0	0	0	39
Morrison	2	0	104	1	0	0	107
						_	

## County Survey Responses: Plastic collected for recycling (tons)

County	Film	HDPE	Mixed	Other	PET	Polystyrene	Total
	plastic		plastic	plastic			Plastics
Mower	53	66	0	0	58	0	177
Murray	0	5	61	1	0	0	67
Nicollet	0	123	47	125	80	0	374
Nobles	0	172	0	0	147	0	319
Norman	0	0	0	0	0	0	0
Olmsted	0	0	709	0	0	44	754
Otter Tail	0	139	0	58	98	0	295
Pennington	0	0	12	0	0	0	12
Pine	0	0	17	0	0	0	17
Pipestone	0	0	469	0	0	0	469
Polk	0	0	108	0	0	0	108
Pope/Douglas	0	0	292	0	0	0	292
Ramsey	100	417	722	0	552	0	1,791
Red Lake	0	0	12	0	6	0	18
Redwood	70	25	158	0	6	0	259
Renville	0	0	37	0	0	0	37
Rice	35	300	70	0	298	0	703
Rock	0	12	0	1	39	0	53
Roseau	288	0	75	104	0	0	467
Scott	68	48	215	8	146	0	485
Sherburne	35	115	268	80	25	0	522
Sibley	0	1	38	0	8	0	46
St. Louis - partial	0	113	0	0	106	0	219
Stearns	132	632	538	560	259	0	2,121
Steele	20	0	121	6	0	0	147
Stevens	0	20	0	0	24	0	44
Swift	0	49	0	0	62	0	111
Todd	1	15	20	0	27	0	63
Traverse	0	0	13	0	0	0	13
Wabasha	0	0	126	0	0	0	126
Wadena	0	0	128	0	0	0	128
Waseca	0	24	52	38	60	0	174
Washington	165	14	1,085	0	15	0	1,278
Watonwan	0	0	88	0	0	0	88
Wilkin	0	0	14	0	0	0	14
Winona	0	0	450	0	0	0	450
WLSSD	83	0	968	0	0	0	1,052
Wright	0	0	237	0	6	0	244
Yellow Medicine	0	0	25	0	0	0	25
		1 6 : 5	00.000				0.1.555
Metro Area	493	1,010	22,083	148	1,249	0	24,983
Greater Minn.	3,733	2,301	12,570	1,540	2,356	361	22,862
Minnesota	4,227	3,311	34,653	1,688	3,605	361	47,845

	Cood to		Source-	
County	Food to	Food to people	separated organics	Total
Aitkin	0	0	0	0
Anoka	3,485	0	0	3,485
Becker	0,400	0	0	0,400
Beltrami	0	0	0	0
Benton	31	0	0	31
Big Stone	0	0	84	84
Blue Earth	0	0	0	0
Brown	2,973	0	0	2,973
Carlton	2,973	0	0	2,973
Carver	9,735	0	0	9,735
Cass	9,735			
	0	0	0	0
Chippewa	0			0
Chisago		0	0	0
Clay	6,383	95	0	6,478
Clearwater	0	0	0	0
Cook	0	0	0	0
Cottonwood	0	0	0	0
Crow Wing	569	0	0	569
Dakota	16,394	0	1	16,395
Dodge	0	0	387	387
Faribault	0	0	0	0
Fillmore	0	0	0	0
Freeborn	0	0	0	0
Goodhue	350	0	0	350
Grant	0	0	0	0
Hennepin	53,994	0	482	54,476
Houston	0	0	0	0
Hubbard	84	0	0	84
Isanti	123	0	0	123
Itasca	0	0	0	0
Jackson	0	0	0	0
Kanabec	0	0	0	0
Kandiyohi	156	0	0	156
Kittson	105	0	0	105
Koochiching	0	0	0	0
Lac qui Parle	0	0	0	0
Lake	0	0	0	0
Lake of The Woods	0	0	76	76
Le Sueur	4,300	0	0	4,300
Lincoln	0	0	0	0
Lyon	0	0	0	0
Mahnomen	0	0	0	0
Marshall	0	0	0	0
Martin	0	0	0	0
McLeod	0	0	2,079	2,079
Meeker	0	15	0	15
Mille Lacs	0	0	0	0
IVIIIIE Lacs	0	0	0	C

	Food to		Source-	
County		Food to people	separated organics	Total
Morrison	0	3	0	3
Mower	0	0	0	0
Murray	0	0	450	450
Nicollet	0	0	0	0
Nobles	113	0	0	113
Norman	0	0	0	0
Olmsted	2,126	0	1	2,127
Otter Tail	8,522	0	0	8,522
Pennington	0	0	0	0
Pine	135	0	0	135
Pipestone	0	0	0	0
Polk	2,308	0	0	2,308
Pope/Douglas	0	0	0	0
Ramsey	21,709	0	27	21,736
Red Lake	0	0	0	0
Redwood	250	490	0	740
Renville	0	0	890	890
Rice	24,010	0	200	24,210
Rock	0	0	0	0
Roseau	0	0	0	0
Scott	0	0	941	941
Sherburne	502	0	0	502
Sibley	2,923	0	0	2,923
St. Louis - partial	0	0	0	0
Stearns	1,618	0	0	1,618
Steele	0	0	0	0
Stevens	0	0	0	0
Swift	0	0	964	964
Todd	0	0	0	0
Traverse	0	0	0	0
Wabasha	0	3,710	0	3,710
Wadena	0	0	0	0
Waseca	0	0	0	0
Washington	2,721	0	0	2,721
Watonwan	0	0	0	0
Wilkin	0	0	0	0
Winona	1,027	0	0	1,027
WLSSD	323	113	1,069	1,505
Wright	0	0	0	0
Yellow Medicine	0	0	0	0
Metro Area	108,540	-	510	109,050
Greater Minn.	58,426	4,427	7,140	69,993
Minnesota	166,966	4,427	7,650	179,043

				Unspecified or	Mattresses &	
County	Carpet	Textiles	Pallets	Other	box springs	Total
Aitkin	0	0	0	16	0	16
Anoka	0	3,257	1,955	4,456	0	9,668
Becker	0	0	0	39	0	39
Beltrami	0	0	0	0	0	0
Benton	0	0	0	0	0	0
Big Stone	0	5	0	0	0	5
Blue Earth	0	952	20,020	0	0	20,972
Brown	0	0	2,786	175	0	2,960
Carlton	0	0	0	0	15	15
Carver	0	5	684	678	0	1,367
Cass	0	21	0	0	0	21
Chippewa	0	0	0	152	0	152
Chisago	0	97	25	0	7	129
Clay	0	234	128	0	2	365
Clearwater	0	10	0	0	0	10
Cook	0	10	0	23	0	33
Cottonwood	0	0	1,500	2,400	0	3,900
Crow Wing	0	202	0	19,005	22	19,229
Dakota	0	368	10,808	46,066	0	57,243
Dodge	0	0	29	40,000	0	30
Faribault	0	0	0	0	0	0
Fillmore	0	12	9	364	0	385
Freeborn	0	2	60	0	0	62
Goodhue	0	16	4	0	0	21
Grant	0	0	0	172	0	172
	0	131	9,659	289,072	0	298,863
Hennepin		21				290,003
Houston	0		0	0	0	
Hubbard	0	176	0	0	0	176
Isanti	0	0	642	0	16	658
Itasca	0	0	2,625	0	0	2,625
Jackson	0	78	634	304	0	1,016
Kanabec	0	0	1	0	289	290
Kandiyohi	0	0	0	0	0	0
Kittson	0	0	0	0	0	0
Koochiching	0	0	48	0	0	48
Lac qui Parle	0	0	0	0	0	0
Lake	0	0	0	0	2	2
Lake of The Woods	0	0	0	0	0	0
Le Sueur	0	0	672	0	0	672
Lincoln	0	9	0	0	0	9
Lyon	0	273	0	6,374	0	6,647
Mahnomen	0	0	0	0	0	0
Marshall	0	0	0	0	0	0
Martin	0	75	1,600	0	0	1,675
McLeod	0	0	563	3,087	0	3,650
Meeker	0	0	858	211	0	1,069
Mille Lacs	0	0	0	0	3	3
Morrison	0	62	1,213	10	50	1,335

				Unspecified or	Mattresses &	
County	Carpet	Textiles	Pallets	Other	box springs	Total
Mower	0	0	9,911	0	0	9,911
Murray	0	159	57	0	0	216
Nicollet	0	3	399	0	0	402
Nobles	0	93	117	0	0	210
Norman	0	0	0	0	0	0
Olmsted	0	571	1,015	0	0	1,586
Otter Tail	0	214	288	727	0	1,228
Pennington	0	0	43	0	0	43
Pine	0	0	0	0	0	0
Pipestone	0	75	1,500	0	0	1,575
Polk	0	0	0	1,775	0	1,775
Pope/Douglas	120	8	0	0	0	128
Ramsey	0	4,148	4,693	151,279	0	160,120
Red Lake	0	0	0	0	0	0
Redwood	16	905	800	3,321	0	5,042
Renville	0	45	0	0	0	45
Rice	0	90	1,698	3	0	1,791
Rock	0	20	861	0	0	881
Roseau	0	0	1,140	0	0	1,140
Scott	80	402	2,334	0	0	2,816
Sherburne	0	0	274	22	0	296
Sibley	0	0	73	0	0	73
St. Louis - partial	0	0	0	0	60	60
Stearns	0	1,300	6,448	2,413	0	10,161
Steele	0	190	5,537	11	0	5,738
Stevens	0	0	0	0	0	0
Swift	0	0	0	0	0	0
Todd	0	0	0	0	0	0
Traverse	0	0	0	0	0	0
Wabasha	0	4	4,160	0	0	4,164
Wadena	0	0	0	0	0	0
Waseca	0	143	0	75	0	218
Washington	0	197	182	3,003	0	3,383
Watonwan	0	0	0	0	0	0
Wilkin	0	0	0	0	0	0
Winona	0	0	3,059	0	0	3,059
WLSSD	0	1,661	2,725	135	67	4,588
Wright	0	0	1	0	0	1
Yellow Medicine	0	0	0	255	0	255
						0
Metro Area	-	8,107	28,255	494,577	-	530,939
Greater Minn.	216	8,137	75,582	41,049	534	125,518
Minnesota	216	16,244	103,837	535,626	534	656,457

# County Survey Responses Problem materials (banned) collected for recycling (tons)

County	Antifreeze	Fl Electronics	luorescent & HID lamps	HHW	Latex paint	Major appliances	Used oil	Used oil filters	Vehicle batteries	Waste tires	Total problem matls
Aitkin	0	26	1	3	5	150	78	8	102	164	536
Anoka	11	230	22	4	97	1,972	263	154	2,017	657	5,425
Becker	0	26	2	17	10	194	26	15	198	65	553
Beltrami	3	97	2	0	0	400	34	20	265	120	941
Benton	0	1	0	0	3	233	31	18	238	78	602
Big Stone	0	1	1	0	0	33	16	5	34	50	140
Blue Earth	50	122	34	22	13	646	143	83	1,107	2,008	4,228
Brown	0	3	5	19	13	159	21	12	163	53	448
Carlton	1	16	1	0	0	205	27	16	210	68	545
Carver	6	127	3	36	59	517	69	40	529	172	1,558
Cass	1	30	4	9	5	268	23	14	178	233	764
Chippewa	0	11	1	0	0	106	10	6	78	1,145	1,358
Chisago	5	37	3	37	42	302	40	23	309	101	898
Clay	18	73	7	20	18	329	232	26	337	363	1,423
Clearwater	0	7	2	4	0	56	7	4	52	66	198
Cook	0	0	0	0	0	32	4	3	33	11	84
Cottonwood	0	10	0	2	2	71	27	6	73	69	261
Crow Wing	9	172	26	2	17	643	49	36	402	131	1,488
Dakota	70	851	110	47	203	2,350	313	185	2,404	783	7,315
Dodge	0	31	1	0	0	121	16	10	124	40	343
Faribault	1	20	4	1	2	92	12	7	95	31	265
Fillmore	8	8	2	0	14	152	18	10	135	44	392
Freeborn	6	18	1	12	14	244	520	17	214	325	1,371
Goodhue	0	20	9	0	0	277	37	22	283	92	739
Grant	0	5	2	4	2	37	5	3	37	12	107
Hennepin	38	2,266	1	0	561	6,915	922	539	7,074	2,305	20,621
Houston	0	2,200 58	2	3	0	305	16	9	122	179	695
Hubbard	0	70	4	6	3	380	34	9	116	357	978
Isanti	0	0	0	3	5	231	31	18	236	77	600
Itasca	2	35	3	0	0	1,300	35	21	272	89	1,757
Jackson	0	8	4	1	1	67	9	5	69	22	1,737
Kanabec	2	367	0	7	0	598	55	8	100	109	1,246
Kandiyohi	0	0	0	0	0	250	33	19	256	83	642
Kittson	0	2	1	0	1	29	33 4	2	29	10	77
Koochiching	-	0	2	2	0	83	11	6	85	28	216
Lac qui Parle	0	7	0	3	2	65 45	22	4	46	26 15	143
Lake	0 8	7 27	2	3 10	7	45 67	22 244	13	46 68	117	
Lake of The	0	21	2	10	,	67	244	13	00	117	562
Woods	0	0	4	_	4	07	4	2	07	40	400
	0	0	1 5	2	1	27	4	3	27	43 67	108
Le Sueur	18	69		8	5	229	22	13	171		607
Lincoln	0	3	1	1	0	38	21	3	39	29	135
Lyon	0	22	0	0	0	150	20	12	154	121	479
Mahnomen	0	0	0	0	0	31	4	2	31	10	79
Marshall	1	1	1	4	2	60	8	5	61	40	183
Martin	9	450	12	37	8	275	25	11	134	78	1,039
McLeod	0	45	8	45	26	1,318	30	17	227	74	1,791
Meeker	4	35	19	0	10	141	19	11	144	47	429
Mille Lacs	0	5	0	5	0	156	21	12	160	52	412
Morrison	1	26	10	0	8	221	356	15	203	370	1,210
Mower	3	12	4	0	5	234	31	18	239	78	624

