



Solid Waste Management Plan

2016-2020 and Beyond

La Crosse County Disposal System
La Crosse County, Wisconsin

November 25, 2015





Building a Better World
for All of Us®

November 25, 2015

RE: Solid Waste Management Plan
La Crosse County Disposal System
La Crosse County, Wisconsin

Mr. Henry A Koch, PE, Solid Waste Director
La Crosse County Solid Waste Department
6500 State Road 16
La Crosse, WI 54601

Dear Mr. Koch:

The La Crosse County Solid Waste Management Plan (SWMP) is an officially recognized policy document by the Wisconsin DNR. The 2015 SWMP provides a five-year update to previously adopted 2008 SWMP. It is intended to guide solid waste decision making in the region. The Plan describes the La Crosse County regional disposal system, summarizes trends impacting the System, identifies key strategic issues and opportunities, and presents a set of strategic recommendations to help guide decision-making over the next five, ten and fifteen year time periods.

Sincerely,

SHORT ELLIOTT HENDRICKSON INC.

A handwritten signature in black ink that reads "Andrew Dane".

Andrew Dane
Senior Project Manager
Short Elliott Hendrickson Inc. (SEH)

A handwritten signature in black ink that reads "John Katers".

Dr. John Katers
Senior Project Design Leader
Short Elliott Hendrickson Inc. (SEH)

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Solid Waste Management Plan

Executive Summary

2016-2020 and Beyond

La Crosse County Disposal System

La Crosse County, Wisconsin



La Crosse Disposal System

A Responsible Resource

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LA CROSSE REGIONAL DISPOSAL SYSTEM - OUR CORE VALUES GUIDE US

Commitment



A strong desire and commitment to regional cooperation and willingness to help coordinate regional approaches in order to provide high quality, cost effective solutions.

Decision-Making



An emphasis on holistic, long-term decision making, by embracing new opportunities and responding to changes in the environment.

Sustainability



A commitment to environmental protection, ecological restoration, responsible actions, and stewardship of today's resources for future generations.

Continuous Improvement



A focus on continuous improvement through: embracing the principles of sustainability, technology advances, creativity, and institutionalizing knowledge

Communication



Effective communication between stakeholders be they regulators, customers, elected officials, site neighbors, staff, school children, or the general public.

Stewardship



A strong land conservation ethic, preserving a valuable asset for future generations while avoiding future cost burdens.



La Crosse County Solid Waste Office and Scale House

Executive Summary

SECTION 1: INTRODUCTION

La Crosse County (County) is recognized locally, regionally and nationally as a leader in solid waste management. The County's long-term commitment to delivering environmentally sound, financially stable solid waste services is reflected in this update to its 2008 Solid Waste Management Plan (SWMP).

Through planning processes such as this update to the 2008 SWMP, the County and its partners stay abreast of changing conditions and prepare for the future. The current plan was updated over a year-long period with significant stakeholder input.

The update was initiated to identify new strategic issues that could affect the County Solid Waste Department's (Department) delivery of solid waste services, and to provide recommendations for addressing these issues for the period 2016-2020 and beyond.

This Executive Summary provides an overview of the fully updated SWMP. Complete details are available in the full SWMP document. In addition to this update, the County and the Department have developed related plans that provide more specific details and recommendations regarding land use, operations, and sustainability.

These include but are not limited to:

- La Crosse County's Landfill Master Land Use Plan
- La Crosse County's Landfill Natural Resource Management Plan and Trail and Recreation Master Plan
- La Crosse County's Landfill Environmental Management System (Green Tier)
- La Crosse County Strategic Plan for Sustainability

Together, this SWMP update and the related plans provide a strong foundation for informed decision-making by elected officials, Department staff and other key stakeholders.

La Crosse Regional Disposal System - Mission Statement

PROVIDE REGIONAL ENVIRONMENTALLY AND ECONOMICALLY SOUND SOLID WASTE SERVICES THROUGH:

1. Cooperation with a regional mindset.
2. Comprehensive communication and education.
3. Fiscally responsible management.
4. Creative and integrated approaches that result in long-term value to stakeholders.
5. Promotion of competition in the market place.

"The Department is very progressive...on the leading edge of the industry. It does an excellent job of planning for the future."

Steve O' Malley,
La Crosse County Administrator

SECTION 2: HISTORY, STRUCTURE, AND RECENT ACCOMPLISHMENTS

The Department manages an integrated, regional solid waste disposal system that serves municipalities and businesses in west central Wisconsin and southeast Minnesota. The term “regional disposal system” is frequently referenced because the Department’s service boundaries include areas beyond La Crosse County.

Operating as a regional system has been a part of the Department’s mission and vision since the County became involved in solid waste management in the early 1970s. The regional system approach is reflected in the current solid waste governance structure which includes:

The Solid Waste Policy Board (SWBP)

The SWBP provides guidance and direction to the Department on strategic issues. The SWPB is comprised of nine members, three of which are La Crosse County Board supervisors. The other six members represent users of the system.

The Public Works and Infrastructure Committee (PWI)

PWI is a standing committee of the La Crosse County Board. Comprised of seven county board members, the committee addresses operational and budgetary issues related to the Department, as well as the County Highway Department and other county facilities.

The La Crosse County Board

The County Board is the elected body which governs La Crosse County. The Board oversees an annual budget of over \$175 million spent across more than 30 major departments, institutions, agencies, and organizations.

Public and Private Partners

The regional system would not be viable without the active support of numerous public and private sector partners.

Key public sector partners include the cities of La Crosse and Onalaska; La Crosse, Buffalo, Trempealeau, Houston (MN), Wabasha (MN) counties; and numerous other cities, villages and towns in the region. Working together, these partners and their contracted waste haulers maintain a stable flow of waste to the system, resulting in effective, cost-efficient operations.

Private sector partners such as Xcel Energy, St. Joseph Construction and Gundersen Health System allow the Department to operate facilities and deliver a wide range of integrated services to fulfill its mission and vision, and to meet the needs of its customers.

La Crosse County Solid Waste Management History

1970s

Open burning dumps common in the region; first cell opened at the County landfill

1980s

County contracts with Xcel Energy (formerly Northern States Power) to provide municipal solid waste (MSW) for use as fuel at Xcel’s Waste to Energy facility

1990s

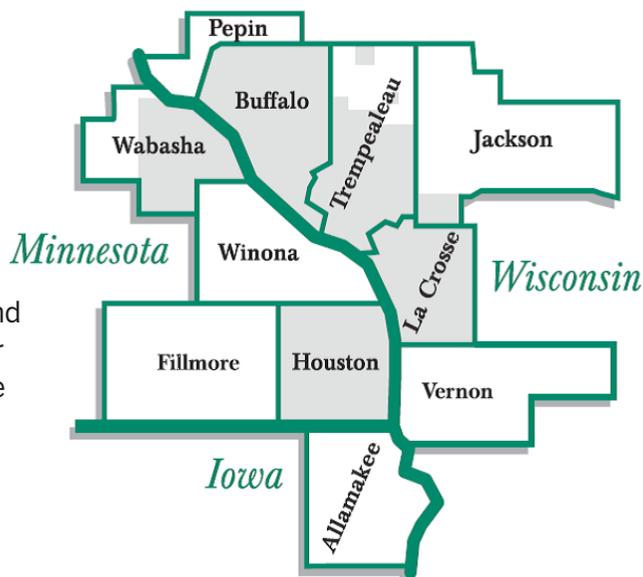
Modern subtitle D landfill cell constructed at County landfill site

2000s

1970s era County landfill remediated; new landfill capacity added; new pollution control equipment installed at Xcel facility; Solid Waste Policy Board (SWPB) established; Household Hazardous Material (HHM) facility opened; County and Wisconsin Department of Natural Resources (WDNR) approve SWMP

2010-2105

Hauler rebate program successfully implemented; landfill gas-to-energy partnership implemented; Master Land Use Plan approved; single stream recycling adopted by cities of Onalaska and La Crosse; updated Solid Waste Management plan prepared; Department joins WI DNR Green Tier program



La Crosse Disposal System Service Area



Landfill Gas to Energy Facility



HHM Facility



Randy Nedrelo celebrates the HHM facility's 10,000th customer during 2014

92% of users are “Very Satisfied” with services provided at the HHM facility, according to a 2014 survey.

Over the past five years, the Department has received multiple awards at the national, regional, and local level.

Key services and facilities include:

- Waste to Energy at Xcel’s WTE facility
- A 350-acre site on Highway 16, which hosts a broad range of disposal and handling services for municipal solid waste (MSW), recycling/reuse, land use management
- A landfill gas-to-energy system that delivers landfill gas to Gundersen Health System for use in generating electricity
- A permanent Household Hazardous Materials (HHM) facility

Recent Accomplishments

The Department has completed several significant projects and initiatives identified as priorities in the 2008 SWMP:

- Tipping fee increases have been avoided or minimized.
- Long-term care and closure accounts for the landfill have been adjusted to remove excess funding.
- A 2010 Solid Waste and Recycling Collection Evaluation initiated by the County led to establishment of single stream recycling in the cities of Onalaska and La Crosse.
- A Landfill Master Land Use Plan and related Conceptual Natural Resource Management Plan and Trail and Recreation Master Plan were completed.
- The County and Gundersen Health System partnered to implement an award-winning landfill gas-to-energy system.
- A hauler rebate program to enhance waste stream security was implemented.
- A popular citizen drop-off area was established.
- Two new municipal solid waste (MSW) landfill cells were constructed, while a construction and demolition (C&D) landfill and filled portions of the MSW landfill were closed.
- The County Solid Waste Department was accepted into the Wisconsin Department of Natural Resources’ (WDNR) Green Tier sustainability program and an Environmental Management System was adopted.
- Partnerships with organizations including the Outdoor Recreational Alliance, Civil Air Patrol (CAP), Habitat for Humanity, Boy Scouts and others were established or expanded.
- The Department’s relationship with Xcel was strengthened.
- Over the past five years the Department has been recognized at the national, regional, and local level through the receipt of numerous awards acknowledging the Department’s commitment and leadership in environmental performance, sustainability, and landfill operations.

SECTION 3: SWMP UPDATE: THE PLANNING PROCESS

Reflecting its commitment to long-range planning, and seeking to build on the accomplishments described above, the Department initiated this update to the 2008 SWMP.

The update was completed over the course of one year. A detailed analysis of solid waste generation, disposal, diversion and recycling in the service area was conducted. In addition, significant stakeholder input and feedback was gathered via focus groups, interviews, surveys, presentations, and informal meetings. Information was organized into a Strengths, Weaknesses, Opportunities, and Threats (SWOT) analysis.

Key takeaways from the analysis included:

- A consistent amount of waste continues to be directed to Xcel's WTE facility to meet contract obligations.
- Waste deliveries to the La Crosse County landfill increased 60% over the period 2010 through 2014, the result of an uptick in the regional economy, implementation of the hauler rebate agreement, and scheduled maintenance at the Xcel's WTE facility.
- The hauler rebate program initiated in 2012 successfully captured a significant amount of additional waste from communities and businesses that had not previously been served by the system.
- Recycling volumes have increased dramatically with the deployment of single stream recycling.
- The HHM program continues to grow each year, serving over 10,000 users and collecting nearly 1 million pounds of material annually.
- There is a high level of stakeholder satisfaction with the current disposal system, and strong interest in continuing to strengthen it by working together regionally.

The data analysis and stakeholder feedback provided insight on new strategic issues that should be addressed in order to secure the future of the regional disposal system.

A few of the key opportunities identified included:

- Continuing to build partnerships and pro-actively communicating with stakeholders in order to strengthen the system.
- Strengthening the financial sustainability of the HHM program and expanding the program.
- Continuing the existing partnership with Xcel Energy as well as identifying new opportunities to work together.



Photo from 2015 Annual Meeting

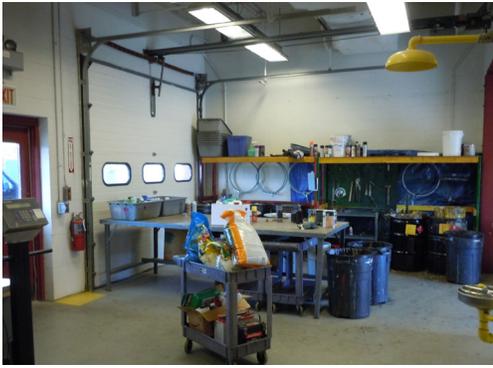
Broad changes in society's attitudes toward waste reduction, increased rates of recycling, and growing interest in tackling climate change are among the local, State, and Federal trends likely to directly impact the regional system over the next five year period and beyond.



National Expert, Neal Bolton, Discusses Landfill Operations Report at 2015 Annual Meeting

"The landfill presents a very positive first impression and it is obvious that considerable thought and effort has gone into creating a facility that is clean and customer oriented..."

National Expert, Neal Bolton,
Blue Ridge Services Inc., August 28, 2015



Inside the HHM Facility

The HHM program provides a critically important environmental service for the region and is highly valued by citizens and system partners. Looking beyond 2017 a new funding model must be developed to maintain the current level of service.

“The Department is in very good financial health. It has funded balances, and diverse revenues including long-term contracts with Xcel Energy and several municipalities. Debt re-financing in 2015 and 2016 will further strengthen the Department’s financial position.”

Sharon Davidson,
La Crosse County Finance Director



Xcel's WTE facility - French Island

Xcel's WTE facility is a cornerstone of the system, and provides an alternative to constructing more landfills.

SECTION 4: STRATEGIC ISSUES AND RECOMMENDATIONS

Input from the data analysis and stakeholder feedback was consolidated into a list of eight strategic issues that should be addressed by the Department. These issues are noted below, followed by key recommendations for implementation. A full description of the issues and list of recommendations is provided in the SWMP document.

Issue No. 1: Financial Stability – how can the Department maintain financial stability while remaining competitive?

Importance: The Department is run as an enterprise fund, so financial stability is critically important in order to maintain operations and continue providing a high level of service. If the Department is not managed well it will go out of business, and stakeholders will not enjoy the benefits of a locally managed, environmentally sound waste disposal and resource recovery option. Equity considerations are important - maintaining a system that is “fair” to all.

Key Recommendations:

- Develop a Tipping Fee Management Plan
- Develop predictive financial management tools consistent with the Department’s Enterprise Fund structure
- Bring in more waste from outside the region

Issue No. 2: Xcel WTE – how can the Department strengthen its current partnership with Xcel to the benefit of both parties and the regional disposal system as a whole?

Importance: Extending the Xcel WTE contract provides system stability, allowing for investments in other parts of the system which may not be feasible without a long term agreement in place. If the Xcel contract is not extended, significantly more solid waste would be directed to the landfill, depleting air space at a much faster rate and reducing the effective lifespan of the landfill.

Key Recommendations:

- Pursue an extension of the WTE contract
- Secure waste from businesses that have “zero waste” policies
- Continue to develop trust and transparency between Xcel, the County, and the general public

Issue No. 3: Waste Stream Security – how can the Department maintain an adequate waste stream now and in the future to achieve its financial objectives?

Importance: The County is obligated by contract to provide 73,000 tons/year of MSW to the Xcel facility. The County’s ability to meet this obligation becomes more challenging as more waste is removed from the waste stream. The County must balance efforts to increase diversion with the need to secure waste in order to remain financially viable.

Key Recommendations:

- Continue to support participation in the regional system by current partners
- Remove barriers to participation by other partners
- Continue to investigate organics diversion
- Market system benefits more effectively and pro-actively to secure more business waste customers from outside the system.

Issue No. 4: Regional Cooperation – how can the Department strengthen regional partnerships to better serve the region?

Importance: To tackle big challenges, partners need to work together to achieve critical mass. Enhanced regional cooperation is critical for the County to grow the system, contribute to the sustainability of the region and maintain financial stability. Without increased regional cooperation waste stream security becomes a bigger challenge.

Key Recommendations:

- Initiate formal discussions with surrounding counties to gauge interest in expanded collaboration
- Identify a future organizational framework to support the regional system
- Offer to provide a greater level of waste management service to individual municipalities in the county.
- Continue to identify partnerships with the private sector, WDNR, and municipalities to improve and expand existing services and develop new ones.

Increased recycling has led to lower BTU values of the RDF. To offset the BTU decrease, either more RDF must be incinerated, the efficiency of processing MSW into RDF needs to increase, or higher BTU quality waste must be delivered to Xcel’s WTE facility to generate equivalent revenues from energy production.



The 10,000th citizen customer of 2014 crossed the Landfill scale



Citizen drop off area provides mattress recycling

“Our vision for the future would be to continue and strengthen this relationship through active involvement at the table as partners in planning and decision making...”

