

Comprehensive Solid Waste Management Plan

Goodhue County, Minnesota

April 26, 2016

Executive Summary

The plan reviews the past and present solid waste management system, landfill abatement programs and policies, and anticipated solid waste management activities for Goodhue County. The plan selects the Red Wing Resource Recovery Facility as achieving the most feasible and prudent reduction of the need for and the practice of land disposal of mixed municipal solid waste (MMSW) for the County. The projected ten-year budget is attached as **Appendix A**. Projected recycling rates are shown in the Goal Volume Table attached as **Appendix C**.

Recycling rates for Goodhue County from 2010 to 2014 and projected recycling rates from 2016-2024 are shown below.

Goodhue County Recycling Data (2010-2014)					
Year	2010	2011	2012	2013	2014
Tons Recycled	16,171	16,158	16,396	13,301	24,652
Tons MSW	25,041	26,068	26,319	31,953	31,248
% Recycled	39.2	38.3	38.4	41.6	44.1

Goodhue County Projected Recycling Data (2016-2025)					
Year	2016	2017	2018	2020	2025
Tons Recycled	17,400	18,000	19,200	19,300	19,700
Tons MSW	44,000	45,000	45,000	45,000	46,000
% Recycled	39.2	40.3	42.7	42.7	42.7

Goodhue County had a recycling rate of 44% in 2014. A total of 31,248 tons of MSW was generated in the County, with 24,652 tons recycled. The County is projecting a 42.7% recycling rate by 2025. Recycling efforts will continue to focus on availability and education to maintain high recycling rates.

The County's existing Comprehensive Solid Waste Management Program as outlined in this Plan (Plan) is an integrated system that includes:

- Goodhue County Demolition Landfill,
- Goodhue County and regional household hazardous waste disposal,
- Goodhue County recycling program and operation of the County Recycling Center,
- MMSW management at the Red Wing resource recovery facility,
- Municipal curbside and commercial recycling programs,
- Providing information to the public regarding solid waste management, and
- Regulation of waste collection & management via a County Solid Waste Ordinance.

The Plan proposes continuation of all programs and waste management facilities that the County currently participates in, with an increased focus on assuring that MMSW is delivered to the City of Red Wing's Resource Recovery Facility to be converted to marketable materials and energy via processing at the Red Wing Resource Recovery Facility and the Xcel power plant in Red Wing. The County will implement waste management programs, ensuring they are in the best interests of the residents and at the same time adhere to applicable County, regional, state, and federal solid waste management regulations.

It is anticipated that new revenue streams may include a waste hauler collected service charge ordinance, and/or an ad valorem tax, and/or service fee on the property tax or any combination of the three can be used to reduce the tax liability of County waste generators and a waste designation ordinance to assure that all MMSW generated in the County is delivered to the Red Wing Resource Recovery Facility and that waste haulers compete based on service and not the ownership of landfills.

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Comprehensive Solid Waste Management Plan

Goodhue County, Minnesota

1.0 Background Information

This 2016 Goodhue County Comprehensive Solid Waste Management Plan (Plan) has been developed and completed by William Root, Goodhue County Public Works Staff (Goodhue County) with the assistance of the Minnesota Pollution Control Agency (MPCA). This Plan replaces the MPCA approved 2007 Goodhue County Solid Waste Management Plan in accordance with the revised Minnesota Rules governing the development, adoption, and implementation of solid waste management plans in Minnesota. Goodhue County, the City of Red Wing and the MPCA have examined the following solid waste issues since 2007:

- Cooperation to achieve increased MMSW recovery;
- Increased recycling of waste;
- Transferring the Bench Street landfill into the MPCA’s Closed Landfill Program; and

This Plan describes the existing integrated waste management system for Goodhue County and presents policies and strategies to be implemented over the next ten years. It also includes Goodhue County’s description of the solid waste landfill abatement programs commonly referred to as SCORE (Select Committee on Recycling and the Environment) programs.

The following sections cover regional background information, solid waste generation and collection, and the history of solid waste management planning in Goodhue County.

1.1 Demographic, Geographic and Regional Information

Goodhue County, located in southeastern Minnesota, is approximately 50 miles south of the City of Saint Paul, MN. The County is bounded on the east by the Mississippi River and the State of Wisconsin, on the west by Rice County, on the south by Wabasha and Olmsted Counties, and on the north by Dakota County and the Prairie Island [Mdewakanton Sioux Indian reservation](#) (Prairie Island). The County covers an area of 758 square miles, and is comprised of 10 cities, 21 townships, and a number of unincorporated areas.

The following sections describe the county population, land use patterns, employment, and economic data.

1.1.1 Current and Projected Population Data

The 2010 U.S. Census projection estimates the 2013 population of Goodhue County at 46,447. The average persons per household during this time was 2.41, and the average household income was \$57,827. The population is expected to remain fairly constant based on projections by the Minnesota State Demographic Center. See **Table 1** below.

The majority of Goodhue County is moderately populated. The 2012 population density is estimated to be 61 persons per square mile. The County is primarily rural.

Table 1. Goodhue County Population Projections (2015-2045)							
County	2015	2020	2025	2030	2035	2040	2045
Goodhue County	48,738	50,589	52,103	53,435	54,305	55,022	55,636

(Minnesota State Demographic Center, March, 2014)

1.1.2 Current and Projected Land Use Pattern

Current land use/cover in Goodhue County is primarily cultivated land and woodlands. Other large land uses include urban areas and both deciduous and coniferous forests. The majority of the public land is owned by cities, federal, state, and tribal entities. Goodhue County anticipates some progressive sub-urban development but the land use is not anticipated to significantly change during the period covered by this Plan.

1.1.3 Current and Projected Employment Indicators

Employment data for Goodhue County from 2007 to 2015 was obtained from the Minnesota Department of Employment and Economic Development (DEED) and is presented in **Table 2**. The County unemployment rate has been steadily improving, from 4.9 percent in 2007 to 3.6 percent as of 2015.

Table 2. Goodhue County Employment Data (2007-2015)						
Year	Data Source	Labor Force	Number Employed	Number Unemployed	Unemployment Rate	Minnesota Rate
2015	Annual Average	27,230	26,261	969	3.6	3.7
2014	Annual Average	26,835	25,802	1,033	3.8	4.2
2013	Annual Average	26,888	25,634	1,254	4.7	4.9
2012	Annual Average	26,792	25,413	1,379	5.1	5.6
2011	Annual Average	26,916	25,303	1,613	6	6.5
2010	Annual Average	25,734	23,853	1,881	7	7.4
2009	Annual Average	25,723	23,763	1,960	7.6	7.8
2008	Annual Average	25,137	23,710	1,427	5.7	5.4
2007	Annual Average	24,003	23,768	1,235	4.9	4.6

(www.deed.state.mn.us April 2015)

Total employment for the state of Minnesota is projected to increase 30 percent from 2010-2020. This trend will likely carry over to Goodhue County, as unemployment rates have decreased since 2009 as shown in **Table 2** above.

1.1.4 Local Economic Conditions

According to the Minnesota DEED, there were 1,336 business establishments in Goodhue County as of 2014. This is a decrease from 2006, at which time there were 1,421 business establishments, the highest since 2003.

The U. S. Census Bureau indicates that the median household income for Goodhue County in 2013 was \$57,827. This is an increase of 3.8 percent in comparison to the median household income of \$55,687 reported in 2010, despite the difficult economic conditions in the late 2000s.

The poverty rate from 2008-2012 was 9.2 percent, which is 2.0 percent lower than the Minnesota rate of 11.2 percent.

1.1.5 Regional Constraints and Opportunity

The City of Red Wing’s MMSW Resource Recovery Facility has been and continues to be a primary local waste management facility. Goodhue County’s Demolition landfill is another primary local waste management facility. However, the proximity to other landfills and transfer stations in neighboring Counties has affected waste management choices made by Goodhue County waste haulers. Several vertically integrated waste management companies have collected waste in Goodhue County and transported the waste to their landfills in Iowa, Wisconsin, and Dakota County, MN.

There are also several outlets for recyclable materials. Goodhue County’s Recycling Center and collection sites are a primary outlet for recyclables. Recyclables collected by curbside waste haulers are transported to several recycling facilities including the City of Red Wing’s waste campus. No demographic, geographical, and regional constraints adversely impact the County’s existing or proposed integrated solid waste management system.

Historically waste generation has been directly related to the population of the County and economic activity. Population centers (cities), areas of commerce and industry, and the Prairie Island Community are the centers of waste generation. The greatest influences on management of waste have been recycling and low cost MMSW disposal options. With the population of Goodhue County projected to grow slowly, it is likely that the tonnage of mixed municipal solid waste (MMSW) generated in the County will also grow.

1.2 Solid Waste Generation and Collection

1.2.1 Solid Waste Generation

Goodhue County had an annual average of 28,126 tons annually in the County’s SCORE Report to the MPCA. Waste generation is based on reports from waste haulers and facilities that supply information to Goodhue County. Estimated MMSW generation between 2010 and 2014 is shown in **Table 3** below.

Year	2010	2011	2012	2013	2014
Tons	25,041	26,068	26,319	31,953	31,248

1.2.1 Solid Waste Collection

Residential and non-residential waste collection in the County is performed by twelve licensed waste haulers. The County is served by both public and private waste haulers. The City of Red Wing operates a waste collection fleet, while most of the other Cities in the County have waste collection arrangements with private haulers. Waste haulers collect MMSW, recyclables, and Construction and Demolition debris (C&D). Waste hauler collection fees for residential and non-residential MMSW are volume-based and are summarized below in **Table 4**.

Hauler	90gallon MMSW and recycling rate (Excluding Tax)	Service Area
Advanced Disposal	\$18.19/month*	Zumbrota and other areas
Gibson Sanitation	\$21.01/month	City of Canon Falls and other areas
Lake City Sanitation	22.76/month	Lake City and other areas
Waste Management	27.21/month	Kenyon and other areas
City of Red Wing	20.00/month	Red Wing

* the price shown is from bids submitted to the City of Zumbrota in 2015 for MMSW residential 65 gallon service under the scenario that all of the MMSW is to be delivered to the RWRRF.

SCORE data from 2010-2014 is summarized in **Table 5** below, and outlines the materials that comprise the recyclable waste stream.

Table 5. Goodhue County SCORE Data (2010-2014) (Tons)*					
Material	2010	2011	2012	2013	2014
Fluorescent & HID Lamps (Units)	15,090	18,792	16,099	14,327	17,026
Major Appliances	278	277	277	279	23
Used Oil	37	37	47	37	25
Used Oil Filters	22	22	17	22	5
Vehicle Batteries	283	284	285	285	23
Waste Tires	92	92	95	93	7
Electronic Appliances	30	27	28	32	15
Glass	1,474	1,463	1,467	469	832
Aluminum	398	397	400	344	661
Co-Mingled Aluminum/Steel/Tin	70	70	71	0*	0*
Steel/Tin Cans	186	191	194	0*	0*
Ferrous & Non-Ferrous	397	407	410	955	10,143
Source Separated Organics	42	42	43	0*	0*
Magazine/Catalog	220	218	220	85	20
Mixed Paper	3,873	3,788	3,851	2,457	5,660
Newsprint	1,107	1,079	1,111	3,571	674
Office Paper	3,034	3,035	3,056	4	2
Corrugated Cardboard	4,179	4,237	4,338	3,379	4,798
HDPE(Milk Jugs, etc.)	75	115	118	98	125
Plastic(Film/Bags)	42	28	27	231	240
PET(Pop Bottles, etc.)	77	116	119	101	161
Total(Tons)	15,916	15,925	16,174	12,442	23,414

(SCORE data provided by the Minnesota Pollution Control Agency)

*Changes in recording and reporting of data are based on waste hauler/facility information

In previous years, Goodhue County’s recycling program combining its recycling center and rural collection with municipal curb-side recycling and non-residential recycling has proved to be very effective. The 2010 recycling rate was approximately 39 percent, with recycling rates increasing to 44 percent in 2014. At the same time, the estimated amount of MMSW generation increased. Percent recycled rates are shown in **Table 6**.

Table 6. Goodhue County Recycling Data					
Year	2010	2011	2012	2013	2014
Tons Recycled	16,171	16,158	16,396	13,301	24,652
Tons MSW	25,041	26,068	26,319	31,953	31,248
% Recycled	39.2	38.3	38.4	41.6	44.1

(Information provided by Goodhue County SCORE data)

1.3 Construction and Demolition Debris

Goodhue County residents use the Goodhue County Demolition Landfill that is permitted on leased property. The tipping fee is \$15/yd³. Goodhue County estimates that about 1,200 tons per year of construction and demolition debris (C&D) is delivered to the Goodhue County Demolition landfill. Several additional outlets for C&D are available such as the Red Wing Resource Recovery Facility(RWRRF), private waste haulers, Dakota County landfills, and other locations. Overall, about 7,000 tons of C&D was reported to be managed in Goodhue County in 2014.

1.4 Major Solid Waste Generators

There are several large industry generators of solid waste in Goodhue County including Red Wing Shoe Company, SB Foot Tanning, Bic, and other businesses. Additionally, Prairie Island and other hospitality and tourist industries produce large quantities of waste, food waste and beverage containers. There are several schools, government centers, and hospitals in the County that are also large quantity generators.

1.5 Solid Waste Planning History

County planning began in 1980 when the State developed solid waste planning by the counties (The Minnesota Waste Management Act – Minn. Stat. 115A) and has continued throughout the past 35 years. Goodhue County began solid waste planning to develop intergovernmental solid waste programs and facilities for waste management and landfill abatement. As a result, around 1991, the County launched plans for a MMSW processing facility just outside of the City of Goodhue, Minnesota, and obtained ownership of the Bench Street landfill from the City of Red Wing. The County’s planned MMSW processing facility was never developed.

The County built the current recycling facility in 1993, in Red Wing, and created a rural recycling program in 2003 to serve the citizens of the County.

Additionally, Goodhue, Wabasha, Dodge and Olmsted counties jointly created the Zumbro River Region Household Hazardous Waste (HHW) Group in 1992, and thereby created a system whereby the Counties cooperatively provide public education, manage, handle, transport, and dispose of non-recyclable HHW. This agreement led to Goodhue County purchasing and operating a mobile unit to transport HHW materials from collection events to Olmsted County’s Household Hazardous Waste Management Regional Facility, located in Rochester, MN.

In 1987 Goodhue County adopted its first solid waste management plan. The plan was updated and approved by the MPCA in 1993, 1998, and 2007.

1.5.1 Current Local and Regional Planning Activities

The County has conducted a long term outreach and engagement process to obtain input and support from the Cities in the County.

Goodhue County continues to participate in the Zumbro River Region Household Hazardous Waste Group.

The City of Red Wing also participates in multi-County collective recyclables marketing and planning efforts with surrounding counties through the Southeastern Minnesota Recycling Exchange (SEMREX).

Goodhue County operates a recycling center, rural recycling drop off sites, administers the County's Solid Waste Ordinance, and HHW collection events with cities and towns in the County.

1.5.2 Future Regional Planning Activities

Goodhue County will continue to participate in the regional HHW management program and attend quarterly meetings with regional Solid Waste Officials thereby continuing waste management coordination with neighboring Counties throughout the period covered by this Plan.

1.5.3 Impediments or Barriers to Regional Efforts

Successful regional efforts include the implementation of the Zumbro River Household Hazardous Group and City of Lake City's shipment of MMSW across County lines to Red Wing.

The major barrier to regional MMSW coordination begins within Goodhue County where citizens outside of Red Wing are reluctant to support the hauling of MMSW to the RWRRF. The County is beginning the process to create a MMSW Designation Plan/Ordinance in 2016/2017 to support hauling to the RWRRF. Once this internal effort is resolved, the County can concentrate on additional regional efforts.

1.5.4 Resolution of Planning Challenges

In 2014, the Minnesota Legislature created an opportunity to transfer the Bench Street landfill into the MPCA's Closed Landfill Program (CLP). This was critical to bringing together the political subdivisions within the County. After considerable discussion and intensive study, Goodhue County has decided to take advantage of this legislation to transfer the landfill to the CLP by beginning the process of creating an ordinance designating all MMSW generated in the County to the RWRRF (as required in the legislative change to the CLP rules).

Goodhue County will hold open discussions with the City of Red Wing and other Cities in the County to resolve overlapping, conflicting, or duplicative solid waste management programs. The challenge posed by aligning disparate viewpoints and economic interests will require the County, the City of Red Wing and other Cities to expend considerable effort to develop meaningful compromises that are beneficial to all County residents.

Future solid waste implementation efforts include:

- Implementing and overseeing Waste Designation authorized in Minn. Stat. . § 115A.80-89.
- Implementing a County Environmental Service Charge to support processing costs over and above landfill Fair Market Rate prices and other essential solid waste program costs,
- Multi-jurisdictional administration of MMSW waste delivery and service agreements between the County, the City of Red Wing, and waste haulers for MMSW delivery and processing services,
- Completing essential steps to finance and complete the transfer of the Bench Street landfill to the CLP.

2.0 Existing Integrated Solid Waste Management System

2.1 General Policy and Goals

The policy of Goodhue County's Solid Waste Management Plan is to provide a comprehensive and accessible solid waste program that is protective of the environment and at the same time manifests economic sustainability.

The primary objective of Goodhue County's Integrated Solid Waste Management System is to create an accessible, environmentally sound, and cost-effective set of programs that will be administered by Goodhue County and operated by the private sector and the Cities in Goodhue County.

A goal for Goodhue County is to implement much of its existing solid waste management system for the period covered by this Plan. In addition, two new priorities will be the transfer of the Bench Street landfill to the CLP and the direction of all MMSW to the Resource Recovery Facility.

2.2 Waste Collection

The most common collection method is by packer trucks (compactors mounted on a truck chassis) at the curb or in the alley adjacent to the source through a waste hauler. The City of Red Wing has a municipal waste collection fleet. The other Cities in the County have municipal collection arrangements whereby the City contracts for residential or residential and commercial waste collection services. Waste collection vehicles complete their collection route and then haul waste to a transfer station, the Resource Recovery Facility, or directly to a sanitary landfill (in various locations outside the County). Subscription collection is used in Pine Island, Cannon Falls, and in rural areas of Goodhue County.