# County Survey Responses Problem materials (banned) collected for recycling (tons)

County	Antifreeze	F Electronics	Fluorescent & HID lamps	HHW	Latex paint	Major appliances	Used oil	Used oil filters	Vehicle batteries	Waste tires	Total problem matls
Murray	0	0	0	0	0	55	15	4	56	25	155
Nicollet	6	41	10	2	21	337	26	15	196	115	769
Nobles	13	0	13	7	3	123	16	10	126	41	352
Norman	0	14	1	2	1	42	6	3	43	14	127
Olmsted	45	2,593	0	0	29	829	111	65	848	276	4,796
Otter Tail	0	78	0	32	24	364	49	32	372	165	1,116
Pennington	0	4	1	3	2	82	11	6	84	27	221
Pine	0	0	0	0	0	1,153	23	13	174	76	1,439
Pipestone	0	0	3	3	0	57	8	4	58	19	152
Polk	0	19	2	2	1	219	25	15	191	94	568
Pope/Douglas	0	0	22	26	14	280	306	22	287	93	1,050
Ramsey	15	178	15	0	242	3,092	412	241	3,163	1,031	8,388
Red Lake	0	0	0	1	0	26	3	2	27	9	68
Redwood	59	741	13	13	7	145	510	25	560	842	2,915
Renville	0	35	3	4	3	159	14	8	105	124	455
Rice	68	102	14	17	28	411	50	29	409	125	1,253
Rock	0	5	2	2	1	57	8	4	59	346	483
Roseau	4	3	6	0	2	99	13	12	108	47	294
Scott	275	210	16	172	95	718	2,601	89	910	239	5,324
Sherburne	12	166	8	0	19	510	68	40	522	170	1,515
Sibley	1	12	2	0	9	115	12	7	94	87	340
St. Louis -											
partial	513	63	8	71	0	3,508	513	38	494	893	6,101
Stearns	59	28	3	0	0	867	777	67	887	1,075	3,762
Steele	0	119	10	3	12	217	29	17	222	72	701
Stevens	0	13	4	6	0	59	8	5	60	20	174
Swift	0	0	2	0	0	69	9	5	70	23	179
Todd	0	16	1	0	1	227	20	12	151	102	530
Traverse	0	0	1	1	1	29	3	2	23	8	66
Wabasha	0	9	1	4	7	135	18	10	138	45	366
Wadena	0	22	0	0	0	84	11	6	251	27	401
Waseca	0	0	2	3	0	118	16	9	120	39	307
Washington	12	59	9	0	174	1,369	182	107	1,400	456	3,768
Watonwan	0	0	1	0	2	69	9	5	71	23	181
Wilkin	0	0	2	0	0	88	10	10	45	35	190
Winona	0	0	0	22	19	300	40	23	306	100	811
WLSSD	48	384	11	11	85	695	93	147	711	232	2,416
Wright	1	22	2	30	45	689	92	54	705	230	1,869
Yellow		•	•	•		0.4		_	0.5	0.4	400
Medicine	0	0	0	0	0	64	8	5	65	21	163
Metro Area	163	3,876	167	87	1,354	16,724	2,230	1,304	17,109	5,575	48,590
Greater MN	1,243	6,509	343	725	657	23,469	7,895	1,384	16,683	13,071	71,980
Minnesota	1,406	10,386	510	812	2,011	40,193	10,125	2,688	33,792	18,646	120,570

# County Survey Responses Wastes generated (tons)

	Estimated	Problem matls	Tons to MSW	Tons	
	tons of MSW	not collected for	disposal/processing	collected for	Total tons
County	not collected	recycling	facilities	recycling	generated
Aitkin	275	187	9,281	2,465	12,208
Anoka	0	8,288	183,009	146,618	337,914
Becker	252	813	18,729	13,165	32,959
Beltrami	0	988	22,349	7,826	31,163
Benton	2,827	978	19,119	29,857	52,781
Big Stone	910	88	2,579	1,124	4,701
Blue Earth	1,343	800	37,848	77,706	117,697
Brown	2,267	664	14,637	25,750	43,318
Carlton	685	863	13,137	4,907	19,592
Carver	294	2,175	52,682	41,969	97,120
Cass	0	512	17,365	9,321	27,198
Chippewa	1,679	201	8,736	3,741	14,357
Chisago	420	1,268	23,377	8,270	33,335
Clay	833	943	26,289	14,084	42,149
Clearwater	126	158	4,095	983	5,362
Cook	30	135	4,745	1,412	6,322
Cottonwood	1,006	231	5,601	5,920	12,758
Crow Wing	246	1,408	40,478	48,058	90,190
Dakota	0	9,875	223,192	180,581	413,647
Dodge	875	491	8,741	5,868	15,974
Faribault	2,180	385	7,573	6,029	16,167
Fillmore	3,022	503	5,443	2,452	11,421
Freeborn	420	0	27,294	17,594	45,308
Goodhue	420	1,162	30,023	13,421	45,026
Grant	753	153	2,015	799	3,719
Hennepin	0	29,066	982,230	598,179	1,609,475
Houston	504	331	5,273	2,443	8,551
Hubbard	0	278	15,039	6,539	21,856
Isanti	1,931	969	22,721	7,416	33,037
Itasca	466	1,052	26,497	14,536	42,551
Jackson	942	280	4,831	3,623	9,676
Kanabec	1,259	267	8,192	2,374	12,092
Kandiyohi	840	1,051	28,118	7,131	37,140
Kittson	90	118	1,653	684	2,545
Koochiching	315	341	8,069	3,121	11,846
Lac qui Parle	1,679	173	3,607	1,531	6,990
Lake	252	22	6,667	2,760	9,701
Lake of The Woods		75	2,692	1,289	4,072
Le Sueur	1,028	651	17,792	10,918	30,389
Lincoln	1,007	115	2,102	622	3,846
Lyon	812	559	20,112	15,657	37,141
Mahnomen	217	127	1,325	346	2,015
Marshall	315	230	4,622	839	6,006
Martin	2,375	443	9,854	21,392	34,064
McLeod	2,099	879	19,140	15,793	37,910
Meeker	588	591	9,129	4,116	14,423
Mille Lacs	1,679	657	13,030	1,798	17,165
Morrison	378	216	13,169	12,018	25,781
Mower	1,301	978	26,078	18,241	46,598
	.,	3,0	==,3.0	-,	-,

### County Survey Responses Wastes generated (tons)

	Estimated	Problem matls	Tons to MSW	Tons	
		not collected for	disposal/processing		Total tons
County	not collected	recycling	facilities	recycling	generated
Murray	877	201	2,998	2,461	6,538
Nicollet	1,049	706	17,756	15,090	34,601
Nobles	1,154	516	7,364	6,629	15,664
Norman	21	173	3,008	1,017	4,219
Olmsted	579	3,486	87,183	52,390	143,638
Otter Tail	965	1,398	34,404	23,342	60,110
Pennington	1,637	345	13,113	2,126	17,220
Pine	1,767	653	19,718	6,512	28,650
Pipestone	1,196	237	4,553	3,686	9,673
Polk	189	720	17,063	10,545	28,517
Pope/Douglas	496	908	30,846	17,384	49,635
Ramsey	0	12,987	408,757	302,847	724,590
Red Lake	8	104	1,560	583	2,256
Redwood	1,891	0	8,045	16,307	26,243
Renville	2,183	299	8,015	3,285	13,782
Rice	2,560	1,508	46,800	45,378	96,246
Rock	546	164	4,019	4,957	9,686
Roseau	682	389	10,208	8,720	19,999
Scott	0	1,137	70,572	71,523	143,231
Sherburne	1,259	2,144	51,004	31,407	85,814
Sibley	443	306	5,875	4,968	11,593
St. Louis - partial	331	817	54,039	62,748	117,935
Stearns	1,198	2,196	73,269	87,155	163,819
Steele	1,049	912	32,839	45,092	79,892
Stevens	403	244	5,394	1,490	7,532
Swift	1,078	290	4,036	3,093	8,497
Todd	1,049	526	10,970	18,164	30,709
Traverse	504	90	1,297	415	2,306
Wabasha	614	566	9,281	14,763	25,224
Wadena	378	335	8,329	8,283	17,325
Waseca	78	494	10,307	37,295	48,175
Washington	0	5,753	101,509	89,797	197,058
Watonwan	1,049	289	7,148	2,615	11,101
Wilkin	840	130	2,127	1,056	4,153
Winona	1,217	1,258	25,891	24,180	52,546
WLSSD	3,652	2,914	64,505	55,770	126,840
Wright	1,511	2,895	50,400	15,432	70,239
Yellow Medicine	1,175	263	4,956	1,843	8,238
TOHOW WIGHTS	.,	200	1,000	1,010	0,200
Metro Area	294	69,279	2,021,951	1,431,513	3,523,036
Greater Minn.	76,292	51,814	1,357,484	1,092,122	2,577,712
Minnesota	76,586	121,093	3,379,435	2,523,635	6,100,748

### County Survey Responses Recycling rate

	Tons		Percent of MSW	Source		Recycling
_	collected for	Total MSW	collected for	reduction	waste	rate with
County	recycling	generated	recycling	credit	credit	credits
Aitkin	2,465	12,208	20.2%	3%	5%	28.2%
Anoka	146,618	337,914	43.4%	3%	5%	51.4%
Becker	13,165	32,959	39.9%	3%	5%	47.9%
Beltrami	7,826	31,163	25.1%	1%	5%	31.1%
Benton	29,857	52,781	56.6%	2%	5%	63.6%
Big Stone	1,124	4,701	23.9%	2%	3%	28.9%
Blue Earth	77,706	117,697	66.0%	3%	5%	74.0%
Brown	25,750	43,318	59.4%	3%	5%	67.4%
Carlton	4,907	19,592	25.0%	3%	5%	33.0%
Carver	41,969	97,120	43.2%	3%	5%	51.2%
Cass	9,321	27,198	34.3%	2%	5%	41.3%
Chippewa	3,741	14,357	26.1%	0%	5%	31.1%
Chisago	8,270	33,335	24.8%	3%	5%	32.8%
Clay	14,084	42,149	33.4%	3%	5%	41.4%
Clearwater	983	5,362	18.3%	2%	0%	20.3%
Cook	1,412	6,322	22.3%	3%	5%	30.3%
Cottonwood	5,920	12,758	46.4%	2%	5%	53.4%
Crow Wing	48,058	90,190	53.3%	7%	5%	65.2%
Dakota	180,581	413,647	43.7%	3%	5%	51.7%
Dodge	5,868	15,974	36.7%	3%	5%	44.7%
Faribault	6,029	16,167	37.3%	3%	5%	45.3%
Fillmore	2,452	11,421	21.5%	3%	5%	29.5%
Freeborn	17,594	45,308	38.8%	3%	5%	46.8%
Goodhue	13,421	45,026	29.8%	1%	5%	35.8%
Grant	799	3,719	21.5%	0%	5%	26.5%
Hennepin	598,179	1,609,475	37.2%	3%	5%	45.2%
Houston	2,443	8,551	28.6%	3%	5%	36.6%
Hubbard	6,539	21,856	29.9%	3%	5%	37.9%
Isanti	7,416	33,037	22.4%	3%	5%	30.4%
Itasca	14,536	42,551	34.2%	3%	5%	42.2%
Jackson	3,623	9,676	37.4%	3%	5%	45.4%
Kanabec	2,374	12,092	19.6%	2%	5%	26.6%
Kandiyohi	7,131	37,140	19.2%	2%	5%	26.2%
Kittson	684	2,545	26.9%	3%	5%	34.9%
Koochiching	3,121	11,846	26.3%	1%	5%	32.3%
Lac qui Parle	1,531	6,990	21.9%	3%	5%	29.9%
Lake	2,760	9,701	28.5%	3%	5%	36.5%
Lake of The Woods	1,289	4,072	31.6%	1%	5%	37.6%
Le Sueur	10,918	30,389	35.9%	3%	5%	43.9%
Lincoln	622	3,846	16.2%	3%	5%	24.2%
Lyon	15,657	37,141	42.2%	0%	5%	47.2%
Mahnomen	346	2,015	17.1%	3%	5%	25.1%
Marshall	839	6,006	14.0%	3%	5%	22.0%
Martin	21,392	34,064	62.8%	3%	5%	70.8%
McLeod	15,793	37,910	41.7%	2%	5%	48.7%
Meeker	4,116	14,423	28.5%	3%	5%	36.5%
Mille Lacs	1,798	17,165	10.5%	1%	5%	16.5%
Morrison	12,018	25,781	46.6%	3%	5%	54.6%
Mower	18,241	46,598	39.1%	3%	5%	47.1%
Murray	2,461	6,538	37.6%	3%	5%	45.6%