Steve Hogden, Southern Tremepealeau County
Solid Waste Commission



County supervisors and staff working at HHM facility during take your Supervisor to Work Day.

The Department will continue to engage the broader community in ecological restoration, recreational, and educational initiatives and projects. It will also identify and pursue applied research projects that leverage faculty expertise and student labor from area universities.



Phase VIII waste placement and compaction

“Just because it’s a landfill it doesn’t have to look like a dump”

Henry A Koch, PE, Director
La Crosse County Landfill

Issue No. 5: Moving from Public Relations to Community Outreach – how can the Department pro-actively engage its stakeholders and partners to encourage productive dialogue, while building understanding of and support for the system?

Importance: Maintaining and expanding positive relationships are the key to business success. Neighbors, businesses, media, regulators, system stakeholders, and the public must be engaged in order to ensure long term support for the system.

Key Recommendations:

- Continue to provide diverse and frequent opportunities for engagement
- Continue to collaborate with not-for-profit organizations on educational and service initiatives
- Develop a scorecard to more effectively communicate the economic, environmental, and social (triple bottom line) benefits of the system.

Issue No. 6: Operational Effectiveness and Efficiency – how can the Department improve its operational effectiveness, and gain efficiencies while continuing to meet the needs of its users?

Importance: The Department is the one and only landfill member of the WDNR Green Tier program and has taken steps to achieve superior environmental performance. There is a growing demand for specialty services such as HHM and zero waste at Xcel’s WTE facility A continued focus on operational effectiveness and efficiency can provide opportunities to reduce expenditures or increase revenues.

Key Recommendations:

- Improve convenience of citizen drop off area
- Improve safety at landfill site entrance/egress
- Develop a mechanism to regularly review, monitor, and implement priority recommendations.
- Identify and implement a sustainable HHM funding model
- Identify additional HHM service opportunities and collaboration opportunities with other similar facilities

Issue No. 7: Succession Planning and Institutional Knowledge – how can the Department retain and attract talented, innovative staff with visionary leadership?

Importance: The loss of experienced Department staff could affect the ability to maintain quality public waste management services. There is a small pool of experienced solid waste and recycling managers in the state. As these managers retire there will be increased competition for talent in the industry, therefore making it more challenging to attract and retain the talent. Keeping and developing institutional knowledge is another challenge facing the Department.

Key Recommendations:

- Invigorate the SWPB
- Solicit participation in events and activities by young solid waste professionals and college/technical college students
- Develop a succession plan
- Prepare a written historical narrative describing the system

Issue 8: Land Use – how can the Department implement the long range vision for the landfill site as identified in the La Crosse County Landfill Master Land Use Plan and related documents?

Importance: The landfill site offers tremendous potential to provide a wide range of social and environmental benefits. Developing and beginning to implement the land use plan today will help minimize future closure costs, and can offer tremendous potential to provide recreational and environmental benefits.

Key Recommendations:

- Create a Landfill Land Use Advisory Committee
- Continue to expand and refine funding strategies for recreational asset development
- Engage with educational institutions to use the landfill as a “living lab”
- Identify stormwater and other environmental service opportunities that enhance surrounding economic development

Without a knowledge of where you've come from, it is very difficult to make good decisions about how to move forward.



Trail Building at Landfill by Wiscorp

“People support that which they help create”.

Unkown Author



Pedestrian Bridge over wetlands completed by Eagle Scout Brant Attleson



The annual meeting provides a venue to present and share information with regional disposal system decision-makers

The Department follows a holistic decision-making process, which lends itself nicely to the implementation of the strategic recommendations identified in this plan.

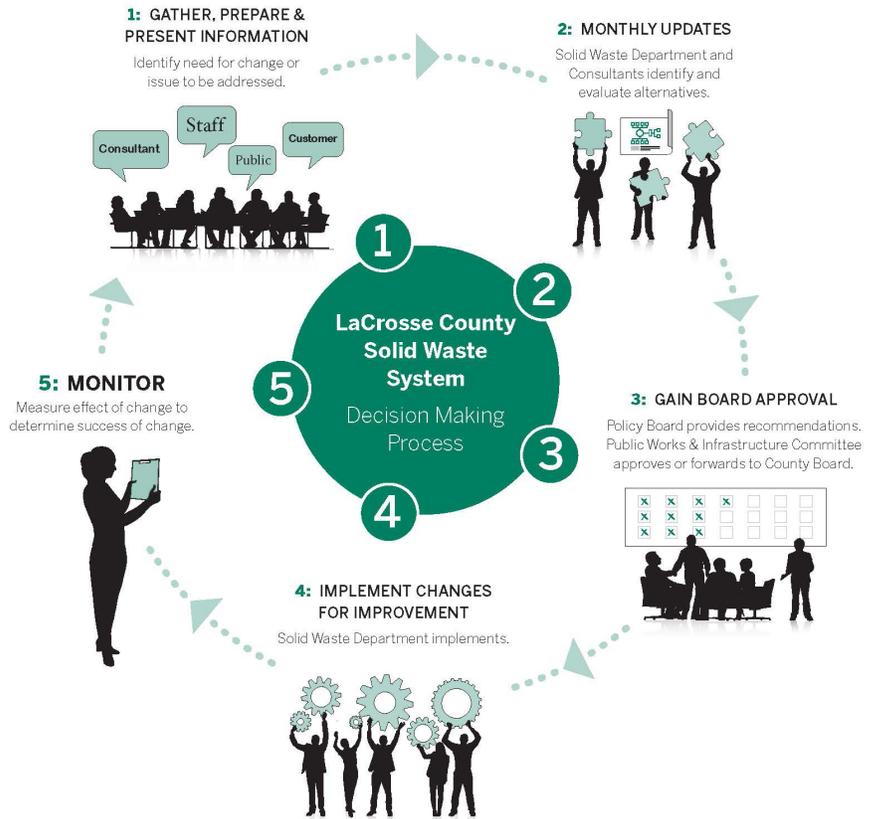


An emphasis on holistic, long-term decision making, by embracing new opportunities and responding to changes in the environment.

The La Crosse disposal system's core values provide a strong foundation for embracing new opportunities as the Department and its partners look to the future.

SECTION 5: NEXT STEPS – IMPLEMENTING THE PLAN

The diagram below represents the La Crosse County solid waste decision making process. Steps 1 and 2 represent the information gathering and strategy development phases of decision-making which occurred during Plan development. Step 3 represents the Policy Board, PWI, and County Board's endorsement of the Plan. Step 4 is Plan Implementation or "next steps," the focus of this section of the Executive Summary.



Some of the recommendations provided in the report fall under the purview of the SWPB, while others are staff level responsibilities which can be executed directly by the Solid Waste Department. Some actions will require the approval of the PW&I and/or the County Board.

Ultimately, the Solid Waste Department Director is accountable for ensuring the Plan's recommendations are implemented through appropriate staffing, work planning, employee evaluations, and development of the annual budget. The Department will develop specific initiatives to satisfy the requirements of this Plan on an annual basis. Progress toward completion of the initiatives will be reviewed during the annual meeting.



For a full copy of the Solid Waste Management Plan, including detailed recommendations visit the Department's website:

<http://www.co.la-crosse.wi.us/solidwaste>

To arrange for a tour of the landfill contact the Department at:

608.785.9572



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Solid Waste Management Plan

2016-2020 and Beyond

Prepared for La Crosse County Solid Waste Department

1.0 Introduction

La Crosse County (County) is a recognized leader in solid waste management in the region, the state of Wisconsin, and nationally. Through partnerships with multiple municipalities, counties, and private industry, the County has led the creation of the La Crosse County regional disposal system that reflects community values, provides accountability to the public, manages resources locally, reduces liabilities, and ensures strong private sector competition by having equal opportunities for all haulers.

Through planning processes such as this update to the 2008 Solid Waste Management Plan (SWMP), the County and its partners stay abreast of changing conditions and prepare for the future. The purpose of the 2015 SWMP update is to:

1. Identify and describe new strategic issues that could affect the County Solid Waste Department's (Department) delivery of solid waste services, and to provide recommendations for addressing these issues for the period 2016-2020 and beyond.
2. Provide a document that the Wisconsin Department of Natural Resources (WDNR) will identify and recognize as the approved SWMP for La Crosse County and those services within this plan that are coordinated within the La Crosse regional disposal system.
3. Strengthen relationships of current and future participants to the continued successful performance of the system.

1.1 Plan Development

The County's long-term commitment to delivering environmentally sound, financially stable solid waste services is reflected in this five-year update to its 2008 SWMP. The process to develop this SWMP was based on a long history of solid waste planning in the region that dates back to 1971, when the "Report on Proposed Sanitary Landfill Facilities for the La Crosse Urban Area" was prepared. The report stated that the disposal of solid wastes should be accomplished through a regional program.

The current plan was updated over a year-long period with significant stakeholder input and feedback. Information gathered from focus groups, interviews, and other stakeholder input activities has been consolidated into lists of perceived strengths, weaknesses, opportunities, and threats (Figure 1). This information is valuable in that

it allows the Department and key decision-makers to see the wide range of perceptions and opinions that exist, then to prioritize those issues for future action.

Section 1 of the SWMP describes the purpose of the plan, the mission of the La Crosse County regional disposal system, and the authorities and responsibilities for solid waste management in Wisconsin and Minnesota.

Section 2 provides an overview of the regional waste and recycling market place itself and how the La Crosse County regional disposal system fits into it.

Section 3 provides data on solid waste quantities and characteristics across the region. A summary of tonnages and capacities is provided, with more detailed information provided in the appendices.

Section 4 summarizes key trends and growth projections impacting the solid waste industry both nationally, at the state level and regionally, helping set the stage for a discussion of key issues and opportunities facing the system in Section 4.

Section 5 identifies key issues impacting the system and then outlines a set of strategies to address those key issues.

Section 6 provides an implementation framework to guide La Crosse County and its regional partners as they implement the strategies identified in Section 4 over the next five, ten and fifteen year time periods.

Figure 1 La Crosse Regional Disposal System SWOT Analysis

(Continued on following page)

Strengths

Vision and future orientation
 Flexibility
 Demonstrated impact
 Attention to detail
 Landfill itself – air space + land
 Continued cooperation with haulers (They feel like customers)
 Institutional knowledge/ long term involvement
 Pro-active orientation of department (already talking about Xcel contract extension for example)
 Excellent communication with Xcel energy – has strengthened over past 5 years.
 Always looking to identify win-win opportunities to work with partners
 Rebate system passing benefits through to customers
 Available air space
 Good brand identity, reputation of the system (through awards, projects such as gas to energy)
 Public opinion of HHM program is very good, popularity increasing (reached over 10,000 residential users in 2014)
 Continuing to add services at the landfill (for example, appliances)
 County-wide cooperation regarding collection of unwanted pharmaceuticals
 System is currently strong economically
 Extensive long term landfill capacity
 Committed/satisfied customers
 Many programs are popular with the public
 Good political support locally.
 Green Tier (environmentally sound per WDNR)
 Strong WDNR relationships
 Dept. staff committed to service, collaboration, and knowledge

Staff works well together and has unique and applicable expertise
 Admin structure of dept leads to continuous improvement
 Actively pursuing land use plan many years out to get best/highest use of land
 Good cooperation with some cities/towns
 No compliance issues
 Public has a benign attitude toward the landfill (don't oppose us because we aren't a problem)
 Regional nature of the system—good working relationships with partners
 Commitment to waste hierarchy and sustainability
 Mobile operations for HHM
 Local state legislators have good understanding of system needs and connections
 Good relationships and communications with haulers
 Diverse and competitive hauler environment
 15 years of clay on property
 Land that could have near future financial value and long term public value
 Beautiful location and convenient
 Respected by community, regulators, other solid waste operators
 LaX county has a strong functional governing structure
 Significant distance to major private landfills (competitors)
 Multiple diversion services which are a strength
 Have rebate program in place
 Gas to Energy

Weaknesses

Low levels of engagement
 Geographic location of department is distant from rest of County Government
 Few County Board members take advantage of the opportunities provided to visit and learn about the landfill
 Lack of documented institutional knowledge
 Getting younger people involved
 Succession plan as staff retires
 Is debt an issue?
 Recent managerial turnover, loss of institutional knowledge
 HHM needs stable funding source after 2017
 HHM costs rising, resulting in reserves being utilized, with little ability to increase HHM revenues
 New diversion programs (i.e., mattress recycling) has higher cost. No longer able to break even
 Lack of sufficient pay scale for HHM techs, turnover, burn out, lack of qualified candidates
 System's naming convention confusing
 Is it a county system? Does it provide more than disposal services?
 The system does not have good name recognition. Speakers tend to refer to the entire system as "the landfill"
 There are multiple visions of the future of the system
 Transfer stations are allowed
 High tipping fees
 Perception that diversion costs are not being accounted for

Responsibility to the public that a private entity does not have
 Don't have a legislative means to secure waste
 Must rely on incentives and competitive pricing
 Wastes are becoming more valuable products which creates a shrinking ton
 Loss of funds from WI recycling funding program
 Debt service cost
 Must be able to pay as we go....can't add short term debt
 County political processtakes a long time to get things done
 Lack of cooperation with some cities/towns
 Complex system, difficult for oversight committees to understand
 Regular turnover of SWPB and PWI members
 Limited marketing budget/personnel
 Lack of historical documentation

Opportunities

Trialing satellite collection of some HHM waste (i.e., fluorescent lamps at Town of Hamilton)

Green Tier status could be leveraged to get WDNR assistance with implementing Master Land Use Plan

Getting calls from all over the State from corporations that want to go green

Working with Monroe and Vernon counties

Identify more win-win opportunities

Get WDNR to waive non-fuel residue tipping fee charge

Work with Winona County on potential for securing solid waste

Pursue partnerships with Xcel Energy for additional front end processing at French Island

Work with smaller communities in County to bring them on board with single stream recycling

Expand HHM services regionally

Raise tipping fee

High solids "dry digester" in partnership with other entities

Waste as a resource

Rebate programs could attract more customers

Rebate programs could be more innovative

Use of Green Tier status to attract other green tier companies' waste

Using HHM and customer drop off to engage more people with the system

Changes to Xcel contract

Landfill bans

Adding key partners

Green Tier to enhance waste security

Recommendations identified in 2015 Landfill Operations/ Contract Review report

Enhance gas production for the Gas to Energy program

Sale of unneeded buffer property

Expand wood waste program for biomass facility

Increase diversion programs

Large service area for HHM that can be expanded

Forest management

Opportunity exists to modify existing contracts to achieve efficiencies

Threats

Lack of adequate time for oversight committees to properly understand the system, evaluate alternatives, and provide guidance on issues

Future funding of the HHM program

New DEA rules have changed how the current program operates

Loss of Clean Sweep grant dollars would result in severe program cuts

Single stream recycling pulling waste from Xcel's guaranteed minimum

EPA air enforcement changes

Increased WDNR fees charged for waste

Waste security

Changing perceptions of "waste" and what that means for a landfill in terms of managing its resources

Limited ability to influence legislation at state/federal level

Changes to Xcel contract, especially ash disposal

No statutory ability to retain waste in the system

Increased tipping fees affect waste security

Limited perception of added benefit

Waste-to-energy not universally embraced

Highly visible business with risk for bad publicity

Frequent turnover of oversight body governing personnel affects long term stability

Shrinking ton with more competition for waste

Lack of collaboration between the County and two cities that may eliminate the potential to sell buffer land at the landfill entrance

Nearby Olmstead Co. has expanded its waste to energy facility

1.2 Mission and Values

The purpose of the La Crosse County regional disposal system is to provide regional environmentally and economically sound solid waste services through:

1. Cooperation with a regional mindset
2. Comprehensive communication and education
3. Fiscally responsible management
4. Creative and integrated approaches that result in long-term value to stakeholders
5. Promotion of competition in the market place

In carrying out its mission, the System is guided by the following six core values illustrated in Figure 2 below.