Self-hauling of waste by the residential, commercial, or industrial generators is sometimes practiced, particularly in rural areas with low population density. Some residents of Goodhue County haul directly to the Goodhue County Demolition Landfill and/or the Resource Recovery Facility.

Haulers, rates, and the areas they service are outlined in Section 1.2.1 above.

2.3 Transfer Stations

The County does not own or operate a transfer station.

Goodhue County waste haulers have in the past reported using privately owned and operated transfer stations in Olmsted County, Wisconsin, and Dakota County in order to ship MMSW to landfills. It is anticipated that in the future, MMSW will be hauled directly from the waste generator to the RWRRF. Recyclables may continue to be hauled to transfer stations for subsequent shipment to materials recovery facilities outside of Goodhue County.

2.4 Description of MMSW Facilities in Use

2.4.1 Existing System

The City of Red Wing's MMSW resource recovery facility is currently the primary waste management method utilized by Goodhue County. Some waste haulers operating in the County ship waste to landfills including:

- Advance Disposal's Seven Mile Creek Landfill in Eau Claire, Wisconsin
- Waste Management Inc.'s Central Disposal Landfill in Lake Mills, Iowa
- Republic Services' Pine Bend Landfill in Inver Grove Heights, MN
- Waste Management Inc.'s Burnsville Landfill in Burnsville, MN
- Waste Management Inc.'s Spruce Ridge Landfill in Glenwood, MN
- The Rice County Landfill outside Dundas, MN
- The Steele County Landfill outside Owatonna, MN

Goodhue County does not direct waste to these landfills and does not have information that describes the particular operations, environmental concerns or long term plans of the seven landfills listed above.

2.4.2 Red Wing Resource Recovery Facility (RWRRF)

The RWRRF is the only such facility in the County and is recognized as the primary MMSW management facility in the County. As mentioned in paragraph 1.5.4, Goodhue County is beginning the process of developing an ordinance that recognizes the RWRRF as the 'selected' waste management facility and will designate all County MMSW to this facility, (if the ordinance adoption process is successful).

In the past, the City operated an MMSW reduction incinerator that produced steam that was sold to the SB Foot Tanning Company. Engineering and operational costs combined with limited revenues from the sale of steam to the SB Foot Tanning Company led to the City of Red Wing closing the boiler. The City calculated that if a long term agreement could be obtained with Xcel Energy, and if the City could obtain sufficient MMSW delivery, then the transition from boiler operations to Refuse Derived Fuel (RDF) production would be cost effective. The City of Red Wing has since shifted to RDF production.

The City of Red Wing is in the process of de-commissioning and removing the boiler system, and modernizing the MMSW RDF processing system to transition to a fixed MMSW processing line to recover recyclables and make RDF. The City anticipates their facility will have a processing capacity of about 40,000 tons per year. The City has made arrangements to direct RDF primarily to the Xcel Energy Waste-To-Energy Facility (XWEF) in Red Wing and to Olmsted County when XWEF cannot convert the RDF to energy during scheduled and unscheduled outages.

The RWRRF recovers approximately 10% of the MMSW as marketable recyclable materials and 75% of the MMSW as RDF. The remainder of the MMSW is unprocessable waste such as oversized and bulky items and fines.

Resource recovery operations at the RWRRF include the following:

- Screening and sorting of unprocessable MMSW on the tipping floor,
- Removal and land disposal of low British Thermal Unit (BTU) MMSW entrained material such as ceramics, glass, rocks, dirt, and small organic particles called "fines",

- Recycling of wood, metals, plastics and papers separated on the tipping floor, sorting line, and via mechanical separators,
- Shredding of combustible materials such as non-recyclable plastics and papers to make refuse derived fuel (RDF), and
- Shipment of RDF to XWEF for combustion (or the Olmsted County Waste-To-Energy Facility if Xcel is offline).

2.4.3 Xcel Energy Waste-To-Energy Facility (XWEF)

The XWEF was built in the 1940s as a coal-fired electricity generating facility. Red Wing's two units were converted in 1986 to burn RDF. RDF is a fluffy, burnable fuel produced from municipal solid waste. The processed MMSW provides a low-cost fuel alternative to coal for generating electricity and reduces the amount of material going to landfills.

The RDF burned at the Red Wing plant is produced at a resource recovery facility in Newport, MN as well as the RWRRF. Each year the XWEF incinerates 200,000 tons of RDF, producing enough electricity to power 50 percent of Red Wing homes.

The Red Wing plant is located amidst the scenic Mississippi River bluffs of southeastern Minnesota, just below Barn Bluff.

2.4.4 Landfilling

MMSW land disposal is at the bottom of the waste disposal hierarchy created by the State of Minnesota. Landfill engineering and operational controls are intended to protect the public health, minimize environmental impacts, and prevent nuisance conditions. Some landfills have created water and air pollution and it is unknown how long MMSW landfills will constitute a source of leachate and landfill gas emissions or how long MMSW landfills will need to maintain engineering controls and financial assurance arrangements in order to manage what is a long term liability in terms of economics and the environment.

In the past, many landfills have been improperly sited, constructed, and operated. Old landfills polluted groundwater due to practices that occurred prior to the promulgation of current regulations mandating ground water, air, and surface water protection measures for landfills. Sanitary landfilling is the financially preferred method of solid waste disposal for landfill owners in Minnesota and other states.

The County assumed control of the Red Wing Landfill in 1990 to serve as a multi-purpose landfill consisting of cells for MMSW, construction and demolition debris (C&D), and the ash from the City of Red Wing's waste reduction incinerator. The MMSW and C&D cells at the landfill are unlined, but were capped with engineered protective liners as well as a comprehensive groundwater monitoring system in 1997.

The County also owns a Demolition Debris Landfill in Minneola Township that was initially licensed by the MPCA in 1983. The landfill is approaching total capacity and the County will need to close and cap the third and final cell in the near future. Future enhancements for the landfill program involve investigating the possibility of opening a transfer facility in the western part of the County to better serve its residents.

Goodhue County's goal of designating all of the MMSW generated within the County to the RWRRF for processing and ultimately becoming RDF that is burnt at the XWEF and eliminating any County generated MMSW from land disposal reflects Goodhue County's commitment to the State's Solid Waste hierarchy.

2.5 Bench Street Landfill

The Red Wing landfill was operated as an open dump for many years until the County assumed control in 1990. The County operated it until it closed the MMSW and C&D Cells in 1997, and capped and covered them

according to MPCA standards. Water monitoring wells and gas wells were installed on and off site for quarterly monitoring as part of the County's on-going post closure care.

There are three types of landfill cells at the site: 1) Construction and demolition debris (C & D) cell; 2) mixed municipal solid waste (MMSW) cell; and 3) MMSW ash cell – which is still operated by the City of Red Wing as they are decommissioning their waste reduction incinerator. Solid waste residual disposal at the Bench Street Landfill is managed by the City of Red Wing, a Co-permittee to the Landfill. Over the short term, the City will dispose of processed MMSW residuals and MPCA approved decontaminated materials from the solid waste boiler (refractory). It is anticipated that this landfill will enter into the MPCA's Closed Landfill Program (CLP) in 2017; at which point, the State will take over responsibility.

The City of Red Wing plans to stop all landfill operations and jointly with the County will transfer the landfill to the CLP as soon as practicable.

The landfill groundwater monitoring system is used to track discharges from the old unlined MMSW areas.

2.5.1 Financial Assurance

Both the City of Red Wing and the County have obligations under Minnesota laws and rules to maintain financial assurance arrangements to pay for anticipated costs related to maintenance of the landfill and reasonable contingency actions. The City has a cash account and the County has a letter of credit to cover their responsibility.

Prior to transferring the Bench Street landfill to the MPCA, the City and County will need to transfer the full amount of the financial assurance funds to the MPCA. This may require the County to transfer over approximately \$1.9 million to the MPCA's CLP. The City will need to transfer its cash account of approximately \$700,000 to the MPCA's CLP

2.6 Bench Street Landfill Operations

The open ash cell and closed MMSW and C & D cells of the landfill are operated in accordance with MPCA requirements. Closed Landfill tasks completed by the County include the following:

- Maintenance of beneficial vegetation growth
- Control of soil erosion
- Maintenance and periodic testing of groundwater monitoring systems
- Removal of rodents and burrowing animals
- Maintenance of leachate, gas venting, and leachate collection systems; and
- Repair of settlement in closed areas

The City's landfill tasks include:

- Leachate from the lined ash landfill is treated at the City of Red Wing's waste water treatment plant

Inspection activities are conducted regularly by MPCA, consultants hired by the County, City and County Staff. The MPCA makes periodic visits to the site and records problems and violations. Repairs or corrections are implemented as problems are discovered.

2.7 Recycling and Special Wastes

Goodhue County operates several recycling and special waste programs and facilities where the public can drop off recyclable materials including:

- The Goodhue County Recycling facility located on US Highway 61 in Red Wing,
- 11 Source separated drop-sites spread throughout the County (See Appendix D – for a list and map),
- Goodhue County’s HHW spring, summer and fall collection program.

Goodhue County is also served by several municipal collection programs and facilities such as their recyclables collection, yard waste collection, and yard waste composting facilities. Some private waste haulers ship recyclables out of the County to recycling centers in the metropolitan area and the RWRRF. Municipal programs and services are outlined in Appendix D – Outlets.

In addition to collecting MMSW, licensed waste haulers in Goodhue County provide recycling and special waste management. Services are provided as a subscription service or as part of municipal organized collection to residential and non-residential customers. Oversized and bulky waste, household clean ups, and C&D collections are available.

Businesses in Goodhue County provide certain specialized services to manage recyclables and special wastes. Tire dealers, automotive service centers, construction firms, and scrap metal outlets offer services that help the public manage materials such as tires, used oil & filters, appliances, electronics, and other wastes. The list of outlets is found in Appendix D.

The County currently has little control over the disposition of solid waste collected by self-haulers. Self-haulers are defined as anyone who does not have services provided by a licensed commercial hauler. Instead, self-haulers handle their own solid waste. Self-haulers can haul and drop off their recyclables at the County’s Recycling Center free of charge, and can haul MMSW to the RWRRF and are charged on a volume basis.

3.0 Proposed Integrated Solid Waste Management System

3.1 Ten-Year Plan

This Plan proposes the potential implementation of several improvements to the present solid waste management system serving Goodhue County. These new program changes include:

- Designation of all MMSW generated in Goodhue County to the RWRRF,
- Implementing a County Environmental Service Charge to support processing costs over and above landfill Fair Market Rate prices and other essential solid waste program costs, in order to reduce the solid waste tax liability of MMSW management for County residents that is paid to the State,
- The County may enter into Acceptable Waste Delivery Agreements negotiated with the existing licensed waste haulers. The contract haulers may deliver acceptable waste collected in Goodhue County to the RWRRF, and
- Complete closure and transfer of the Bench Street landfill into the MPCA CLP.

The MPCA has requested that Goodhue County work closely with Red Wing to insure that all MMSW generated in the County is processed at the RWRRF. This joint effort both insures that all MMSW generate in the County is managed by a process high on the MPCA's waste management hierarchy which reduces future landfill cleanup liability for County residents and provides a stable volume of MMSW processed at the RWRRF.

In light of the above, the potential future County Integrated Solid Waste Management System (ISWMS) under a Designation Ordinance includes private and City haulers collecting and hauling MMSW generated throughout the County to the RWRRF where it will be processed into RDF that will then be hauled to the XWEF where it will be used to generate electricity.

Prior to designating waste to the RWRRF, legal and environmental impacts will be taken into consideration. As part of this consideration of waste designation, a "do nothing" alternative will be evaluated assuming a 'business as usual' approach.

4.0 Solid Waste System Evaluation and Ten Year Implementation Plan

4.1 Solid Waste Reduction Policy and Goals

Minnesota Statutes §115A.55, §115A.5501, and §115A.5502 address and encourage source reduction through waste education programs, promotion of waste reduction, technical and financial assistance to solid waste generators, and reduction of packaging in waste. The County recognizes that waste reduction is an important component in a successful solid waste management program. Requiring generators of solid waste to pay the full costs of proper disposal of waste in an environmentally sound manner is the best way to influence waste reduction habits. Paying the full cost of an integrated solid waste management system provides an economic incentive to reduce the amount of waste generated through a desire to reduce costs. Through the waste abatement programs of recycling, composting and proper hazardous waste management, waste generators can reduce the amount paid in disposal fees. Additionally, Goodhue County has implemented a public education program that promotes waste reduction in addition to other messages about proper solid waste management.

4.2 Existing Solid Waste Reduction Practices

Goodhue County staff and residents are encouraged to practice waste reduction. The County's procurement of goods operates to reduce waste, re-use whenever feasible, and reduce the toxicity of waste. Goodhue County provides public information about waste management to motivate individuals and businesses to reduce waste, donate re-usable items, and obtain items for reuse.

Goodhue County Solid Waste staff are using the “Source Reduction Checklist” supplied by the Office of Environmental Assistance as a template for the County’s reduction program. The County has implemented the following activities from the checklist.

- Distribution of education materials on re-use.
- Promotion of the Minnesota Chamber of Commerce “Waste Wise Program.”
- Distribution of source reduction materials to County residents.
- Promotion of source reduction/re-use activities in schools.
- Cooperation with other counties to promote source reduction.
- Inform the public of economic incentives for waste reduction/re-use.
- Promote and inform County offices to purchase recycled materials.

4.3 Volume Based Collection Fees

Experience has shown that volume-based fees may encourage the general public to reduce waste. All licensed waste haulers in Goodhue County use a volume-based collection charge using a per-can, per-bag, or by-weight basis.

4.4 Specific Programs to be Developed

Goodhue County proposes continuation of its existing programs for the 10 year period covered by this Plan. It is not anticipated that any new specific programs will be developed during this period

5.0 Waste Education

5.1 General Policy and Goals

The primary key to implementing any program to reduce the volume of solid waste disposed is a public education program. Public information via the internet, service announcements, brochures, newspaper articles and media campaigns on waste management, and speaking engagements can stimulate the necessary public awareness of waste generation practices to initiate changes in disposal habits. A public education brochure on waste reduction is available via the internet and the County will place information regarding changes in solid waste, recycling and hazardous waste programs in the different County media publications, including, but not limited to newspapers and magazines.

It is the policy of Goodhue County to comply with minimum MPCA requirements for maintaining, updating and distribution of current waste information for the public use.

It is a goal of Goodhue County to provide accurate public information.

5.2 Existing Solid Waste Information Practices

Goodhue County considers providing public information as an important activity for achieving and improving waste management awareness and a key aspect to having the public adopt constructive activities. The County provides print information and a comprehensive web-site on recycling and household hazardous waste throughout the year for use by the public.

5.3 Specific Programs to be Developed

The County will continue to implement existing programs. It is not anticipated that any new specific programs will be developed during this period.

6.0 Recycling

6.1 General Policy and Goals

It is the policy of Goodhue County to comply with MPCA requirements for providing residents and businesses the opportunity to recycle.

It is a goal of Goodhue County to provide recycling opportunities to residents in accordance with Minn. Stat. §115A.555, which states that one recycling center, accepting four or more materials, must be open 12 or more hours per week. Goodhue County has a dozen sites open 24 hours a day and therefore meets this requirement to provide residents with an “opportunity to recycle”.

6.2 Existing Recycling Practices

Goodhue County has multiple recycling collection sites that are free of charge. There is a main recycling center in Red Wing and 11 drop off sites for source separated recyclables, seven Cities have municipal curbside recycling, subscription cardboard collection, and numerous other outlets for recycling special wastes.

Goodhue County operates several recycling and special waste programs and facilities, see section 2.7 for specific details.

6.3 Programs to be Implemented

Goodhue County will continue to implement its recycling program and lend public support to other existing recycling activities operated by municipalities, waste haulers, and businesses.

In 1987, Goodhue County supported an initiative by the City of Cannon Falls, a local environmental group, and their waste hauler to launch one of SE Minnesota’s first curbside recycling programs. During this 10 year Plan there may be other recycling initiatives or opportunities that may materialize and need the County’s support. Goodhue County will entertain initiatives by municipalities, waste haulers, local industry, and businesses to expand cost-effective recycling services.

7.0 Yard Waste Management

7.1 General Policy and Goals

Yard waste is banned from MMSW by state law. Composting yard waste such as leaves and grass is relatively simple and produces a dark, humus-like material characterized by low nutrient value and high moisture retention. Yard wastes comprise a significant portion of the solid waste stream in spring and fall.

It is the policy of Goodhue County to comply with minimum MPCA requirements for handling yard waste.

A goal of Goodhue County is that all yard waste will be taken to a yard waste composting site or composted at the residence.

7.2 Existing Programs

Most cities in Goodhue County provide yard waste compost sites for residents. Several offer curbside collection of yard waste during the spring and fall for city residents. The County receives information from cities about the tons of yard waste converted to compost but does not have an estimate of backyard composting tonnages. Backyard composting has and will continue to be a part of some households' waste disposal practice.

The RWRRF also processes tree and wood waste to make a bio-mass fuel for the Saint Paul District Energy facility.

The composted material is utilized by each city at community parks and recreation areas and is also available to residents at no cost. Outlets for yard waste and opportunities to compost yard waste are shown in Appendix D.

7.3 Specific Programs to be Developed

The County does not plan to make any changes for the duration of this Plan, therefore it is not anticipated that any new specific programs will be developed during this period.

7.4 Environmental Impacts of Yard Waste Management

Burning creates smoke and fire hazards. Composting can create odors and attract vermin such as raccoons and opossum. Composting and mulching yard waste can have positive benefits and can be used for many applications in people's yards and can be used as part of water and soil conservation measures.

8.0 Source-Separated Organic Materials Composting

Goodhue County does not have or plan to employ any source-separated organic materials composting facilities.

9.0 Solid Waste Composting

Goodhue County does not have or plan to employ any MMSW composting facilities.