### County Survey Responses Recycling rate

	Tons		Percent of MSW	Source	Yard	Recycling
	collected for	Total MSW	collected for	reduction	waste	rate with
County	recycling	generated	recycling	credit	credit	credits
Nicollet	15,090	34,601	43.6%	3%	5%	51.6%
Nobles	6,629	15,664	42.3%	3%	5%	50.3%
Norman	1,017	4,219	24.1%	0%	0%	24.1%
Olmsted	52,390	143,638	36.5%	3%	5%	44.5%
Otter Tail	23,342	60,110	38.8%	3%	5%	46.8%
Pennington	2,126	17,220	12.3%	3%	5%	20.3%
Pine	6,512	28,650	22.7%	3%	5%	30.7%
Pipestone	3,686	9,673	38.1%	3%	5%	46.1%
Polk	10,545	28,517	37.0%	3%	5%	45.0%
Pope/Douglas	17,384	49,635	35.0%	3%	5%	43.0%
Ramsey	302,847	724,590	41.8%	3%	5%	49.8%
Red Lake	583	2,256	25.9%	3%	5%	33.9%
Redwood	16,307	26,243	62.1%	3%	5%	70.1%
Renville	3,285	13,782	23.8%	3%	5%	31.8%
Rice	45,378	96,246	47.1%	3%	5%	55.1%
Rock	4,957	9,686	51.2%	3%	5%	59.2%
Roseau	8,720	19,999	43.6%	3%	5%	51.6%
Scott	71,523	143,231	49.9%	3%	5%	57.9%
Sherburne	31,407	85,814	36.6%	3%	5%	44.6%
Sibley	4,968	11,593	42.9%	3%	5%	50.9%
St. Louis - partial	62,748	117,935	53.2%	3%	5%	61.2%
Stearns	87,155	163,819	53.2%	3%	5%	61.2%
Steele	45,092	79,892	56.4%	2%	5%	63.4%
Stevens	1,490	7,532	19.8%	3%	5%	27.8%
Swift	3,093	8,497	36.4%	3%	5%	44.4%
Todd	18,164	30,709	59.1%	2%	5%	66.1%
Traverse	415	2,306	18.0%	3%	5%	26.0%
Wabasha	14,763	25,224	58.5%	3%	5%	66.5%
Wadena	8,283	17,325	47.8%	1%	5%	53.8%
Waseca	37,295	48,175	77.4%	1%	5%	83.4%
Washington	89,797	197,058	45.6%	3%	5%	53.6%
Watonwan	2,615	11,101	23.6%	0%	0%	23.6%
Wilkin	1,056	4,153	25.4%	3%	5%	33.4%
Winona	24,180	52,546	46.0%	3%	5%	54.0%
WLSSD	55,770	126,840	44.0%	3%	5%	52.0%
Wright	15,432	70,239	22.0%	3%	5%	30.0%
Yellow Medicine	1,843	8,238	22.4%	1%	5%	28.4%
Metro Area	1,431,513	3,523,036	40.63%	3.0%	5.0%	48.6%
Greater Minn.	1,092,122	2,577,712	42.37%	2.5%	4.8%	49.7%
Minnesota	2,523,635	6,100,748	41.37%	2.6%	4.8%	48.7%

## Appendix C. Policy Report Stakeholder Engagement, June 2007 through February 2008

MPCA staff and leadership began by preparing a discussion paper that proposed to structure its biennial solid waste policy report around the twin themes of energy gains and greenhouse-gas reductions. Following that paper MPCA staff and leadership met with more than 300 people statewide in the following stakeholder gatherings. This initial round of meetings went from June to September 2007. Follow-up meetings lasted into February 2008.

- Environmental Innovations Advisory Council
- Solid Waste Management Coordinating Board Lead staff
- Solid Waste Management Coordinating Board Monthly Meeting
- Source Separated Organics Working Group
- Minnesota Environmental Initiative
- Solid Waste Association of North America Minnesota Chapter
- Association of Minnesota Counties Solid Waste Advisory Committee
- Northeast Waste Advisory Council (NEWAC)
- Minnesota Chamber of Commerce Environmental Policy Committee meeting
- Minnesota Resource Recovery Association annual meeting
- Solid Waste Administrators Association executive board meeting
- Solid Waste Administrators Association annual meeting
- Association of Recycling Managers and Recycling Association of Minnesota combined meeting
- EPA Region 5 Annual State Solid Waste Managers meeting

MPCA hosted a joint meeting of stakeholder representatives on October 12, 2007, to discuss a list of "straw policy proposals," meaning proposals not yet endorsed by leadership. Attendance at these meetings numbered about 50.

MPCA distributed a first-draft Policy Report with a range of policy options on December 21, 2007. After hearing that more time was needed, MPCA extended the comment deadline to January 25, 2008, for a total of five weeks. MPCA staff relayed all letters, e-mails, and attachments directly to leadership and also collated the comments by topic in the form of a spreadsheet (Appendix D).

As part of the time-extension offer that was distributed via electronic mail and website, MPCA Commissioner Brad Moore also offered twelve meeting slots on the morning of January 31, 2008, to stakeholder groups on a first-come, first-served basis. All slots were filled. Groups that met with Commissioner Moore were:

- East Central Solid Waste Commission
- Association of Minnesota Counties
- National Solid Wastes Management Association and Minnesota Chamber of Commerce

- Solid Waste Management Coordinating Board
- Eureka Recycling
- Minnesota Resource Recovery Association
- Association of Recycling Managers and Recycling Association of Minnesota
- Goodhue County Board
- Neighbors Against the Burner
- St. Louis County Solid Waste Department
- Solid Waste Administrator's Association
- Minnesota Beverage Association and Midwest Coca Cola Co.

# Appendix D. Comments from Stakeholders on MPCA Policy Report Comment Draft of December 21, 2007

Commenter first name	Commenter last name	Organization	SWPR Draft Part	Stakeholder comment
Buzz	Anderson	Mn Retailers Assoc	Overall	Should remove Pts 3B and 3C from draft
Buzz	Anderson	Mn Retailers Assoc	Overall	Retailers are major recyclers without govt mandates
Joan	Archer	Minnesota Bev Assoc	Overall	Oppose ban on bev containers from landfills
Joan	Archer	Minnesota Bev Assoc	Overall	Bottles and cans only 2% of all waste
Joan	Archer	Minnesota Bev Assoc	Overall	Indus realizes has a role to be stewards of own pkg
Joan	Archer	Minnesota Bev Assoc	Overall	Landfill ban won't achieve the broad goals MPCA sets out
Joan	Archer	Minnesota Bev Assoc	Overall	Eliminate section
Joan	Archer	Minnesota Bev Assoc	Overall	MPCA should raise funding to local govts to raise recycling
Joan	Archer	Minnesota Bev Assoc	Overall	MPCA should reinvigorate campaigns thru education and motivation
Joan	Archer	Minnesota Bev Assoc	Overall	encourage single stream statewide and use economic incen like recycleBank
ARM-RAM	ARM-RAM	ARM-RAM	Overall	recycling is major benefit env and job-wise; yet has plateaued in state; 27% of resid discard is recyclingclable and 26% is compostable organic
ARM-RAM	ARM-RAM	ARM-RAM	Overall	SWMCB counties saved 7.2 trillion BTU with recycling, avoided 249,000 metric tons of carbon equiv, and resources (list)
ARM-RAM	ARM-RAM	ARM-RAM	Overall	SCORE to counties is 1/3 less than in 91, tho stream is bigger
ARM-RAM	ARM-RAM	ARM-RAM	Overall	Should add \$5 million in FY 09 than \$6 million per year to SCORE grant total
ARM-RAM	ARM-RAM	ARM-RAM	Overall	Matrial Recovery Facilities need reporting and certif requirements - data now is poor; can't know if residue rates are correct when evaluating exemption from SWM Tax
ARM-RAM	ARM-RAM	ARM-RAM	Overall	State is allowing uses for residues like broken glass that are not recycling (drainage media) - citizens expect true recycling - definition of recycling should apply to MRFs
ARM-RAM	ARM-RAM	ARM-RAM	Overall	Env Preferable Purchasing - extend price preference to paper so that agencies buy at least 30% PCC and are encouraged to buy 100% PCC
Mike	Berkopec	ACE Solid waste	Overall	Opposed to market manipulation proposed in draft

Mike	Berkopec	ACE Solid waste	Overall	Organized collection will put us out of business - will benefit larger haulers and hurt consumers
Jean	Buckley	City of Bloomington	Overall	Org collection would have huge impact on GHG cuts but guess is too controversial right now
Doug	Carnival	NSWMA	Overall	Not clear what proposal is - looks like artificial pricing structure to boost recycling
ECSWC	ECSWC	East Central SWC handout	Overall	Landfill gas to energy using recirculation of leachate is renewable energy; is reliable (available 95% of time)
ECSWC	ECSWC	East Central SWC handout	Overall	maintain leachate recirc as accepted practice - aids Landfill gas recovery for energy
ECSWC	ECSWC	East Central SWC handout	Overall	Do not require landfills that recirculate leachate to control gas with flares - would cost operators their CCX credits
Mark	Gamm	SWAA	Overall	Draft is comprehensive and bold; there will be opposition, but issues need attention
Mark	Gamm	SWAA	Overall	Minnesota has high rate of Landfill diversion but recycling rates are flat due to stagnation of SCORE funding; without rise even a 0.5% increase in recycling is doubtful
Mark	Gamm	SWAA	overall	Good to see MPCA involved and willing to take leadership role, but concerned on funding and workability - counties cannot afford new efforts
Mark	Gamm	SWAA	overall	See SWAA 2008 Policy Platform, attached
Mark	Gamm	Dodge County	overall	Support policies that consider econ of scale, consider SW mgmt as integral part of energy policy; leads to stable funding for local govts in pursuit of state goals
Mark	Gamm	Dodge County	Overall	While impt to set incentives to reach GHG and energy goals need funding to sustain base level recycling and HHW services in all areas of state
Wayne	Hanson	Great River Energy	Overall	Disappointed by major focus - suggests Minnesota should continue relying on landfilling while picking out a few items like cans and phone books
Susan Tim	Hubbard Brownell	Eureka Recycling	Overall	lack of vision, garbage not renewable energy and energy return minimal, there is opposition to "energy" as focus if assume it means WTE, 3x increase in WTE called for
Greg	Isakson (and county board)	Goodhue County	Overall	Lack of substance re: GHG and energy goals and need to restore SCORE money; report fails to pick up on Gov's renewable energy goals; small pct of energy addressed, MPCA should show solid leadership
Greg	Isakson (and county board)	Goodhue County	Overall	Need bold leadership to get recycling off current plateau; energy should be immediate not long-term goal; focus on 2.2 million Landfill tons and can do by taxing every ton to Landfill for WTE and MRF

Leigh	Lenzmeier	For MRRA - also Stearns County Board member	Overall	MRRA members combust 1.1 million tons/yr, provide renewable energy to 100K homes, generating 110 Mwe; now is time to expand WTE given new energy and GHG goals; WTE hasn't kept pace; pressing need for state leadership, reengaged MPCA, and more funding
Leigh	Lenzmeier	For MRRA - also Stearns County Board member	Overall	Toxic reduction is impt element - better to eliminate use of toxics like lead, mercury and cadmium than deal with at back end - would like to see more product stewardship about this in report
Vern	Massie	Hubbard County	Overall	Generally good education, enforcement and money all have to happen at same time whenever you want to change system - make sure it fits with common sense
Doug	Morris	Crow Wing	Overall	Counties are losing personnel
Doug	Morris	Crow Wing	Overall	MPCA needs to give direction on used oil collection by counties - looks like 775K gal are not coming into system and could be recycling or burned
Doug	Morris	Crow Wing	Overall	Promote grease collection for biodiesel and to keep out of WWTP
Doug	Morris	Crow Wing	Overall	Need better tie to nonprofits like Salvation Army work
Doug	Morris	Crow Wing	Overall	Counties want to tie into national product stewardship work for prob matls like thermostats, nicad batts
Doug	Morris	Crow Wing	Overall	Can't use bans for items that won't be seen at scale house - works for tires and appliances and electronics but not anything that goes in trash bag
Jim	Mulder	Assoc of Minnesota Counties	Overall	Are many statements about incr of recycling goals - counties feel while good will need much more state financial help - see particular additional enforcement duties
Jim	Mulder	Assoc of Minnesota Counties	Overall	Impt for state to show leadership and take action on GHG progress and on WTE capacity - WTE woud go a long way to reinforcing the WM hieararchy
Jim	Mulder	Assoc of Minnesota Counties	Overall	AMC will help in stakeholder process - appreciate lines of communication counties and MPCA
Jim	Mulder	Assoc of Minnesota Counties	Overall	supports existing e waste and use of manufacturer payments to pay LGUs when necy
Jim	Mulder	Assoc of Minnesota Counties	Overall	support PS with emphasis on costs supp'd by industry