Regional Disposal System Core Values

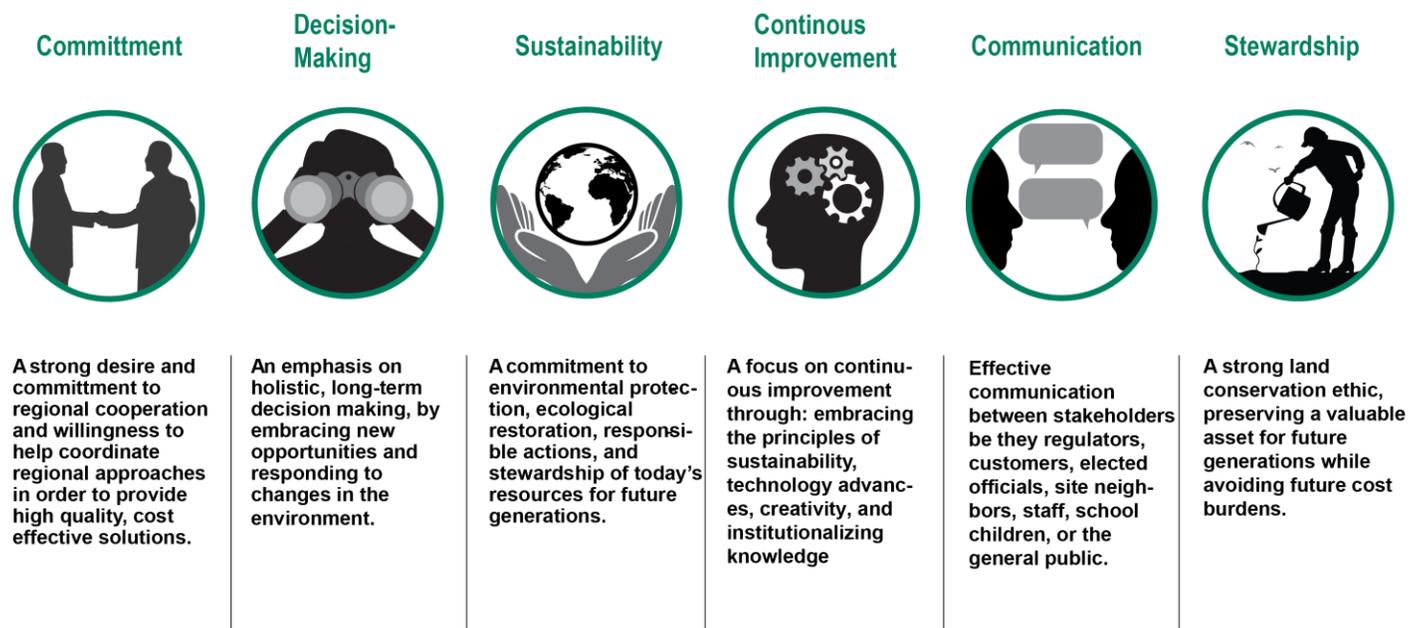


Figure 2 – La Crosse County Regional Disposal System Core Values

1.3 Planning Framework

The SWMP is a broad, comprehensive document which describes the La Crosse regional disposal system and identifies a set of key issues and opportunities to guide decision making in the future. It provides a framework for change through the identification of strategic recommendations to address the key issues facing the system.

Several other plans are intended to compliment this plan by providing more detailed and topical analyses relate to topics such as land use, operations, and sustainability. These include but are not limited to the following:

- La Crosse County's Land Use Master Plan

- La Crosse County’s Landfill Natural Resource Management Plan, and Trail and Recreation Master Plan
- La Crosse County’s Landfill Environmental Management System (Green Tier)
- La Crosse Strategic Plan for Sustainability

Through annual work planning and on-going priority setting exercises with system partners, specific initiatives have been and will be developed and implemented based on the recommendations contained in this plan.

1.4 Key Issues

Based on the results of the stakeholder engagement activities, discussion with the Department, prior document review, and a review of recent trends impacting the La Crosse regional disposal system, a set of strategic issues was identified. Listed below are the key challenges, or strategic issues, facing the system over the next five year time period and beyond. Strategic recommendations to manage these key issues are presented in Section 5 of this report.

1. **Financial Stability** – how can the Department maintain financial stability while remaining competitive?
2. **Xcel Energy’s Waste-to-Energy (WTE) facility**– how can the Department strengthen its current partnership with Xcel Energy to the benefit of both parties and the disposal system as a whole?
3. **Waste Stream Security** – how can the Department maintain an adequate waste stream now and in the future to achieve its financial objectives?
4. **Regional Cooperation** – how can the Department strengthen regional partnerships and better serve the region?
5. **Moving from Public Relations to Community Outreach** – how can the Department pro-actively engage its stakeholders and partners to better meet their needs?
6. **Operational Effectiveness and Efficiency** – how can the Department gain efficiencies and better meet the needs of its users through new technologies?
7. **Succession Planning and Institutional Knowledge** – how can the Department retain and attract talented, innovative staff with visionary leadership?
8. **Land Use** – how can the Department implement the long range vision for the landfill site as identified in the La Crosse County Landfill Master Land Use Plan (MLUP) (Appendix A) and related documents?

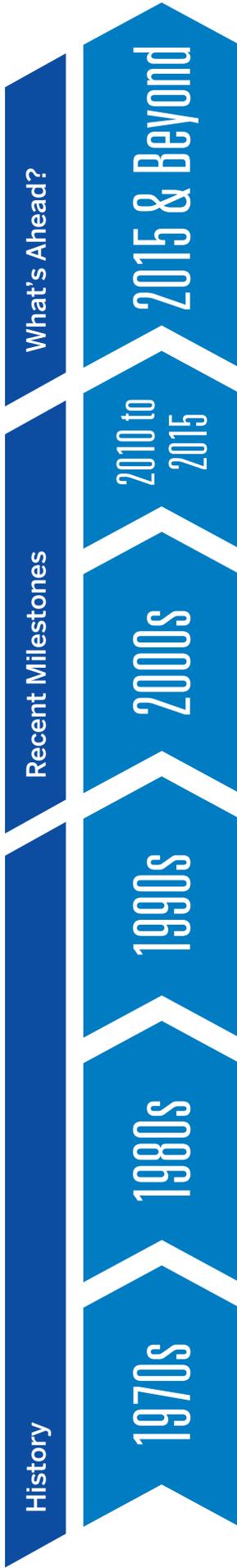
1.5 Key Accomplishments

1.5.1 Historical System Timeline

Planning for the future does not take place in a vacuum. The La Crosse County regional disposal system has had many successes over the past 35 years, continually evolving to meet the needs of its stakeholders. See Figure 3 for a list of key milestones from the 1970’s through the present.

35 Years of Continuous Improvement

- Managing Problems
- Discovering Opportunities
- Building a New Future



Open burning dumps common in the region
 First cell opened at the County landfill

County contracts with Xcel Energy to provide municipal solid waste for use as fuel at the French Island waste-to-energy facility

Subtitle D landfill cell constructed at County landfill site

70s era County landfill remediated
 New pollution control equipment installed at Xcel facility
 Solid Waste Policy Board established
 Household Hazardous Material facility opened
 County and Wisconsin Department of Natural Resources approve Solid Waste Management Plan

Multiple solid waste diversion programs operating successfully
 Landfill gas-to-energy partnership implemented
 Green Tier environmental certification achieved
 Processional management of system-wide operations
 Master Land Use Plan approved
 Xcel yield shows gains

Xcel contract through 2023
 Landfill site life of 30-50 years at current disposal rates
 Construction/ Demolition Recycling, Mattress, Recycling, New Diversion Programs
 Other processing technologies
 Solid Waste Plan Update
 Master Land Use Plan Update



Figure 3 - La Crosse County Regional Disposal System History

1.5.2 Recent Accomplishments

Several successful projects and initiatives have been realized since the 2008 SWMP was approved. Many of the accomplishments were identified as priorities in that plan. A brief list of key accomplishments is provided below:

- Tipping fee increases have been avoided or minimized.
- Long term care and closure costs were renegotiated resulting in cost savings to the County of approximately \$1 million annually.
- The Household Hazardous Materials (HHM) program has grown by nearly 300 percent since its inception in 2008.
- The 2010 La Crosse County Solid Waste and Recycling Collection Evaluation led to establishment of single stream recycling in the cities of Onalaska and La Crosse. Within the first eleven months of implementation recycling rates increase approximately 137 percent.
- A Landfill Master Land Use Plan and related Conceptual Natural Resource Management Plan and Trail and Recreation Master Plan were completed.
- The County and Gundersen Health System partnered to design and implement an award winning Landfill Gas to Energy system.
- A hauler rebate program was implemented, and has improved waste stream security.
- A popular citizen drop-off area that accepts garbage, construction and demolition (C&D) wastes, bulky wastes, tires, recyclables, and more was established.
- Two new municipal solid waste (MSW) landfill cells (Phase VII module 1, Phase VIII module 1) were constructed, while an intermediate sized C&D landfill and portions of Phase I through Phase V of the MSW landfill were closed.
- The County Solid Waste Department was accepted into the WDNR's Green Tier sustainability program and an Environmental Management System was adopted.
- Partnerships with regional organizations including the Outdoor Recreational Alliance, Civil Air Patrol (CAP), and Boy Scouts and others were established or expanded.
- The Department's relationship with Xcel Energy was strengthened.
- Over the past five years the Department has been recognized at the national, regional, and local level through the receipt of numerous awards acknowledging the Department's commitment and leadership in environmental performance, sustainability, and landfill operations.

1.6 Organizational Structure

The La Crosse County regional disposal system is made up of many public and private partners. Figure 4 shows the current organizational structure for the system. A brief description of each component of the system is described on the next page.

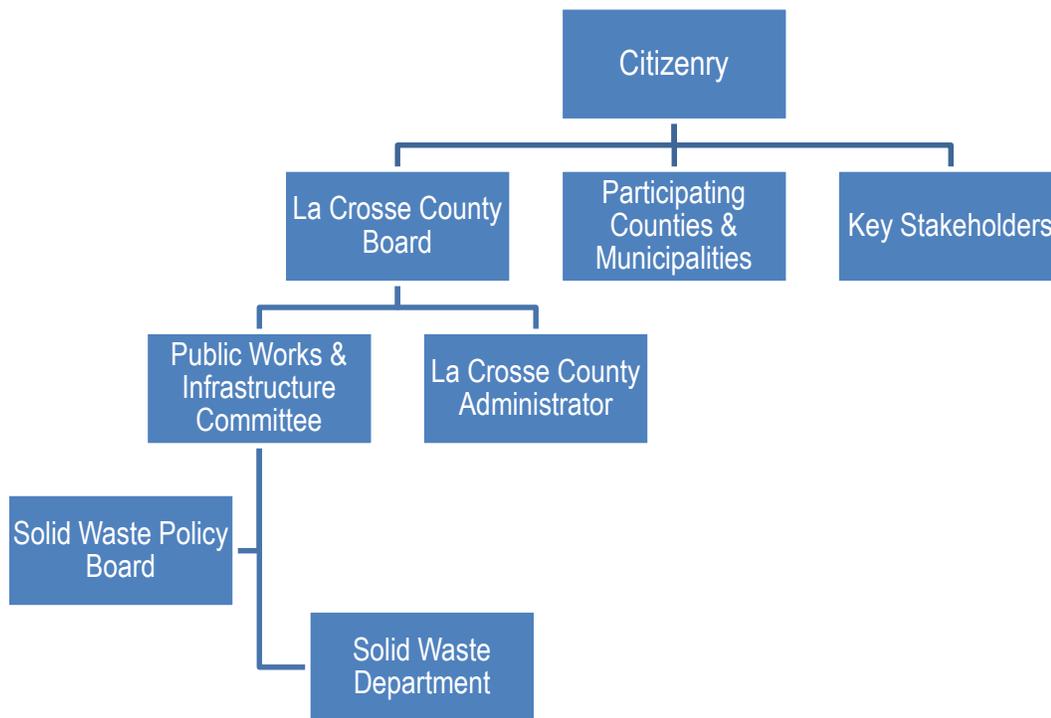


Figure 4 – La Crosse County Regional Disposal System

1.6.1 La Crosse County Regional Disposal System

The La Crosse County regional disposal system is an integrated solid waste management system that provides a full range of waste management services in southwestern Wisconsin and southeastern Minnesota. The system supports Wisconsin’s Solid Waste Reduction, Reuse, Recycling, Composting, and Resource Recovery Policy (WI Stat § 287.05), which states “that maximum solid waste reduction, reuse, recycling, composting and resource recovery is in the best interest of the state in order to protect public health, to protect the quality of the natural environment and to conserve resources and energy.”

The Policy expressly encourages cooperative approaches and intergovernmental coordination “in order to maximize beneficial results while minimizing duplication and inefficiency.” It provides “municipalities and counties certain powers to adopt waste flow control ordinances in order to require the use of recycling and resource recovery facilities.”

1.6.2 La Crosse County Board of Supervisors

The County Board is the ultimate decision-making body for all La Crosse County business. The County Administrator serves at the pleasure of the Board and is responsible for overall management of the various departments and gains legal counsel from the County Corporation Counsel. The County Board has final approval over department budgets, issuance of bonds, contract approvals, and basic matters affecting finance. As the governing body for the County, the Board of Supervisors also sets official County policy including the Solid Waste Management Code (See Appendix B, “La Crosse County Solid Waste Management Code”).

1.6.3 La Crosse County Public Works and Infrastructure Committee

The Public Works and Infrastructure (PWI) Committee acts as the oversight committee for facilities, highway and departments. The PWI Committee makes policy, legislative and funding decisions related to all county-owned buildings, highways, bridges, parks and solid waste facilities, as well as other real estate and properties. Issues typically addressed by this committee include: capital improvement projects; facilities maintenance; preventive maintenance; construction; personal property and real estate; and the operations, repairs and upkeep of assets.

1.6.4 La Crosse County Administrator

The County Administrator is Chief Executive Officer and the primary employee of the County Board of Supervisors. Local government operations are organized under the direction of the County Administrator within the policy framework established by the Board.

1.6.5 La Crosse County Regional Disposal System Solid Waste Policy Board

The Solid Waste Policy Board (SWPB) was created in 2004 and consists of nine members appointed by the County Board Chair. Three members must be La Crosse County Board Supervisors. Six members are from the regional participants with two of those from within La Crosse County. The rest are currently made up of one representative from each of the four county contract holders (Houston and Wabasha counties in Minnesota and Buffalo and southern Trempealeau counties in Wisconsin).

The SWPB develops plans for the county solid waste management programs; establishes operations and methods of waste management that are considered appropriate; engages in research and demonstration projects that are intended to improve the techniques of solid waste management; through the budget process recommends establishment of reasonable fees; creates service districts which provides different types of solid waste collection or disposal services; educates users of the services of the county solid waste management system and the public.

The SWPB provides a voice for participants from the region in many of the issues critical to those regional participants. However, the SWPB does not own assets, enact ordinances, contract with private entities, accept funds, or levy taxes. Rather, the SWPB provides recommendations to La Crosse County's PWI Committee, which in turn makes recommendations to the County Board. See Figure 5 for a diagram of the decision making process which La Crosse County and its partners use to identify issues, gain approvals, monitor impacts, and implement activities.



Figure 5 – La Crosse County Regional Disposal System Decision-Making Process

1.6.6 Participating Counties and Municipalities

La Crosse County contracts with multiple public entities and private businesses in order to maintain a strong regional disposal system. These include, but are not limited to the following counties and commissions:

1. La Crosse County, Wisconsin
2. Houston County, Minnesota
3. Wabasha County, Minnesota
4. Buffalo County, Wisconsin
5. Trempealeau County, Wisconsin
6. Southern Trempealeau County Solid Waste Commission, Wisconsin

Contract holders commit to sending municipal solid waste within their control to Xcel Energy's WTE facility. They also use other services provided by the Department such as the HHM program.

1.6.7 Key Stakeholders

There are dozens of key stakeholders in the system including but not limited to the following:

- Public partners such as La Crosse County, other participating counties and municipalities
- Private partners such as Waste Management, Hilltopper's Refuse & Recycling Service (Hilltopper's), Harter's Quick Clean Up (Harter's), St. Joseph Construction Company, Inc., Gundersen Health System, and Xcel Energy.
- Community partners such as the Outdoor Recreation Alliance (ORA), Boy Scouts of America (BSA), Habitat for Humanity and Wisconsin Conservation Corps (WisCorps).

1.6.8 La Crosse County Solid Waste Department

The Department is responsible for overseeing landfill operations and provides education and outreach services both locally and regionally. Staff include the following:

- Special Waste Technician (3)
- Operations Coordinator
- Solid waste Operations Technician
- Sustainability Coordinator
- Special Waste Manager
- Secretary
- Scale Attendant (2)
- Accountant
- Director

1.7 Legal Framework

Wisconsin law provides counties and municipalities authority to manage solid waste alone or in cooperation with one another. This section of the plan highlights the solid waste management authority and roles for counties in Wisconsin and Minnesota. The first subsection covers two US Supreme Court rulings regarding solid waste flow control.

1.7.1 Supreme Court Rulings

Flow control is an important topic for the regional disposal system because of the long term contracts which have been put in place that guarantee a specified amount of solid waste be delivered to Xcel for conversion to RDF.