10.0 Materials and Energy Recovery of Mixed Municipal Solid Waste

10.1 General Policy and Goals

It is a goal of Goodhue County to protect the state's land, air, water, and other natural resources and the public health by implementing materials and energy recovery of MMSW generated in the County.

As mentioned in paragraph 1.5.4, Goodhue County is beginning the process of developing a designation ordinance that will require MMSW generated in the County be managed at a resource recovery facility located within the County for the next 20 years (as required for the State to allow the Bench Street Landfill into their CLP). Since the only such facility located in the County is the RWRRF, the intent is that the RWRRF will be recognized as the 'selected' waste management facility and all MMSW generated in the County will be designated to this facility, assuming the ordinance adoption process is successful. Selecting the RWRRF abates landfilling of MMSW and aligns Goodhue County's solid waste management policy with those outlined in the State's Waste Management Act.

It is a goal of the County to direct all MMSW to the RWRRF using Waste Designation and potentially waste hauler contracts. Goodhue County's goal is to direct MMSW to the RWRRF generated by or collected by a waste hauler under an agreement with a Public Entity at the same time that all MMSW is directed to the RWRRF via Waste Designation or via waste hauler contracts. However, The County selects the RWRRF as the County's MMSW outlet governing Public Entity MMSW management arrangements when the Designation Plan and Ordinance are approved by MPCA or July 1, 2017 whichever occurs later.

10.1.1 Public Entities

Public Entities must ensure that their waste is managed in a manner consistent with the County's selected methods for waste management, according to the state Public Entities Statutes (Minnesota Statutes §§ 115A.46, subd. 5, and 115A.471). These statutes state that public entities that manage waste, or contract to have their waste managed, must manage their waste in a manner that is consistent with the County plan, unless they obtain the permission from the County to do otherwise. Additional information is presented in Appendix E.

Goodhue County will provide time for public entities to comply with this Plan and MN Statute §§ 115A.46 subd.5 and MN Statute 115A.471. Public entities that manage waste must manage their waste in accordance with the County Solid Waste Management Plan, and therefore must deliver their MMSW to the Resource Recovery Facility as described in Section 10.1.

The definition of public entities includes any of the following:

- An office, agency, or institution of the state;
- The metropolitan council;
- A metropolitan agency;
- The metropolitan mosquito control district;
- The legislature;
- The courts;
- A statutory or home rule charter city;
- A town;
- A school district;
- Another special taxing district; or
- Any contractor acting pursuant to a contract with a public entity.

Benefits of MMSW designation to the RWRRF include:

- (1) obtain access to the MPCA CLP;
- (2) reduction in the toxicity of the RDF;
- (3) separation and recovery of materials and energy from waste;
- (4) ensure that waste is managed in a way that protects public health and welfare and benefits the environment;
- (5) reduce the future liability of Goodhue County residents by reducing indiscriminate disposal of waste at landfills;
- (6) coordination of solid waste management among political subdivisions; and
- (7) orderly and deliberate development and financial security of waste processing facilities.

10.2 Existing Program

The existing program is described in detail in Section 2.0.

10.2.1 Changes at the RWRRF

Due to the County's potential implementation of Waste Designation, the RWRRF is anticipated to receive more MMSW over the 10 year period of the Plan. The City of Red Wing is in the process of making capital improvements to the RWRRF to more effectively manage MMSW generated in Goodhue County. Certain major improvements are described below.

10.2.1.1 Decommissioning Boiler and improvements to the RDF line

Red Wing's waste reduction incinerator and steam boiler have been shut down for decommissioning and demolition. Some boiler materials will be recycled, some will require decontamination and specialized disposal, and some will be landfilled at the Bench Street ash cell. Demolition of the boiler is planned to be completed in 2016.

Plans to improve the RWRRF waste sorting and shredding system processing line in order to more cost-effectively manufacture 40,000 tons per year of RDF are moving forward. The RWRRF will have a fixed shredding system, an improved metals recovery system, and an expanded tipping floor. Other upgrades should be open and operational by mid to late 2018.

10.2.2 Closure of Bench Street Landfill and Residuals disposal

The Bench Street landfill is owned and co-permitted by Goodhue County and the City of Red Wing and will be closed by January 1, 2019, and transferred to the MPCA's CLP. Until the Bench Street Landfill closes, the RWRRF will use the ash cell of the Bench Street Landfill to dispose of "fines" and allowable decontaminated steam boiler materials. This is the most cost effective and environmentally sound residual disposal option available to the City.

The City potentially could partner with a firm to recover precious metals for the ash cell. The County would only support this precious metals recovery proposal if it has no impact to the landfill entering the CLP.

The City will select and fund a new landfill resource to use for disposal of “fines.”

10.2.3 Changes at XWEF

As of the writing of this plan, there are no changes to the operations at XWEF.

10.3 Environmental and Public Health Impacts

Much information has been discussed regarding the potential environmental risks associated with RDF combustion and energy recovery at the XWEF power plant in Red Wing. Primary concerns relate to airborne releases of particulate matter, dioxins and furans, and acid gases.

The XWEF is permitted by the MPCA and has to comply with strict air emissions limits. The facility conducts continuous emissions monitoring and periodic air pollution stack testing. Air pollution control systems and operational control recognizes the potential risks inherent in RDF combustion and aim to reduce the risks. These control and monitoring systems combined with programs to reduce the presence of waste materials containing toxic constituents such as mercury help reduce the risks associated with the waste-to-energy process.

Based on the potential ISWMS proposed in the Plan, the County does not anticipate any change in the environmental and public health impacts as there are no changes to the XWEF.

11.0 Waste Tire Disposal and Recovery

11.1 Policy and Goals

Minnesota Statute §115A.914, subd. 3 require that counties include collection and processing of waste tires in their solid waste management plans. Under this statute, counties shall adopt ordinances for the management of waste tires that meet or exceed the MPCA Rules (MS 115A. 914, subd. 3., and MR 9220.0200 to 9220.0680).

Waste tires were banned from land disposal in Minnesota after July 1, 1985 (MS 115A.904). Although banned from disposal in landfills, waste tires may be stored above ground at landfills permitted by the MPCA. A permitted landfill may store no more than 10,000 waste passenger car tires or the equivalent weight of other tires or tire-derived products at any time without obtaining additional permits. Any person that collects, stores, or processes 500 or more waste tires must have a waste tire facility permit. State statute does exempt individual and businesses from the need to obtain a waste tire facility permit if certain criteria are met.

It is the policy of Goodhue County to comply with minimum MPCA requirements for handling waste tires.

A goal of Goodhue County is that all waste tires will be taken to a tire retail store or a licensed recycling or waste facility.

11.2 Existing Waste Tire Practices

Goodhue County directs the public to take used tires to licensed recyclers for reuse or to be made into fuel. Information regarding the drop-off locations can be found in Appendix D.

11.3 Specific Programs to be Developed

Goodhue County does not intend to modify the existing waste tire disposal and recovery practices during the 10 year period covered by this Plan, therefore it is not anticipated that any new specific programs will be developed during this period.

11.4 Implementation Schedule

Goodhue County intends to maintain the waste tire program through the 10 year period covered by this Plan.

12.0 Electronic Products

12.1 General Policy and Goals

It is the policy of Goodhue County to comply with minimum MPCA requirements for handling Electronic Products which includes the prohibition of Cathode Ray Tubes (CRTs) from disposal in a landfill.

A goal of Goodhue County is that all Electronic Products will be taken to a licensed recycling facility.

12.2 Existing Electronic Products Management Practices

Goodhue County directs CRTs and other electronic equipment for recycling at the outlets shown in Appendix D. The County will continue to make referrals to licensed electronics recyclers within the state. The County will continue to review alternatives for land disposal of residential electronics wastes and to provide collection opportunities for County residents.

12.3 Specific Programs to be Developed

Goodhue County does not intend to modify existing electronic management practices during the 10 year period covered by this plan, therefore it is not anticipated that any new specific programs will be developed during this period.

13.0 Major Appliance and Scrap Metal Management

13.1 General Policy and Goals

A person may not place major appliances in MMSW or dispose of them in a solid waste processing or disposal facility after July 1, 1990 (MS 115A.9561). Major appliances are clothes washers and dryers, dishwashers, hot water heaters, garbage disposal, trash compactors, conventional ovens, ranges and stoves, air conditioners, microwave ovens, refrigerators, and freezers.

It is the policy of Goodhue County to comply with minimum MPCA requirements for handling Major Appliances and Scrap metal

A goal of Goodhue County is that all Major Appliances and Scrap metal will be taken to a licensed recycling facility

13.2 Existing Appliance and Scrap Metal Management Practices

Appliances are accepted at the outlets listed in Appendix D.

13.3 Specific Programs to be Developed

Goodhue County plans to continue the existing system throughout the 10 year period covered by this Plan, therefore it is not anticipated that any new specific programs will be developed during this period.

13.4 Implementation Schedule

It is the intention of Goodhue County to continue the existing program.

14.0 Automotive Mercury Switches, Motor Vehicle Fluids and Filters, and Lead-Acid and Dry Cell Batteries Management

14.1 Policy And Goals

Minn. Stat. § 115A.932 prohibits mercury switches from being placed in solid waste; they must be recycled or sent to a hazardous waste facility. Any other wastes generated during the removal of the mercury switch must be managed according to the solid waste rules.

Minnesota Statute §115A.916 states a person may not place used oil or oil filters in mixed municipal solid waste or place used oil in or on land, unless approved by the agency.

Used oil includes: spent automotive lubricating oils (including car and truck engine oil), transmission fluid, brake fluid, turbine, bearing oils, hydraulic oils, metal working oils, gear oils, electrical oils, refrigerator oils, fluids related to rail operations, and spent industrial process oils.

Minn. Stat. §325E.11 requires that any person selling at retail or offering motor oil for retail sale in Minnesota must provide a notice indicating the nearest location, or a location within ten miles of the point of sale, where used motor oil may be returned for recycling or reuse, or provide a collection of used motor oil and post notice of the availability of the tank.

Minn. Stat. 115A.915 states a person may not place a lead acid battery in MMSW or dispose of a lead acid battery. Minn. Stat. 115A.9155 states a person may not place in MMSSW a dry cell battery containing mercuric oxide electrode, silver oxide electrode, nickel-cadmium, or sealed lead-acid.

A person selling lead acid batteries at retail or offering lead acid batteries for retail in this state shall accept, at the point of transfer, lead acid batteries from the customers (Minnesota Stat. §325E.115). Retailers are also required to accept used lead acid batteries, even if the customer does not purchase a battery.

It is the policy of Goodhue County to comply with minimum MPCA requirements for handling automotive mercury switches, motor vehicle fluids and filters, lead-acid batteries and dry cell batteries.

A goal of Goodhue County is that all automotive mercury switches, motor vehicle fluids and filters, lead-acid batteries and dry cell batteries will be taken to a licensed facility, including recycling centers, hazardous waste facilities, oil change businesses and/or automotive parts supply stores.

14.1.1 Goodhue County's Current or Proposed Action

Mercury switches, Ni-Cad, various rechargeable batteries and other hazardous components are collected and disposed of in the same manner as household hazardous waste, as described in Section 15.0. Lead acid/dry cell batteries can also be taken to the Goodhue County Recycling Center.

Motor Vehicle fluids and filters are collected and disposed of at the Recycling Center. Used oil and filters are collected at local service stations at a variable charge as required by Minnesota law. Local retailers accept used oil free of charge, but may have a disposal fee on used filters. Companies that accept used oil and filters are listed in Appendix D.

14.2 Specific Programs to be Developed

The County considers this program to be mature and has no plans for expansion at this time

15.0 Household Hazardous Waste and Very Small Quantity Generator (VSQG) Hazardous Waste Management

15.1 General Policy and Goals

Minn. Stat. 115A.96, subd.1 (b) defines household hazardous waste as waste generated from household activity that exhibits the characteristics listed as hazardous waste under MPCA rules. A waste is defined as hazardous waste if it is:

- ignitable,
- toxic,
- corrosive, or
- reactive.

Household hazardous waste (HHW) may include: pesticides, solvents, preservatives, cleaners, paints, and other common household products. These wastes may affect the environment by impairing air quality, or by contaminating soil, surface water, or ground water. If improperly managed, household hazardous waste may be ingested, inhaled, or absorbed through the skin.

It is the policy of Goodhue County to comply with minimum MPCA requirements for handling household hazardous waste and VSQG hazardous waste. A VSQG is defined as any business that generates 220 pounds or less of hazardous waste per year

A goal of Goodhue County is that all HHW and VSQG hazardous waste will be taken to a licensed hazardous waste facility. HHW can be taken to any of the 12 HHW collections in the County and the Olmsted County Hazardous Waste Facility in Rochester year round. VSQG hazardous waste can only be taken to the Olmsted County Hazardous Waste Facility.

15.2 Existing Programs and Practices

Goodhue County is a member of the Olmsted, Dodge, Wabasha, & Goodhue Zumbro River Regional HHW Program (ZR Regional Program). The regional facility is located in Rochester and is available for drop-off year around. Goodhue County holds approximately 12 collections throughout the County every year. Historically, Goodhue County staff also provide assistance and a mobile unit at the other County event collections. The County also participates in bi-annual Department of Agriculture collections for pesticide containers.

15.3 Specific Programs to be Developed

This program is anticipated to be operated as it has been in the past with changes in specific HHW management as stipulated by statute or by mutual consent of Counties that make up the Zumbro River Regional HHW Program. Otherwise it is not anticipated that any new specific programs will be developed during this period.

16.0 Construction and Demolition Debris (C&D)

16.1 General Policy and Goals

Construction and demolition debris (C&D) is usually collected separately from MMSW. Some C&D is landfilled in the Goodhue County demolition landfill, some C&D is delivered to the RWRRF for sorting and disposal, and some is collected and disposed at other landfills outside of Goodhue County. Goodhue County will continue to operate the existing demolition landfill located in Wanamingo, MN, to provide a disposal option to County residents and businesses. The Wanamingo landfill has a finite life and may reach capacity within the span of this 10 year plan. The County may look for another option for C&D disposal to replace this landfill when it is full and closed. The County reserves the right to refuse any load of C&D waste brought to the landfill for any reason.

It is the policy of Goodhue County to comply with minimum MPCA requirements for handling construction and demolition debris waste disposal.

A goal of Goodhue County is that all C&D will be taken to a licensed facility.

16.2 Existing Construction and Demolition Debris Practices Program

The materials accepted are restricted to those defined in the MPCA C&D rules, which eliminates the need for financial assurance at the site. The County currently charges \$15 per cubic yard for C&D waste generated in the County, and an additional \$10 per cubic yard for C&D waste generated outside the County for disposal at the Wanamingo C&D Landfill.

16.3 Specific Programs to be Developed

Goodhue County will continue to maintain its existing C&D program and operate the Wanamingo Demolition Landfill for the 10 year period covered by this Plan or until the landfill reaches capacity. The County has discussed and may continue to explore new opportunities for C&D disposal as the current landfill reaches capacity.

17.0 Solid Waste Ordinance

Goodhue County adopted this Ordinance in 1990 and the ordinance provides regulations for the proper management and disposal of solid waste within the County and is used as the primary licensing and reporting tool concerning waste management. A copy of the existing Solid Waste Ordinance is included as Appendix B.

17.1 Ordinance Status

It is anticipated that a new hauler collected solid waste charge ordinance (as per Chapter 400) and a Waste Designation Ordinance as per (Chapter 115A) will be adopted by the County. The 1990 Solid Waste Ordinance will continue to be administered during the 10-year planning process or until a new ordinance is adopted.

17.2 Implementation and Enforcement Issues

Some residents have disposed of waste on their own land or burned it in burning barrels and have not contracted for waste collection and disposal services. While this practice is changing, some residents and potentially rural businesses still dispose of waste improperly. An enforcement issue may arise because designation will apply to all waste generators regardless of how they manage it. When information regarding a violation of the Solid Waste Ordinance is received by Goodhue County, staff is dispatched to the site to investigate. If a violation is verified, Goodhue County coordinates with the MPCA to resolve the problem. In most past cases the property owner, waste hauler, or business complied with the County's and the MPCA's directions and no further action has been necessary. However, when further enforcement actions may be necessary, the MPCA may issue a notice for the violation.

County public education programs will be used to minimize violations by haulers, businesses, and by waste generators. Goodhue County will most likely need to hire staff to enforce the requirements of potential future Acceptable Waste Delivery Agreements, and to enforce the potential future Designation Plan and Designation Ordinance.

17.3 Planned Amendments

The County Commissioners may elect to modify the County's Solid Waste Ordinance to reflect changes in statute and rules, and the needs of the County as necessary. Additionally, the County has begun the process of creating an ordinance designating all MMSW generated in the County be designated to the RWRRF (the only such facility in the County)

18.0 Solid Waste Staff

18.1 Existing Staff

Existing solid waste staffing levels in Goodhue County are listed below.

County Solid Waste Official	.50 FTE
HHW & Problem Materials	.50 FTE
Recycling Operations Coordinator	1.00 FTE
Operations and Collection	3.00 FTE
Administration	.33 FTE

The Solid Waste Official (Official) is the responsible staff member for leading the plan updating process, overseeing the implementation of the County’s Solid Waste Plan, programs listed therein, and execution of directives from Administration and the County Board. The Official is responsible for the enforcement of the County Solid Waste Ordinance and coordinates with other County offices and MPCA staff regarding solid waste, recycling and hazardous waste issues including risk management and enforcement of on-site and illegal disposal compliance activities. The Official coordinates and works with the Recycling Operations Coordinator to maintain related solid waste programs in the County.

Recycling Center staff collect, sort, and market recyclables, batteries, fluorescent bulbs and used oil and filters. Recycling center staff and household hazardous waste collection staff provide support to the mobile hazardous waste collection events and serve as the contact for the PaintCare drop off location at the Goodhue County Recycling Center.

The County Attorney is responsible to initiate legal proceedings against those who violate the Solid Waste Ordinance (and the potential future Designation Ordinance.)