Jim	Mulder	Assoc of Minnesota Counties	Overall	support SCORE money for recycling activities mandated by Legis
Jim	Mulder	Assoc of Minnesota Counties	Overall	support increased CAP funding
Jim	Mulder	Assoc of Minnesota Counties	Overall	support reinstating the proc credit
Jim	Mulder	Assoc of Minnesota Counties	Overall	supports allocating 100% of SWMT rev to state and county PS, HHW and other WM activities
Theresa	Olsen	Resident, St. Paul	Overall	MPCA needs to consider effect of WTE on communities
Theresa	Olsen	Resident, St. Paul	Overall	Not enough time to respond even with extra weeks
Theresa	Olsen	Resident, St. Paul	Overall	MPCA should set goal to reduce and eliminate waste burned or incinerated; building incinerator encourages wastefulness; evidence of health threat regardless of air pollution controls; toxins are bioaccumulative; EPA stds not protective
Theresa	Olsen	Resident, St. Paul	Overall	Work to achieve Zero Waste - underway in other places; products should fit this
Theresa	Olsen	Resident, St. Paul	Overall	Educate public on alternatives and reduction - will be receptive
Tim	Pratt	ARM	Overall	In meetings MPCA staff said more money was going to go to RDF but I don't see it in draft - is extremely disappointing
Tim	Pratt	ARM	Overall	Looks like MPCA only pushing for ideas that don't draw on MPCA resources - best to think big
Tim	Pratt	ARM	Overall	Citizens often ask why more plastics aren't recyclingclable
Mike	Robertson	Minnesota Chamber - Environmental Policy Committee	Overall	Agree is a new resolve to do better on GHG; stakeholder worthwhile; Part 3 seems too narrowly focused; Part 4 should look at what worked and what didn't
John	Schatz	St. Paul resident	Overall	Rept concerns residents near Rock Tenn
Neil	Seldman	Inst for Local Self-Reliance	Overall	MPCA acknowledges need for work on reduction, recycling and composting but calls for more WTE without justification; shoud analyze; where is evidence for allegation that WTE supports recycling?;
Neil	Seldman	Inst for Local Self-Reliance	Overall	could get steam and elec energy from organics at cost of \$30 million for 300 tpd digester plant;
Neil	Seldman	Inst for Local Self-Reliance	Overall	no mention of legislation to ensure product- package redesign, bans on hard to handle matls, mandatory take-back for manufacturers; should do a cost per ton analysis comparing WTE, recycling, reduction, composting, Landfill

Jon	Steiner	Polk County, SW administrator	Overall	Rept well written and identifies issues facing Polk and Minnesota statewide, correct on history and need for analysis
Jon	Steiner	Polk County, SW administrator	Overall	Agree with need to raise recycling rates but won't happen without new and add'l funds to county
Steve	Steuber	Scott County	Overall	Overall report is going in right direction: cuts to GHG emissions using SW practices. Should be used also for fresh look at existing laws and regs
Ted	Troolin	St. Louis County SW administrator	Overall	Minnesota should continue to encourage integrated SW mgmt, including increased reductin, recycling, and increased processing with WTE; counties crucial
Ted	Troolin	St. Louis County SW administrator	Overall	Minnesota unlikely to see more WTE absent state leadership and tech and financial resources - opposition is there
Ted	Troolin	St. Louis County SW administrator	Overall	More work is needed on achievability of recycling and reduction goals in MCCAG report; financial side is not evaluated enough there
Ted	Troolin	St. Louis County SW administrator	Overall	Legis unwilling to maintain SCORE funding since 89 - need inflation adjustment at least - otherwise local role will drop
Susan	Young	City of Mpls	Overall	Report doesn't mention a lot of source reduction already accomplished, thinwalling of bottles and cans
Susan	Young	City of Mpls	Overall	Report doesn't consider full set of costs for recycling including transp, labor, etc
Mike	Hanan	Otter Tail County	Pt 1	Counties don't see strong state investment in recycling
Julie	Andrus	Mpls resident	Comment process	Comment period too short, even tho extended to Jan 25 - should be 90 days at least - can't provide specific information in that time - makes bias in favor of industries
Don	Arnosti	IATP	Comment process	Jan 11 too short - can't get to MEP by that time
Michael	Cousino	Olmsted	Comment process	Jan 11 deadline too short
Diadra	Decker	Inver Grove Hts resident	Comment process	Should extend comment period by 90 days
Carol	Greenwood	Legalelectric group	Comment	Extend timeline
John	Harkness	Resident	Comment process	Extend timeframe at least 30 more days
Ann	Holt	St. Paul resident	Comment process	Too short
David	Kamis	W Lakeland Twp	Comment process	Want another 30 days
Katherine	Krueger	Mpls resident	Comment process	Need more time - 90 days at least to respond

Katherine	Montague	Resident	Comment process	Comment period not long enough - 90 days - include neighbors as stakeholders
Katherine	Montague	Resident	Comment process	Report too focused on incineration and not enough on recycling and reduction - see WM hierarchy
David	Morris	Inst for Local Self Reliance	Comment process	Extend timeline - who were stakeholders
Janet	Nye	Resident	Comment process	Not enough time for public input
John	Schatz	St. Paul resident	Comment process	Comment period not adequate
Mark	Sulander	Resident	Comment process	Extend timeline for 30 days
Tom	Vallenga	St. Paul resident	Comment process	Err on side of maximum public input, and don't rely solely on standard representatives
Tom	Vallenga	St. Paul resident	Comment process	MPCA should contact public health experts with concerns about incineration and ask for their concerns, then make that info available
Tom	Vallenga	St. Paul resident	Comment process	Include neighborhoods as stakeholders
Barbra	Weiner	Resident	Comment process	Comment period not long enough - 90 days - include neighbors as stakeholders
Joanna	Willis	St. Paul resident	Comment process	Not enough time for public input
Susan	Young	City of Mpls	Comment process	Solid waste experts didn't have much voice in process
Mike	Berkopec	ACE Solid waste	Note of transmittal	See attached letter
Thomas	Casey	West Lakeland Bd of Supervisors	Note of transmittal	Comments only relate to fly ash and spray dryer ash disposal and benef use - WL Twp is concerned about Xcel proposed ash disposal
Dan	Costello	HDR	Note of transmittal	facil in twp; concerns about draft EIS See attached letter
Melissa	Dallum	WLSSD	Note of transmittal	See comments on separate letter/memo
Curt	Gadacz	Lake County	Note of transmittal	See attached letter
Mark	Gamm	Minnesota Solid Waste Administrators Assoc	Note of transmittal	See attached letter

Mark	Gamm	Dodge County	Note of transmittal	Letter attached with Dodge County comments
Linda	Gondringer	Richardson Richter Assoc	Note of transmittal	See comments on separate letter/memo
Matt	Herman	Great River Energy	Note of transmittal	Letter attached from Wayne Hanson
Jill	Johnson	Winona County	Note of transmittal	Letter attached
David	Kamis	W Lakeland	Note of	See attached letter from Tom Casey
Dianna	Kennedy	Twp Eureka Recycling	transmittal Note of transmittal	See comments on separate letter/memo
Joy	Kubat	Minnesota Chamber	Note of transmittal	See letter attached from Mike Robertson
Kevin	Morris	Midwest Coca Cola	Note of transmittal	See attached letter
Larry	Angove	Assoc of Direc Publishers	Pt 3A	ADP taking active role in broad Phone Book Project sponsored by Prod Stewardship Inst
Larry	Angove	Assoc of Direc Publishers	Pt 3A	Dereg brought much competition and increase in quality and innovation in directory formats - prices came down
Larry	Angove	Assoc of Direc Publishers	Pt 3A	Phone books deliv'd usually free to all within target area of publisher so directories are scoped to that region - some broad scope some narrow in area
Larry	Angove	Assoc of Direc Publishers	Pt 3A	The range of geog scopes give advertisers options since can pick narrow directory and keep costs down
Larry	Angove	Assoc of Direc Publishers	Pt 3A	Is impt to direc business that can deliver to all homes and business in chosen region - so value of advertising matches scope of coverage
Larry	Angove	Assoc of Direc Publishers	Pt 3A	Opt-in would prevent advertisers knowing who has directories - would cause drastically smaller delivery - consumers wouldn't get as good of info
Larry	Angove	Assoc of Direc Publishers	Pt 3A	Draft proposes fundamental change in phone directory delivery
Larry	Angove	Assoc of Direc Publishers	Pt 3A	How could consumers know whether to opt-in when hadn't seen that book - is opposite of principle of informed choice
Larry	Angove	Assoc of Direc Publishers	Pt 3A	What is possible benefit of such a measure - just assuming that "there are too many phone directories" - just arbitrary goal of 50%^ cut
Larry	Angove	Assoc of Direc Publishers	Pt 3A	Don't assume internet and CDs are acceptable substitutes
Larry	Angove	Assoc of Direc Publishers	Pt 3A	If there are MN residents who don't want phone books then op out would meet that concern
Jean	Buckley	City of Bloomington	Pt 3A	Support opt-in, sounds feasible

Doug	Carnival	NSWMA	Pt 3A	rept should recognize impt role of single stream recycling and how it boosts recycling rate
Doug	Carnival	NSWMA	Pt 3A	Phone books are small pct - can't support extra state and local money - is accepted in local collection programs
Jack Curt	Ezell Gadacz	WLSSD Lake County	Pt 3A Pt 3A	State should go ahead with "opt-in" right now MPCA has had authority since 92, so get it done; problems are phone companies say they don't print them, glue on bindings is problem,
Curt	Gadacz	Lake County	Pt 3A	markets reject unprocessed phone book and to make marketable is labor intensive, brokers want semitrailer lots but ages poorly in storage lowering value, phone co has given no support to county
Mark	Gamm	SWAA	Pt 3A	Any effort to work with publishers will help - but don't allow obligation to be met only through relying on local programs; many more directories are distributed than people use
Carol	Greenwood	not stated	Pt 3A	Need more information on phone directories; Online and phone 411 service not as good as having a phone book available; what about those lacking Net; cost info would help decisions; recycling of phone books should be mandatory but how enforce it
Mike	Hanan	Otter Tail County	Pt 3A	Phone book recycling is a joke - only effort is that phone bk co's point residents to locally funded collection
Mike	Hanan	Otter Tail County	Pt 3A	Best to have just one phone book for area - understand that problem connected to changes in phone markets since dereg
Kacy	Hayner	Yellow Pages	Pt 3A	See letter attached
Susan Tim	Hubbard Brownell	Eureka Recycling	Pt 3A	support - eureka processes 650t phone bk cost of \$32500/yr; often in orig pkg so not used;
Susan Tim	Hubbard Brownell	Eureka Recycling	Pt 3A	state waste comp should include more detail eg catalogs - each purchase triggers more - we will help with analysis
Greg	Isakson (and county board)	Goodhue County	Pt 3A	opt-in would need a lot of work by phone co's, would confuse public, no state has done it - would be a lot of work for 1/10 of 1 pct of waste stream - easier to just enforce the 1992 law
Jim	Kordiak	For SWMCB - also Anoka County Board member	Pt 3a	Support use of product stewardship; responsible companies need to know Minnesota will enforce the law; publishers must meet legal obligations
Vern	Massie	Hubbard County	Pt 3A	Current program is a farce; phone cos did little and counties did a lot - opt-in sounds good but people are busy and will lose the followup reminder -
Neg	Norton	Yellow Pages Assoc	Pt 3A	Oppose opt-in approach

Neg	Norton	Yellow Pages Assoc	Pt 3A	manufacturer of directories is env sensitive, works with Prod Stewardship Institute, three states with opt-out failed to see signif support, may run afoul of 1st Amendment,
Neg	Norton	Yellow Pages Assoc	Pt 3A	Background info on directory manufacturing and materials
Neg	Norton	Yellow Pages Assoc	Pt 3A	951 is clear - don't dispose of phone books, so look at barriers to compliance not new mandates;
Neg	Norton	Yellow Pages Assoc	Pt 3A	Reasonable alternatives to consider incl. why exempt haulers from recycling obligations, household behavior, what clarif needed if any,
Neg	Norton	Yellow Pages Assoc	Pt 3A	Yellow pages provide crucial info to consumers such as emergency info, legislators, govt services
Neg	Norton	Yellow Pages Assoc	Pt 3A	Included copy of Jt Env Guidelines
Tim	Pratt	ARM	Pt 3A	Phone book companies have shirked duties and left it to LGUs - should pay fee if not offering dropoffs at gro stores
Tim	Pratt	ARM	Pt 3A	yes, current stat not working, agree with opt-in - don't need more than one good one
Tim	Pratt	ARM	Pt 3A	Should have PS proposals listed for paint and carpet too
Tim	Pratt	ARM	Pt 3A	Strong support on phone book action, and would be better if fee included
Tim	Pratt	ARM	Pt 3A	Need to get new commitment from phone book co's for PS - fee needed
Mike	Robertson	Minnesota Chamber - Environmental Policy Committee	Pt 3A	Want more info on three elements of publisher duties - what pub did, how promoted, what results; what did MPCA try; what is 14-yr history; how is statute unclear and did MPCA try to fix;
				what would clarification be; what would be recovery improvement
Mike	Robertson	Minnesota Chamber - Environmental Policy	Pt 3A	
Mike Marc	Robertson	Chamber - Environmental	Pt 3A	Instead of fixing recycling problems if exist, rept goes to proposal not adopted in any state, opt-in; opt-in would likely eliminate phone directory
		Chamber - Environmental Policy Committee		Instead of fixing recycling problems if exist, rept goes to proposal not adopted in any state, opt-in; opt-in would likely eliminate phone directory business - no justification  Paper on benefits of competition in yellow pages mkt - independents provide price pressure
Marc	Rysman	Chamber - Environmental Policy Committee For ADP	Pt 3A	Instead of fixing recycling problems if exist, rept goes to proposal not adopted in any state, opt-in; opt-in would likely eliminate phone directory business - no justification  Paper on benefits of competition in yellow pages mkt - independents provide price pressure downward  Better to reduce volume and have phone bks given for free only on request by residents - also booksellers should offer book recycling outside