In 1994, "the Carbone Decision" by the US Supreme Court limited the ability of public solid waste agencies to direct the flow of solid waste to the public agency's contracted private solid waste management facilities via an ordinance requiring all private haulers to deliver to the designated facility. However, on April 30, 2007, the US Supreme Court issued another key ruling, "Oneida-Herkimer". This ruling determined if properly conducted under the laws of the specific state, that flow control to publicly-owned and operated solid waste management facilities by ordinance is acceptable.

1.7.2 Wisconsin County Authority

La Crosse County's authority for solid waste management planning is based in Wisconsin Statutes. **WI Stat § 289** states that:

- “Each county board individually or jointly with another county board may prepare and adopt a county solid waste management plan consistent with state criteria.”
- “All county plans shall be submitted to the department for review. Within 90 days after submittal, the department shall approve or disapprove the plans. During its review, the department shall consult with the appropriate regional planning commission or other planning agency to determine whether any facility use and operation is in conflict with any plans adopted by such agency.”

WI Stat § 59.70 ‘Environmental protection and land use’ authorizes counties to engage in solid waste management as well. It states that:

- “The board of any county may establish and operate a solid waste management system or participate in such system jointly with other counties or municipalities....”
- The Statute allows for creation of a solid waste management board, which may exercise powers including:
 - Develop a plan for a solid waste management system and acquire lands within the county;
 - Establish operations of waste management as well as acquire the necessary equipment;
 - Enact and enforce ordinances;
 - Contract with private collectors, transporters or municipalities to receive and dispose of waste;
 - Accept funds that are derived from state or federal grant or assistance programs and enter into necessary contracts or agreements;
 - Appropriate funds and levy taxes to provide funds for acquisition or lease of sites, easements, and necessary facilities;
 - Make payments to any municipality in which county disposal sites or facilities are located to cover the reasonable costs of services;
 - Charge or assess reasonable fees; and
 - Create service districts which provide different types of solid waste collection or disposal services.

WI Stat § 59.70 ‘Environmental protection and land use’ also authorizes counties to establish and require recycling or resource recovery facilities. The statute states that “the board may establish and require use of facilities for the recycling of solid waste or for the recovery of resources from solid waste as provided under Section 287.13.” La Crosse County implemented this required use designation under Section 287.13 at the time of developing the original Refuse Derived Facility contract with Northern States Power (NSP).

1.7.3 Wisconsin Municipal Authority

Cities, villages and towns also possess the authority for collection and removal of solid wastes from places within their municipality. This includes authority to arrange for all places or those that desire service. Districts may be created and different regulations applied to each. Cost may be recovered by various means.

Local governments may also provide for solid waste management through intergovernmental agreements under Section 66.30 of the Statutes. These joint agreements are limited to those powers the local government can legally perform individually.

The WDNR has numerous regulatory requirements covering all aspects of solid and hazardous waste management. La Crosse County and other Wisconsin participants are required to follow these regulations with all facilities and programs.

1.7.4 Wisconsin Responsible Unit Authority

Wisconsin Statute 287.07 prohibits land disposal and incineration of several recyclable materials unless “Effective Recycling Programs” have been developed. Effective Recycling Programs must be developed and continue to be operated by Responsible Units. The materials banned along with the exemptions for Effective Recycling Programs are established in Statutes and governed by regulations adopted by the WDNR. The statute exempts the La Crosse County regional disposal system from certain prohibitions regarding the burning of prohibited recyclable materials.

1.7.5 Local Ordinances

La Crosse County has adopted a Solid Waste Management Code to “regulate the storage, collection, transport, processing, recovery, and disposal of solid waste in order to protect the present and future public safety, health, welfare, economic stability, and the environment of the people of La Crosse County.”

Most municipalities have ordinances addressing issues associated with solid waste management. For example, Chapter VIII of the City of La Crosse code addresses “Dwelling and Sanitary Regulations.” The ordinance addresses the proper handling of refuse and recyclables for collection and outlines the specific responsibilities of a Responsible Unit of Government to guide recycling efforts.

1.7.6 Minnesota Solid Waste Management Planning

In Minnesota the primary responsibility and authority for solid waste management rests with county government. Outside the Minneapolis-St. Paul metropolitan area, Minnesota counties have statutory authority under Chapter 400: Greater Minnesota-County Solid Waste Management Act and Minn. Stat. §115A, also known as the Waste Management Act.

The goal of the Minnesota statutes is to protect the state’s land, air, water, and other natural resources and the public health by improving waste management in the state to serve the following purposes:

1. Reduction in the amount of toxicity of waste generated
2. Separation and recovery of materials and energy from waste
3. Reduction in indiscriminate dependence on disposal of waste
4. Coordination of solid waste management among political subdivisions
5. Orderly and deliberate development and financial security of waste facilities including disposal facilities

1.7.7 Minnesota County Solid Waste Planning

There is stronger county-level solid waste planning in the State of Minnesota compared with the State of Wisconsin. For example, public entities in Minnesota are required to follow their counties when they arrange for solid waste services unless they have the county's permission to do otherwise. This may include requirements related to recycling, banning of certain materials from the waste stream, and use of designated WTE or composting facilities.

1.8 Financial Condition of the La Crosse County Solid Waste Department

The Department is a self-funded (enterprise fund) entity in that the revenue generated by the system covers its operating costs. The system does not rely on general tax revenue for funding. Key assets include: property and equipment; land, airspace and permits for future disposal; waste stream revenue and waste-to-energy revenue from other wastes (HHM, e-waste). Key liabilities include: Operating costs for waste disposal and beneficial reuse programs; capital investments; bond repayment obligations; regulatory requirements for long-term care of the landfill and waste that leaves the system.

Solid Waste Management is one of the major enterprise funds of La Crosse County, along with Hillview Health Care Center. A set of financial assumptions were identified through a review of existing financial documents and interviews with the County Administrator, County Finance Director, Solid Waste Department Director, and the former Solid Waste Department Finance Specialist.

1.8.1 Assumptions Regarding the Overall Financial Health of the System

1. The County maintains an "Aa1" rating from Moody's Investors Services for general obligation debt. An "Aa1" is graded as high quality and a very low credit risk to investors. This means the County has a proven track record, the financial strength, and the ability to repay short-term debt.
2. Several tools and techniques are used to ensure that the County manages its finances both in the shorter term and longer term in a sustainable manner. For example:
 - a. As part of long range planning, the County employs a five-year comprehensive Capital Improvement Plan. This process ensures that capital project needs are reviewed and evaluated on an annual basis to ensure that all projects are identified, priorities established and the possible ways to finance them are discussed.
 - b. Annual budgets are prepared with the following principles in mind: Limiting the use of reserves to fund ongoing operating expenses, examining service delivery systems to ensure revenue sources are maximized, and making internal organizational changes to increase efficiencies and service.
 - c. Annual 3rd party audits are conducted.
3. The Department, which is a part of the County, is in very good financial health. The Department has funded balances, and diverse revenues including long term contracts with Xcel Energy and several municipalities.
4. Net retained earnings or the "year end fund balance" is the difference between the total assets and liabilities of the Solid Waste Fund. For 2014 the figure was \$5,770,566. The fund balance is considered adequate, and in fact the County

has been slowly reducing the fund balance over the past 5 years by opting to pay cash for some capital projects.

5. Looking at revenues, roughly 75% come from tipping fees. Consequently, if future price increases are needed the focus needs to be on increased tipping fees. Key questions include - how to do it equitably and also maintain waste security in the system?
6. In terms of expenses, contracts with Xcel Energy, debt management, and site operations are the most significant items. A multi-pronged approach will likely be needed to effectively manage expenses.
7. Over the period 2009 to 2013 revenues exceeded expenditures. Despite rising costs (labor, energy, contractor costs, materials, supplies) and on-going debt payments the Department was able to improve its financial position through a series of cost savings initiatives (reducing operating cost) and revenue enhancements (increased ferrous recovery, increased gas production).
8. Maintaining a Household Hazardous Materials (HHM) program that is cost effective is a key challenge facing the Department. HHM funding needs are approximately \$400,000-\$450,000/year and currently funded with a 50% tax levy (\$1/per person contributed by every La Crosse County municipality and matched by the County. The remainder includes a 25% State Grant and a 25% User Fee (Businesses & e-waste). A variety of funding options have been analyzed and a new intergovernmental agreement needs to be negotiated by December 31, 2017.
9. The Department carried very little debt until the mid-2000's. However, beginning in 2000 the debt load began to increase in order to fund waste relocation, new cell construction, cell expansion, and environmental controls at Xcel WTE facility. The debt principal as of the beginning of 2015 included the following:
 - 1) 2005 A debt issue (\$5,115,000, callable in 2015)
 - 2) 2006 A debt issue. (\$9,355,000, callable in 2016)
 - 3) 2006 B debt issue. (\$12,775,000)
10. The County has historically used General Obligation (GO) debt for financing landfill related projects. More recently, however, the County has paid cash for several projects including the landfill gas to energy project, new cell construction, and closure costs - with no new debt issued since 2006.
11. Over the next two years (2015-2016), the County intends to borrow additional funds to pay for other larger, non-Solid Waste related capital projects including a downtown campus project, which includes a new Administrative Center Lot C development, and administrative center redevelopment. Consequently, the County has decided to use other funding sources to re-finance the existing landfill debt in order to increase the County's overall debt capacity to help fund the other projects.
12. In 2015, following a thorough review of available options, the County made several decisions regarding its debt structure, including re-financing Department debt and issuing new debt to help pay for the downtown campus project. Other decisions include:
 - a. Make an additional \$2.5 million debt payment on the 2005 A debt issue, allowing the County to pay off this debt October 1, 2015.

- b. Refinance the 2006 A debt issue through the Wisconsin State Trust Fund (STF), lowering the interest rate from 5.5% to 4% interest over the next ten years. STF funding allows the County to avoid bond issuance costs and pre-payment penalties.
 - c. Call the 2006 B debt issue in 2016 and refinance it using STF funding, lowering the interest rate from 5.5% to 4%.
 - d. Borrow approximately \$17.7 million for the Lakeview nursing home project in one issue and \$13.5 million for starting the downtown campus project.
13. As a result of these financial decisions, the County and the Department are in better financial shape for the future. The projected impact of the debt restructuring is shown in figure 6 below showing the Department's remaining debt balance.
- a. The Department is projected to have approximately \$16.6 million in outstanding principal and interest debt payments as of the end of 2015.
 - b. The County anticipates net cost savings of approximately \$285,000 as a result of the restructuring over the ten years.
 - c. Moving the Department debt from GO to STF debt revenue bond debt will help keep the County's Moody rating at AA1, which enables the County to receive a better interest rate on the bond market.

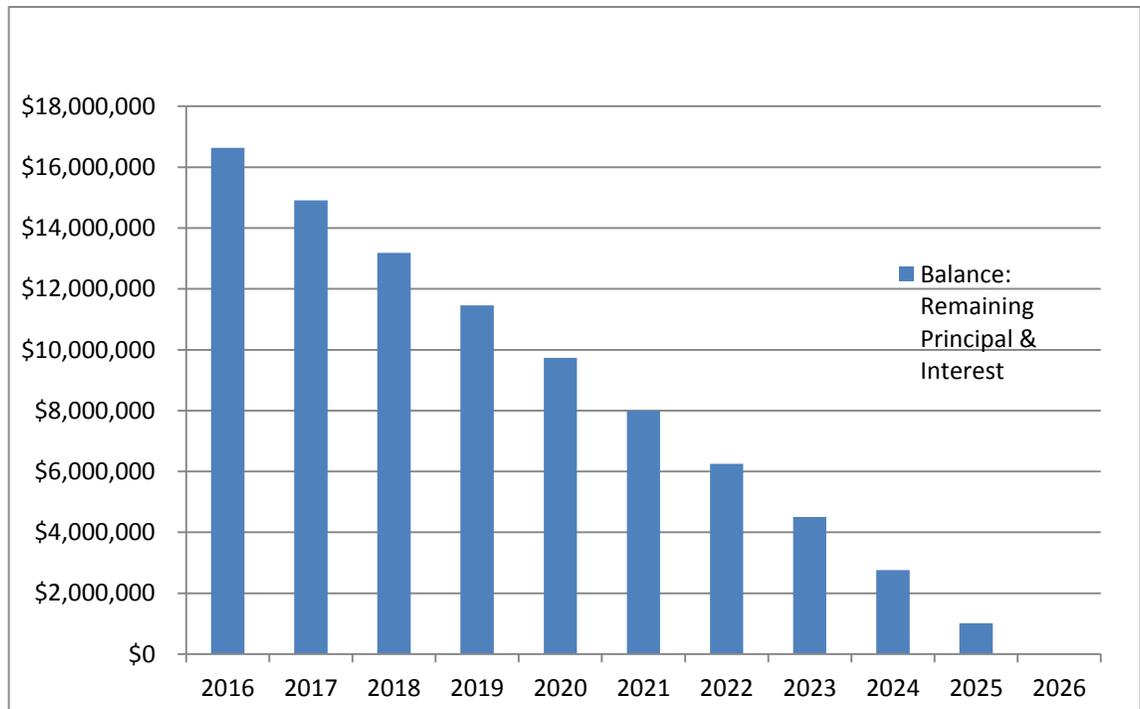


Figure 6 – Solid Waste Department Remaining Debt Balance at Year-End (Principal and Interest)

14. As a result of the financial decisions described above, the annual debt payment schedule has improved as well.
- a. As can be seen in Figure 6 the remaining debt balance tapers off over the period 2016-2026, assuming current contracts are kept in place.

- b. For 2016, the projected payments will be just under \$1 million.
- c. In 2017 and beyond annual debt payments will be approximately \$1.7 million.
- d. Annual debt payments will remain relatively even through 2025 dropping to approximately \$1 million in 2026, at which time the debt will be paid off.

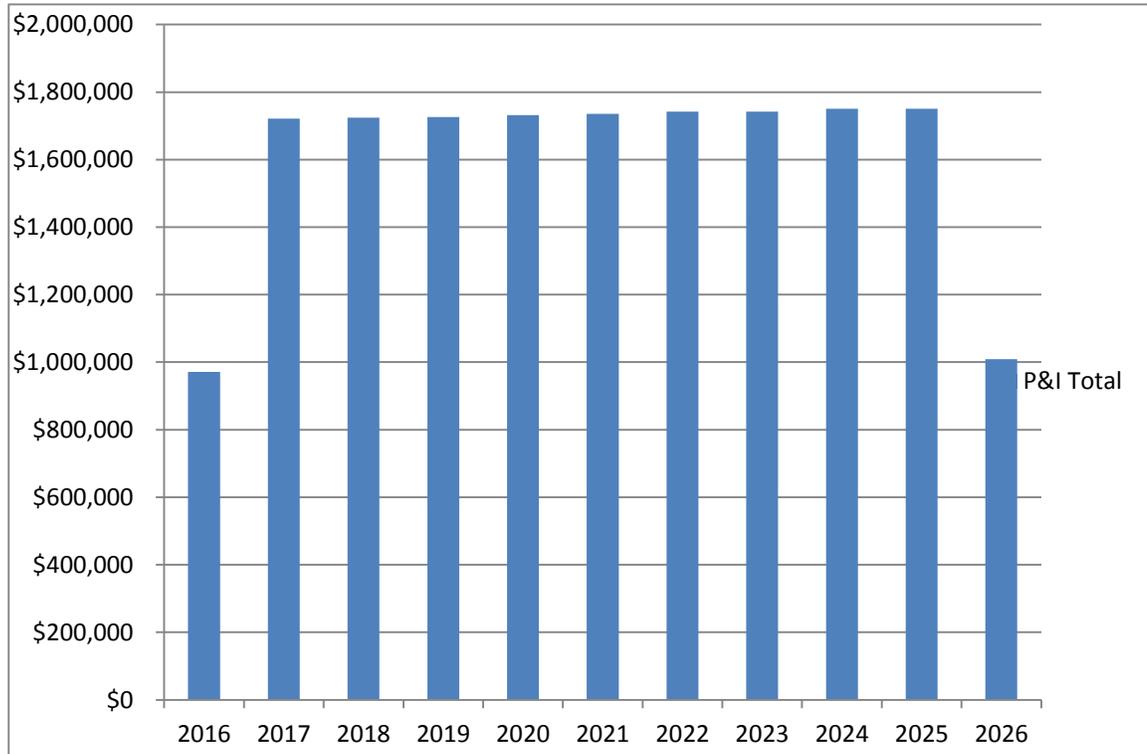


Figure 7 – Debt-Remaining Annual Payments

15. Debt discussions have also raised several important questions including:
- (1) What is the appropriate /reasonable level of debt for the Department?
 - (2) What will the advantages be after 2026 when debt is expired?
 - (3) What are long-term plans beyond 2023?
 - (4) Are there additional new investments needed for the system to continue operating successfully?
16. Looking to the future, the County and the Department will continue to monitor and evaluate all available financing options to ensure the long-term fiscal health of both the County and the Department.