The Public Works Director is responsible for managing the Solid Waste Official.

The Goodhue County Board is responsible for setting and approving budgets, policy, and staffing levels.

18.2 Staffing Needs

Goodhue County’s initial implementation of the proposed Waste Designation Ordinance will require additional staff. To promulgate the County Environmental Service Charge and Waste Designation Ordinance, make arrangements to transfer the Bench Street Landfill to the MPCA, negotiate waste delivery agreements with the City of Red Wing and local waste haulers, and manage these new arrangements to assure that the County Board’s policies and goals are achieved.

19.0 Solid Waste Program Funding

Revenues and expenditures for Goodhue County's solid waste programs are presented in the County's projected annual budgets located in Appendix A. These budgets are based upon past revenue and expenditure totals and an informed forecast of new costs and revenues. The Board of Commissioners intends to obtain revenue for the County's program from one or a combination of the following options: the County Environmental Service Charge, state HHW funding, and SCORE revenues.

The budget attached to the Plan is not binding upon Goodhue County and the actual budget will be promulgated annually by the County Board of Commissioners as the Board sees fit over the 10 year period covered by the Plan. It is a goal and policy of the Commissioners to implement programs in the most cost efficient manner possible.

19.1 Policies and Goals

Goodhue County recognizes the need to assess the various waste designation options available in order to continue the waste abatement efforts currently in place and to ensure that waste generated in the County is properly managed.

These five options have been used successfully in other Minnesota counties:

- Public Entities compliance with the Plan
- County Service Fee to subsidize the tipping fee and reduce solid waste tax liabilities
- County-Hauler Contracts to guarantee waste delivery
- Countywide Organized collection of MMSW
- Waste Designation via ordinance

A strategy being considered by the County is a waste designation ordinance coupled with one or a combination of the following revenue streams including a County Environmental Service Charge to support processing costs and to help buy down the tipping fee at the Resource Recovery Facility for haulers delivering MMSW generated in Goodhue County.

19.2 Amounts and Sources of Funding

19.2.1 County Environmental Service Charge

Counties have the authority to implement environmental service charges to make assessments for environmental programs, such as: environmental education, household hazardous waste collection, recycling programs, and activities supporting the management of waste as preferred in the County plan.

Counties have a number of options to acquire funding to support environmental programs, including: ad valorem taxes, special assessments on property tax statements, and hauler collected service charges. Goodhue County may utilize one option or a combination of options to acquire the necessary funds for the County solid waste and environmental programs.

19.2.1.1 Hauler Collected Service Charge

Counties have the ability to negotiate contracts with haulers to bring the waste to the facility selected in the County Solid Waste Management Plan. Many counties and cities use negotiated contracts with haulers to bring waste to the county selected waste management facility. Several counties have recently negotiated contracts with the waste haulers within their jurisdictions.

Goodhue County may enter into negotiations with the waste haulers in the County in order to assign contracts to haul all of the waste collected in the County to the RWRRF by 2017.

According to a Minnesota Supreme Court decision, the proceeds from a hauler-collected service charge is an appropriate and particularly effective method for funding the County solid waste programs outlined in the Waste Management Act. Goodhue County may use this funding source to reduce the taxable charge for managing MMSW at the designated RWRRF and potentially use this funding source to pay off the financial assurance bond required for the Bench Street Landfill entering the CLP, or for other purposes as determined by the County Board.

This service charge could be levied on the waste generator pursuant to Minnesota Statute § 400.08, and it is anticipated that the charge could be collected by the waste hauler and then remitted to the County. The charge can be set up as a percentage of the collection/disposal bill. Goodhue County MAY implement a HCSC in order to buy down the tipping fee at the RWRRF for waste disposal by Goodhue County residents and waste haulers.

19.2.1.2 Special Assessment On Property Tax Statements

Counties have the ability to apply a special assessment on property in Goodhue County specifically for solid waste services.

19.2.1.3 Ad Valorem Taxes

A property tax, millage tax is an ad valorem tax that an owner of real estate or other property pays on the value of the property being taxed. There are three species or types of property: Land, Improvements to Land (immovable man made things), and Personal (movable man made things). Real estate, real property or realty are all terms for the combination of land and improvements. The County Board may choose to use ad valorem taxes, as allowed by Minn. Stat. 473-H10 to help fund the solid waste programs and subsidize the tipping fee at the RWRRF.

19.3 Waste Designation

In response to pressure from waste haulers wishing to dispose of MMSW in landfills that they own and operate, many local governments that prefer MMSW is delivered to resource recovery facilities have promulgated Waste Designation Ordinances under 115A.80-89. Counties may combine other waste assurance methods with waste designation.

As mentioned in paragraph 1.5.4, Goodhue County is beginning the process to implement Waste Designation by Ordinance to direct all MMSW to the RWRRF (the only such facility in the County).

Goodhue County's waste designation ordinance may utilize County-Hauler contracts and a County Environmental Service Charge to cover added program costs and reduce the tax liability of Goodhue County waste generators.

A long-standing policy of Goodhue County is economic sustainability by maintaining fee-for-services principles. The Goodhue County Integrated Solid Waste Management System (GCISWMS) needs the revenues from a steady flow of MMSW processed at the RWRRF to maintain a consistent operational level and to plan repayment of capital expenses required to maintain and upgrade the RWRRF as required to operate.

The goals of landfill abatement, energy recovery, materials recovery, coordination of solid waste management among governmental bodies, orderly development of waste facilities and financial security of waste facilities cannot be reasonably achieved without assuring the consistent/uniform management of solid waste.

20.0 Plan Review and Ten-Year Plan

20.1 Plan Development Time Line

The Plan and annual budget will be reviewed by Goodhue County Staff each year, over the ten-year period covered by this Plan. Any and all major modifications or amendments to this Plan will be submitted in writing to the MPCA for review and approval. A new plan is generally required every ten years. The County will continue to evaluate the solid waste management programs on an annual basis, determine if goals are being met and help with developing an annual work plan.

Six months before the new plan is due, writing of a new draft will begin.

20.2 Program Budget

Annual review of the Plan and ten year revision are included in the staff and administration section of the Department budget, with general revenue and the County Environmental Service Charge being the funding sources.

The program budget attached to the Plan is not binding upon Goodhue County and the actual budget will be promulgated annually by the County Board of Commissioners as they see fit over the period covered by the Plan.

21.0 Goal-Volume Table

The Goal-Volume Table is included as Appendix C.

22.0 Itemized Solid Waste Budget

The itemized Solid Waste Budget is included as Appendix A.

23.0 Public Participation

Residents can access a copy of the Comprehensive Solid Waste Plan from the Goodhue County website, the Minnesota Pollution Control Agency (MPCA), or they may pick one up at the County Public Works Department. The plan will be sent to the County's 10 Cities by the MPCA. The plan will be placed on public notice in the official county newspaper by the MPCA for 30 days and the MPCA will accept comments during that time.

24.0 Alternatives To Proposed System

As discussed in paragraph 10.0, MMSW processing at the RWRRF is the only RRF in Goodhue County. The County is beginning the process of developing a designation ordinance that will require MMSW generated in the County be managed at a resource recovery facility located within the County (as required for the State to allow the Bench Street Landfill into their CLP). If the City's facility is not available, then Goodhue County will examine several alternatives, including, but not limited to:

- Olmsted County's waste to energy facility, in Rochester, MN
- Xcel Energy's French Island processing facility in LaCrosse, Wisconsin
- The Ramsey / Washington refuse derived fuel facility, in Newport, MN
- Landfills in Rice County, Burnsville, Pine Bend, Wisconsin, and Iowa
- Barron County waste to energy facility, in Almena, WI

24.1 Short-Term Alternatives

In case of a short-term outage at the RWRRF, (1 week to 1 month), waste collected outside the City of Red Wing would be directed to either the Olmsted County WTE facility, the Barron County Waste-To-Energy Facility or to one of the landfills in Rice County, Burnsville, Pine Bend, Wisconsin or Iowa. If the XWEF is unable to use the fuel produced by the RWRRF, MMSW would continue to be delivered to the RWRRF and RDF would be transferred to Olmsted County or the Barron County Waste-To-Energy Facility or to a landfill during a short term facility outage.

24.2 Long-Term Alternatives

If the RWRRF is closed for an extended period of time the County would need to reevaluate the selected method of disposal of County generated MMSW. The options listed in paragraph 24.0 may be considered.

25.0 On-Site and Illegal Disposal (Environmental & Public Health Impacts)

25.1 On-Site Disposal

The County strives to mitigate impacts to land, air, surface and ground waters and to avoid nuisance conditions from the on-site disposal of mixed municipal solid wastes. To this end, Goodhue County provides HHW, rural recycling, C&D landfill services and coordinates with Red Wing's MMSW processing facility for all areas of the County. It is the goal of Goodhue County to eliminate the illegal disposal of waste materials by residents through a solid waste management system that provides convenient, accessible, affordable, and environmentally-safe disposal options.

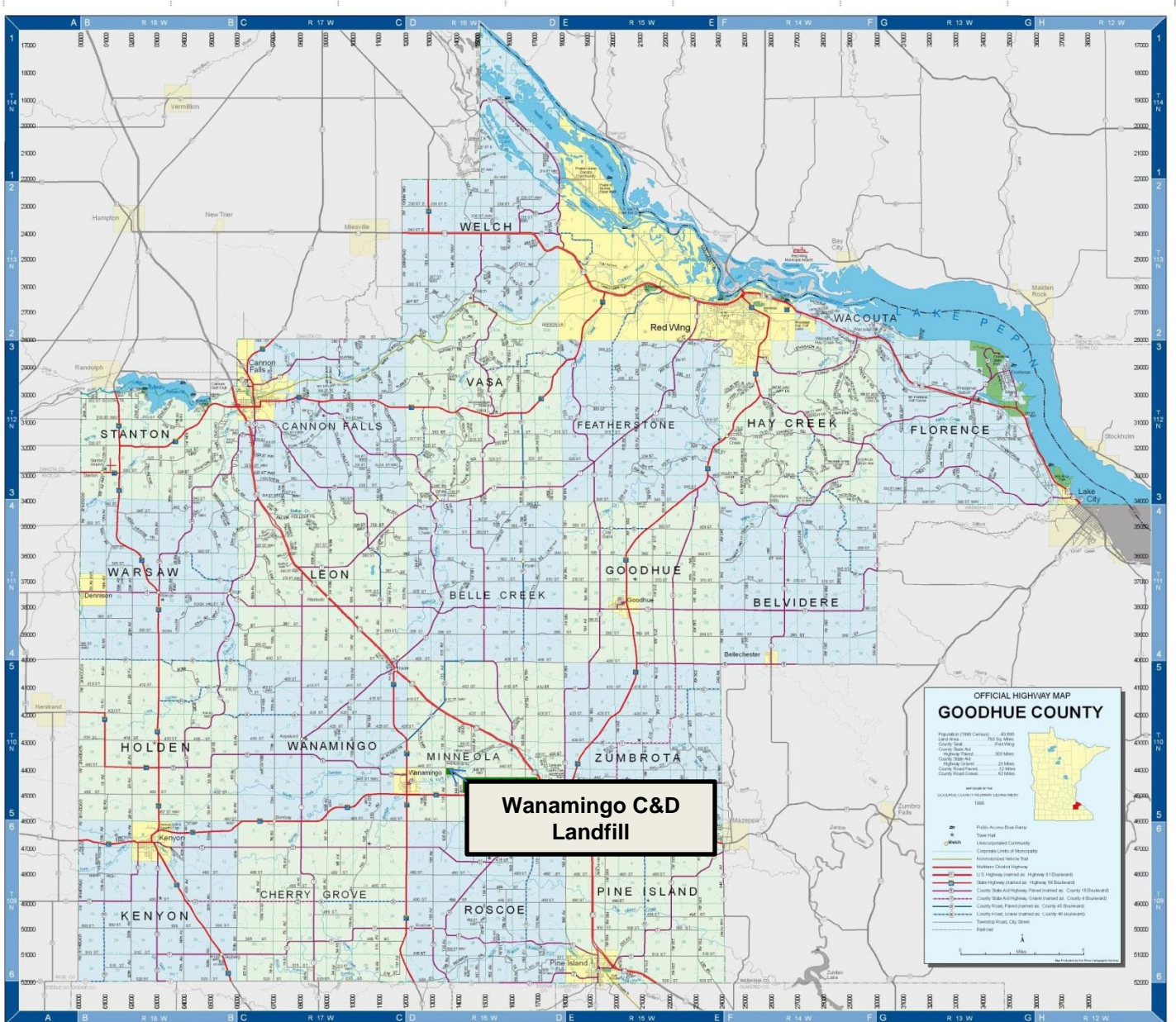
25.2 Illegal Disposal

Although it is the goal of Goodhue County to eliminate illegal disposal of waste materials, some of these illegal disposal sites may still exist. When illegal disposal complaints are received by the Public Works Department, staff is dispatched to the site to investigate. If illegal disposal is verified, the Official coordinates with the MPCA to resolve the illegal disposal problem. In most past cases the property owner complied with the County's and the MPCA's directions and no further action was necessary. However, when further enforcement actions have been necessary, the MPCA may issue a notice for the violation.

It is a goal of the County to discourage illegal disposal of waste materials through community education programs and by providing convenient, accessible, and affordable disposal services to its citizens with enforcement actions being taken only when necessary.

Figures

Figure 1 – Goodhue County Demolition Landfill Site Map





Appendix A
Projected Annual Budget



GOODHUE COUNTY SOLID WASTE
 10 YEAR BUDGET PROJECTION PLAN
 2017 - 2027
 April 2016

FUND 61	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
Revenue	819,968	840,467	861,479	883,016	905,091	927,719	950,911	974,684	999,051	1,024,028	1,049,628	1,075,869
Co Environmental												
Service Fee	1,401,016	1,436,041	1,471,942	1,508,741	1,546,460	1,585,121	1,624,749	1,665,368	1,707,002	1,749,677	1,793,419	1,838,254
Total Revenue	2,220,984	2,276,508	2,333,421	2,391,757	2,451,551	2,512,840	2,575,660	2,640,052	2,706,053	2,773,705	2,843,047	2,914,123

Expense	819,968	840,467	861,479	883,016	905,091	927,719	950,911	974,684	999,051	1,024,028	1,049,628	1,075,869
Co Environmental												
Service Fee	1,401,016	1,436,041	1,471,942	1,508,741	1,546,460	1,585,121	1,624,749	1,665,368	1,707,002	1,749,677	1,793,419	1,838,254
Total Expense	2,220,984	2,276,508	2,333,421	2,391,757	2,451,551	2,512,840	2,575,660	2,640,052	2,706,053	2,773,705	2,843,047	2,914,123

Annual SCORE Funds: 113,400 included in Rev and Exp figures above (no increase or decrease)
 312,245 Accumulated Withholding not included in Rev and Exp figures above

Annual Inflation Rate: 2.50%

City of Red Wing Solid Waste
 10 Year Budget Projection Plan
 2017 - 2027
 April 2016

	2017	2018	2019	2020	2021	2022
		Inflation 1.025	Inflation 1.025	Inflation 1.025	Inflation 1.025	Inflation 1.025
Based on:	32,000 ton	32,000 ton	32,000 ton	32,000 ton	32,000 ton	32,000 ton
A. Tip fee:	88.98	91.21	93.49	95.82	98.22	100.67
B. Fair Market Value: FMV revenue	45.20 1,446,400	46.33 1,482,560	47.49 1,519,624	48.68 1,557,615	49.89 1,596,555	51.14 1,636,469
C. Co Environ. Service Fee CoESF revenue	43.78 <u>1,401,016</u>	44.88 <u>1,436,041</u>	46.00 <u>1,471,942</u>	47.15 <u>1,508,741</u>	48.33 <u>1,546,460</u>	49.54 <u>1,585,121</u>
Total Tip Fee Revenue:	2,847,416	2,918,601	2,991,566	3,066,356	3,143,014	3,221,590
Other revenue:	607,655	622,846	638,417	654,378	670,737	687,506
Total Revenue:	3,455,071	3,541,448	3,629,984	3,720,733	3,813,752	3,909,095
Total Expenses:	3,455,071	3,541,448	3,629,984	3,720,733	3,813,752	3,909,095

City of Red Wing Solid Waste
 10 Year Budget Projection Plan
 2017 - 2027
 April 2016

2023	2023	2025	2026	2027
Inflation 1.025	Inflation 1.025	Inflation 1.025	Inflation 1.025	Inflation 1.025
32,000 ton	32,000 ton	32,000 ton	32,000 ton	32,000 ton
103.19	105.77	108.42	111.13	113.90
52.42 1,677,381	53.73 1,719,315	55.07 1,762,298	56.45 1,806,355	57.86 1,851,514
50.77 <u>1,624,749</u>	52.04 <u>1,665,368</u>	53.34 <u>1,707,002</u>	54.68 <u>1,749,677</u>	56.04 <u>1,793,419</u>
3,302,130	3,384,683	3,469,300	3,556,032	3,644,933
704,693	722,311	740,368	758,878	777,849
4,006,823	4,106,993	4,209,668	4,314,910	4,422,783
4,006,823	4,106,993	4,209,668	4,314,910	4,422,783

Appendix B

Goodhue County Solid Waste Ordinance

WASTE MANAGEMENT ORDINANCE

FOR

GOODHUE COUNTY

DECEMBER 1990

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WASTE MANAGEMENT ORDINANCE

An Ordinance authorizing and providing for County Waste Management, establishing powers and duties in connection therewith, establishing standards and requirements for waste management operations, including, but not limited to, compost facilities, recycling centers, transfer facilities, land disposal facilities, refuse-derived fuel processing facilities, and incinerators, within the County of Goodhue, requiring a license for the establishment and use of a waste management operation; embodying minimum standards and requirements established by rules of the Minnesota Pollution Control Agency and established by Goodhue County; providing for enforcement of said requirements; requiring a performance bond and insurance; imposing penalties for failure to comply with these provisions; and establishing a fee system for the licensing, permitting and enforcement of the provisions of this Ordinance in purpose and object to promote health, welfare and safety of the public and protect resources of water, air and land pursuant to Minnesota Statutes, Chapters 115, 115A, 116 and 400.