Maggie	Stonecipher	Dex	Pt 3A	Phone co's in substantial compliance with 951 - participated in recycling setups meanwhile broad programs appeared; works with 42 LGUs in Minnesota, public ed program, RAM member
Maggie	Stonecipher	Dex	Pt 3A	Phone co's already offer CD-ROMs as alt; aggressively manages obsolte directories; has method to avoid delivery of unwanted directories, has provided voluntary opt-out
Maggie	Stonecipher	Dex	Pt 3A	Opt-in big impact on local subscribers, consumers, businesses in MN - like those who put ads in; lot of people use yellow pages
Maggie	Stonecipher	RH Donnelly	Pt 3A	See letter attached
Susan	Young	City of Mpls	Pt 3A	Just handle phone books along with other recyclingclables - can follow Mpls example
Buzz	Anderson	Mn Retailers Assoc	Pt 3B	Landfill bans don't work - look at phone books
Buzz	Anderson	Mn Retailers Assoc	Pt 3B	Landfill bans can't be enforced and would be burdensome on business if it was enforced;
Buzz	Anderson	Mn Retailers Assoc	Pt 3B	use Incentives, education and motivatation instead of bans
Buzz	Anderson	Mn Retailers Assoc	Pt 3B	Businesses already pay high SWM Tax so use that for recycling, comprehensively, not just focusing on alum cans
Buzz	Anderson	Mn Retailers Assoc	Pt 3B	Partner with Waste Wise
Buzz	Anderson	Mn Retailers Assoc	Pt 3B	Minnesota has matched Wisconsin recycling rates but without bans - look to incentives
Buzz	Anderson	Mn Retailers Assoc	Pt 3B	There is oppty to capture more material, including resid and multifamily units
Joan	Archer	Minnesota Env Coalition of Labor & Industry	Pt 3B	supports aggressive but realistic goals for increased recycling at home and away from home
Joan	Archer	Minnesota Env Coalition of Labor & Industry	Pt 3B	Minnesota system was set up instead of mandates and take-backs approach; Minnesota system is working
Joan	Archer	Minnesota Env Coalition of Labor &	Pt 3B	Oppose landfill ban - bans without practical enforcement won't work
Joan	Archer	Industry Minnesota Env Coalition of Labor &	Pt 3B	All businesses should have comprehensive recycling programs
Joan	Archer	Industry Minnesota Env Coalition of Labor & Industry	Pt 3B	Eliminate 3B part of rept and provide incentives for businesses - SCORE to local govt, money to WasteWise, assistance to business for comprehensive recycling
Joan	Archer	Minnesota Env Coalition of Labor & Industry	Pt 3B	Support single stream recycling

Joan	Archer	Minnesota Bev Assoc	Pt 3B	Products other than beer and soft drinks don't add that much to the aluminum total in the facts section - only adds 6% to the total.
Joan	Archer	Minnesota Bev Assoc	Pt 3B	Bad data and bad conclusions - MPCA numbers too high on aluminum too low on PET
Joan	Archer	Minnesota Bev Assoc	Pt 3B	Can't judge actual recycling rates, MPCA numbers so far off - can't get aggressive recycling goals with bad data
Joan	Archer	Minnesota Bev Assoc	Pt 3B	Landfill ban not approp for nonhaz, recyclingclable things like bev containers - use comprehensive recycling
Joan	Archer	Minnesota Bev Assoc	Pt 3B	MRRA says aluminum soon not a problem - facil adding preprocessing now - state recycling rate will go up
Joan	Archer	Minnesota Bev Assoc	Pt 3B	Industry is being a good steward so ban not approp since put lot of effort into 100% recyclingclable and source reduced containers
Joan	Archer	Minnesota Bev Assoc	Pt 3B	Few states have bev container bans and aren't like MN - Wisc was broad ban, plastic later lifted, MN recycling rate higher - NC has different situation too - these do not support bans
Joan	Archer	Minnesota Bev Assoc	Pt 3B	Ban not only un-enforceable but will burden business and jobs - don't interfere in business relationship - proposals just inflate prices and don't work
Joan	Archer	Minnesota Bev Assoc	Pt 3B	Container deposit or redemp would just add costs, and add GHG emissions due to transp
Joan	Archer	Minnesota Bev Assoc	Pt 3B	Enforcement of bans would be unfair wherever tried it, whether C store, hauler, facilities, Landfill
Joan			Dt OD	
	Archer	Minnesota Bev Assoc	Pt 3B	Industry supports comprehensive programs
Joan	Archer		Pt 3B	Industry supports comprehensive programs  need to leverage existing infrastruc
Joan Joan		Assoc Minnesota Bev		
	Archer	Assoc Minnesota Bev Assoc Minnesota Bev	Pt 3B	need to leverage existing infrastruc
Joan	Archer Archer	Assoc Minnesota Bev Assoc Minnesota Bev Assoc Minnesota Bev	Pt 3B	need to leverage existing infrastruc  MPCA should provide addl money to local govt
Joan Joan	Archer Archer Archer	Assoc Minnesota Bev Assoc Minnesota Bev Assoc Minnesota Bev Assoc Minnesota Bev	Pt 3B Pt 3B Pt 3B	need to leverage existing infrastruc  MPCA should provide addl money to local govt  MPCA should provide addl money to WasteWise
Joan Joan Joan	Archer Archer Archer	Assoc Minnesota Bev Assoc	Pt 3B Pt 3B Pt 3B Pt 3B	need to leverage existing infrastruc  MPCA should provide addl money to local govt  MPCA should provide addl money to WasteWise  Should expand single stream recycling  public bldgs and facil not recycling like law says - don't go after businesses until public facil in line -
Joan Joan Joan Joan	Archer Archer Archer Archer	Assoc Minnesota Bev	Pt 3B Pt 3B Pt 3B Pt 3B Pt 3B	need to leverage existing infrastruc  MPCA should provide addl money to local govt  MPCA should provide addl money to WasteWise  Should expand single stream recycling  public bldgs and facil not recycling like law says - don't go after businesses until public facil in line - see Metrodome and schools  Multihousing is good opportunity - bans won't
Joan Joan Joan Joan Joan	Archer Archer Archer Archer Archer	Assoc Minnesota Bev Assoc	Pt 3B Pt 3B Pt 3B Pt 3B Pt 3B	need to leverage existing infrastruc  MPCA should provide addl money to local govt  MPCA should provide addl money to WasteWise  Should expand single stream recycling  public bldgs and facil not recycling like law says - don't go after businesses until public facil in line - see Metrodome and schools  Multihousing is good opportunity - bans won't work there tho

Joan	Archer	Minnesota Bev Assoc	Pt 3B	MBA supporting message in bottle with RAM - will continue to help with funding, promo and delivery of program
Joan	Archer	Minnesota Bev Assoc	Pt 3B	MBA has suggestions to boost curbside recycling - educ, dropoff
Joan	Archer	Minnesota Bev Assoc	Pt 3B	MBA and coca cola foundation investing in new mkts for recycling
Joan	Archer	Minnesota Bev Assoc	Pt 3B	Summary of nation efforts incl NRC and Natl recycling Partnership with EPA
Joan	Archer	Minnesota Bev Assoc	Pt 3B	Coca Cola has goal to recycling or reuse 100% of PET bottles - spent \$60 million 2007 - Recyclebank
Joan	Archer	Minnesota Bev Assoc	Pt 3B	Bev industry cutting footprint ecologically
Joan	Archer (with Tom Koehler)	Minnesota Env Coalition of Labor & Industry	Pt 3B	Support aggressive recycling goals but oppose ban on landfilling of beverage containers; mandates and bans are bad for economy; section 3B should be removed
Jean	Buckley	City of Bloomington	Pt 3B	Yes there is cost for contr deposit but also for ban enf'ment - will need a lot more recycling containers put out -
Jean	Buckley	City of Bloomington	Pt 3B	I think if you want the away from home consumer to recycle you will have better luck with a container deposit - drivers won't hunt around for a container at the C store
Doug	Carnival	NSWMA	Pt 3B	Does not support landfill bans of any kind, on any material - implementation would fall on haulers and facilities, unfairly; Wisc program relies more on local action than ban; MPCA bev can tonnage is too high
Dan	Costello	HDR - member of SWANA	Pt 3B	support option of removing bev containers from waste stream but enforcement unclear without material sep at Landfills and WTE
Kevin	Dietly	Northbridge EM Consultants	Pt 3B	Some data discrepancies may be due to very rough tools Minnesota uses to measure recycling and disposal
Kevin	Dietly	Northbridge EM Consultants	Pt 3B	Report's aluminum and PET recycling tonnages have problem with SCORE reporting - could be hi or low
Kevin	Dietly	Northbridge EM Consultants	Pt 3B	MPCA est of PET fraction in MMSW is certainly too low - has been "significant increase" in PET sales since 99
Kevin	Dietly	Northbridge EM	Pt 3B	MPCA PET and aluminum estimates should better reflect uncertainty, at least as a range
Kevin	Dietly	Consultants Northbridge EM Consultants	Pt 3B	MPCA data for glass, HDPE and PET likely include non-beverage too - has signif impact on glass and HDPE
Kevin	Dietly	Northbridge EM Consultants	Pt 3B	Northbridge estimates 30,500 tons total gen of aluminum cans, MPCA est is 66 to 68,000

Kevin	Dietly	Northbridge EM Consultants	Pt 3B	Northbridge estimates 33-44,000 tons of total gen PET, MPCA is 24-34000
Kevin	Dietly	Northbridge EM Consultants	Pt 3B	Northbridge estimates 14,000 tons HDPE, MPCA estimates 21,000 tons total gen
Kevin	Dietly	Northbridge EM Consultants	Pt 3B	Northbridge estimates 230-240,000 glass containers generated, MPCA estimates 189,000
Kevin	Dietly	Northbridge EM Consultants	Pt 3B	MPCA should use range in wastestream to show uncertainty not single figure 0.7%; other states don't validate Minnesota 1999 data; if look at consumer trends since 99 more likely 0.63 to 0.98 pct alum cans in discards
Jack	Ezell	WLSSD	Pt 3B	Bans are OK and could be adopted without 2-yr spacing; worried about burden on locals; container deposit is proven alt, and wants info why not recomm'd
Curt	Gadacz	Lake County	Pt 3B	if ban aluminum cans won't work better than phone books; yes revenues up but so are operating costs; problem is special events where waste all mixed; can add containers but who will empty
Curt	Gadacz	Lake County	Pt 3B	counties won't add expense to gather more cans - millions to get thousands in rev
Mark	Gamm	SWAA	Pt 3B	Support goal to pursue GHG cuts and energy gains through more aggressive recycling; MPCA has underestimated cash and staffing needs; enforcement of bans difficult;
Mark	Gamm	SWAA	Pt 3B	look at ways to have bev container manufacturers assist with collection or \$\$ as in E waste or waste pesticide programs; not fair to enforce ban against disposal facil; end of pipe not preferred approach
Mark	Gamm	Dodge County	Pt 3B	Timeline vague, container deposit looks more effective than ban so if don't choose deposit, explain why - if deposit would weaken recycling infra give evidence for that
Mark	Gamm	Dodge County	Pt 3B	Revenue from recycling'd glass and plastic doesn't cover county cost; would need subsidy to handle this
Mark	Gamm	Dodge County	Pt 3B	Maybe better to ban paper disposal than bev containers - cross ref to 3C - doesn't paper generate methane in Landfills?
Carol	Greenwood	not stated	Pt 3B	Support ban of beverage container disposal along with container deposit, but there will be objections; if have it don't exceed 8 cents; many won't like return process though, and curbside more convenient;
Mike	Hanan	Otter Tail County	Pt 3B	Problem is the ban with no way to enforce it - can't see in garbage bag

Mike	Hanan	Otter Tail County	Pt 3B	Nice to reach 80% can recycling but ban won't do it - who would or could enforce it - unfair at facility - can't see inside bags at curb - ban on cans would be worse than problem with phone
Susan Tim	Hubbard Brownell	Eureka Recycling	Pt 3B	book ban support ban of all containers with cont'r deposit if results short of goal; be sensitive to costs outside Metro; glass recycling rate is overstated - anchor glass showing drop in input; MRFs need mand'y reporting
Greg	Isakson (and county board)	Goodhue County	Pt 3B	how would you enforce a container disposal ban; lot of work for 1 pct; why follow this option when matrix shows deposit more likely to reach target look at Michigan and 97% recycling rate; retailers will complain but live with it
Jill	Johnson	Winona County Solid Waste Advisory	Pt 3B	supports ban on container disposal; even with aggressive recycling program here we miss materials
Jim	Kordiak	Committee For SWMCB - also Anoka County Board member	Pt 3B	Applauds goal of 80% recycling but should seek other options before banning disposal in business, gas stations, on the go, container deposit, incentives and promotion
Leigh	Lenzmeier	For MRRA - also Stearns County Board	Pt 3B	Increased recycling of aluminum would aid GHG goal but ban is not appropriate nor enforceable - MRRA would oppose a ban on can disposal
Vern	Massie	member Hubbard County	Pt 3B	Would be best to have one combined phone book for given area, with all the correct phone #
Vern	Massie	Hubbard County	Pt 3B	Might be OK but implementation a problem - would need two years to sell it - bans need good public ed
Elizabeth	McLaughlin	Container recycling	Pt 3B	Are major GHG and energy opportunities with beverage containers, nationally
Elizabeth	McLaughlin	Institute Container recycling Institute	Pt 3B	Program set up under container deposit legislation (CDL) is extremely effective, has high return rates (70-95%), yields high quality material; needs no tax dollars
Elizabeth	McLaughlin	Container recycling	Pt 3B	Trend in local programs is to see financial pinch so revenue gained with CDL is helpful to them
Elizabeth	McLaughlin	Institute Container recycling Institute	Pt 3B	See attached Beverage Mkt Data Analysis for MN: estimate total bev bottles and cans used in MN at 4.1 billion/yr
Elizabeth	McLaughlin	Container recycling Institute	Pt 3B	Reconsider option 2, disposal ban; mand recycling has effect of raising costs for all doing business at given retailer but CDL puts costs on those benefiting from bev sales, producers and consumers
Elizabeth	McLaughlin	Container recycling Institute	Pt 3B	Aware that CDL historically unpopular with industry but we see renewed interest