2.0 System Description

La Crosse County serves as the hub for the La Crosse regional disposal system, an integrated solid waste disposal system that is provided through public/private partnerships. This system is utilized by several counties and municipalities in Wisconsin and Minnesota (See Figure 8 below).

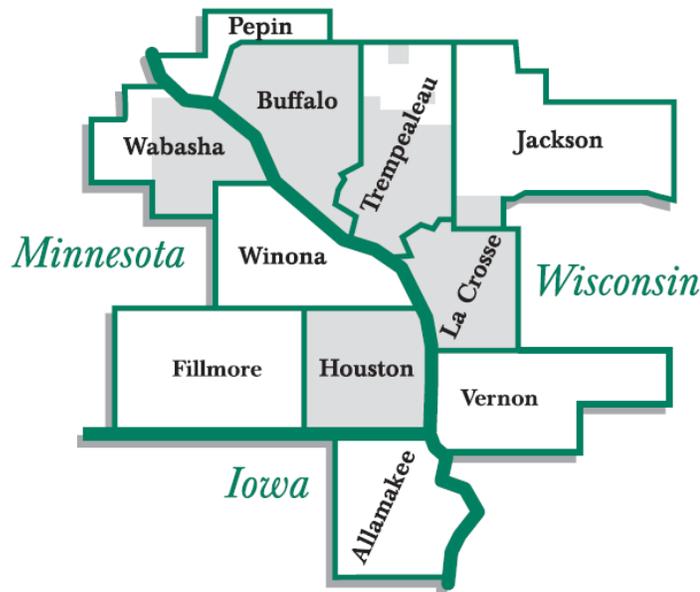


Figure 8 – Map of La Crosse County Regional Disposal System

The system accepts residential, commercial, industrial, and institutional wastes. The disposal system processes solid waste into refuse derived fuel (RDF) which is then utilized in generating electricity by Xcel Energy. The system provides reuse, resource recovery, recycling, and disposal services, in addition to programs designed to reduce the toxicity of various waste streams. The majority of these services are provided at the La Crosse County Landfill. Resource recovery activities are conducted at Xcel Energy's WTE facility located on French Island

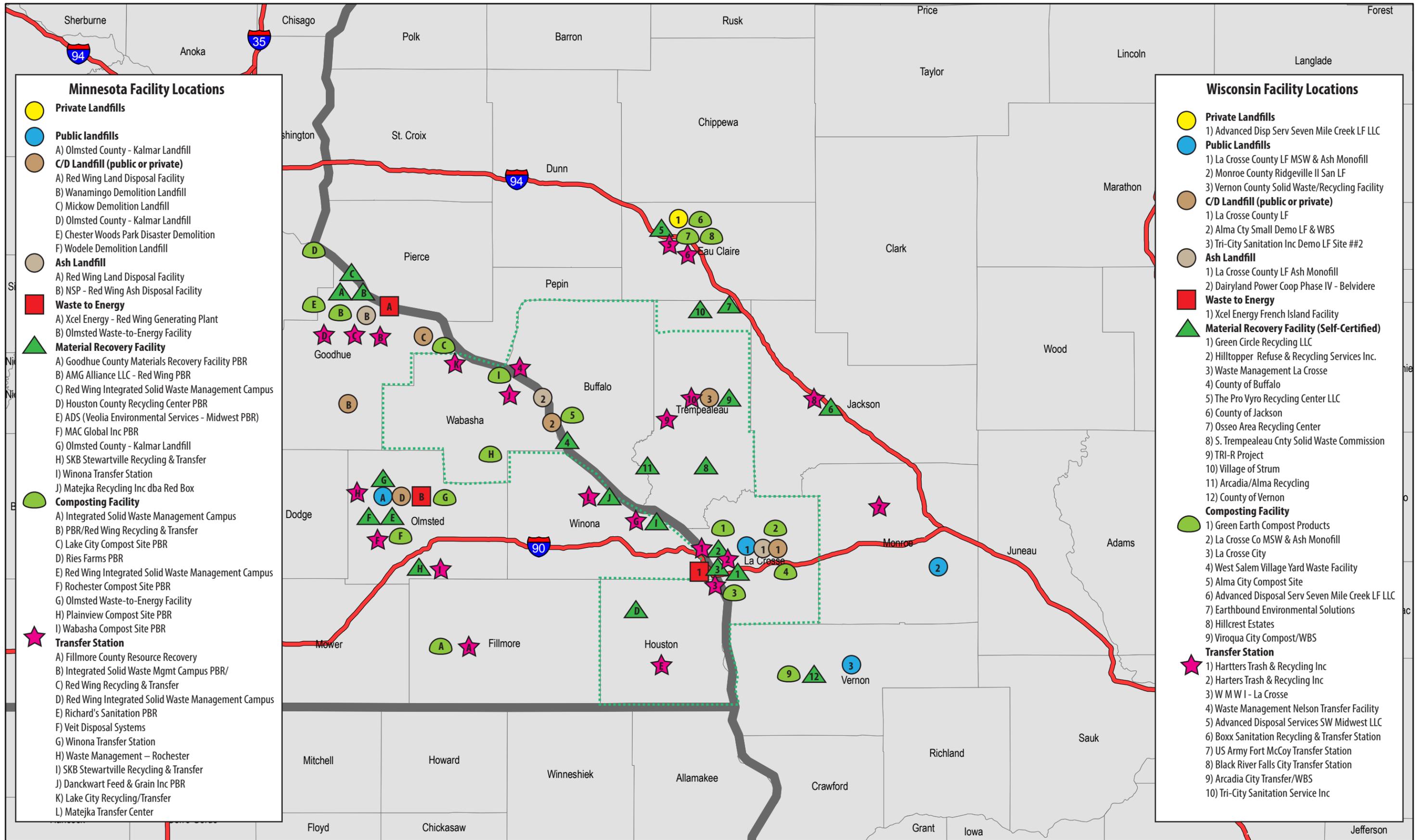
The services offered by the system are consistent with the State of Wisconsin's and State of Minnesota's preferred waste management policies. The system keeps transportation distances and costs low, as well as ensuring strong private sector competition by maintaining accessible, fairly priced services.

This section of the report provides a description of the various components of the system. It includes information pertaining to area landfills and Material Recovery Facilities (MRFs), a description of existing collection and transfer programs, and a summary of public education and outreach activities. The system includes a diverse mix of stakeholders and assets including but not limited to:

- Publically-owned and operated facilities and programs
- Privately owned and operated businesses
- Publically-owned, privately operated facilities

Figure 9 shows the location of the region's landfills, WTE, and transfer stations.

Figure 9 - Regional Solid Waste Facility Map



- Minnesota Facility Locations**
- **Private Landfills**
 - **Public landfills**
 - **C/D Landfill (public or private)**
 - **Ash Landfill**
 - **Waste to Energy**
 - ▲ **Material Recovery Facility**
 - **Composting Facility**
 - ★ **Transfer Station**
- A) Olmsted County - Kalmar Landfill**
- B) Wanamingo Demolition Landfill**
- C) Mickow Demolition Landfill**
- D) Olmsted County - Kalmar Landfill**
- E) Chester Woods Park Disaster Demolition**
- F) Wodele Demolition Landfill**
- A) Red Wing Land Disposal Facility**
- B) NSP - Red Wing Ash Disposal Facility**
- A) Xcel Energy - Red Wing Generating Plant**
- B) Olmsted Waste-to-Energy Facility**
- A) Goodhue County Materials Recovery Facility PBR**
- B) AMG Alliance LLC - Red Wing PBR**
- C) Red Wing Integrated Solid Waste Management Campus**
- D) Houston County Recycling Center PBR**
- E) ADS (Veolia Environmental Services - Midwest PBR)**
- F) MAC Global Inc PBR**
- G) Olmsted County - Kalmar Landfill**
- H) SKB Stewartville Recycling & Transfer**
- I) Winona Transfer Station**
- J) Matejka Recycling Inc dba Red Box**
- A) Integrated Solid Waste Management Campus**
- B) PBR/Red Wing Recycling & Transfer**
- C) Lake City Compost Site PBR**
- D) Ries Farms PBR**
- E) Red Wing Integrated Solid Waste Management Campus**
- F) Rochester Compost Site PBR**
- G) Olmsted Waste-to-Energy Facility**
- H) Plainview Compost Site PBR**
- I) Wabasha Compost Site PBR**
- A) Fillmore County Resource Recovery**
- B) Integrated Solid Waste Mgmt Campus PBR/**
- C) Red Wing Recycling & Transfer**
- D) Red Wing Integrated Solid Waste Management Campus**
- E) Richard's Sanitation PBR**
- F) Veit Disposal Systems**
- G) Winona Transfer Station**
- H) Waste Management - Rochester**
- I) SKB Stewartville Recycling & Transfer**
- J) Danckwart Feed & Grain Inc PBR**
- K) Lake City Recycling/Transfer**
- L) Matejka Transfer Center**

- Wisconsin Facility Locations**
- **Private Landfills**
 - **Public Landfills**
 - **C/D Landfill (public or private)**
 - **Ash Landfill**
 - **Waste to Energy**
 - ▲ **Material Recovery Facility (Self-Certified)**
 - **Composting Facility**
 - ★ **Transfer Station**
- 1) Advanced Disp Serv Seven Mile Creek LF LLC**
- 1) La Crosse County LF MSW & Ash Monofill**
- 2) Monroe County Ridgville II San LF**
- 3) Vernon County Solid Waste/Recycling Facility**
- 1) La Crosse County LF**
- 2) Alma Cty Small Demo LF & WBS**
- 3) Tri-City Sanitation Inc Demo LF Site #2**
- 1) La Crosse County LF Ash Monofill**
- 2) Dairyland Power Coop Phase IV - Belvidere**
- 1) Xcel Energy French Island Facility**
- 1) Green Circle Recycling LLC**
- 2) Hilltopper Refuse & Recycling Services Inc.**
- 3) Waste Management La Crosse**
- 4) County of Buffalo**
- 5) The Pro Vyro Recycling Center LLC**
- 6) County of Jackson**
- 7) Osseo Area Recycling Center**
- 8) S. Trempealeau Cnty Solid Waste Commission**
- 9) TRI-R Project**
- 10) Village of Strum**
- 11) Arcadia/Alma Recycling**
- 12) County of Vernon**
- 1) Green Earth Compost Products**
- 2) La Crosse Co MSW & Ash Monofill**
- 3) La Crosse City**
- 4) West Salem Village Yard Waste Facility**
- 5) Alma City Compost Site**
- 6) Advanced Disposal Serv Seven Mile Creek LF LLC**
- 7) Earthbound Environmental Solutions**
- 8) Hillcrest Estates**
- 9) Viroqua City Compost/WBS**
- 1) Hartters Trash & Recycling Inc**
- 2) Harters Trash & Recycling Inc**
- 3) W M W I - La Crosse**
- 4) Waste Management Nelson Transfer Facility**
- 5) Advanced Disposal Services SW Midwest LLC**
- 6) Boxx Sanitation Recycling & Transfer Station**
- 7) US Army Fort McCoy Transfer Station**
- 8) Black River Falls City Transfer Station**
- 9) Arcadia City Transfer/WBS**
- 10) Tri-City Sanitation Service Inc**

Legend

- - - - - System Boundary
- Private Landfills
- Public Landfills
- C & D Landfill (public or private)
- Ash Landfill (public or private)
- Waste to Energy
- ▲ Material Recovery Facilities
- Composting Facility
- ★ Transfer Stations



La Crosse Disposal System
A Responsible Resource

2.1 Current La Crosse County Landfill Facility and Activities

The La Crosse County Landfill is located on a 350 acre parcel of land in west central La Crosse County, within the city limits of both La Crosse and Onalaska. The landfill is publically owned, however the majority of landfill operations are performed by a private contractor, St. Joseph Construction Company, Inc.

The landfill comprises an active 43- acre municipal solid waste (MSW) landfill with approximately 20 acres in final closure, a closed relocated MSW landfill, a closed 6-acre demolition landfill, an active ash monofill, and two smaller closed demolition landfills.

Landfilling in the closed MSW landfill occurred primarily in the 1970s and 1980s and ceased in 1991. The closed landfill was relocated to the active MSW site between 2005 and 2008. The closed landfill has documented groundwater impacts which the county continues to monitor and proactively address in consultation with the WDNR.

The active landfill (also referred to as Subtitle D sanitary landfill) was originally designed with six horizontal phases. A March 2003 Plan Modification combined the remaining two phases into a single Phase V. Phase V was constructed and approved for waste placement in 2004. A horizontal and vertical expansion (North Expansion) was approved in 2006, which included five liner construction sequences and added 3,853,000 CY of air space. A portion of this air space was consumed by relocating the closed landfill.

Phases I and II of the active landfill have a 5-foot thick clay liner underlain with a full basin 60-mil HDPE geomembrane lysimeter. Phase III through Phase VIII have a composite liner consisting of 4 feet of clay overlain with a 60-mil HDPE geomembrane liner. To date, Phase I through Phase VIII Module 1 have been constructed, with Phase VII Module 1 completed during 2010 and Phase VIII Module 1 completed in 2014. Two cells remain to be constructed, including Phase VII Module currently scheduled for 2018 and Phase VIII Module 2 currently scheduled for 2020. Recent construction of two new cells (Phase VII module 1-2010, Phase VIII module 1-2014).

Figure 10 shows the site layout and the location of the activities numbered below. Descriptions of these activities are provided throughout Section 2 of this report.

1. Active landfill area
2. Landfill scale, offices, and reuse room
3. Household hazardous materials (HHM) facility
4. The active landfill area with the contiguous expansion waste limits
5. The closed intermediate sized demolition landfill
6. The ash monofill waste limits
7. Closed small size demolition landfills
8. Stormwater management basins
9. Asphalt and shingle processing area
10. Sand and clay stockpiles
11. Rooting soil stockpile area

12. The landfill gas to energy building and pipeline
13. Materials processing pad
14. Citizen's drop off site
15. Pedestrian bridge and trails
16. Other features such as maintenance buildings, communications tower, leachate storage tanks, and the approximate limits of the closed landfill that was excavated

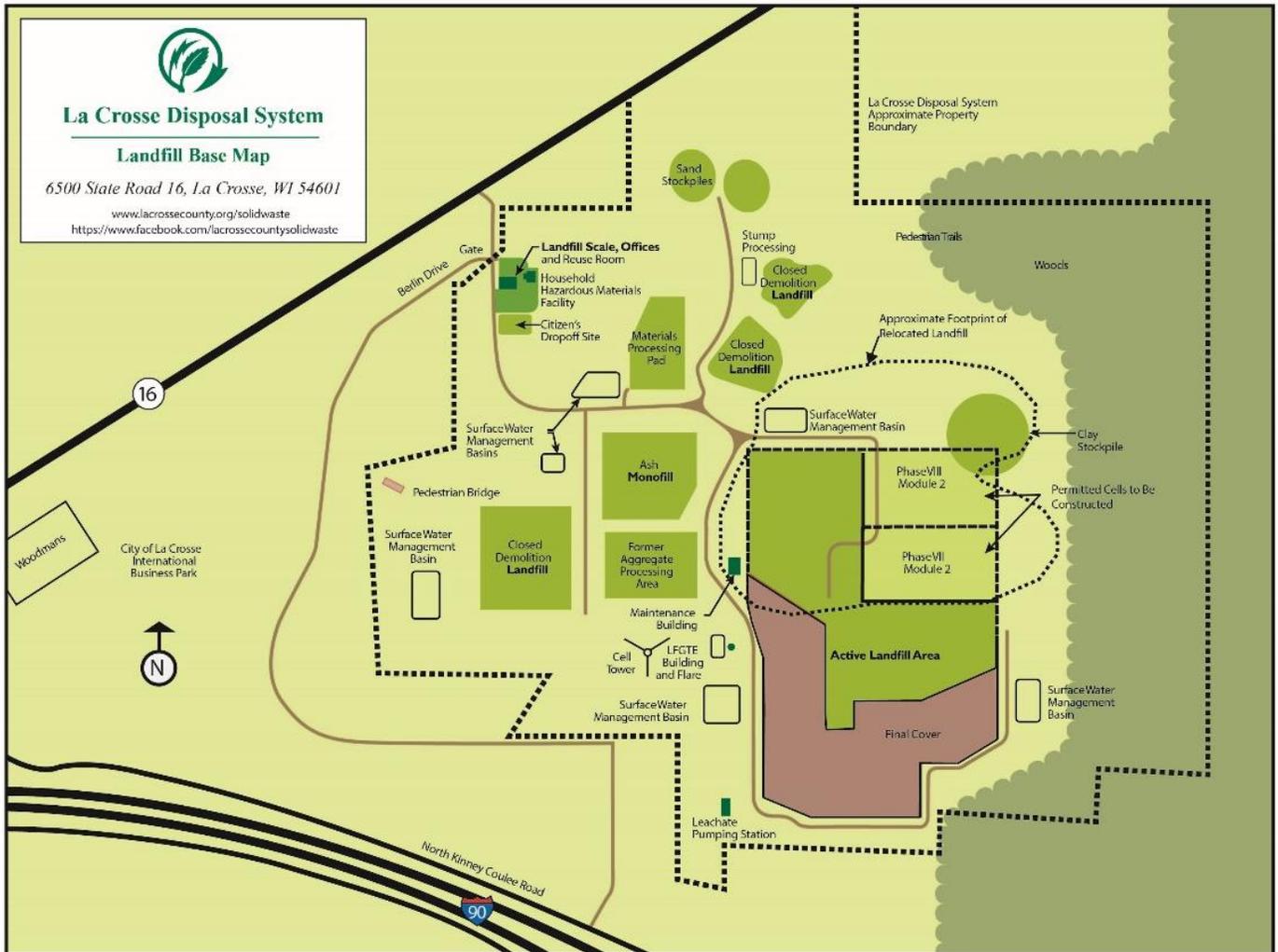


Figure 10 – La Crosse County Landfill Base Map

2.2 Landfills

The majority of the region's municipal solid waste is transported to one of five landfills listed in the table below. These landfills currently have remaining air space capacity ranging from six years at the Seven Mile Landfill site in Eau Claire County to 27 years of life at the La Crosse County Landfill. As of 2015, all of the landfills listed in the table except La Crosse were actively looking at the potential for expansion, or actively pursuing expansion.