This Ordinance also establishes the policies and goals for Goodhue County regarding waste reduction, reuse and recycling in order to achieve mandated goals included in Minnesota Statutes regarding Waste Reduction and Recycling.

The County Board of Commissioners of the County of Goodhue, hereinafter referred to as the County Board, does ordain:

SECTION I. DEFINITIONS.

Unless specifically altered, terms and abbreviations used in this Ordinance shall be interpreted in a manner consistent with Minnesota Statutes, Chapters 115, 115A, 116 and 400 and rules of the Minnesota Pollution Control Agency, which have been or hereafter may be adopted under those provisions. Terms and abbreviations used herein that are not specifically defined by law shall be construed in accordance with the context and professional usage.

Subd. 1. "Agency" means the Minnesota Pollution Control Agency.

Subd. 2. "Administrator" means the Solid Waste Administrator or a representative of the Solid Waste Administrator for Goodhue County.

Subd. 3. "Air Contaminant" means the presence in the outdoor atmosphere of any dust, fume, mist, smoke, vapor, gas or other gaseous fluid, or particulate substance differing in composition from or exceeding in concentration the natural components of the atmosphere.

Subd. 4. "Air Pollution" means the presence in the outdoor atmosphere of any air contaminant or combination thereof in such quantity, of such nature and duration, and under such conditions as would be injurious to human health or welfare, to animal or plant life, or to property, or to interfere unreasonably with the enjoyment of life or property.

Subd. 5. "Ash" means the incombustible material that remains after the incineration of raw and processed waste materials including, but not limited to, coal, solid waste, hospital waste, or wood.

Subd. 6. "Backyard Compost Site" means a site used to compost food scraps, garden wastes, weeds, lawn cuttings, leaves and prunings from a single family or household, apartment buildings, or a member of which is the owner, occupant or lessee of the property.

Subd. 7. "Bulking Agent" means the material added to a compost system to provide structural support and prevent the settlement and compaction of the decomposing waste.

Subd. 8. "Bulky Item" means an oversized waste including appliances, furniture, trees or other waste that requires extraordinary handling methods to achieve compaction.

Subd. 9. "Canister System" means one or more waste storage containers located to function as intermediate storage facilities, and which are serviced on a regular basis by a public or private waste hauler.

Subd.10. "Certified Capacity" means the in-place volume granted an owner or operator of a mixed municipal solid waste land disposal facility for the disposal of mixed municipal solid waste by a certificate of need as granted by the County Board.

Subd.11. "Closure" means the act of ceasing to accept waste for disposal, processing or recycling or other management and followed by actions to prevent or minimize the threat to public health and the environment including removing stored wastes, removing contaminated equipment, applying final cover, installing monitoring devices and all other work performed as necessary.

Subd.12. "Commercial Hauler" means any person who owns, operates, or leases vehicles for the purpose of collection and/or transportation of any type of waste for recycling, disposal or other approved management.

Subd.13. "Composting" means the controlled microbial degradation of organic waste to yield a humus-like product.

Subd.14. "Contaminated Soils" means soil that has been impacted by a release of a chemical or petroleum-based substance and is subject to local, State, and Federal regulations.

Subd.15. "County" means any department or representative of the county who is authorized by this Ordinance or otherwise by the County Board to represent the County of Goodhue in the enforcement or administration of this Ordinance.

Subd.16. "Cover Material" is material that is used to cover compacted waste in a land disposal site. Important general characteristics of good cover are low permeability, uniform texture, cohesiveness and compactability.

Subd.17. "Demolition Debris" means waste resulting from the destruction of buildings, roads and other manmade structures including concrete, brick, bituminous concrete, untreated wood, masonry, glass, rock, trees and plastic building parts.

Subd.18. "Disposal Site" means a facility that is designed or operated for the purposes of reducing the volume of waste prior to placement of the waste, or the placement of waste residue in or on the land or the placement of waste directly in or on the land. All appurtenant facilities needed to process or transfer the waste are considered part of the facility.

Subd.19."Existing Facility" means a facility that is in operation or on which construction has started on or has been arranged through a contractual agreement that cannot be cancelled or modified without substantial loss.

Subd.20. "Floodplain" means any land that is subject to a one percent or greater chance of flooding in any given year from any source.

Subd.21. "Free Liquid" refers to the liquid produced when a 100-milliliter representative sample of waste placed on a standard 400-micron conical paint filter for five minutes.

Subd.22. "Garbage" means discarded material resulting from the handling, processing, storage, preparation, serving and consumption of food.

Subd.23. "Generator" means any person, by site, whose act or process produces hazardous waste or whose act first causes a hazardous waste to become subject to regulation.

Subd.24. "Hazardous Waste" means any refuse or discarded materials or combinations of refuse or discarded materials in solid, semi-solid, liquid, or gaseous form which cannot be handled by routine waste management techniques because they pose a substantial present or potential hazard to human health or other living organisms because of their chemical, biological, or physical properties. Categories of hazardous waste materials include, but are not limited to, explosives, flammables, oxidizers, poisons, irritants, and corrosives. Hazardous waste does not include sewage sludge and source material, special nuclear material or by-product material as defined by the Atomic Energy Act of 1954, as amended.

Subd.25. "Incineration" means the process by which wastes are burned for purpose of volume or weight reduction or energy recovery in facilities designed for such use.

Subd.26. "Incinerator Ash" is considered a special waste until either of the following events occurs:

- A. the United States Environmental Protection Agency establishes testing and disposal requirements for incinerator ash; or
- B. the Minnesota Pollution Control Agency adopts rules as required in Minnesota Statute Section 115A .97.

Subd.27. "Industrial Solid Waste" means all solid waste generated from an industrial or manufacturing process and solid waste generated from non manufacturing activities such as service and commercial establishments. Industrial solid waste does not include office materials, restaurant and food preparation waste, discarded machinery, demolition debris or household refuse.

Subd.28. "Inert Material" means the uncompostable material remaining in a compost system after decomposition. Inert material does not include soil particles or other naturally occurring materials that may be found in the compost system.

Subd.29. "Infectious Waste" means laboratory waste, blood, regulated body fluids, sharps and research animal waste that have not been decontaminated.

Subd.30. "Intermediate Waste Storage Facility" is a facility for the preliminary storage of waste including, but not limited to, transfer facility, canister site or system, recovery of recyclable materials, reduction, shredding and compression or other management techniques.

Subd.31. "Intervention Limit" means a concentration or measure of a substance which, if found to be exceeded in a sample of surface water, ground water, soil or air, indicates possible pollution from a facility or activity.

Subd.32. "Land Pollution" means the presence in or on the land of any waste in such quantity, of such nature and duration, and under such condition as would affect injuriously any waters of the state, create air contaminants or cause air pollution.

Subd.33. "Landspreading" means the placement of waste or waste by-products on or incorporation of them into the soil surface.

Subd.34. "Leachate" means liquid that has percolated through waste and has extracted, dissolved or suspended materials from it.

Subd.35. "Licensee" means a person who has been issued a license by the County Board for waste management purposes pursuant to this Ordinance.

Subd.36. "Liner" means a continuous layer of reworked natural soil or man made materials beneath and on the sides of a land disposal facility, compost facility or storage area that restricts the downward or lateral escape of waste, leachate or gas.

Subd.37. "Major Appliance" means clothes washers and dryers, dishwashers, hot water heaters, garbage disposals, trash compactors, conventional ovens, ranges and stoves, air conditioners, refrigerators and freezers.

Subd.38. "Monitoring Point" means any installation or location used to determine the quality or physical characteristics of water, air or soil.

Subd.39. "Open Burning" means burning any matter whereby the resultant combustion products are emitted directly to the open atmosphere without passing through an adequate stack, duct or chimney.

Subd.40. "Open Dump" means a land disposal site at which waste is disposed of in a manner that does not protect the environment, is susceptible to open burning and is exposed to the elements, flies, rodents and scavengers.

Subd.41. "Operation" means any site, facility, or activity relating to waste management.

Subd.42. "Person" means any human being, any municipality or other governmental or political subdivision or other public agency, any public or private corporation, any partnership, firm, association, or other organization, any receiver, trustee, assignee, agent, or other legal representative of any of the foregoing, or any legal entity.

Subd.43. "Problem Material" means a material that, when it is processed or disposed with mixed municipal solid waste, contributes to one of the following results:

- A. the release of a hazardous substance, or pollutant or contaminant, as defined in Minnesota Statutes, Section 115B.02, Subdivisions 8, 13, and 15;
- B. pollution of water as defined in Minnesota Statutes, Section 115.01, Subdivision 5;
- C. air pollution as defined in Minnesota Statutes, Section 116.06, Subdivision 3; or
- D. a significant threat to the safe or efficient operation of a solid waste processing facility.

Subd.44. "Putrescible Material" means waste that is capable of being rotten, or that may reach a foul state of decay or decomposition.

Subd.45. "Recyclable Materials" means materials that are separated from waste for the purpose of recycling, including paper, glass, plastic, metals, automobile oil, and batteries. Refuse-derived fuel or other material that is destroyed by incinerators is not a recyclable material nor is any material that is processed in a manner that precludes further use in its original form or processed form.

Subd.46. "Recycling" means the process of collecting and preparing recyclable materials and reusing the materials in their original form or using them in manufacturing process without destruction of the material. Recycling includes yard waste composting and mechanical or hand separation of materials for reuse.

Subd.47. "Refuse" means putrescible and nonputrescible wastes, including garbage, rubbish, ashes, incinerator ash, incinerator residue, street cleanings, market and industrial solid wastes, and municipal treatment wastes that do not contain free moisture.

Subd.48. "Refuse-derived Fuel" is solid waste that has been processed to make it suitable for use as a fuel source.

Subd.49. "Shoreland" means land located within the following distances from public water:

- A. 1,000 feet from the ordinary high water mark of a lake, pond, or flowage; and
- B. 300 feet from a river or stream, or the landward extent of a floodplain designed by ordinance on such a river or stream, whichever is greater.

Subd.50. "Solid Waste" means garbage, refuse, sludge from a water supply treatment plant or air contaminant treatment facility, or other discarded waste materials and sludges, in solid, semi-solid, or contained gaseous form, resulting from industrial, commercial, mining, or agricultural operations, or from community activities, but does not include hazardous waste, animal waste used as fertilizer; earthen fill, boulders, rock; sewage sludge, solid or dissolved material in domestic sewage or other common pollutants in water resources, such as silt, dissolved or suspended solids in industrial wastewater effluents or discharges which are point sources subject to permits under

Section 402 of the Federal Water Pollution Control Act; as amended, dissolved materials in irrigation return flows; or source material, special nuclear material, or byproduct material as defined by the Atomic Energy Act of 1954, as amended.

Subd.51. "Transfer Facility" means a fixed or mobile facility in which waste collected from any source is temporarily deposited, compacted, or rearranged for transportation to another waste management facility in quantities greater than 10 cubic yards or stored more than 48 hours. Trucks and semi-trailers used solely to deliver waste from one facility to another are not considered to be transfer facilities.

Subd.52. "Transporter" means a person engaged in the off-site transportation of hazardous waste by air, rail, highway, or water.

Subd.53. "Waste Management" means the storage, collection, processing or removal of waste from or on public or private property, its transportation to intermediate storage facilities or its final disposal or processing by methods approved by the Agency.

Subd.54. "Waste Collection Service" means a public or private operation engaged in waste collection and transportation.

Subd.55. "Waste Materials" means all wastes defined as a hazardous waste or solid waste in their processed or unprocessed state. Waste materials include source-separated wastes, refuse-derived fuel, recyclables, compost, ash, etc.

Subd.56. "Water Pollution" means the discharge of any pollutant into any waters of the state or the contamination of any waters of the state so as to create a nuisance or render such waters unclean, or noxious, or impure so as to be actually or potentially harmful or detrimental injurious to public health, safety or welfare, to domestic, agricultural, commercial, industrial, recreational or other legitimate uses; or to livestock, animals, birds, fish or other aquatic life; or the man made or man-induced alteration of the chemical, physical, biological, or radiological integrity of waters of the state.

Subd.57. "Water Table" means the surface of the ground water at which the pressure is atmosphere. Generally this is the top of the saturated zone.

Subd.58. "Waters of the State" means any waters, surface or underground, except those surface waters which are not confined but are spread and diffused over the land. "Waters of the State" includes all boundary and inland waters.

Subd.59. "Wetland" means a surface water feature classified as a wetland in the publication entitled "Classification of Wetlands and Deep Water Habitats of the United States," written and published by the United States Fish and Wildlife Service Biological Services Program, FWS 035-71/31, December 1979.

Subd.60. "Yard Waste" means the garden wastes, leaves, lawn cuttings, weeds, and prunings generated at residential or commercial properties.

SECTION II. GENERAL PROVISIONS.

Subd. 1. No person shall cause, permit, or allow land or property under his control to be used for waste management purposes, except at an operation for which a license has been granted by the County Board, unless otherwise provided by this Ordinance.

The Administrator may take action as allowed under Section VI, subdivisions 2 through 4 for actions violating this subdivision.

Subd. 2. Any operation to be used for any method of waste management not otherwise provided for in this Ordinance must be licensed by the County Board before operation may commence. The license application shall include three sets of complete plans, specifications, design data and ultimate land use plans. Proposed operating procedures for a waste management facility must be prepared by a professional engineer registered in Minnesota. The applicant shall procure a proper zoning permit to accompany the application if required by a local governmental unit's Zoning Ordinance.

No license shall be issued for a waste facility unless the applicant has demonstrated to the satisfaction of the County Board the availability of revenues necessary to operate the facility in accordance with applicable Federal, State and local laws, ordinances and rules.

Subd.3. After receiving an application for an operation, the County Board shall refer such applications to the Administrator who shall give a recommendation to the County Board concerning whether it should issue or deny the license. If an applicant is denied a license, such applicant shall be notified in writing of the reasons therefor by the County Board. A denial shall be without prejudice to the applicant's right to an appearance before the County Board or to the applicants right to file a further application after revisions are made to satisfy objections specified as reasons for the denial. All applicant's shall receive a preliminary response within 60 days of submittal and a final response within 120 days. Response times may be extended to obtain more information and/or to hold required public hearings.

Subd.4. The County Board shall refuse to issue a license for any operation that does not comply with this Ordinance, Agency rules and the County's Solid Waste Management Plan.

Subd. 5. Issuance of any license pursuant to the provisions of this Ordinance shall be contingent upon the applicant furnishing to the County a bond in an amount to be set by the County Board. This bond shall name the County as obligee with sufficient sureties duly licensed and authorized to transact business in the State of Minnesota as sureties. The condition of such bond shall be that, if the licensee fails to comply with any requirements or fails to perform any of the acts required of an operation or ceases to operate any monies or expend any labor or material to restore the operation to a condition in compliance with this Ordinance, the bond holder and the sureties on its bond shall reimburse the County for any and all expenses incurred by the County to remedy failure of the licensee to comply with the terms of this Ordinance, and the bond holder and its sureties shall indemnify and save the County harmless from all losses, costs, and charges that may occur to the bond holder or its sureties because of any default of the licensee under the terms of the bond terms to operate in compliance with the terms of the ordinances of the County.

Subd.6. In addition to the bond referred to in subdivision 5, issuance of any license pursuant to the provisions of this Ordinance shall be contingent upon the applicant securing insurance, and furnishing to the County a copy of a certificate therefor, the following types of insurance issued to the licensee by insurers duly licensed within the State of Minnesota and in amounts to be set by County Board; general liability including, but not limited to, bodily injury, property damage, motor vehicle, or other insurance such as Worker's Compensation, required by State or County Law.

Subd.7. Any license granted by the County Board under the provisions of this Ordinance may be suspended by the County Board at any time for noncompliance with the provisions of the license, this Ordinance or applicable state laws or rules, or upon written notification to the licensee and the County Board by the Administrator or by an authorized representative of the Agency that the continued use of the operation endangers the health, welfare or safety of the public or that the continued use pollutes or impairs the environment.

The notice of suspension shall be deemed adequately served whenever it is served upon the licensee personally or by leaving the same at the licensed premises with the person in charge thereof or by registered mail. A copy of the notice of suspension shall be provided to the County Board. The County Board shall remove the license suspension only upon presentation of evidence acceptable to the County Board that the conditions that were cited as cause for suspension have been fully corrected.

A license may be revoked only after the County Board has held a public hearing at which the licensee and other persons wishing to be heard concerning the operation shall have the right to be heard. The date of the hearing for license revocation shall be set by the County Board and shall not be held earlier than thirty days after notice of said hearing was mailed to the licensee. Evidence may be adduced in a manner consistent with the rules of

evidence applied in civil cases. A transcript thereof shall be made by tape recording or other suitable technique.

If, pursuant to said hearing, the County Board shall determine that the operation has been conducted in violation of the provisions of the license, this Ordinance, State laws or State rules, the County Board may revoke the license or continue such suspension until the licensee has demonstrated that full compliance with the rules has been attained and that such compliance will be continued in the foreseeable future.

Subd. 8. Routine inspection and evaluation of an operation shall be made by the Administrator at such frequency as to ensure consistent compliance by the operation with the provisions of this Ordinance. The licensee shall be provided with a written inspection report containing a precise description of any deficiencies, recommendations for the correction thereof and the date when the corrections shall be accomplished. Copies of said report(s) shall be furnished to the Agency. The licensee shall allow to authorized representatives of the County or the Agency access to the facility at any time for purpose of making such inspections as may be necessary to determine compliance with the requirements of this Ordinance, and any other applicable statute, ordinance, or rule.

Subd. 9. Where the conditions imposed by any provision of this Ordinance differ with conditions imposed by other provision of this Ordinance, or any other applicable law, ordinance or rule, the provision that establishes the higher standards for the promotion of the public health, safety, and general welfare shall prevail.

Subd.10. Every license issued under this Ordinance for a waste management shall be registered with the office of the Administrator.

Subd.11. All unpaid bills related to waste management may be certified on the tax rolls for the next year.