Kevin	Morris	Midwest Coca Cola	Pt 3B	Should remove from report
Kevin	Morris	Midwest Coca Cola	Pt 3B	Estimates of aluminum and PET inaccurate so can't know recycling rates - looks like 56% compared to 58% in Calif
Kevin	Morris	Midwest Coca Cola	Pt 3B	Approach to recycling should be comprehensive not focused on containers - form a stakeholder group on strategy to advance recycling
Kevin	Morris	Midwest Coca Cola	Pt 3B	Current goal is to recycle or reuse 100% of PET bottles in US - spent \$60 mill through recycleBank and NRC
Doug	Morris	Crow Wing	Pt 3B	Can't see ban working better if we are already at higher recycling overall than Wisc (41 comp to 35) - need to add value if want people to collect.
Doug	Morris	Crow Wing	Pt 3B	Should look at Calif approach - if bring in alum cans as res you get 50 cents per lb deposit plus market value - means \$1.10 lb. Counties depended on this bonus. If item has value Americans will go get it
Jamie	Pfuyl	Minnesota Grocers Assoc	Pt 3B	MGA members some of most successful recyclers - see Message in Bottle and It's in the Bag - didn't need mandates
Jamie	Pfuyl	Minnesota Grocers Assoc	Pt 3B	Can see from phone book experience that bans from disposal didn't work
Tim	Pratt	ARM	Pt 3B	Disagree, ban is toothless tiger on its own without
Tim	Pratt	ARM	Pt 3B	Container deposit would be much higher in impact than disposal ban - see Vertmont
Tim Mike	Pratt Robertson	Minnesota Chamber - Environmental Policy	Pt 3B Pt 3B	Container deposit would be much higher in
		Minnesota Chamber - Environmental		Container deposit would be much higher in impact than disposal ban - see Vertmont  Opposes disposal ban on aluminum; look at Part 3A that pointed out phone book ban didn't work -
Mike	Robertson	Minnesota Chamber - Environmental Policy Committee Minnesota Chamber - Environmental Policy Committee  Minnesota Chamber - Environmental Policy Committee	Pt 3B	Container deposit would be much higher in impact than disposal ban - see Vertmont  Opposes disposal ban on aluminum; look at Part 3A that pointed out phone book ban didn't work - is no analysis on how ban would achieve goal;  on books the statutory penalties from115A.034 are tough; but rept says generators would be off the hook; enf'ment at disposal facility is impractical and totally unfair; expecting them to pick cans is ridiculous; ban is hollow shell for PR
Mike Mike	Robertson	Minnesota Chamber - Environmental Policy Committee Minnesota Chamber - Environmental Policy Committee  Minnesota Chamber - Environmental	Pt 3B	Container deposit would be much higher in impact than disposal ban - see Vertmont  Opposes disposal ban on aluminum; look at Part 3A that pointed out phone book ban didn't work - is no analysis on how ban would achieve goal;  on books the statutory penalties from115A.034 are tough; but rept says generators would be off the hook; enf'ment at disposal facility is impractical and totally unfair; expecting them to pick cans is ridiculous; ban is hollow shell for PR effort  "Aggressive and meaningful public education effort" coupled with convenient opportunities to recycle" will produce behavioral changes to hit

Lawrence	Yoswa	Teamsters Local 792	Pt 3B	Will interfere with businesses' negotiation on recycling; mandates add costs; oppose mandates; mandates inefficient; what will happen to rejected loads; no add'l recycling; use curbside;
Lawrence	Yoswa	Teamsters Local 792	Pt 3B	Bev containers already recycled at high rates; industry is setting up public venue recycling;
Lawrence	Yoswa	Teamsters Local 792	Pt 3B	MPCA should describe lightweighting to date and efforts to reduce GHG emissions; use SWM Tax to offer rebates to businesses with comprehensive recycling; motivation and education are better tools than mandates
Lawrence	Yoswa	Teamsters Local 792	Pt 3B	Eliminate 3B as presented and focus on comprehensive efforts and protect Minnesota jobs
Susan	Young	City of MpIs	Pt 3B	Bans don't work well and are likely to trigger illegal dumping
Susan	Young	City of Mpls	Pt 3B	In general bans are very hard to enforce
Joan	Archer	Minnesota Env Coalition of Labor & Industry	Pt 3C	All public facil should comply with recycling reqt I n 115A.151 before ban affecting businesses - see Metrodome
Joan	Archer	Minnesota Env Coalition of Labor & Industry	Pt 3C	Propose reqt by 2010 that all public and private entities provide opp to recycling - variation of Part 3C option 4
Joan	Archer	Minnesota Env Coalition of Labor & Industry	Pt 3C	Use SWMTax revenues to support away from home - see Message in a Bottle - a container disposal ban would hurt C-stores
Joan	Archer	Minnesota Bev Assoc	Pt 3C	Better to require that govt and business should have "oppty to recycling" and be required to recycling up to 3 matls - and provide incentives to business for that opp
Mike	Berkopec	ACE Solid waste	Pt 3C	"transparent pricing" will hurt haulers - customers won't tolerate artificial pricing without basis in real costs - schemes can't be enforced
Mike	Berkopec	ACE Solid waste	Pt 3C	Business can handle a regulation that applies uniformly and that can be enforced - better alt would be mand'y recycling
Mike	Berkopec	ACE Solid waste	Pt 3C	Single-sort recycling has raised tonnage 25% and dropped mmsw tonnage 2% even with customer adds - and was done without govt subsidy
Mike	Berkopec	ACE Solid waste	Pt 3c	Re \$300 million in recycling value - must consider cost to collect and process - do full cost analysis
Jean	Buckley	City of Bloomington	Pt 3C	It has not been easy in Bloomington to get cooperation on mandatory business recycling - complaints on space being tied up and the extra cost imposed on business

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Doug	Carnival	NSWMA	Pt 3C	Oppose govt manipulation of contracting between businesses, plus commercial customers are already price conscious and won't like manip
Doug	Carnival	NSWMA	Pt 3C	Agree that more comml recycling is needed but don't support statutory changes described
Doug	Carnival	NSWMA	Pt 3C	Providing recycling services to multifamily is expensive
Doug	Carnival	NSWMA	Pt 3C	Looks like artificial pricing structure and we oppose govt manip of pricing -
Jack	Ezell	WLSSD	Pt 3C	Yes there is need to address away-from-home and non-res recycling to boost recycling rate, but worried about local burden
Curt	Gadacz	Lake County	Pt 3C	businesses regard their recycling at the breakeven point already and will question reason to assign employee time; garb collection costs rising but landfill costs stable and economical
Mark	Gamm	SWAA	Pt 3C	some small businesses lack enough material to justify recycling collec - would be unnecessary added cost; have same concerns about added duties under 3B; counties can't enforce 115A.552 opportunity to recycling statute
Mark	Gamm	Dodge County	Pt 3C	Timeline vague as with container deposit; agree that more business site recycling would be impt in reaching goals; subsidy may be needed;
Mark	Gamm	Dodge County	Pt 3C	recycling pricing change probably won't drop total cost to business waste generator - might stay flat
Mark Mark	Gamm	Dodge County  Dodge County	Pt 3C	Consider option for MPCA to offer tech assistance to businesses and govt agencies so can evaluate res mgmt options and contracting w/ haulers Implem change - increase SCORE funding to
				counties that do tech assistance to businesses
Carol	Greenwood	not stated	Pt 3C	mandate recycling for businesses and multihousing; any method to simplify pricing should be pursued; mandate haulers to offer separated recycling; offer credits or rebates for matls; fund compost collec
Mike	Hanan	Otter Tail County	Pt 3C	Current pricing for garbage collection and disposal goes against recycling gains
Susan Tim	Hubbard Brownell	Eureka Recycling	Pt 3C	support non-res but unclear on goal and timeline - see Macklenburg Co NC for nonres definitions; costs can be offset by less garbage cost; target govt funded public events and Capitol complex first, require recycling at events, starting with largest
Greg	Isakson (and county board)	Goodhue County	Pt 3C	Could revise building code for longterm solution but currently such a reqt would be hardship on businesses, which are already tight in floor space;
Greg	Isakson (and county board)	Goodhue County	Pt 3C	not a good idea to keep adding mandates that need more enforcement; use economic incentives like container deposit instead

Jim	Kordiak	For SWMCB - also Anoka County Board member	Pt 3C	Support .552 chane to expand opp to recycling; current law points to county so would need additional SCORE money and enforcement resources; also need plan for state-level enforcement
Vern	Massie	Hubbard County	Pt 3C	Oppty is there, but not happening enough - need education and enforcement - ban might help
Kevin	Morris	Midwest Coca Cola	Pt 3C	Should remove from report
Doug	Morris	Crow Wing	Pt 3C	Can't mandate comml recycling unless also mandate recycling services by haulers - is controv with small businesses - note also big box stores do their own recycling
Doug	Morris	Crow Wing	Pt 3c	Do believe big counties can get more bang for the buck
Jamie	Pfuyl	Minnesota Grocers Assoc	Pt 3C	Rept is too focused on business - misses resid recycling; should make resid easier with single stream and increased curbside in rural Minnesota
Jamie	Pfuyl	Minnesota Grocers Assoc	Pt 3C	Minnesota businesses pay a SWM Tax and should be used for recycling such as small retailers; Minnesota Waste Wise does this very well
Tim	Pratt	recycling coordinator Roseville	Pt 3C	enforcing opp to recycling will help but key is enfocement; Ramsey county used SCORE to get cities to enforce multifamily recycling; state bldgs and agencies should use resource mgmt contracts
Tim	Pratt	ARM	Pt 3C	Won't be enough to change transp pricing reqt - too little incentive at most locations
Tim	Pratt	ARM	Pt 3C	small businesses worried about bottom line, don't want extra cost for recycling service
Tim	Pratt	ARM	Pt 3C	Should require state agencies and blgs to use res mgmt contracts
Mike	Robertson	Minnesota Chamber - Environmental Policy Committee	Pt 3C	Agree with goal to increase non-res recycling; waste wise will help with concerted effort to achieve strategies; approach will confuse people; already non residential bills are transparent on fees
Mike	Robertson	Minnesota Chamber - Environmental Policy Committee	Pt 3C	Problem with extending resid language in opportunity to recycling statute to non-res is that former is uniform but not latter - won't work just to replace "residents" or "residential" with customer
Neil	Seldman	Inst for Local Self-Reliance	pt 3C	ILSR is doing study on impact of recycling, reuse and composting on GHG - will be done before 2-08 and can send
Steve	Steuber	Scott County	Pt 3C	Scott County has a business recycling reqt in SW ordinance but hasn't been able to enforce it - might consider requiring haulers to provide spec matl recycling for specific business customers might work

Steve	Steuber	Scott County	Pt 3C	Above possibility might be burden on small haulers tho - also note floor space problems at many businesses if must set out more containers - maybe consider mixed recycling for sorts later
Mike	Berkopec	ACE Solid waste	Pt 3D	Support compostable bags or reusable contrs for compost collection
Doug	Carnival	NSWMA	Pt 3D	Supports, but allow as acceptable alternative the reusable container - also some concerns on functionality of compostable plastic bags, eg tearing given sticks poking through;
Jack	Ezell	WLSSD	Pt 3D	support Option 2, allowing use if state enf'ment available - should be more emphasis on boosting SSOM
Curt	Gadacz	Lake County	Pt 3D	If want to make difference then ban all noncompostable trash bags, and make color unique - this has to be dealt with at front end not county end
Mark	Gamm	SWAA	Pt 3D	Unaware of need for state action - can be handled by individual facilities - concern on enforcement of statewide mandate
Mike	Hanan	Otter Tail County	Pt 3D	Plastic bags are a problem all through the waste mgmt system, hard to manage and contrib to litter - note related problem of ag-bags
Hennepin County handout	Hennepin County handout	Hennepin County handout	Pt 3D	Need to handle organics that are 25% of discards; Hennepin has programs in place; compost is valuable; need to fix licensing barriers now; don't define source-sep organics as MSW; haulers can't commingle with yard waste due to law
Susan Tim	Hubbard Brownell	Eureka Recycling	Pt 3D	More impt is comprehensive state compost policy; Strat Plan needs separate goal for SSOM; hard to permit these; direct \$\$ to compost not WTE, target extra SCORE money to compost; use more of SWMT
Jim	Kordiak	For SWMCB - also Anoka County Board member	Pt 3D	No immediate need for state law on ASTM B 6400 standards for bags; recom that counties impose ban if relevant; organics mgmt is changing so do further analysis first
Vern	Massie	Hubbard County	Pt 3D	Won't help unless all plastic bags are compostable, public can't tell difference - think if one OK another is
Vern	Massie	Hubbard County	Pt 3D	If want to keep plastic bags on sale they should all be compostable - is better than banning them - name the ASTM standard - MN should be a leader
Doug	Morris	Crow Wing	Pt 3D	We already require compost to be debagged - if we got rid of bags I wouldn't mind - continual litter issue at our Landfill
Tim	Pratt	recycling coordinator Roseville	Pt 3D	concern on higher costs for leaf programs