**Table 1
Solid Waste Facilities Used in the Mississippi River Region**

Landfill Name	Landfill Location	Landfill Owner	Capacity as of January 2015 (Cubic Yards)	Estimated Site Life in Years
Seven Mile Creek	Eau Claire County, WI	Advanced Disposal Services	2,182,200	6
La Crosse County	La Crosse, WI	La Crosse County	2,532,831	27
Adams County	Friendship, WI	Adams County	214,177	5-7
Monroe County	Monroe County, WI	Monroe County	298,941	8
Vernon County	Vernon County, WI	Vernon County	232,508	10

Source: WDNR, MRRPC Comprehensive Plan 2014-2034

2.2.1 La Crosse County Landfill

2.2.1.1 Capacity and Landfill Life

As of January 1, 2015, the remaining constructed air space for the active MSW (Phase I through Phase VI, and Phase VII Module 1 and Phase VIII Module 1) was estimated at 668,133 CY. The future construction of Phase VII Module 2 and Phase VII Module 2 will add approximately 1,845,249 CY of air space; therefore bringing the total permitted air space available to 2,513,382 CY. Based on the filling rates from 2011 through 2013, the remaining permitted site life for Phase 1- Phase 8 is 27 years.

There is additional property available at the landfill for airspace additions in the future. Projecting landfill life is subject to many variables such as future waste delivery quantities, future processing, service area size, future land use practices in the area, and the compatibility of the landfill with the area. With continued use of the Xcel WTE facility or some similar solid waste processing facility, the landfill life may last well over 50 years. Future concerns, land use conflicts, or lack of waste processing could reduce the projected landfill life.

2.2.1.2 Landfill Stabilization

As specified in NR 514.07(9)(a) Wisconsin Administrative Code, all landfills that have been issued a plan of operation between January 1, 2004 and January 1, 2007 are required to submit an Organic Stability Plan (OSP) for significantly reducing the amount of degradable organic material remaining after site closure in order to materially reduce the amount of time the landfill will take to achieve organic stability. La Crosse County submitted an OSP as part of the Plan of Operations for the North Expansion.

On November 1, 2011 the WDNR issued a Request for Information (RFI) to review and issue approval of the OSP. La Crosse issued an updated OSP to the WDNR during April 2012 to address items outlined in the RFI. The WDNR issued approval of the OSP on September 10, 2012.

2.2.1.3 La Crosse County Landfill Supplemental Services

Besides serving as the site for MSW disposal, the active landfill comprises several additional services, which are described below.

2.2.1.3.1 *Construction & Demolition Material*

Currently, the Department provides a separate area within the MSW footprint for C&D waste. The facility resumed C&D disposal within the MSW when the intermediate sized C&D landfill closed in 2008. At some point in the future, disposal of C&D within the MSW may be mixed with other MSW and special waste.

2.2.1.3.2 *Trailer Home Disposal*

Trailer homes are disposed of at the landfill. The steel trailer frames are removed and recycled prior to demolition. This program is currently operating on a limited basis.

2.2.1.3.3 *Special Wastes Management*

Special wastes include several different types of materials that are disposed of or beneficially re-used in the landfill. Special wastes include: coal/wood ash, wastewater treatment plant sludge, two types of asbestos, sludge, miscellaneous special waste, street sweepings, foundry sand, bottom WTE ash, car wash grit, other approved daily cover, industrial waste, petroleum impacted soil and foundry sand.

2.2.1.3.4 *Impacted soils*

These soils (typically petroleum impacted) are treated at the landfill and the soil is then re-used as a grading layer or for alternative daily cover. The Department utilizes in situ microbes in a prepared environment to treat petroleum impacted soils in a location that is part of the active landfill. These soils, after being treated to a regulatory standard, are then used as daily cover or as final grading layer within the landfill.

2.2.1.3.5 *Citizen Drop Off Area*

Public use of the landfill's public drop-off site is available for use by homeowners, renters, and businesses located around the region. In August of 2014, the landfill switched to a flat rate fee system for citizen users dropping off household waste, such as garbage and furniture, or construction materials. This new system allows for faster use of the public drop off site by eliminating the need to weigh in and out via the scale house. Future modifications to the citizen drop off area may be necessary as part of the landfill entrance relocation. Drop off items include:

- Tires and shingles
- Large items: Furniture and furnishings including upholstered items, general household waste, toys, bikes, grills, lawnmowers (without gas and oil), mattresses, stoves, hot water heaters, washers, dryers, small appliances, and other items
- Demolition/Construction Debris: Wood, drywall, doors, windows, sinks, toilets, tubs, roofing, bricks, carpets, tile, and flooring
- Garbage: Normal household waste like bagged waste, paper, and food waste
- Other: Yard waste/grass clippings, shingles, brush, and animal carcasses
- Refrigerators, dehumidifiers, air conditioners

2.2.1.3.6 *La Crosse County Landfill Materials Processing Pad*

The pad was constructed in 2010 and expanded in 2012. The area provides a location for consolidating clean wood, shingles, clean concrete, asphalt, and yard waste, which makes landfill operations more efficient.

Shingles Recycling

The Department accepts clean (largely free of wood and other non-shingle roofing debris) shingles (largely free of wood and other non-shingle roofing debris) on the processing pad at a lower rate than disposal. The landfill operator is contracted to grind the shingles to a certain specification for re-use. Currently the majority of the ground shingles are sold to Mathy Construction for use in asphalt production. Dirty shingles (shingles mixed with other debris) are currently disposed of in the C&D area within the MSW landfill.

Clean Wood Waste Diversion

La Crosse County accepts clean wood such as pallets (with nails), crates, and tree trunks and branches. The clean wood is ground by the landfill operator at a contracted fee and County currently sells the wood chips to Xcel for use as a supplemental fuel at Xcel's WTE facility.

Aggregate recycling

Concrete, and asphalt fluctuates based on the construction activity in the area. The Department has entered into an agreement with the La Crosse County Highway Department regarding the management of used aggregate. The Department has designated an area on their processing pad for the highway department to store used concrete and asphalt generated from nearby construction projects. The highway department is required to maintain the piles on the processing pad and periodically grind the material for re-use. The ground aggregate is owned by the highway department, but may make available excess material available to the Department and/or the landfill operator for a reasonable fee.

Yard Waste

The Department works with organizations that deal in their own waste specialty. A good example of this philosophy is the partnership with Green Earth Composting, a division of Dummer Family Farms. All of the yard waste received at the Landfill is stored on the processing pad until it is transported to Green Earth where it is mixed with other materials including some food waste, clean sheetrock waste, leaves, cow manure, and other organics to produce an excellent soil amendment.

2.2.1.3.7 *Pedestrian Bridge and Trails*

The County, in partnership with the Boy Scouts, completed construction of a pedestrian bridge in 2014. The bridge serves as a link to the landfill site and extends an adjacent walking trail which is used by area residents and employees of nearby businesses. In 2015 the county also planned to build a half mile trail segment and pedestrian board walk in cooperation with WisCorp.



Figure 11 – Photo of Trail Building at La Crosse County Landfill

2.2.1.3.8 Landfill Gas to Energy

Landfill gases are captured by a collection system made up of horizontal and vertical extraction wells. Prior to 2010, the gas had been flared. In 2010, La Crosse County and Gundersen Health System entered into an agreement to construct a pipeline to transfer the methane gas to Gundersen’s Onalaska campus. Landfill gas is now cleaned and compressed into pipeline quality gas and sent 1.8 miles to a combined heat and power (CHP) engine installed on Gundersen’s Onalaska campus (Figure 12). The gas powers the engine and turns a generator that produces electricity. The engine also creates heat, which is used to heat the buildings and water on Gundersen’s campus. In 2012, the project was recognized as a “Project of the Year” by the US Environmental Protection Agency through its Landfill Methane Outreach Program. The award recognizes partners for excellence in innovation and creativity, success in promoting landfill gas to energy, and achieving both environmental and economic benefits.

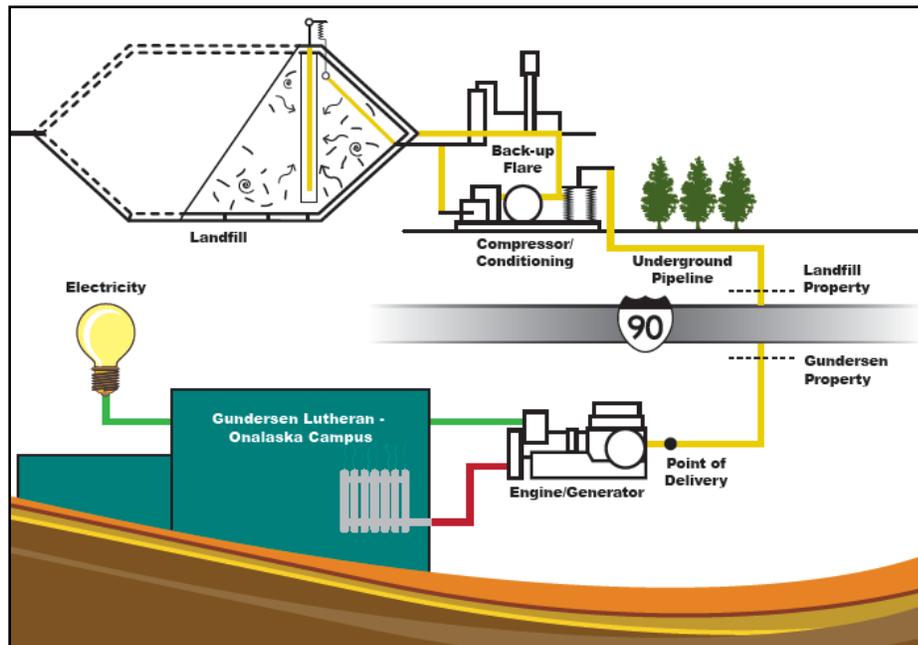


Figure 12 – Diagram of the La Crosse County Landfill/Gundersen Health System Landfill Gas to Energy Project

2.2.2 La Crosse County Ash Monofill

The ash produced from Xcel's WTE facility is disposed of at the landfill complex. There are two types of ash delivered, bottom ash and fly ash. Bottom ash is disposed of in the MSW landfill and is approved for re-use activities. Fly ash must be disposed of in the ash monofill or used as MSW overlay. Bottom ash has some beneficial uses within the MSW landfill and therefore has a lower tipping fee. Fly ash has a higher tipping fee, which is needed to finance debt service related to construction, closure and long-term care of the ash monofill. The Department received approval from the WDNR during early 2015 to utilize fly ash as a final grade overlay material in select areas of the MSW landfill. This is expected to provide sufficient air space for fly ash disposal until 2023 when the term of the Xcel Energy WTE contract is set to expire.

2.2.3 Surrounding Counties

La Crosse County welcomes participation and coordination with surrounding counties and other municipalities. Roundtable discussions are routinely held regarding regional issues and opportunities. For purposes of this SWMP update, some background data on the counties of Winona, Minnesota; Monroe, Wisconsin; and Vernon, Wisconsin, is included. It should be noted that these counties are not a part of the La Crosse regional disposal system and may or may not ever be active participants. However, with the increasing importance of regional coordination for many local government services, La Crosse County will continue to encourage additional participation in the system.

2.2.3.1 Vernon

- Vernon County owns and operates a bale fill type landfill located northeast of Viroqua that provides disposal for municipal solid waste and construction and demolition materials. It is approximately 35 miles from the La Crosse County landfill, with an estimated travel time of 51 minutes.
- According to the WDNR, the permitted, unused capacity at the landfill was 232,508 CY as of January 1, 2015. The estimated site life at the current fill rate is approximately 8-10 years.
- The county has completed a vertical and horizontal expansion. There is an approximately 10-acre parcel and the county has done a preliminary study indicating it is a viable site for expansion. While an initial site inspection request has been issued to the WDNR, Vernon County has not committed to an expansion at this time. Current site benefits include having both sand and clay on site.
- A key issue for Vernon County is the cost of leachate disposal. The county has been working with UW-Stevens Point and a private engineering firm on a leachate disposal alternative pilot project. They received DNR approval for the project as a demonstration project only, approved for a 5- year period starting in the spring of 2015. However, the project was on hold as of 2015 due to cost.
- The county serves as the Responsible Unit (RU) for all of the communities in the county including: Bergen, Christiana, Clinton, Coon, Forest, Franklin, Genoa, Greenwood, Hamburg, Harmony, Hillsboro, Jefferson, Kickapoo, Stark, Sterling, Union, Viroqua, Webster, Wheatland and Whitestown; Villages of Chaseburg, Coon Valley, De Soto, Genoa; La Farge, Ontario, Readstown, Stoddard and Viola, Cities of Hillsboro, Viroqua and Westby.

2.2.3.2 Monroe

- Monroe County, immediately east of La Crosse County, owns and contract operates the Monroe County Landfill located in the Town of Ridgeville.
- This landfill is approximately 44 miles from the La Crosse County Landfill, with an estimated travel time of 50 minutes.
- According to the WDNR, the permitted, unused capacity of the Monroe County Landfill as of January 1, 2015 was 298,941 CY, with an anticipated site life of approximately 8 years.
- The Ridgeville II Landfill is projected to last until 2019 at the 33,600 ton per year filling rate. There is land for expansion with a projected capacity to last another 16 years (to approximately 2035).
- Monroe County has requested an initial site inspection by the WDNR to initiate a potential expansion project.
- Leachate disposal costs are a concern for Monroe County. Approximately 4 million gallons of leachate must be hauled off site annually at a cost of approximately \$220,000.
- The County receives and processes waste wood tonnage of approximately 250 tons per year.
- The county serves as the RU for the following majority of municipalities in the county including: Adrian, Angelo, Byron, Clifton, Greenfield, Jefferson, La Fayette, La Grange, Leon, Lincoln, Little Falls, New Lyme, Oakdale, Portland, Ridgeville, Scott, Sheldon, Sparta, Tomah, Wellington, Wells and Wilton Townships; Villages of Cashton, Kendall, Melvina, Norwalk, Oakdale, Warrens, Wilton and Wyeville; and Cities of Sparta and Tomah.

2.2.3.3 Adams County

- The Adams County Landfill and Recycling Center is located in Friendship, Wisconsin, 80 miles or two hours' drive time, from the La Crosse County Landfill.
- According to the WDNR, the permitted, unused capacity of the Adams County Landfill as of January 1, 2015 was 214,177 CY. Adams County has requested an initial site inspection by the WDNR to initiate a potential expansion project.

2.2.4 Potential Private Landfills

According to the WDNR, there are no new facilities being planned in the region.