SECTION III. SOLID WASTE ADMINISTRATOR.

Subd. 1. The Solid Waste Administrator shall have all necessary authority to implement and carry out the provisions of this Ordinance including, but not limited to, the following:

- A. To review and consider all license applications and supporting materials referred to the Administrator for waste management within the County, and after such review and consideration, to recommend in writing with documentation to the County Board whether a license should be granted or denied;
- B. To inspect operations to determine compliance and to investigate complaints about violations of this Ordinance;
- C. To recommend to the County Attorney that legal proceedings be initiated against a person or group of persons to compel compliance with the provisions of this

Ordinance or to terminate or control an operation not in compliance with this Ordinance;

- D. To encourage and conduct studies, investigations and research relating to aspects of waste management, including but not limited to, methodology, chemical and physical considerations, and engineering;
- E. To advise, consult, and cooperate with the public and other governmental agencies in furtherance of the purpose of this Ordinance; and
- F. To develop and implement an educational program to involve school curriculum, local governmental units, the public at large, and affected parties to ensure and encourage participation in waste management programs.

Subd. 2. The Administrator shall be responsible for the completion of all reports to the Minnesota Office of Waste Management and Agency regarding County- owned waste facilities and expenditures from any grant funds. The reports shall include the following:

- A. Annual Reports for the Goodhue County Recycling Facility, the Goodhue County Demolition Land Disposal Facility, and the Red Wing Land Disposal Facility and any other County-owned or operated waste management facility;
- B. Annual Report on the Goodhue County's efforts to meet the State of Minnesota's mandated recycling goal; and
- C. Annual Report on the expenditures of the SCORE funding and surcharge imposed by the State of Minnesota.

Subd.3. The Administrator shall recommend to the County Board application for funding opportunities to assist in the implementation of this Ordinance from public or private sources.

Subd. 4. The Administrator shall be responsible for the development of plans and manuals as required to meet State and Federal rules.

SECTION IV. WASTE STORAGE.

Subd. 1. Waste materials shall be stored in a manner that complies with State and Federal rules administrated by the Agency.

Subd.2. Toxic or hazardous wastes shall be stored in accordance with State and Federal rules administrated by the Agency.

Subd.3. Transfer facilities and canister sites may be established and shall be licensed annually according to Sections II, V, XX, and shall meet all additional requirements imposed by the County Board.

Subd. 4. Waste materials shall not be stored on public or private property for more than two (2) weeks without the written approval of the Administrator. Nonputrescible wastes suitable for recycling shall not be stored on public or private property in a manner that create a nuisance, safety concerns or health hazard. Approval may be granted for longer storage at the time of licensure for a commercial hauler based on the service provided.

SECTION V. COLLECTION AND TRANSPORTATION OF WASTE.

Subd. 1. The collection and transportation of waste materials shall be performed in accordance with State rules administered by the Agency.

Subd.2. Toxic or hazardous wastes shall be transported in a manner consistent with State rules administered by the Agency.

Subd. 3. No person may collect or transport waste materials for hire without first obtaining a license from the County Board. The County Board shall not issue a license until the applicant complies with all of the following requirements:

- A. The applicant shall submit a completed application form provided by the County for a waste collection and transportation license.
- B. The applicant shall submit for inspection to the County, when requested but no more than once per year except when are detected as not meeting Ordinance standards, all vehicles to be used for waste collection and transportation. An annual Minnesota Department of Transportation inspection shall be conducted prior to license issuance. The Minnesota Department of Transportation inspection results may be used in replacement of a County inspection.

Such vehicles shall have leak-resistant bodies of easily cleanable construction, completely covered with metal, heavy canvas or other suitable covering, and shall be subject to approval and periodic inspection by the Administrator or the Administrator's designee.

- C. The applicant shall meet all of the applicable requirements for obtaining a license that are specified in Section II of this Ordinance.
 - D. The applicant shall establish a fee for collection and transportation of waste materials on a volume-based system, to the extent possible.
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SECTION VI. LITTER.

Subd. 1. It shall be unlawful to place any portion of waste in or on public or private lands, shorelands, roadways, or waters. Such placement will be considered littering under this Ordinance.

Subd. 2. A person in violation of Subdivision 1 shall be subject to a civil penalty of not less than twice or more than five times the amount of cost incurred by the County to remove, process, and dispose of the waste.

Subd. 3. The Administrator with the County Attorney shall bring action to recover the civil penalty; related legal, administrative, and court costs; and damages for injury to or pollution of the lands, shorelands, roadways, or waters where the waste was placed.

Subd. 4. The County Board may place a lien on property used as a deposit for waste in violation of Section II, Subdivision 1, and collect the cost as a special assessment.

Subd. 5. The following provisions will apply to all unauthorized placement of waste:

- A. the deposition of waste in the County is prohibited except as allowed by this Ordinance;
- B. the property owner or occupant is required to remove any unauthorized deposition of waste;
- C. if the waste is not removed, the County shall provide for its removal at the property owner's or occupant's expense; and
- D. if direct payment is not received, the County shall provide for the expense to be a lien on the property and collected as a special assessment.

SECTION VII. PROBLEM MATERIAL MANAGEMENT.

Subd. 1. No person shall place major appliances in mixed municipal solid waste or dispose of major appliances in a solid waste processing or disposal facility after July 1, 1990.

Subd. 2. No person shall place a motor vehicle battery in mixed municipal solid waste.

Subd. 3. A person selling lead acid batteries at retail or offering lead acid batteries for retail sale in Minnesota must accept lead acid batteries from customers, charge the fee established by the State, and provide written notice of all State requirements.

Subd. 4. Any person selling lead batteries at wholesale or offering lead acid batteries for sale at wholesale must also accept lead acid batteries from customers.

Subd. 5. All lead acid batteries must be recycled.

Subd. 6. A person who sells lead acid batteries at retail may not charge to receive lead acid batteries from consumers.

Subd. 7. A consumer may not deliver more than five lead acid batteries to a retailer at one time.

Subd. 8. A retailer who does not recycle lead acid batteries received from consumers is guilty of a misdemeanor. Each lead acid battery that is not recycled is a separate violation.

Subd. 9. All household batteries and industrial or commercial generated dry-cell batteries must be managed in accordance with the County's household battery program.

Subd.10. As more problem materials are defined by the State, all persons in Goodhue County will be required to meet the management controls established for each problem material.

SECTION VIII. RECYCLING AND RECYCLING FACILITIES.

Subd. 1. With this Ordinance, the County Board establishes a minimum recycling goal of 25 percent by weight of the total solid waste generated in Goodhue County. This goal will be met, to the extent possible, by December 31, 1992. Within two years from obtaining the 25 percent minimum, the County will increase the amount recycled by 10 percent.

Subd.2. In an effort to meet this goal, the County shall work with city and township officials to develop and implement programs including education efforts. All citizens of Goodhue County shall be given the opportunity to recycle.

Subd.3. A license shall be required for the collection and transportation of recyclables. The license shall be obtained in accordance with Sections II, V and XX. All recycling facilities, except publicly-owned and operated facilities, shall be licensed according to Sections II, V and XX and must comply with Agency permit requirements.

Subd.4. All applications for a recycling facility must include the potential markets, volumes, and fees for the proposed operations.

Subd. 5. All recycling collectors and facility operators shall submit an annual report to the Administrator. The report shall be submitted by January 10 of each year and shall cover the previous year's material handled.

Subd. 6. The Administrator shall work with state, city and township officials to develop recycling opportunities for problem materials and newly identified materials.

Subd. 7. The following technical standards shall apply to all recycling facilities:

- A. The site must be designed and constructed to prevent surface water from draining through recyclable or unusable material.
- B. All spills or leaks must be contained.

- C. Ample storage of recyclable materials and unusable materials.
 - D. The facility must be operated in a manner that minimizes dust and other windblown material, vermin populations due to improper storage, and other nuisance conditions.
 - E. All unusable material must be removed at least once each week.
 - F. All facility structures must be located at least 20 feet from any property lines and must conform to all building and zoning requirements.
 - G. A plan must exist for the routing of materials, if particular markets disappear or if the facility must close for a period of time - either scheduled or unscheduled shutdowns.
 - H. If the facility is open for use by individuals, a separate unloading area must be provided or traffic controlled to prevent collisions between commercial and individual vehicles. This provision may be waived by the Administrator for facilities with fewer than 10 vehicles entering per day.
 - I. When the facility is permanently closed, all materials must be removed and properly managed.
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SECTION IX. TRANSFER FACILITIES.

Subd. 1. No person shall construct or operate a waste transfer facility without first obtaining a license issued by Goodhue County. The license shall be obtained in accordance with Sections II, V, and XX, and the facility must comply with Agency permit requirements.

Subd.2. The applicant must provide the following information when applying for a license to construct and/or operate a transfer facility:

- A. the facility design and layout;
- B. the types and number of vehicles expected to use the facility;
- C. the types of waste to be accepted;
- D. the hours of operation;
- E. the storage capacity of the facility;
- F. final location of waste;
- G. on-site traffic operations;

- H. operating plans;
- I. recycling and composting activities to be conducted, if any; and
- J. a copy of all permit materials submitted to the Agency.

Subd.3. All facility structures must be at least 20 feet from any property line and conform with all building and zoning ordinances.

Subd. 4. The design and operation of a transfer facility must meet the following standards:

- A. The facility must be secured.
- B. The facility must have all-weather roads that are negotiable by loaded collection vehicles.
- C. Tie downs or wheel curbs must be provided at elevated unloading areas.
- D. Tipping areas must be cleaned on a routine basis and capable of containing free moisture.
- E. All loading and unloading must be completed on an impervious surface.
- F. Special storage areas, Le. tires, appliances, etc., must be designed to prevent nuisance conditions, fire hazards, or other safety or health hazard.
- G. All putrescible waste must be removed at least twice per week and all stored materials at least monthly, unless otherwise approved.

Subd. 5. At closure, all materials must be removed from the facility and properly stored.

SECTION X. COMPOST SITES AND FACILITIES.

Subd. 1. A person operating a backyard compost site shall not be required to obtain a license under this Ordinance.

Subd.2. Backyard compost sites must be operated in a nuisance-free condition. No meat scraps or other uncompostable material may be deposited in the site. The pile must be turned regularly.

Subd. 3. All community yard waste compost sites must be licensed in accordance with Section II, unless publicly-owned and operated. All sites must receive a permit-by-rule from the Agency.

Subd.4. All yard waste compost sites must be constructed and operated in accordance with the following standards:

- A. Surface water drainage must be diverted from the compost area.
- B. The compost site must have controlled access and open only during posted hours.
- C. During the active lawn-cutting months when large amounts of grass are entering the site, the compost piles must be turned at least weekly with alternating days preferred. During the winter months, turning will not be required at a rate more frequent than monthly.
- D. Odors must be controlled.
- E. Non-compostables must be removed from the site at least weekly.

Subd. 5. All waste (including large scale manure operations) compost sites must be licensed in accordance with Section II. An agricultural producer composting only that waste generated by a single operation shall not be required to obtain a license.

Subd. 6. The compost site must be in compliance with local Zoning Ordinances, and be constructed and operated in accordance with State and Federal laws relative to compost facilities. The application for a County license shall include, but not be limited to, the following:

- A. the facility design plans including surface water controls, leachate control, traffic patterns and the compost pad standards;
- B. the operating plan describing material accepted, compost methods (e.g. turning standards, detention time, temperature), waste analysis, residual management, and final use of the finished product;
- C. the performance standards for the facility and final product;
- D. the distribution plan for the finished product; and
- E. the necessary information to show that the applicant is financially and operationally capable of properly managing the facility.

SECTION XI. SOLID WASTE LAND DISPOSAL FACILITIES.

Subd. 1. Land disposal facilities, including, but not limited to, mixed municipal solid waste, industrial solid waste, and demolition debris shall meet all the requirements of State rules administered by the Agency, which governs these facilities. Additionally, no person shall establish, operate or maintain a land disposal facility without first obtaining a license from the County Board in accordance with Section II.

Subd.2. An application for a county license shall include, but not be limited to, the following:

- A. An operating schedule and a schedule of fees to be levied at the land disposal facility.
- B. A notarized affidavit stating that the applicable local governments have been given thirty (30) days notification of the pending application for a license.
- C. A certificate from the County Zoning or City Administrator that the use proposed is in accordance with the established County or City Zoning Ordinance.
- D. Sufficient documentation to enable the County Board to determine whether the applicant is financially and operationally capable to properly dispose of all solid waste.

Subd. 3. All land disposal facilities, in addition to the standards established by the Agency, shall be required to meet the following standards.

- A. A minimum 200-foot buffer zone for new disposal areas shall be maintained around aU facilities except for demolition debris facilities where the buffer zone will be based on the end use of the site. The 200-foot buffer zone is measured from the waste boundary to the nearest property boundary.
- B. All mixed municipal solid waste or other putrescible waste shall be covered daily. Cover material will be approved by the Administrator at the time of licensure.
- C. All leachate treatment must be consistent with local, State and Federal standards. If the proposed leachate is found to be consistent, the Administrator shall approve the treatment process.
- D. All new facilities shall be screened. Natural screening, such as existing trees or hills, will be acceptable.

SECTION XII. INCINERATION AND ENERGY RECOVERY.

All incinerators having a capacity greater than 6,000 pounds per hour shall meet the requirements of Federal and State rules administered by the Agency. Additionally, the following requirements shall apply to all incinerators of any size that process waste from more than a single household or other establishment.

Subd. 1. No person shall install or operate an incinerator without first obtaining a license from the County Board.

Subd.2. The applicant shall meet all requirements for obtaining a license as specified in Section II of this Ordinance. Furthermore, the County Board shall not issue a license until the applicant and facility comply with the following requirements:

- A. All of the same criteria for incinerator construction, operation and maintenance contained in State rules administered by the Agency that presently apply to incinerators with capacities greater than 6,000 pounds per hour.
- B. Upon completion of the facility and prior to initial operation, the Administrator shall be notified to allow personnel of the County to inspect the facility both prior to and during the performance tests.

Subd. 3. The application for a license shall include, but not limited to, the following:

- A. an operating schedule and a schedule of fees to be levied at the incinerator;
- B. a notarized affidavit stating that the applicable local governments have been given at least thirty (30) days written notification of the pending application for a license;
- C. a certificate from the County or City Zoning Administrator that the use proposed is in accordance with the established County or City Zoning Ordinance;
- D. sufficient documentation to enable the County Board to determine whether the applicant is financially and operationally capable to properly process and dispose of all waste;
- E. all of the same information required for review by the State rules administered by the Agency that presently apply only to incinerators with capacities greater than 6,000 pounds per hour; and
- F. such additional data and information as may be required by the Administrator.

Subd. 4. During normal operation, the facility shall comply with the following requirements:

- A. Permanent records shall be maintained for County inspection as to the quantity of material incinerated, the total quantity of resulting residue and total hours of plant operation.
- B. Any discharges to the air, or to surface or ground waters of the state shall meet all applicable State rules for air and water quality or effluent standards now or hereafter adopted.
- C. All unloading and processing of solid wastes at the facility shall be conducted in such a manner as to prevent or eliminate odors, run-off, and litter outside the facility.

SECTION XIII. OTHER WASTE MANAGEMENT FACILITIES.

All waste management facilities shall be reviewed by the Administrator. The inability to amend this Ordinance on a timely monthly basis to address new management facilities

shall not exempt any individual from the need to be licensed. All requirements including fees already in the Ordinance shall be consistent with established requirements and State and Federal laws until such time as this Ordinance is amended.

SECTION XIV. LAND APPLICATION.

Subd. 1. The land application of waste, sewage sludge, contaminated soils must be approved by the Administrator prior to land applying the material. The following information must be supplied for review:

- A. chemical analysis of the material;
- B. amount of material to be land applied;
- C. treatment method, as appropriate;
- D. location map of area to be used as the application site;
- E. a certificate of local approvals granted, if required; and
- F. any other conformation requested by the Administrator in order to adequately review the application.

Subd. 2. The following minimum standards apply to the land application of any material or waste:

- A. All material must be kept at least 20 feet from any property line, 500 feet from any residence, and 500 feet from any well.
 - B. The material may be spread in layers no thicker than 4 inches.
 - C. All analytical and operational reports must be submitted to the Administrator for review.
 - D. Final incorporation of contaminated soils is not permitted without approval from the Administrator.
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SECTION XV. HAZARDOUS WASTE MANAGEMENT.

Subd. 1. All generators of hazardous waste shall notify the Administrator of their existence. The generator shall submit to the Administrator a copy of the disclosure forms completed for the Agency.

Subd. 2. All transporters of hazardous waste shall submit to the Administrator a copy of their insurance and their identification number.

Subd.3. All hazardous waste facilities shall be designed, constructed and operated in accordance with State and Federal rules. A copy of all application materials submitted to the Agency shall be submitted to the Administrator for review also.

SECTION XVI. FEES.

Approval by the County Board of an application for a license for a waste management facility shall be contingent upon the payment to the County of a fee in the amount established by the County Board. The amount of the fee shall be based upon the cost to the County for processing the application including review of application material, public meetings and notifications, mailing, overhead, and administering and enforcing this Ordinance for a particular facility. The fees prescribed shall be paid by an applicant for each facility maintained. Waste fees shall be paid as a condition for license renewal. Fees shall be paid to the County Treasurer prior to issuance of licenses or approvals. The County Board shall also establish fees necessary to ensure proper waste management in accordance with Minnesota Statutes, Chapters 115A and 400.

SECTION XVII. TERMINATION OF SOLID WASTE OPERATIONS.

Subd. 1. All waste operations shall be terminated in accordance with County ordinances, Federal laws, and State rules administered by the Agency.

Subd. 2. The license of any operation in subd.1 with water monitoring wells or lysimeters that are reviewed by the County or the Agency shall establish with the County an escrow account no later than one year from the effective date of this Ordinance.

The purpose of the escrow account is to set aside adequate funds to continue sampling required by the County or the Agency for a period of no less than 30 years from termination of the operation.