Tim	Pratt	recycling coordinator Roseville	Pt 3D	need to address ways to get organics out of waste stream - more capacity, easier permitting
Judy Mike	Purman Robertson	Purman Group Minnesota Chamber - Environmental Policy Committee	Pt 3D Pt 3D	Target for action needs rewording - is confusing Support compostable bags, but don't prohibit reusable containers
Jon	Steiner	Polk County, SW administrator	Pt 3D	Compostable bag not a big issue for counties like Polk; leave to facil operators; not equal to other issues in rept
Steve	Steuber	Scott County	Pt 3D	Need more evidence on whether is a good idea re: GHG to compost more organics rather than send to WTE
Caleb	Werth	Resource Recov Technologies	Pt 3D	Target for action must be a typo - check that - bags are a problem now
Doug	Carnival	NSWMA	Pt 3E	Supports. Fully supports waste mgment using all methods  and support end to backyard, open burning of trash with cost effective and conven alternatives
Jack	Ezell	WLSSD	Pt 3E	support ban along with development of emf'ment strategies and implem by MPCA - need level playing field
Curt	Gadacz	Lake County	Pt 3E	Problematic - needs to be state law, no exceptions; will meet local resistance; will be problem to enforce in thinly populated areas; be aware local enf'ment has many pressing issues to cover
Mark	Gamm	SWAA	Pt 3E	Best to focus on access to proper disposal; but are some locations where only onsite will be feasible for foreseeable future; state could ban in areas unless county ID'd it otherwise; then revisit that exemption later
Mark	Gamm	Dodge County	Pt 3E	Like phased approach because 2010 may be too soon for some counties;
Mark	Gamm	Dodge County	Pt 3E	Implem change - maybe consider covering business waste in burning ban
Carol	Greenwood	not stated	Pt 3E	Increased education is helping cut burn barrel usage; composting food at home works if education good; use fines so that is cheaper to have waste hauled than to burn; municipality should get fine proceeds to finance enforcement
Mike	Hanan	Otter Tail County	Pt 3E	About time for ban on burning - big source of pollutants
Mike	Hanan	Otter Tail County	Pt 3E	Re: survey on burning, likely that % of people who burn in backyd is higher than their pct of waste, as they don't burn everything
Susan Tim	Hubbard Brownell	Eureka Recycling	Pt 3E	Yes should stop open burning and other burning too

Jill	Johnson	Winona County Solid Waste Advisory Committee	Pt 3E	If open burning ban in place, state must share costs for dropoff centers for garbage and recycling collection; are reports here haulers may drop rural collection due to fuel costs, in sparsely pop'd areas; proper disposal option would have to be assured
Jim	Kordiak	For SWMCB - also Anoka County Board member	Pt 3E	Open burning has significant adverse health effects so take steps to reduce open burning; Metro counties have taken steps already
Leigh	Lenzmeier	For MRRA - also Stearns County Board member	Pt 3E	Open burning should end; will be controversial but MRRA supportive of a statewide ban; education is key; go beyond barrels to use of fire rings, eg in Metro since much is burned besides wood; consider working with MDH on measurement of health impact
Vern	Massie	Hubbard County	Pt 3E	Time for this is due - I support it - enforcement is problem but ban will help
Doug	Morris	Crow Wing	Pt 3E	Education and enforcement will be needed - also need to make sure cities over 5000 pop are enforcing waste collection statute
Doug	Morris	Crow Wing	Pt 3E	For above problem may need to look at org collec as solution - question is whether govt is serious - if it is there are ways to better manage the waste
Jim	Mulder	Assoc of Minnesota Counties	Pt 3E	supports statutory authority of counties to regulate onsite burning of MSW and encourages MPCA to educate citizens on issues of backyard burning
Mike	Robertson	Minnesota Chamber - Environmental Policy	Pt 3E	Support - It's about time to ban open burning
Steve	Steuber	Committee Scott County	Pt 3E	Scott County has banned open burning for 20 yrs and we support ban - counties with sparse population may need countywide assessment to provide dump stations
Julie	Andrus	Mpls resident	Pt 4	Broaden stakeholders to residents of areas in roadmap paper
Julie	Andrus	Mpls resident	Pt 4	Don't focus on increasing garbage incineration - reuse and recycle instead
Joan	Archer	Minnesota Bev Assoc	Pt 4	Use process to develop more comprehensive and sustainable approach for higher recycling rates - bev industry would like spot there
Joan	Archer	Minnesota Bev Assoc	Pt 4	Reservations about participation list - bev industry wasn't on list of meetings in fall
Noelle	Bell	St. Paul resident	Pt 4	MPCA should look at WM hierarchy again - incineration is not moving waste up the hierarchy
Noelle	Bell	St. Paul resident	Pt 4	Should double recycling rate instead - better for GHG
Noelle	Bell	St. Paul	Pt 4	Look at MPCA staff letter from 20 yr ago

		resident		
Michael	Buelow	St. Paul resident	Pt 4	MPCA should not increase incinerator but rather double the recycling rate and stop burning of garbage
Michael	Buelow	St. Paul resident	Pt 4	Incin turns out millions of pounds of damaging pollutants per year
Michael	Buelow	St. Paul resident	Pt 4	State should work out zero waste plan instead
Doug	Carnival	NSWMA	Pt 4	Supports stakeholder with all initiatives proposed in neutral manner by MPCA, with thorough and fair discussion.
Doug	Carnival	NSWMA	Pt 4	Concerned on some concepts mentioned like org collec and designation - is interference with free enterprise; like eminent domain can hurt businesses, must have just compensation if happens
Dan	Costello	HDR - member of SWANA	Pt 4	good approach, our company would like to be involved
Dan	Costello	HDR - member of SWANA	Pt 4	use of energy and GHG is appropriate but use broad approach so full effect is known
Dan	Costello	HDR - member of SWANA	Pt 4	WTE is extensive in MN but more opportunity remains
Dan	Costello	HDR - member of SWANA	Pt 4	Look for opportunities with state of art WTE and also monitor alternative conversion methods
Diadra	Decker	Inver Grove Hts resident	Pt 4	MPCA wrong on hierarchy - more burning not acceptable - objections to Midtown claims - woodsmoke is threat to health
ECSWC	ECSWC	East Central SWC handout	Pt 4	MPCA should assist removing the arduous process for counties to designate waste to facil like ECSWC's - Oneida decision says state statute not needed anyway
ECSWC	ECSWC	East Central SWC handout	Pt 4	Can MPCA serve as designation partner? At least state must streamline process - good designation would allow recycling goals to be reached, and serve energy and GHG goals
Jack	Ezell	WLSSD	Pt 4	support effort if structured and has clear purpose, goals and outcomes and reasonable timeframe
	Fignat	Resident	Pt 4	See letter attached
Christine	Frank	Climate Crisis Coalition	Pt 4	Don't move WTE up the hierarchy - use zero waste - abolish all throwaway goods - stop all burning including engines and natural gas - mine landfills
Christine	Frank	Climate Crisis Coalition	Pt 4	Use only top levels of hieararchy down to composting
Libby	Frost	Resident	Pt 4	MPCA shouldn't allow any more urban pollution - toxics have cumulative effect - incineration is expensive and outmoded, use geothermal and solar instead - if can't prove to us that incinerators are safe then don't build them

Curt	Gadacz	Lake County	Pt 4	is good to focus on densely populated areas; but will be problematic to gather four counties, Fond du Lac and WLSSD into one region since most of area not like Duluth;
Curt	Gadacz	Lake County	Pt 4	may have been mistake to close rural Landfills like Lake and Cook, since rev dried up; Lake can't afford additional duties
Curt	Gadacz	Lake County	Pt 4	region lacks transp infrastructure; admit that some Landfill will be needed and driving to WTE will require lots of fuel in spare areas;
Mark	Gamm	SWAA	Pt 4	themes we support include - make use of Oneida decision, emphasize waste hierarchy in waste-intensive regions, use SCORE restructuring to pursue GHG and energy themes; develop SCORE based incentives
Janice	Greenfield	St. Paul resident	Pt 4	Very concerned as Highland Pk resident about any proposal to increase incineration - already area burdened with jet exhaust
Janice	Greenfield	St. Paul resident	Pt 4	Incineration of garbage is outdated and unethical
Janice	Greenfield	St. Paul resident	Pt 4	Will volunteer to lobby for laws on zero waste - need leadership from agencies
Carol	Greenwood	not stated	Pt 4	WTE is more problematic than landfilling - hierarchy is wrong
Carol	Greenwood	not stated	Pt 4	would like to see breakdown in energy and GHG of incineration, using latest info
Carol	Greenwood	not stated	Pt 4	Resource mining could be option for our descendants if buried, but not if burned
MM	Habermas- Scher	Mpls resident	Pt 4	Comment period too short, even tho extended to Jan 25 - should be 90 days at least
MM	Habermas- Scher	Mpls resident	Pt 4	Broaden stakeholders to residents of areas in roadmap paper
MM	Habermas- Scher	Mpls resident	Pt 4	Don't focus on increasing garbage incineration - reuse and recycle instead
MM	Habermas- Scher	Mpls resident	Pt 4	NAB will work with MPCA on zero waste program and on phasing out WTE
Mike	Hanan	Otter Tail County	Pt 4	Worried that new incentives might send wrong message, encouraging cutbacks
Mike	Hanan	Otter Tail County	Pt 4	Will participate in stakeholder but remember solutions in cities don't work automatically in rural
Wayne	Hanson	Great River Energy	Pt 4	While aluminum recycling is energy effective state should move large amt of MSW up hierarchy with WTE; WTE would help GHG and energy; WTE is at least carbon neutral depending on factors like Landfill emissions;
Wayne	Hanson	Great River Energy	Pt 4	WTE not mentioned in any goals or proposals despite point in 2005 SWPR that WTE is at crossroads and that 2005 SWPR called for increase I WTE

Wayne	Hanson	Great River Energy	Pt 4	Next few years are crucial in adding WTE vs slowly losing curretn WTE - 2007 rept doesn't advance issue
Wayne	Hanson	Great River Energy	Pt 4	WTE will face opposition in 2008, including move to take WTE out of renewable status, but MPCA silent - silence will only promote growth of Landfill usage
Wayne	Hanson	Great River Energy	Pt 4	MPCA should affirm benefits of WTE; at least can discuss imptance and detail barriers to future
Wayne	Hanson	Great River Energy	Pt 4	MPCA should stress to Legis the need to keep WTE ranked among renewables
Reed	Heffelfinger	Resident	Pt 4	Don't add garbage burners
Ann	Holt	St. Paul resident	Pt 4	Roadmap refers to increased WTE and this will burden the communities
Ann	Holt	St. Paul resident	Pt 4	Stakeholder process must include the ordinary citizens affected
Ann	Holt	St. Paul resident	Pt 4	Report is focused on increasing garbage incineration - contrary to waste mgmt hierarchy
Ann	Holt	St. Paul resident	Pt 4	Report fails to address health effects
Ann	Holt	St. Paul resident	Pt 4	Xcel plans to shutter its RDF burners in 2012
Ann	Holt	St. Paul resident	Pt 4	See FRB report - WTE is very expensive
Ann	Holt	St. Paul resident	Pt 4	Rock Tenn burner for RDF would cost hundreds of millions
Nancy	Hone	Neighbors Against the Burner	Pt 4	Comment period too short, even tho extended to Jan 25 - should be 90 days at least - can't provide specific information in that time - makes bias in favor of industries
Nancy	Hone	Neighbors Against the Burner	Pt 4	NAB should have been stakeholder in MPCA draft process
Nancy	Hone	Neighbors Against the Burner	Pt 4	No cities should take on burden of added WTE
Nancy	Hone	Neighbors Against the Burner	Pt 4	Call to increase WTE goes against hierarchy for WM
Nancy	Hone	Neighbors Against the Burner	Pt 4	Report should say why burning percentages dropped - must be cost and health effects
Nancy	Hone	Neighbors Against the Burner	Pt 4	Supreme Court decision shouldn't be exploited by special interests
Nancy	Hone	Neighbors Against the Burner	Pt 4	References MPCA management letter on concerns about WTE reliance two decades ago
Nancy	Hone	Neighbors Against the Burner	Pt 4	NAB will work with MPCA on zero waste program and on phasing out WTE