2.3 Processing Facilities

In La Crosse County, most of the traditional reduction, reuse, recycling, and composting activities are conducted at the municipal contract holder level. Each entity provides educational programs, residential curbside or drop-off recycling service, and yard waste composting service.

2.3.1 Xcel Energy WTE Facility

La Crosse County has a contract with Xcel Energy to receive and process MSW into RDF. The processing facility and power plant are located on French Island in the City of La Crosse. La Crosse County's contract with Xcel Energy extends into 2023 and calls for La Crosse County to provide a minimum of 73,000 tons per year of MSW to Xcel's WTE facility.

Xcel's WTE facility uses biomass (including railroad ties and wood chips) and MSW to generate electricity using fluidized boilers and steam turbine generators. The MSW is processed into RDF - a fluffy, burnable fuel produced on site at a facility built specifically for that purpose.

In 2014, Xcel's WTE facility employed 31 people, generating over 8,700 hours. Including its two combustion turbines, the plant generated over 72,500 megawatt hours (MWH) of electricity in 2014 – enough to serve nearly 10,000 homes.

According to Xcel, the WTE facility has the capacity to process approximately 104,000 tons of MSW each year. Garbage trucks dump solid waste on the tipping floor and then front-end loader operators inspect the waste and push it on the floor to a feed conveyor. The RDF processing facility removes recyclable materials and non-combustible items from the waste, then chops and shreds the remaining materials into a uniformly sized fluffy product that is burned with waste wood.

As a result of being re-classified as a large combustor under the federal Clean Air Act Amendments, a major air pollution control upgrade was completed in 2002. To finance the air pollution control system upgrade, La Crosse County and Xcel Energy extended the original facility contract which was to expire on 2008 for 15 years until 2023. La Crosse County also extended the contracts for waste delivery with the La Crosse County regional disposal system participants.

2.3.2 Material Recovery Facilities (MRFs)

2.3.2.1 La Crosse County

2.3.2.1.1 Green Circle Recycling, LLC

In 2013 Harter's Quick Clean Up (Harter's) constructed a single stream MRF (Green Circle Recycling, LLC) at 2850 Larson Street in La Crosse. Its current throughput capacity is 5 tons per hour and the facility receives recyclables from the cities of Onalaska and La Crosse, WI. Green Circle Recycling, LLC, has enabled Harter's to expand its recycling collection services in the region.

2.3.2.1.2 Hilltopper Refuse and Recycling Service, Inc.

Hilltopper Refuse and Recycling Service, Inc. maintains a MRF at W6836 Industrial Blvd. in Onalaska. The facility accepts glass, tin cans, newspapers and magazines, cardboard, #1 and #2 plastics, office paper, and cartons. White goods (appliances) and electronic waste are accepted at the site for a small fee.

2.3.2.1.3 Waste Management

Waste Management owns and operates a MRF at 3019 Commerce Street in La Crosse. Fiber materials is baled and sold directly to mills. Single stream recyclables are transferred to Waste Management's MRF in Germantown, Wisconsin.

2.3.2.1.4 Runde Metal Recycling

Runde Metal Recycling is a fully operational scrap yard offering metal recycling services for home, farm, or business. Runde was recently approved for a less than 50 tons/day transfer station. Runde is also doing C&D processing at their facility.

2.3.2.2 Trempealeau County

The Southern Trempealeau County Solid Waste Commission (STCSWC) owns and operates a MRF at W21488 State Road 54 in Galesville. The STCSWC is a multi-governmental program formed in 1989 which provides solid waste and recycling services to Caledonia, Dodge, Gale and Trempealeau townships; the villages of Trempealeau and Melrose; and the City of Galesville. The commission is under contract with La Crosse County to direct its solid waste into the La Crosse County regional disposal system. STCSWC's MRF is used to process multi-stream recyclables (all fiber and recyclable containers). The STCSWC's curbside recycling contractor processes and markets recyclable materials collected from the Galesville and Trempealeau curbside recycling programs. The STCSWC provides a revenue sharing program to participating municipalities. A portion of the revenue from the revenue share program is derived from the sale of recyclables.

The facility also hosts a free hazardous waste clean-up day, and provides special recycling services including electronics, used oil, and appliances. The STCSWC also provides aluminum can, paper and cardboard recycling for schools, offices, and businesses in the area. The STCSWC also partners with other responsible units and UW-Extension to offer county-wide recycling events.

2.3.2.3 Houston County

Houston County does not have a MRF, however they do purchase aluminum cans at five drop off sites within the county, at Woodland Industries in Caledonia, and at the Houston County Recycling Center in Houston. In addition, the county maintains composting sites in the cities of Caledonia, Hokah, Houston and Spring Grove.

2.3.2.4 Buffalo County

Buffalo County maintains a self-certified MRF in Mondovi, which functions primarily as a transfer station. Fiber and containers are packaged into ten ton containers at the facility and transferred to the Pierce County MRF.

2.3.2.5 Wabasha County

There are no MRFs in Wabasha County.

2.3.3 Other Processing Facilities

This section of the report highlights other facilities within the system that receive and handle specific materials typically found in the solid waste stream, although they might not commonly be thought of as "processing facilities."

2.3.3.1 La Crosse County HHM Facility

La Crosse County owns and operates a permanent HHM facility located at the landfill. In 2014, over 1 million pounds of material were collected alone. The facility accepts all the typical household hazardous materials plus electronic wastes (e-waste). Except for television disposal, the facility serves all households within La Crosse County without a user fee. Non-residents pay a fee for service. Businesses that qualify as Very Small Quantity Generators (VSQG) can use the program for a fee.



Figure 13 – Photo of HHM Facility at the La Crosse County Landfill

A product Reuse Room provides access to good, unused, or slightly used items brought to the facility. These materials are provided free to customers although donations are accepted. In 2014, the program made available 38,900 pounds of material.

The county also has a mobile collection trailer that is used to operate collection events at other locations than at the landfill. This allows service to be taken out to La Crosse County municipalities and to other counties in the region. Outreach to neighboring counties through the Clean Sweep program has become another important mission of the program. In 2014, 1,800 participants in nine counties delivered over 54,500 pounds of hazardous waste to clean sweep events.

A 2014 survey of HHM service users found that:

- 92 percent of were “very satisfied” with the program, 6.4 percent “satisfied” and 2.2 percent “neutral”

When asked what services they felt were lacking the following types of comments were received:

- Not enough people know about it
- Location
- More hours
- Prescription drop off more frequently
- More convenient for out of County users

When asked about the value of the HHM program, respondents listed the following attributes:

- Convenience
- Responsible
- Necessary
- Fantastic
- Safe
- Valuable
- Guilt free disposal

2.3.3.2 Yard Wastes

Management of yard wastes is most often handled at the municipal level in not only La Crosse County, but the region as a whole. These facilities are relatively small scale with the exception of the cities of La Crosse and Onalaska. There is also a privately owned and operated yard waste composting facility in rural La Crosse County—Green Earth Compost, a division of Dummer Family Farms.

2.3.3.3 Dynamic Recycling

Dynamic Recycling is located in Onalaska, and provides computer and electronic recycling, IT asset management, scrap purchasing, and government contracting. They have been servicing the computer and electronics recycling needs of businesses, healthcare institutions, municipalities, residents, and educational institutions throughout Wisconsin and the Upper Midwest since 2007. They accept electronics, appliances, fluorescent light bulbs and ballasts, and scrap.

2.3.3.4 Alter Metal Recycling

Alter Metal Recycling is a fully operational scrap yard offering metal recycling services for home, farm, or business.

2.3.3.5 Habitat for Humanity ReStore

The Habitat ReStore is a unique building materials retail outlet that enables customers to buy the supplies they need for home or office renovation, remodeling, and decorating projects. All proceeds from ReStore benefit the mission of the Habitat for Humanity La Crosse Area to build houses to remove families in need from poverty housing.

Materials that come to the landfill that can be reused are redirected to the Habitat ReStore located next door to the landfill. If customers either cannot or will not transport their own material, some may be reclaimed from the containers and transported by landfill staff to the ReStore for resale. Through the donation process, tons of materials are diverted from the landfill each year. The ReStore is located off Highway 16 across from the La Crosse County Landfill.

2.3.3.6 7 River Recycling LLC

7 Rivers Recycling, LLC was founded in 2011 by Hilltopper Refuse & Recycling Service, Inc. and D&M Recycling as a collaborative effort to do more in recycling. Hilltopper focuses on the collection and transportation of waste and recyclables and the processing/marketing of recyclable containers and fiber. D&M focuses on the recycling of containers and fiber with a permanent drop-off facility. 7 Rivers Recycling was set up to focus on recycling electronic waste and appliances, as well as white goods (appliances), light bulbs, and other materials. More recently, 7 Rivers and the Department initiated a pilot program to divert mattresses from the landfill and recycle their component parts including steel, foam, and wood.

2.3.3.7 Goodwill

Goodwill is a not-for-profit human services organization that supports a wide variety of programming in the area. The Goodwill retail store receives donations of used clothing, books, housewares, jewelry, tools, furniture, toys, and other items from area residents and businesses and sells them at their stores to raise money for their programming. Goodwill has stores in La Crosse and Onalaska.

2.4 Collection and Transfer

Municipal solid waste collection, recycling collection, and transfer services vary across the region. Households in the larger municipalities typically have access to curbside solid waste and recycling collection, while more rural areas often utilize drop off sites.

With the implementation of single stream in the cities of Onalaska and La Crosse in 2014, curbside recycling pickup services, many of the residents in the system service area have easy and convenient access to recycling collection.

Commercial and industrial businesses contract directly with haulers for solid waste and recycling collection services.

2.4.1 Residential Solid Waste and Recycling Collection

2.4.1.1 La Crosse County

Curbside solid waste and recycling collection is widely available throughout the county through municipal contracts with several waste haulers, including Harter's Quick Clean-up, Hilltopper, Richard Sanitation, and Waste Management. Residential solid waste is directed, by contract, to either Xcel's WTE facility or the La Crosse County Landfill. Residential solid waste and recycling service fees within La Crosse County vary between monthly household fees and individual bag sales, and are primarily determined by individual political units. There are several public and private drop off sites throughout the County, including at the La Crosse County Landfill. Operating hours, materials accepted, and funding mechanisms for drop off locations varies from site-to-site.

See Appendix C, "La Crosse County Residential Collection System Summary" for a summary of curbside programs and drop-off sites, as well as recycling collection information pertaining to La Crosse County.

2.4.1.2 Houston County

Houston County, as required under Minnesota statute, is responsible for solid waste management planning for the cities and townships located within its borders. As participants in the public planning process, cities and townships are required to implement the counties policies within their jurisdiction.

Each of the cities and two of the townships within Houston County have contracted with haulers for curbside collection of refuse and recyclables. Residents of those townships without organized curbside collection bring their refuse and recyclables to one of five centrally located, county operated, supervised drop-off collection sites located in Houston, Caledonia, Spring Grove, La Crescent and Hokah. The drop-off sites also accept a variety of problem materials such as electronics, HHW, appliances, and other items. Local haulers also offer individual subscription service for curbside waste and recycling pick up.

Through contract, solid waste is delivered to Xcel's WTE facility and other wastes are delivered to the La Crosse County Landfill. For curbside systems, collection and disposal of solid waste is established by each city or township and fees vary. Recyclable materials collected curbside are processed by the respective waste haulers. Drop-off collected recyclables are transferred for processing at Harter's Material Recovery Facility in La Crosse.

See Appendix D, “Houston County Residential Collection System Summary” for a summary of residential MSW collection systems used by each government unit within Houston County.

2.4.1.3 Wabasha County

Wabasha County, as required under Minnesota statute, is responsible for solid waste management planning for the cities and townships located within its borders. As participants in the public planning process, cities and townships are required to implement the counties policies within their jurisdiction.

Waste haulers, servicing cities within Wabasha County, are under contract to deliver MSW to Xcel’s WTE facility or Red Wing Generating Plant. Curbside collection of solid waste and recyclables is widely available throughout the county.

Appendix E, “Wabasha County Residential Collection System Summary” provides an overview of the residential MSW collection systems used by each government unit within Wabasha County.

Wabasha County also maintains a system of eight recycling drop off sheds located throughout the county. Wabasha County contracts with a single hauler on a multi-year basis to pick up each shed on a predetermined, but flexible, schedule based on volume and need.

2.4.1.4 Buffalo County

The County is under contract with La Crosse County to direct municipal solid waste to the La Crosse regional disposal system. Individual municipalities within Buffalo County are responsible for the management and disposal of solid waste, and also serve as the Responsible Units for recycling purposes. They contract directly with area haulers for solid waste and recycling services. Buffalo County collects recyclables from nine locations throughout the county.

Some of the county’s solid waste is leaving the system, hauled to Seven Mile Landfill in Eau Claire. The Buffalo County Solid Waste Director is exploring options, including hauler reporting requirements, to ensure that the county’s waste is directed into the system.

The standard solid waste disposal practice within the Buffalo County municipalities is to utilize the bag program. Municipalities sell bags to generate revenue to support labor, infrastructure and disposal costs. Two municipalities offer curbside pickup, Fountain City and Mondovi, while the majority of county residents utilize one of twelve drop off sites for both solid waste and recycling. There is some individual subscription for curbside solid waste and recycling collection occurring in the county, although it is unclear to what extent.

Appendix F, “Buffalo County Residential Collection System Summary” provides an overview of the residential recycling systems used by each government unit within Buffalo County.

2.4.1.5 Southern Trempealeau County

The Southern Trempealeau County Solid Waste Commission (STCSWC) coordinates waste and recycling collection for seven communities in the county and serves as the RU for all seven of those communities. Curbside collection is provided in the villages of Melrose and Trempealeau as well as the City of Galesville.

Residents of the towns of Caledonia, Gale, Dodge, and Trempealeau utilize the recycling facility as a drop-off. The drop off facility is open two days per week and available to all residents of the commission area. The STCSWC contracts directly with a private hauler for solid waste and recycling collection services to serve its members. It assists two of its member municipalities with separate contracting for their collection services. Collection costs are paid for through a bag system and municipal service fees.

Appendix G, “Southern Trempealeau Collection System Summary” provides an overview of residential MSW and recycling collection systems used by participants of the Southern Trempealeau Solid Waste Commission.

2.4.1.6 Surrounding Counties

2.4.1.6.1 *Vernon*

As with recycling, private haulers handle the bulk of collection. Residents can also bring their waste to the landfill. The villages of Westby and La Farge bring their waste to the county landfill. The Village of Westby brings its recyclables to the county landfill. The landfill and its small MRF serves the townships in the county. Households are provided a container and pick up is provided by private haulers, which handle most of the municipalities in the county. Residents can also bring source separated recyclables to the landfill, which maintains a small MRF at the landfill.

2.4.1.6.2 *Monroe*

Recycling is provided county-wide, partially subsidized through landfill revenue. Modern Disposal Systems collect and hauls recyclables to John’s Disposal MRF in Whitewater. The hauler is paid upon tipping its load at John’s Disposal’s MRF.

2.4.1.6.3 *Winona*

Solid waste generated in Winona County is currently being delivered to different out-of-state facilities. The existing waste management system contains the following components:

- Landfilling at private landfills in Wisconsin
- Waste reduction
- Recycling
- Yard waste composting
- Household Hazardous Waste management
- Special waste management
- Waste education
- Backyard food waste composting
- Community Memorial Hospital waste delivered to Xcel’s WTE facility

Winona County has an “open” solid waste system. Private waste hauling companies operate on the open market contracting directly with customers. Winona County recently implemented a countywide curbside, single stream collection program to serve both rural as well as urban households. All recyclables go to one of Waste Management’s MRFs.

2.4.2 Commercial/Industrial/C&D

Commercial, industrial, and /C&D waste is often a significant portion of the municipal solid waste stream, however most local governments do not play an active role in managing collection contracts. Most commercial material is collected by the private sector, which contracts directly with private businesses for services.

C/I/C&D wastes are all collected by private companies using front loaders, rear loaders, or roll-off trucks servicing dumpsters on routes or by dedicated roll-off containers set at a job site locations.

Haulers which have signed the hauler rebate agreement with La Crosse County are obligated to direct their C/I/C&D material collected within the system to the landfill or Xcel's WTE facility.

2.4.3 Transfer Facilities

There are several licensed solid waste transfer stations within the La Crosse County regional disposal system.

2.4.3.1 La Crosse County

There are currently three state licensed solid waste transfer stations in La Crosse County. Waste Management of Wisconsin (owns and operates a transfer station at 415 Island Street La Crosse. However because of a signed hauler rebate agreement with the county, the facility is not currently being utilized by Waste Management to transfer their solid waste. The facility is open to third parties, including local contractors that drop off C&D waste and area households that drop off bulky items. These materials are directed to either the landfill or Xcel's WTE facility.