The County Board shall specify by resolution the amount of money to be deposited in the account and the terms for payments which shall be made by the licensee to that account. Failure by the licensee to meet the escrow account conditions established by the County Board shall constitute a failure of the licensee to comply with the terms of this Ordinance, thereby enabling the County to use the provisions of Section II, Subd. 5 to make the necessary deposits to the escrow account.

Subd. 3. The licensee of each waste operation shall inform the County Board in writing of a licensee's intent to abandon or terminate the operation. Such notice shall be provided in advance of the abandonment or termination date by at least six months to allow the

County Board to address closure requirements including costs. Failure of a licensee to comply, for any reason, with the above advance notice requirements shall constitute a failure of the licensee to comply with the terms of this Ordinance. The County Board may elect to pay all public and private higher-than-normal waste management costs which result from the premature cessation of a waste operation. The County may recover these costs through the provisions of Section II, subd. 5.

SECTION XVIII. VARIANCES.

Upon written application by the applicant or operator, the County Board may grant variances from the provisions of this Ordinance in order to promote the effective and reasonable application and enforcement of the provisions of this Ordinance. If such variance would result in noncompliance with Agency rules, a variance application must be filed with the Agency.

A variance may be granted by the County Board after a public hearing where the County Board determines that enforcement of this Ordinance would cause the applicant undue hardship, or that the Ordinance cannot be complied with due to technological impossibility or economic unreasonableness.

Such a variance shall not be granted for a period in excess of two years, except for a variance providing for the construction of permanent facilities, but may be renewed upon application by the applicant and after a public hearing is held. A variance may be revoked prior to expiration of the variance by the County Board at a public hearing. An application for a variance shall be accompanied by a plan and schedule for achieving compliance with the Ordinance. Prior to any public hearing held by the County Board under this provision, persons who may be adversely affected by the granting of the proposed variance shall be given at least thirty (30) days notice to said public hearing. Publication of a notice of hearing in appropriate newspapers shall be considered adequate notice.

SECTION XIX. NONCONFORMING SITES AND FACILITIES.

Waste management facilities in existence on the effective date of this Ordinance shall conform to the provisions of this Ordinance or terminate operations no later than 240 days from that date unless a variance application is submitted to the County Board within 180 days period following the effective date of this Ordinance. If the variance request is denied, the waste management facility must be properly closed.

SECTION XX. ADDITIONAL REQUIREMENTS.

For the purpose of protecting the public health, safety and welfare, the County Board may impose additional requirements consistent with the intent of this Ordinance for the operation of waste management sites or facilities.

SECTION XXI. SEVERABILITY.

It is hereby declared to be the intention of the County Board that the several provisions of this Ordinance be severable in accordance with the following:

Subd. 1. If any Court of competent jurisdiction shall adjudge any provision of this Ordinance to be invalid, such judgement shall not affect any other provision of this Ordinance not specifically included in said judgement.

Subd. 2. If any Court of competent jurisdiction shall adjudge invalid the application of any provision of this Ordinance to a particular structure, site, facility, or operation not specifically included said judgement.

SECTION XXII. PROVISIONS ARE CUMULATIVE.

The provisions of this Ordinance are cumulative limitation upon all other laws and ordinances heretofore passed or that may be passed hereafter, covering any subject matter of this Ordinance.

SECTION XXIII. NO CONSENT.

Nothing contained in this Ordinance shall be deemed to be consent, license or permit to locate, construct, operate or maintain any site, facility or operation, or to carry on any activity.

SECTION XXIV. VIOLATIONS.

Subd. 1. Any person who violates or fails, neglects or refuses to comply with the provisions of this Ordinance shall be guilty of a misdemeanor and upon conviction thereof shall be punished therefor as provided by Minnesota Statutes. A separate offense shall be

deemed committed upon each separate day during or which a violation occurs or continues.

Subd. 2. This Ordinance, in addition to other remedies, may be enforced by injunction, action or compel performance or other appropriate action in District Court to prevent, restrain, correct or abate violations.

SECTION XXV. OTHER ORDINANCES AND REGULATIONS.

Nothing in this Ordinance shall preclude any local units of government from adopting stricter regulations than this Ordinance.

SECTION XXVI. EFFECTIVE DATE.

This Ordinance shall be in full force and effect from and after its passage and publication according to law.

Chair
Goodhue County Board

Attested By:
Goodhue County Administrator

Date

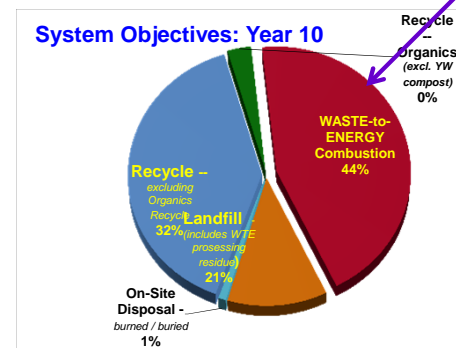
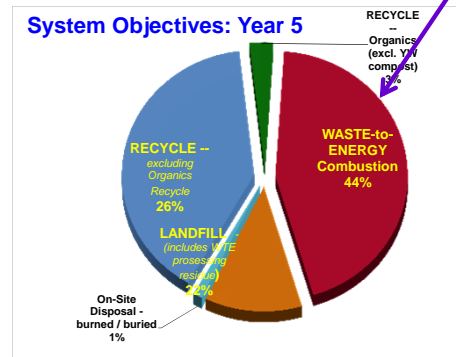
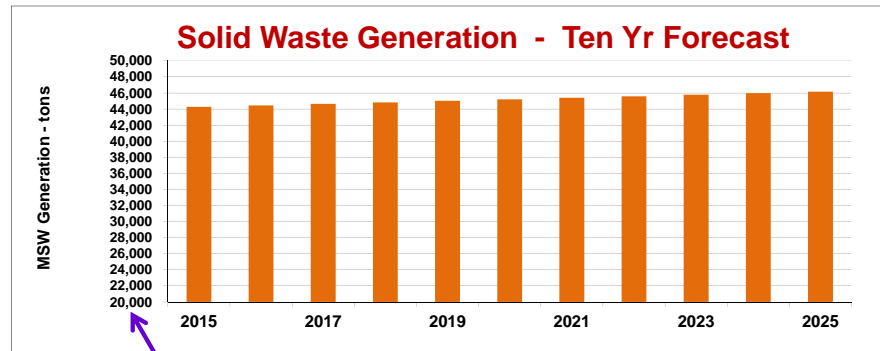
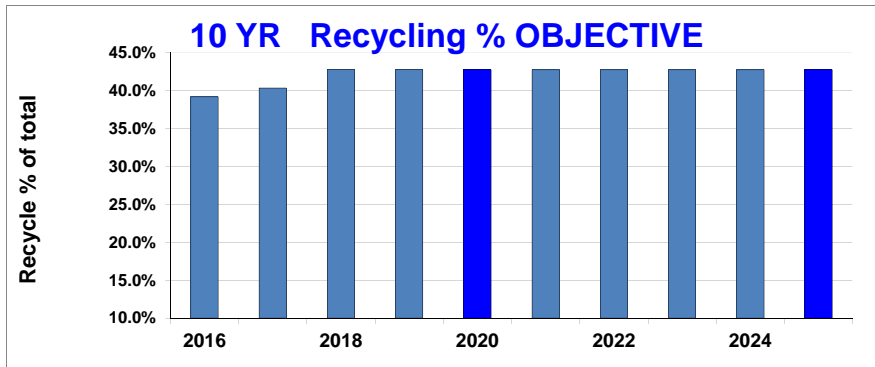
Date

Appendix C
Goal Volume Table

SUMMARY Waste Management System OBJECTIVES

for the GOODHUE County Solid Waste Management Plan

Planning Year #	2015	2016	2017	2018	2020	2025
		Planning Yr 1	Planning Yr 2	Planning Yr 3	Planning Yr 5	Planning Yr 10
MANAGEMENT METHOD OBJECTIVES for the County MSW Solid Waste Management System						
Source Reduction						
RECYCLE -- excluding Organics Recycle	36.9%	36.3%	37.4%	39.9%	39.8%	39.8%
RECYCLE -- Organics (excl. YW compost)	2.71%	2.88%	2.88%	2.88%	2.88%	2.88%
WASTE-to-ENERGY Combustion	36.2%	28.7%	37.0%	44.3%	44.3%	44.5%
LANDFILL -(includes WTE processing residue)	23.3%	31.1%	21.7%	11.9%	11.9%	11.9%
On-Site Disposal - burned / buried	0.9%	0.9%	1.0%	1.1%	1.1%	0.9%



Note - the percent values for waste mgmt methods does not automatically update with data input changes -- the two pie charts need to be manually edited to properly present any percentage changes made for changes to various management scenario percentage levels. To show correctly the % in the chart, the pie chart data labels need to be completely deleted and then added back. To accomplish this, click on the existing label text so all the labels show in a box, then hit delete and all the boxes are erased, then right click on the pie to get a info box and select "add data labels" and then right click again on the labels and select edit "edit data labels". After clicking on edit data labels, click off the " values" check mark. Each individual data label can be edited for color, bold and font size using the edit features in on the Home Page. Delete this note after making the edits.

Note - the axis value range for % & tpy on these charts needs to be initially edited to match the range of % and generation values for the county -- To show correctly the % and tpy in the tables, table data labels ranges need to be edited. To accomplish this, right click on the existing range values text so all the labels show in a box, then right click on the range box to get a info box and select "format axis" and then edit the minimum and maximum values to show a presentable tpy value range. Delete this note after

SUMMARY DATA - Waste Management SYSTEM OBJECTIVES for the GOODHUE County Solid Waste Management Plan

Planning Year #	2015	2016	2017	2018	2020	2025	10Yr Totals
		Planning Yr 1	Planning Yr 2	Planning Yr 3	Planning Yr 5	Planning Yr 10	
SYSTEM OBJECTIVES							
Recycle -- excluding yard waste	39.6%	39.2%	40.3%	42.7%	42.7%	42.7%	
Resource Recovery	36.2%	28.7%	37.0%	44.3%	44.3%	44.5%	
Landfill	13.6%	23.5%	11.8%	0.0%	0.0%	0.0%	
On-Site Disposal - burned / buried	0.9%	0.9%	1.0%	1.1%	1.1%	0.9%	
Recycling % Detail							
Residential recycling %	22.3%	22.3%	22.3%	23.7%	23.7%	23.7%	
Commercial recycling %	7.7%	8.2%	8.2%	8.2%	8.2%	8.2%	
Organics Recycling (source separated food to people & livestock)	2.7%	2.9%	2.9%	2.9%	2.9%	2.9%	
Mechanical /Hand Sorted @ Res Rec Fac.	5.1%	4.0%	5.2%	6.2%	6.2%	6.3%	
Banned Problem Materials + Other recycle	1.7%	1.7%	1.7%	1.7%	1.7%	1.7%	
Percent of Total MSW	39.6%	39.2%	40.3%	42.7%	42.7%	42.7%	
Total MSW Generated	44,000	44,000	45,000	45,000	45,000	46,000	10Yr Totals 453,000
On-Site Disposal - bury, burn barrel, open burn -- tons	400	400	500	500	500	400	4,611
Recycling - tons							
Residential	9,900	9,900	10,000	10,600	10,700	10,900	106,100 tons
Commercial/ Industrial/ Institutional - documented	3,410	3,600	3,700	3,700	3,700	3,800	37,200 tons
Organics Recycle (s. separated commercial & residential)	1,200	1,300	1,300	1,300	1,300	1,300	13,000 tons
Mechanical / Hand Sorted @ Res Rec Fac.	2,240	1,800	2,300	2,800	2,800	2,900	26,900 tons
Problem Materials - Banned + Other recycle	770	800	800	800	800	800	7,700 tons
RECYCLING total tons	17,500	17,400	18,000	19,200	19,300	19,700	190,900 tons
Resource Recovery -tons tipped							
Resource Recovery Red Wing	22,340	18,000	23,259	27,999	28,211	28,921	269,000 tons
RRT Newport/Ramsey Washington County	220	-	-	-	-	-	- tons
Total RR Facilities MSW Tipped	22,560	18,000	23,259	27,999	28,211	28,921	269,000 tons
MSW from other Co's sent to a County Res. Rec. Facility							
Dakota	100	500	1,000	1,500	1,500	1,500	1,500 tons
	2,500	500	500	500	500	500	500 tons
	-	-	-	-	-	-	- tons
	-	-	-	-	-	-	- tons
	-	-	-	-	-	-	- tons
	-	-	-	-	-	-	- tons
	-	-	-	-	-	-	- tons
TOTAL RECEIVED AT RR FACILITY in Co. -- tons	25,151	19,000	24,759	29,999	30,211	30,921	285,259
Landfill - MSW from within the County to LF - tons	6,000	6,000	2,000	-	-	-	8,000 tons
LANDFILL DISPOSAL DESTINATIONS for GOODHUE Co's MSW							
Rice	100	100	100	-	-	-	- tons
Steele	-	-	-	-	-	-	- tons
EMPIRE TS Pine Bend/Burnsville	2,000	2,000	-	-	-	-	2,000 tons
Out-of-State Landfills							
7-Mile Creek	3,900	3,900	1,900	-	-	-	6,000 tons
--	-	-	-	-	-	-	- tons
Total All Co's MSW to ALL LF's - tons	6,000	6,000	2,000	-	-	-	8,000 tons
LF Capacity USED + Cover - for ALL Co MSW -cy	11,500	10,500	7,100	5,900	6,000	6,100	65,700 cu yds
LANDFILL DISPOSAL of Solid Waste at landfills located WITHIN the COUNTY							
MSW GENERATION to LF	-	-	-	-	-	-	- tons
All MSW Imported to LF in the Co. - tons	-	-	-	-	-	-	- tons
TOTAL MSW to - tons	-	-	-	-	-	-	- tons
Industrial & non-MSW Waste to MSW LF's in the Co. - tons	4,800	3,600	4,700	5,700	5,700	5,900	54,200 tons
Total Solid Waste to LF within Co. - tons	4,800	3,600	4,700	5,700	5,700	5,900	54,200 tons
LF Capacity USED + cover for ALL Wastes -cu yds	5,600	4,200	5,500	6,600	6,700	6,900	60,200 cu yds
Demolition Debris - received at C&D sites in Co - cy							
C&D Waste - received at C&D sites in Co. - Cu Yds	7800	7800	7800	7800	7800	7800	78,000 cu yds
Yard Waste - received at YW sites in County							
Yard Waste - received at YW sites in Co. - Cu Yds	8000	8200	8400	8800	8800	8000	84,600 cu yds

LANDFILL CAPACITY USE Data for Landfills Receiving County Solid Wastes

Ten Year Totals

GOODHUE Co MSW to ALL Landfills **8,000** tons

GOODHUE Co MSW Capacity Use at ALL Landfills **65,700** cubic yards compacted in-place

- **-** tons to LF within the County

GOODHUE County MSW to Out-of-State Landfills **5,800** tons

- **54,200** tons to LF in the County

- **-** Cubic Yards to LF in the County

- **54,200** tons

- **54,200** tons

- **60,200** cubic yards compacted in-place

LF Waste Density Assumptions

Cover Material % - intermediate & Final	10%
MSW Density =	1,800 lbs/cubic yard in-place
Industrial Waste Density=	1,800 lbs/cubic yard in-place

2015 2016 2017 2018 2019 2020 2021 2022 2023 2024 2025 10-Year Totals

DESTINATION LANDFILLS for GOODHUE CO's MSW

	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	10-Year Totals
Rice	0	0	0	0	0	0	0	0	0	0	0	0
Steele	100	100	50	0	0	0	0	0	0	0	0	150
EMPIRE TS Pine Bend/Burnsville	30	30	15	0	0	0	0	0	0	0	0	45
<u>Out-of State Landfills</u>	2,045	2,045	0	0	0	0	0	0	0	0	0	2,045
7-Mile Creek	3,857	3,857	1,929	0	0	0	0	0	0	0	0	5,786
--	0	0	0	0	0	0	0	0	0	0	0	0
Total All Co's MSW to ALL LF's - tons	6,032	6,032	1,994	-	-	-	-	-	-	-	-	8,026

County MSW ONLY CAPACITY USE at All Landfills Receiving County Solid Waste - cubic yards compacted In-Place + cover materials = 5%

LF's Capacity Use -All Wastes + Cover - cu yds 11,500 10,500 7,100 5,900 5,900 6,000 6,000 6,000 6,000 6,000 6,100 6,100 65,700

LANDFILL CAPACITY USE Data for Landfills Receiving County Solid Wastes

LANDFILL CAPACITY USAGE for Landfills located WITHIN GOODHUE County

	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	10-Year Totals
GOODHUE Co's MSW to - tons	-	-	-	-	-	-	-	-	-	-	-	-
MSW IMPORTED into												
--	0	0	0	0	0	0	0	0	0	0	0	-
--	0	0	0	0	0	0	0	0	0	0	0	-
--	0	0	0	0	0	0	0	0	0	0	0	-
--	0	0	0	0	0	0	0	0	0	0	0	-
--	0	0	0	0	0	0	0	0	0	0	0	-
--	0	0	0	0	0	0	0	0	0	0	0	-
Other MSW Imported to	0	0	0	0	0	0	0	0	0	0	0	-
MN MSW Received at - tons	-	-	-	-	-	-	-	-	-	-	-	-
Out-of-State MSW to Landfill in Co. - tons	-	-	-	-	-	-	-	-	-	-	-	-
Total MSW to LF in the County - tons	4,800	3,600	4,700	5,700	5,700	5,700	5,700	5,700	5,700	5,800	5,900	54,200
Industrial & other Non-MSW Waste to LF cells - tons	4,800	3,600	4,700	5,700	5,700	5,700	5,700	5,700	5,700	5,800	5,900	54,200
Total Solid Waste to	4,800	3,600	4,700	5,700	5,700	5,700	5,700	5,700	5,700	5,800	5,900	54,200
												Total 10 yr All Waste Tons to Bench