Nancy	Hone	Neighbors Against the Burner	Pt 4	Garbage incinerator is landfilling into the air and should not be on the hierarchy of SW mgmt
Shanan	Horecka	Twin Cities resident	Pt 4	Timeline for comment is too short, an insult to residents, even with Jan. 25 extension
Shanan	Horecka	Twin Cities resident	Pt 4	Residents don't want incinerators at all - idea is old and must be dropped - incineration only moves pollutants around
Susan Tim	Hubbard Brownell	Eureka Recycling	Pt 4	Have participated in all these but would try another; look at Citizens Jury and broad stakeholder rep; is tough to be sole env'l org in these panels - need more diversity
Greg	Isakson (and county board)	Goodhue County	Pt 4	If taxed 2.2 million Landfill tons would raise \$22 million for MRF recycling and WTE - would serve all goals; ban all non-processed waste to Landfill
Greg	Isakson (and county board)	Goodhue County	Pt 4	counties spending more than fair share on SCORE programs - raise SCORE to at least match inflation
John	Kieselhorst	Hamline- Midway resident	Pt 4	21 day comment too short - should start over - see roadmap - at least 90 day extension
John	Kieselhorst	Hamline- Midway resident	Pt 4	Stakeholder process must include the ordinary citizens affected
John	Kieselhorst	Hamline- Midway resident	Pt 4	Don't increase incineration - raise recycling instead
John	Kieselhorst	Hamline- Midway resident	Pt 4	WTE has dropped because is unhealthy
John	Kieselhorst	Hamline- Midway resident	Pt 4	Pay attention to letter twenty years ago from MPCA staff saying "too much incineration"
Deborah	Kitzman	Mpls Resident	Pt 4	Waste and biomass should not be burned - use solar and wind for electricity
Jim	Kordiak	For SWMCB - also Anoka County Board member	Pt 4	Should include public health and toxicity issues too
Katherine	Krueger	Mpls resident	Pt 4	Concerned about pollution from any new garbage burners - agree with NAB - residents are already downwind of existing burners
Katherine	Krueger	Mpls resident	Pt 4	Roadmap didn't mention RDF proposal at Rock Tenn - left that neighborhood out
Katherine	Krueger	Mpls resident	Pt 4	We'll work on zero waste with MPCA
Leigh	Lenzmeier	For MRRA - also Stearns County Board member	Pt 4	Willing to participate; MPCA should consider supporting resumption of LCWM for legislative review of tools to achieve integrated solid waste mgmt
Leigh	Lenzmeier	For MRRA - also Stearns County Board	Pt 4	Support increased SCORE as tool for GHG cuts; some facil have front end sep now; new facil will help state reach 50% recycling goal;
Byron	Lind	member Resident	Pt 4	Opposed to garbage burning

Dean	Lucker	St. Paul resident	Pt 4	MPCA not protecting public health with a sanction on garbage burning - am suffering health effects from air quality now
Dean	Lucker	St. Paul resident	Pt 4	Should be recycling and composting instead
Vern	Massie	Hubbard County	Pt 4	Another case of failure to decide so turn it over to a group - don't make it longer than 12 mos - SCORE needs updating but GHG issue may not be good guide
Vern	Massie	Hubbard County	Pt 4	GHG may be flavor of the year rather than best benchmark - like counties getting credit for actions
Vern	Massie	Hubbard County	Pt 4	Prod stewardship sounds good in theory bu haven't seen it work with previous problem materials - same story, local programs pay for it
Margo	McCreary	Resident	Pt 4	Comment period too short, even tho extended to Jan 25 - should be 90 days at least
Margo	McCreary	Resident	Pt 4	Broaden stakeholders to residents of areas in roadmap paper
Margo	McCreary	Resident	Pt 4	Don't focus on increasing garbage incineration - reuse and recycle instead
Margo	McCreary	Resident	Pt 4	NAB will work with MPCA on zero waste program and on phasing out WTE
Katherine	Montague	Resident	Pt 4	Do zero waste instead of burners
Katherine	Montague	Resident	Pt 4	Flow contol can be exploited by spec interests
Katherine	Montague	Resident	Pt 4	Should phase out incinerator - see MPCA letter from staff 20 yr ago
Doug	Morris	Crow Wing	Pt 4	Support idea of "bang for buck" tying expenditures to where most of waste is
Doug	Morris	Crow Wing	Pt 4	Check current situation in Cook County
Doug	Morris	Crow Wing	Pt 4	If are interested in GHG returns would be good to set up program to round up junk cars - better result than tin can recycling
MRRA	MRRA	MRRA handout	Pt 4	WTE has 9 plants in MN, 89 in US, 400 in Europe and more around world
MRRA	MRRA	MRRA spreadsheet	Pt 4	WTE produced elec for 100,000 homes in MN 2006
MRRA	MRRA	MRRA spreadsheet	Pt 4	WTE is env friendly and renewable - reduces vol by 90%
MRRA	MRRA	MRRA spreadsheet	Pt 4	2005 WTE avoided 1.096 mill metric tons of carbon equiv
MRRA	MRRA	MRRA spreadsheet	Pt 4	2025 if at 2.6 mill tons would avoid 2.3 mill metric tons of carbon equiv
Jim	Mulder	Assoc of Minnesota Counties	Pt 4	opposes inverse condemnation bill from waste industry - counties need ability to pursue org collection when approp
Jim	Mulder	Assoc of Minnesota Counties	Pt 4	support ability of counties to use waste assurance tools authorized by state law

Jim	Mulder	Assoc of Minnesota Counties	Pt 4	supports review and changes to shorten authorization of waste assurance ordinances
NAB	NAB	Neighbors Against the Burner	Pt 4	Burning is a landfill in the air, dioxins can't be stopped, if was rated for biomass it could end up burning 30% RDF
NAB	NAB	Neighbors Against the Burner	Pt 4	wood burning and garbage burning produce dioxins, PCBs and other pollutants (list); dioxin lasts in body 7 yrs
NAB	NAB	Neighbors Against the Burner	Pt 4	Wood burning produces tiny airborne particles that are not carbon neutral - raise heat trapping by decreasing cloud cover
Janet	Nye	Resident	Pt 4	MPCA shows resignation to WTE and shouldn't - isn't safe - are using neighborhoods as test cases for health effects
Janet	Nye	Resident	Pt 4	Objections to woodburning project
Janet	Nye	Resident	Pt 4	Need more work on problem packaging
Janet	Nye	Resident	Pt 4	Need attention to winterizing homes - wastes energy
Tim	Pratt	recycling coordinator Roseville	Pt 4	Include city-county staff; report to 2009 Legis
Tim	Pratt	recycling coordinator Roseville	Pt 4	What effect implementation would have on estab organiz like SWMCB; how achieve highest and best use of recyclingclables not just diversion
Tim	Pratt	ARM	Pt 4	yes cities will be part of stakeholder talks
Tim	Pratt	ARM	Pt 4	Refocus on SCORE is OK if change MRF reporting so is reliable
Mike	Robertson	Minnesota Chamber - Environmental Policy Committee	Pt 4	Will participate; should do full analysis and review of systems and options for improvement - shouldn't be predetermined agenda or outcome
John	Schatz	St. Paul resident	Pt 4	Incineration of garbage shouldn't be part of any state plan for waste
John	Schatz	St. Paul	Pt 4	Rept slanted toward business lobbying
John	Schatz	resident St. Paul resident	Pt 4	See Inst of Ecological Medicine study - PDF link - incineration is not safe
John	Schatz	St. Paul	Pt 4	Landfilling less risky than incineration
John	Schatz	resident St. Paul resident	Pt 4	Need to move society to more recycling and incinerator is step backward
Susan	Schatz	Twin Cities resident	Pt 4	MPCA shouldn't promote incineration - will just promote people tossing waste in garbage because "it will go for energy" - state should go for 80% recycling instead
Gregory	Schmidt	Neighbors Against the Burner	Pt 4	Comments on Draft Report and roadmap for WTE

Gregory	Schmidt	Neighbors Against the Burner	Pt 4	Don't increase incineration - is insanity - helath effects are profound - childhood asthma on increase so must be a pollution problem
Gregory	Schmidt	Neighbors Against the Burner	Pt 4	Will work with MPCA to achieve zero waste - only studies in favor of WTE are those paid for by industry
Sandra	Seemann	Mpls resident	Pt 4	Opposed to increase in garbage incin, not acceptable option - already live within 1/2 mi of garbage burner - hurts homeowners
Sandra	Seemann	Mpls resident	Pt 4	Incineration is against WM hierarchy
Jon	Steiner	Polk County, SW administrator	Pt 4	WTE is being opposed by special interests - MPCA support is essential to keep it viable
Jon	Steiner	Polk County, SW administrator	Pt 4	Agree with general direction of report tho specific actions need discussion first - be sure to include rural concerns
Steve	Steuber	Scott County	Pt 4	Support idea of looking at regions with lots of waste - stakeholder process should be intense and short to be productive - should come up with many proposals that address both WM hierarchy and GHG emissions
Steve	Steuber	Scott County	Pt 4	Need to raise recycling content of paper bought by state, to 30%
Tom	Vallenga	St. Paul resident	Pt 4	Public health and global warming are not being weighted appropriately - report leans toward establishment instead and energy system
Tom	Vallenga	St. Paul resident	Pt 4	Priority 1: protect public health and children esp - any measurable harm is too much - err on safety side
Tom	Vallenga	St. Paul resident	Pt 4	Priority 2 - fight innov that could make global warming worse, unless benefits outweigh costs
Tom	Vallenga	St. Paul	Pt 4	Priority 3 - use precautionary principle (quoted)
Tom	Vallenga	resident St. Paul resident	Pt 4	Draft is wrong in boosting incinerator in MN - particularly in urban areas
Tom	Vallenga	St. Paul resident	Pt 4	Society should avoid incinerator whenever possible
Tom	Vallenga	St. Paul resident	Pt 4	Refer to MPCA position paper 20 yrs ago, against growth in WTE - pay attn to that
Anna	Waugh	Student	Pt 4	Put money into reduction and recycling rather than burning garbage - dioxin hazardous - MN must protect clean air and water
Barbra	Weiner	Resident	Pt 4	Residents don't want more incineration, already worry about pollution
Barbra	Weiner	Resident	Pt 4	Report too focused on incineration and not enough on recycling and reduction - see WM hierarchy
Barbra	Weiner	Resident	Pt 4	Use zero waste instead of incinerator - burners not safe
Tom	Welna	St. Paul	Pt 4	WTE has bad impact on communities
Tom	Welna	resident St. Paul	Pt 4	Residents are key part of stakeholder process

		resident		
Tom	Welna	St. Paul resident	Pt 4	Rept is focused on WTE and lacks specifics on how to boost reduction and recycling; look at hierarchy; fails to address costs and damage from incineration; makes more GHG than some fossil fuels; incinerator is just using air as landfill
Joanna	Willis	St. Paul resident	Pt 4	Roadmap work left out community stakeholders
Joanna	Willis	St. Paul resident	Pt 4	Don't increase garbage incineration
Joanna	Willis	St. Paul resident	Pt 4	No recycling specifics
Joanna	Willis	St. Paul resident	Pt 4	Don't overuse Oneida
Joanna	Willis	St. Paul resident	Pt 4	Look at MPCA staff letter from 20 yr ago
Jean	Buckley	City of Bloomington	Pt 5	I wish there were more examples of reduction besides phone books
Thomas	Casey	West Lakeland Bd of Supervisors	Pt 5	should mention source reduction, beneficial use and safe disposal of coal fly ash and SDA ash as needing further research and action
Mark	Gamm	Dodge County	Pt 5	Suggest need to refocus SCORE, targets and use of SWM Tax be up front - if focus on this could be ready for 2009 legis session
Susan Tim	Hubbard Brownell	Eureka Recycling	Pt 5	Need real action on composting - LFGE and WTE have gotten advantage in recent RES laws
Doug	Morris	Crow Wing	Pt 5	Like idea of setting goal for ewaste recycling and charging manufacturers fee if fail
Jim	Mulder	Assoc of Minnesota Counties	Pt 5	Elec utilities should support industry funded system for fluorescent recycling
Jim	Mulder	Assoc of Minnesota Counties	Pt 5	Landfill capacity - MPCA should work with counties on CON process
Jim	Mulder	Assoc of Minnesota Counties	Pt 5	Supports alloc of funds from waste pesticide acct to support county costs for collection - also clarify MDA duties in law
Jim	Mulder	Assoc of Minnesota Counties	Pt 5	supports fully funded collection for resid as well as ag pesticides
Jim	Mulder	Assoc of Minnesota Counties	Pt 5	MPCA should work collaboratively with counties on permitting new or expanded WTE
Tim	Pratt	recycling coordinator Roseville	Pt 5	MPCA should assist in LCA work on recycling
Deborah	Kitzman	Mpls Resident	Wood burning	Midtown Eco Energy should not be allowed
Marne	Moe	Resident, Mpls	Wood burning	Oppose biomass burning - not clean fuel; can't filter everything; transp impacts to area

Marne	Moe	Resident, Mpls	Wood burning	What would be impact on trees within radius; neighborhood already env'ly burdened; biomass is fiasco needing subsidies and will encourage middlemen to cut mature trees
Rachel	Lind	Resident	Wood burning	MPCA should veto burner at Lake and Hiawatha
Julie	Mellum	Clean Air Revival and Take Back the Air	Wood burning	Don't let wood combustion add to urban air pollution - WHO study says particulates kill 30,000 in US alone - some studies say 5,000 die per US city due to particulates
Julie	Mellum	Clean Air Revival and Take Back the Air	Wood burning	Wood combustion causes deforestation
Nancy	Przymus	Mpls resident	Wood burning	Bad idea for Midtown project to propose urban trees as fuel - will cause excess cutting - is not green technology
Nia	Sopiwnik	Mpls resident	Wood burning	MPCA should deny permit - no local benefit - risky
Susan	Wrayge	Resident	Wood burning	Oppose wood burner in S MpIs - MPCA should deny permit - area already burdened, truck traffic a big concern - should use wind not combustion for electricity