Total Cubic Yard Capacity Use at the - MSW + Ind. W. + cover

TOTAL ALL MSW TO - cu yds	-	-	-	-	-	-	-	-	-	-	-	MSW to LF CY
Industrial Waste (IW) to Bench - cu yds	5,300	4,000	5,200	6,300	6,400	6,400	6,300	6,300	6,400	6,400	6,500	60,200
ALL Solid Waste + Cover - Cu Yds In-Place	5,600	4,200	5,500	6,600	6,700	6,700	6,600	6,600	6,700	6,700	6,900	60,200

Grand Total LF Capacity Use - cu yds

LANDFILL GRAND TOTAL 10yr Solid Waste Capacity Use - cu yds 60,200

Remaining Permitted Landfill Capacity - cy + cover

- - - - - - - - - - - - - - -

GOODHUE County-- Detailed Solid Waste Management System Projections & Calculations

	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	10-Year Totals
County Population	46,642	46,838	47,035	47,232	47,431	47,630	47,830	48,031	48,232	48,435	48,638	
Number of Households	19,194	19,275	19,356	19,437	19,519	19,601	19,683	19,766	19,849	19,932	20,016	
Number of Persons per Household (St.Demographer data)	2.43											
Annual Population / MSW Change - Demographer Forecast	0.42%											
Per Capita MSW generation for On-Site-Disposal (PCA #)	2.30 lbs / person / day (after recycling)											

	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	10-Year Totals
TOTAL MSW GENERATED	44,275	44,461	44,648	44,836	45,024	45,213	45,403	45,594	45,785	45,977	46,170	453,111

Recycling - tons

Residential	9,887	9,915	9,957	10,626	10,671	10,715	10,761	10,806	10,851	10,897	10,942	106,140
Commercial/Industrial/Institutional	3,414	3,646	3,661	3,677	3,692	3,707	3,723	3,739	3,754	3,770	3,786	37,155
Organics Recyc (source sep. food to people & livestock)	1,200	1,280	1,286	1,291	1,297	1,302	1,308	1,313	1,319	1,324	1,330	13,050
Mechanical /Hand Sorted @ Res. Recovery Fac	2,244	1,800	2,326	2,800	2,811	2,821	2,835	2,850	2,864	2,878	2,892	26,876
Problem Materials - Banned +Other Recycle	772	772	772	772	772	772	772	772	772	772	772	7,715
TOTAL MATERIALS RECYCLED:	17,517	17,413	18,001	19,165	19,241	19,318	19,398	19,479	19,559	19,640	19,722	190,935

AVAILABLE MSW for Resource Recovery + Landfill Disposal

MSW AVAILABLE FOR Resource Rec. + LF	28,583	28,429	28,519	27,999	28,105	28,211	28,352	28,494	28,635	28,778	28,921	284,441
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RESOURCE RECOVERY FACILITY DESTINATIONS for GOODHUE Co's MSW

Resoure Recovery Red Wing	22,336	18,000	23,259	27,999	28,105	28,211	28,353	28,495	28,637	28,779	28,921	268,759
% Mechanical or Hand Materials Recycling at RR	10.0%	10.0%	10.0%	10.0%	10.0%	10.0%	10.0%	10.0%	10.0%	10.0%	10.0%	10.0%
Mechanical or Hand Materials Recycling to RR - tons	2,234	1,800	2,326	2,800	2,811	2,821	2,835	2,850	2,864	2,878	2,892	
Non-Processable MSW & Bypass MSW %	19.0%	19.0%	19.0%	19.0%	19.0%	19.0%	19.0%	19.0%	19.0%	19.0%	19.0%	19.0%
Non-Processable MSW & Bypass MSW - tons	4,244	3,420	4,419	5,320	5,340	5,360	5,387	5,414	5,441	5,468	5,495	
RRT Newport/Ramsey Washington County	215	-	-	-	-	-	-	-	-	-	-	-
% Mechanical or Hand Materials Recycling to RR	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%
Mechanical or Hand Materials Recycling to RR - tons	11	-	-	-	-	-	-	-	-	-	-	-
Non-Processable MSW & Bypass MSW %	20%	20%	15%	15%	15%	15%	15%	15%	15%	15%	15%	15%
Non-Processable MSW & Bypass MSW - tons	43	-	-	-	-	-	-	-	-	-	-	-
Total Tipped MSW at RR Facilities	22,551	18,000	23,259	27,999	28,105	28,211	28,353	28,495	28,637	28,779	28,921	268,759
Total Mechanical or Hand Materials Recycling at RR	2,244	1,800	2,326	2,800	2,811	2,821	2,835	2,850	2,864	2,878	2,892	26875.9
Total Non-Processable MSW & Bypass MSW - tons	4,287	3,420	4,419	5,320	5,340	5,360	5,387	5,414	5,441	5,468	5,495	51,064
Total Co MSW to RES REC Facility - tons	16,020	12,780	16,514	19,879	19,955	20,030	20,131	20,231	20,332	20,433	20,534	190,819

Waste-to-Energy Facility Ash to LF - dry tons @ est. 10%	1,602	1,278	1,651	1,988	1,995	2,003	2,013	2,023	2,033	2,043	2,053	19,082
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MSW imported from other Co's sent to a County Res. Rec. Facility

Dakota	100	500	1,000	1,500	1,500	1,500	1,500	1,500	1,500	1,500	1,500	13,500
Wabasha	2,500	500	500	500	500	500	-	-	-	-	500	-
--	-	-	-	-	-	-	-	-	-	-	-	-
--	-	-	-	-	-	-	-	-	-	-	-	-
--	-	-	-	-	-	-	-	-	-	-	-	-
0	-	-	-	-	-	-	-	-	-	-	-	-
0	-	-	-	-	-	-	-	-	-	-	-	-
Total MSW imported to WTE Facility	2,600	1,000	1,500	2,000	2,000	2,000	1,500	1,500	1,500	1,500	2,000	13,500
Mechanical or Hand Materials Recycling at RR	260	100	150	200	200	200	150	150	150	150	200	
Imported MSW Non-Processable MSW & Bypass MSW - %	19.00%	19.00%	19.00%	19.00%	19.00%	19.00%	19.00%	19.00%	19.00%	19.00%	19.00%	19.00%
Non-Processable MSW & Bypass MSW - tons	494	190	285	380	380	380	285	285	285	285	380	
TOTAL RECEIVED AT RR FACILITY in Co. - tons	25,151	19,000	24,759	29,999	30,105	30,211	29,853	29,995	30,137	30,279	30,921	285,259
	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	10-Year Totals

LANDFILL DISPOSAL

AVAILABLE GOODHUE County MSW for Landfill Disposal Only

County MSW to Send to Landfills	6,032	10,429	5,260	0	(0)	(0)	(1)	(1)	(2)	(1)	(0)	15,682
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DESTINATION LANDFILLS for the CO's MSW - tons

Rice	100	100	50	-	-	-	-	-	-	-	-	150
Steele	30	30	15	-	-	-	-	-	-	-	-	45
EMPIRE TS Pine Bend/Burnsville	2,045	2,045	-	-	-	-	-	-	-	-	-	2,045
<u>Out-of-State Landfills</u>												
7-Mile Creek	3,857	3,857	1,929	-	-	-	-	-	-	-	-	5,786
--	-	-	-	-	-	-	-	-	-	-	-	-
Total All Co's MSW to ALL LF's - tons	6,032	6,032	1,994	-	-	-	-	-	-	-	-	8,026
Solid Waste Processing Residue & Unacceptable waste	4,287	3,420	4,419	5,320	5,340	5,360	5,387	5,414	5,441	5,468	5,495	
Total County Solid Waste to Landfill	10,319	9,452	6,413	5,320	5,340	5,360	5,387	5,414	5,441	5,468	5,495	
			21.3%									

Landfill CAPACITY USE at All Landfills Receiving County Solid Waste - cubic yards compacted In-Place + cover

LF's Capacity Use including Cover	11,465	10,502	7,126	5,911	5,933	5,956	5,986	6,016	6,046	6,076	6,106	Cu Yds 65,658
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On-Site Disposal - bury, burn barrel, open burning

Population using On-Site Disposal of MSW	1,000	1,000	1,082	1,123	1,164	1,205	1,164	1,123	1,082	1,041	1,000	
On-Site Disposal of MSW - tons	420	420	454	471	489	506	489	471	454	437	420	4,611

Appendix D

Goodhue County Solid Waste Outlets

Figure 1-Recycling Drop-Off Site Map:

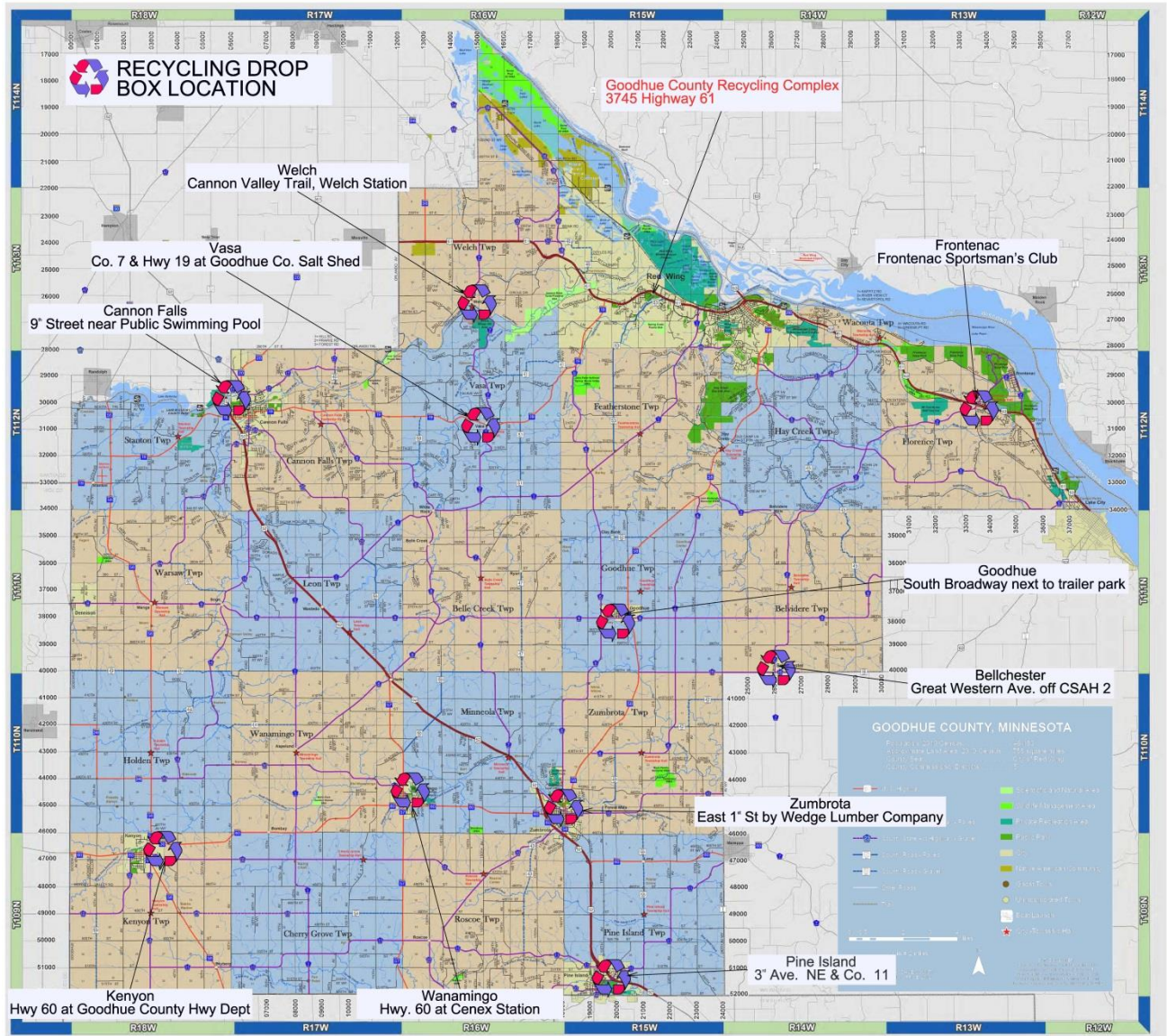


Table 1 – Yard Waste Collection/Composting Sites

Yard Waste Collection/Compost Site	Address
City of Cannon Falls	918 River Road Cannon Falls, MN 55009 507-263-9300
City of Kenyon	709 2 nd Street Kenyon, MN 55946 507-789-6415
City of Lake City	205 West Center Street Lake City, MN 55041 651-345-5383
City of Wanamingo	401 Main Street Wanamingo, MN 55983 507-824-2477
City of Red Wing Waste Campus	1873 Bench St Red Wing, MN 55066 651-385-3658
City of Zumbrota	175 West Avenue Zumbrota, MN 55992 507-732-7318

*This list is not a complete list of all available vendors in the County and is only a snapshot of a limited number of available sites in the County at the time the Goodhue County Comprehensive Solid Waste Plan was written. Other vendors may be found in the phone book.

Table 2 – Waste Tire Disposal

Tire Recycler	Address
Wanamingo Demolition Debris Land Disposal Facility	44284 135 th Avenue Zumbrota, MN 55992
Bauer Built Tire & Service	1511 W Main St Red Wing, MN 55066
Johnson Tire Service	806 Main St Red Wing, MN 55066
City of Red Wing Waste Campus	1873 Bench St Red Wing, MN 55066
Dennison Tire	12536 Dennison Blvd Dennison, MN 55018

*This list is not a complete list of all available vendors in the County and is only a snapshot of a limited number of available sites in the County at the time the Goodhue County Comprehensive Solid Waste Plan was written. Other vendors may be found in the phone book.

Table 3 – Used Oil Drop Off Sites

Waste Oil Handler	Address
Wanamingo Demolition Debris Land Disposal Facility	44284 135 th Avenue Zumbrota, MN 55992
Goodhue County Recycling Center	3745 Highway 61 Red Wing, MN 55066

*This list is not a complete list of all available vendors in the County and is only a snapshot of a limited number of available sites in the County at the time the Goodhue County Comprehensive Solid Waste Plan was written. Other vendors may be found in the phone book.

Table 4 – Scrap Metal Recycling

Scrap Metal Recycler	Address
Wanamingo Demolition Debris Land Disposal Facility	44284 135 th Avenue Zumbrota, MN 55992
Goodhue County Recycling Center	3745 Highway 61 Red Wing, MN 55066
City of Red Wing Waste Campus	1873 Bench St Red Wing, MN 55066

*This list is not a complete list of all available vendors in the County and is only a snapshot of a limited number of available sites in the County at the time the Goodhue County Comprehensive Solid Waste Plan was written. Other vendors may be found in the phone book.

Table 5 – Electronics Recycling

Electronics Recycler	Address
Wanamingo Demolition Debris Land Disposal Facility	44284 135 th Avenue Zumbrota, MN 55992
ProAct Inc	204 Mississippi Avenue Red Wing, MN 55066
City of Red Wing Waste Campus	1873 Bench St Red Wing, MN 55066

*This list is not a complete list of all available vendors in the County and is only a snapshot of a limited number of available sites in the County at the time the Goodhue County Comprehensive Solid Waste Plan was written. Other vendors may be found in the phone book.

Table 6 – Appliance Recycling

Appliance Recycler	Address
Wanamingo Demolition Debris Land Disposal Facility	44284 135 th Avenue Zumbrota, MN 55992
City of Red Wing Waste Campus	1873 Bench St Red Wing, MN 55066
Busby Hardware	321 S Main St Zumbrota, MN 55992
Althoff Hardware	128 N 4 th St Cannon Falls, MN 55009

*This list is not a complete list of all available vendors in the County and is only a snapshot of a limited number of available sites in the County at the time the Goodhue County Comprehensive Solid Waste Plan was written. Other vendors may be found in the phone book.

Table 7 – Mercury, Lead Acid and Dry Cell Battery and Motor Vehicle Fluid Recycling

Problem Material Handler	Address
Goodhue County Recycling Center	3745 Highway 61 Red Wing, MN 55066

*This list is not a complete list of all available vendors in the County and is only a snapshot of a limited number of available sites in the County at the time the Goodhue County Comprehensive Solid Waste Plan was written. Other vendors may be found in the phone book.

Appendix E

MPCA Public Entity Summary



Solid Waste Requirements for Public Entities in Minnesota

Public entities play an important role in implementing and achieving county solid waste management plan goals. The following is a list summarizing statutes and rules for procurement and solid waste management as they relate to public entities. Some apply to public entities specifically, while others are required of all persons in the state, but are of particular relevance to public entities. Additional requirements may exist in local ordinances established by counties, cities, or towns.

Procurement

<p>1. Purchase of recycled, repairable, and durable materials Minn. Stat. § 16C.0725</p>	<p>When purchasing commodities or services, state agencies:</p> <ul style="list-style-type: none"> • Shall purchase recycled materials, when feasible and when price does not exceed non-recycled content materials by more than 10%. Agencies may use other appropriate procedures to acquire recycled materials at the most economical cost to the state. • Shall apply and promote the solid waste management hierarchy in purchases. • In bid specifications, shall take into consideration: <ul style="list-style-type: none"> • Recycled content, postconsumer material • Recyclability • Durability • Reusability • Marketability through state resource recovery
<p>2. Purchase and use of paper stock; printing; public entity purchasing Minn. Stat. § 16C.073</p>	<p>When purchasing paper, whenever practicable, a public entity shall:</p> <ol style="list-style-type: none"> 1. Purchase uncoated copy, office and printing paper. 2. Purchase recycled content copy paper with at least 30% postconsumer material and printing and office paper with at least 10% postconsumer material. 3. Purchase paper which has not been dyed with colors other than pastels. 4. Purchase recycled content paper made without chlorine bleach or chlorine derivatives. 5. Use reusable binding materials, staples, or another method that does not use glue. 6. Use soy-based inks. 7. Produce reports, publications, and periodicals that are readily recyclable. 8. Purchase paper which has been manufactured in Minnesota. 9. Print on both sides of the paper where commonly accepted publishing practices allow.