Harter's Trash and Recycling has a transfer station located in La Crosse at Larson St. and Hauser St. The transfer station serves Harter's collection trucks operating in Minnesota and Wisconsin. Materials accepted include MSW, C&D wastes, recyclables and bulky wastes. There is some material recovery for ferrous metals, wood, and cardboard.

Harter's Trash and Recycling has a second transfer station located in Onalaska at 841 Second Ave. SW. It is permitted to handle recyclable material only. Both of Harter's transfer stations are permitted as small transfer facilities (<100 tons/day).

In addition to the three state licensed solid waste transfer facilities above, Waste Management's La Crosse MRF serves as a transfer station for recyclables. The facility is used to transfer single stream recyclables to Waste Management's MRF in Germantown.

2.4.3.2 Buffalo County

Waste Management maintains a license for a transfer station in the Town of Nelson in Buffalo County, It is permitted to accept contaminated soil, demolition, foundry, garbage, and refuse. The facility is permitted as a large (>100 tons/day) operation. While the transfer station license for the Nelson Transfer Station is active, no transfer activities are being conducted at the facility as Waste Management is delivering waste for the contract service area to the La Crosse County Landfill or Xcel's WTE facility under the hauler rebate agreement.

Buffalo County maintains a recycling center in Mondovi which serves as a transfer station for recyclables. Approximately 75 percent of the county's recyclables are transferred by the county through a collection and transfer contract with Durand Sanitation. A new dual stream process is being utilized to by the county to package fiber and containers in Buffalo County. The county has purchased its own containers. Ten ton loads of fiber and containers are packed and shipped to the Pierce County MRF in Ellsworth.

2.4.3.3 Wabasha County

There is a C&D waste transfer station in Lake City owned and operated by Lake City Disposal. According to information provided by Wabasha County, this facility typically handles approximately 4,000 tons of C&D waste per year.

2.4.3.4 Trempealeau County

There are two licensed transfer facilities located in the county. Tri-city Sanitation Service operates a small solid waste transfer facility in Whitehall which accepts garbage and refuse. The City of Arcadia maintains a small transfer facility in Arcadia township, which accepts garbage, non-combustibles, and recyclables.

2.4.3.5 Houston County

Richard's Sanitation runs a private transfer station in Caledonia. The facility is used for transferring both solid waste and recycling. Solid waste is transferred to the landfill or the Xcel WTE facility. Recyclables are transferred to Hilltopper's MRF in Onalaska.

2.4.3.6 Surrounding Counties

In Monroe County, The US Army has an active license for a small solid waste transfer facility at the Fort McCoy US Army Base, which can accept demolition, garbage, recyclables, and refuse. However, the US Army's Fort McCoy transfer station was recently closed.

2.5 Planned Improvements Within and Adjacent to the System

2.5.1 La Crosse County

This section provides a brief overview of two significant, planned improvements at the landfill. The reconfiguration of the landfill entrance will likely occur in the 2016-2017 time period. Longer term plans for ecological restoration and trail construction will be phased in over the next several decades.

2.5.1.1 Reconfigured La Crosse County Landfill Entrance

The current entrance to the landfill scale experiences congestion periodically with trucks backing up into the Highway 16 intersection. Safety continues to be a concern with haulers, citizen drop-off, and HHM users all using a relatively small space at the same time. Additionally, scale users are required to "circle back" to weigh out, causing additional conflict points and congestion within the entrance.

In 2015, the Department was tasked with developing an alternate entrance for the landfill as a response to a proposed frontage road. This proposed roadway will provide access to future development along Highway 16 and will also include the reconfiguration of the Landfill Road and Berlin Drive intersection.

Because the new roadway will require access changes to the existing site, an alternate location and layout for the scale, citizen drop-off area, HHM area, and container storage area is under investigation. The reconfigured entrance area will improve safety and efficiency, while providing additional flexibility for future needs and demands at the landfill.

2.5.1.2 Outdoor Recreational and Ecological Restoration Activities

The MLUP and related documents for the landfill lay out a vision and goals for improving the site's ecological health and providing outdoor recreational opportunities. Figure 14 shows the trail and recreational plan for the site as identified in the September 2015 Conceptual Natural Resource Management Plan and Trail and Recreation Master Plan. The plan identifies existing and proposed biking, walking, and multi-use trails. As of 2015, several trails had already been completed.

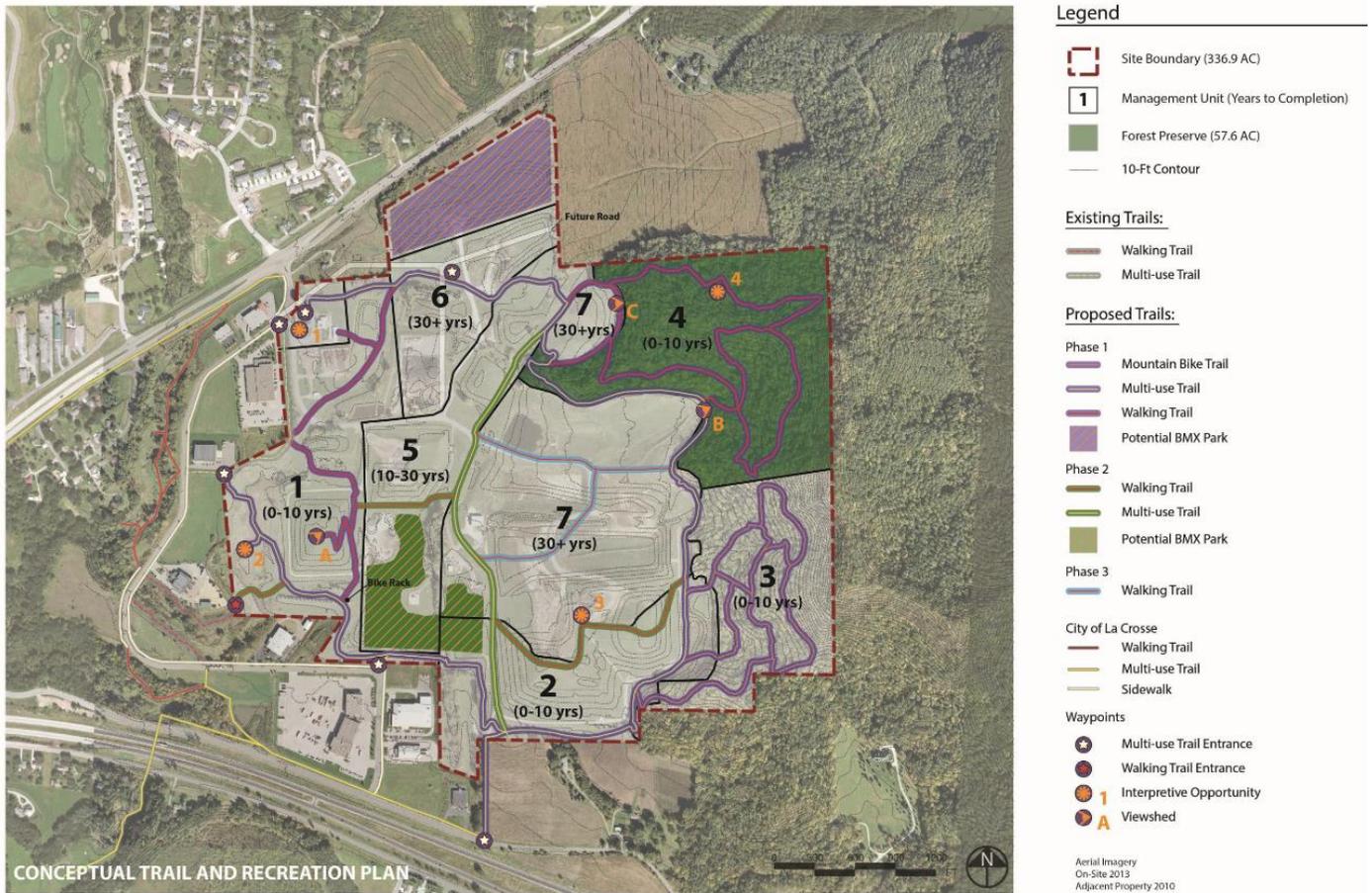


Figure 14 – Trail and Recreation Master Plan

Figure 15 shows the draft proposed plant communities and management units for the site as identified in the September 2015 Conceptual Natural Resource Management Plan and Trail and Recreation Master Plan. They proposed management areas include prairie, forest, savanna, pond, wet meadow, and development areas.

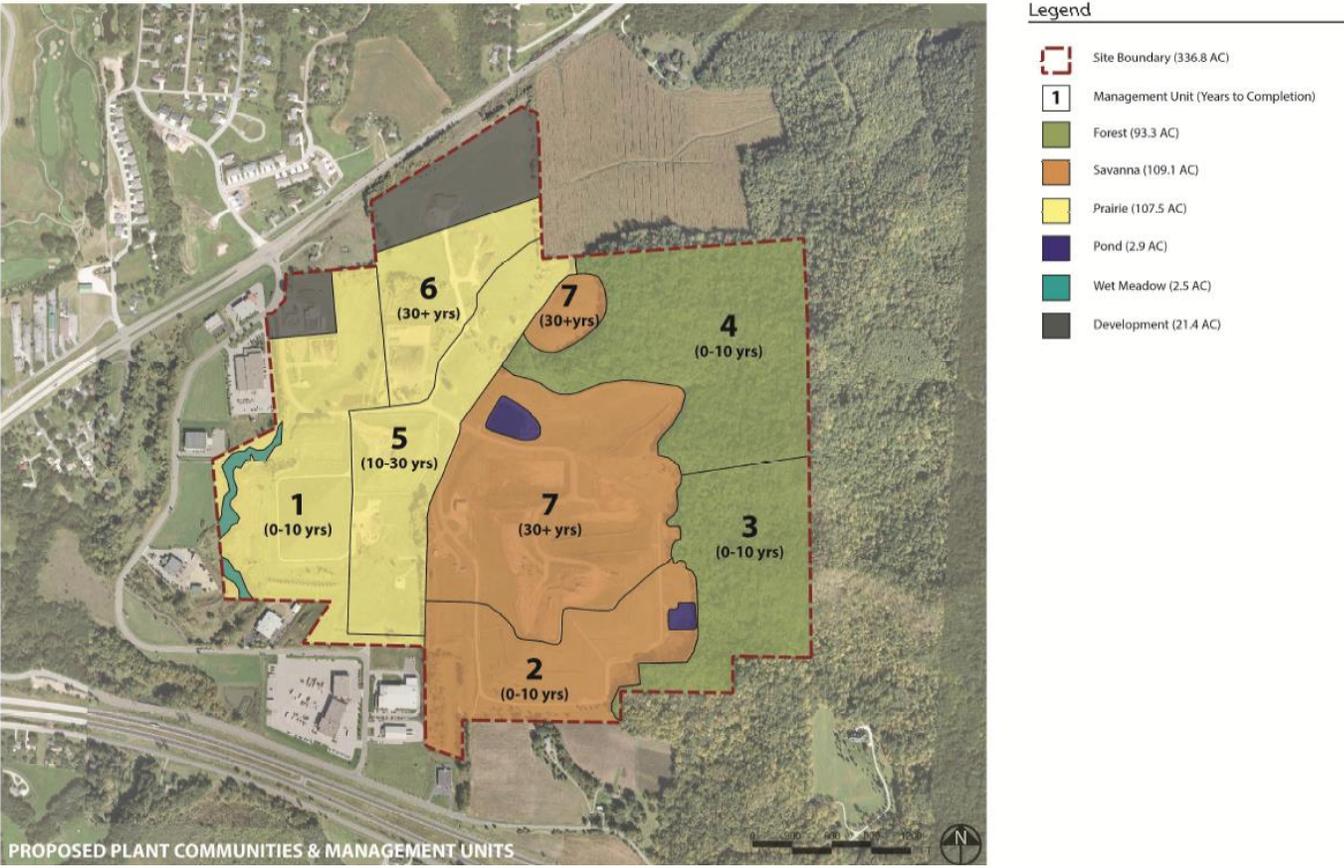


Figure 15 – Proposed Plant Communities and Management Units

2.5.2 Wabasha County
No new facilities planned.

2.5.3 Houston County
No new facilities planned.

2.5.4 Buffalo County
No new facilities planned.

2.5.5 Trempealeau County
No new facilities planned.

2.5.6 Other Non-Participating Counties

2.5.6.1 Monroe County

At the time of development of this solid waste management plan, Monroe County was considering options for the future of its landfill, which included expansion, siting

a new landfill, or discontinuing operations. The county has issued to the WDNR an initial site inspection request to start the expansion process.

2.5.6.2 Adams County

The county has issued to the WDNR an initial site inspection request to start the expansion process.

2.5.6.3 Vernon County

As of June 2015, the county had begun having discussions with communities and the county's solid waste committee regarding future options, which presently include permitting a new landfill expansion, serving as a transfer station, or getting out of the landfill business altogether. The county has issued to the WDNR an initial site inspection request to start the expansion process.

2.6 Education and Outreach

The Department provides communication and education to residents specific to the programs and services provided directly by the Department. This is accomplished through a variety of means including social media, news releases, tours, presentations, and other tools. The County's Sustainability Coordinator position supports these efforts and helps identify and support partnership opportunities as well.

2.6.1 Community Outreach

Public relations is a component of education and the system has determined that the public relations program could be improved by evolving to a community outreach program (Figure 16) In contrast to the public relations program the community - outreach program would put greater emphasis on meeting people where they are, identifying what is important to them, helping them make the most of participation opportunities while continuing education and information activities, and learning from them about potential improvements and changes to the system.

Goals of the Community Outreach Program:

- Establish and sustain authentic, genuine relationships with stakeholders
- Encourage varied and continuing public involvement opportunities throughout the solid waste planning, program development, and operations processes
- Provide timely, accurate information to stakeholders affected by solid waste plans and projects
- Actively solicit, review, and respond to all public input
- Implement activities to gauge the Program's effectiveness, making revisions as necessary
- The community outreach program will be a sustained presence that builds trust and demonstrates transparency

2.6.2 Partnerships

As is discussed elsewhere in this SWMP update, partnerships are a fundamental component of the existing regional system. Through formal and informal partnerships, the county furthers its goals of delivering environmentally and financially sound solid waste solutions, providing educational and service learning opportunities, and enhancing the value of the landfill as multi-use asset. The county

takes a lead role in fostering partnerships with a variety of not-for-profit organizations, businesses, municipalities, and counties. Examples of these partnerships include but are not limited to:

- Landfill Gas to Energy – Gundersen Health System
 - The County and Gundersen teamed to design and construct a pipeline to transport methane gas from decomposing landfill waste to Gundersen’s nearby Onalaska campus. There, the gas is used as fuel to generate heat and electricity, making the campus the only health care facility in the US to be completely energy independent.
- Camporee and Scrap-a-Thon – Boy Scouts of America/Gateway Council
 - The Department has hosted two overnight camping and service events at the landfill site. Scouting participants from throughout the region engaged in numerous hands-on activities related to solid waste and recycling, as well as helping improve hiking trails and other amenities at the site. The Scrap-a-Thon events engaged both landfill staff and Scouts in promoting recycling.
- Recreational Trail Building – WisCorps
 - WisCorps is a not-for-profit conservation corps that serves communities by engaging youth and young adults in direct conservation projects on public lands across the state of Wisconsin and the Upper Midwest. The Department and WisCorps have worked together to enhance and expand the recreational trail system on the landfill site.
- 7 Rivers Mattress Recycling Program
- UW-La Crosse Applied Research Program
- Materials Reuse-Habitat for Humanity
 - Habitat for Humanity’s ReStore is a retail outlet for discarded building materials and other reusable construction items. The organization recently purchased a building adjacent to the landfill for its operations. Department staff and Habitat staff have begun discussions about collaborating to re-direct reusable construction materials from the landfill to Habitat’s ReStore.

From Public Relations to Community Outreach



The Solid Waste System has determined that the Public Relations Program could be improved by evolving to a Community Outreach Program. In contrast to the Public Relations Program the Community Outreach Program would put greater emphasis on meeting people where they are, identifying what is important to them, helping them make the most of participation opportunities while continuing education and information activities, and learning from them about potential improvements and changes to the system.

- Goals of the Community Outreach Program:**
- Establish and sustain authentic, genuine relationships with stakeholders
 - Encourage varied and continuing public involvement opportunities throughout the Solid Waste planning, program development, and operations processes
 - Provide timely, accurate information to stakeholders affected by solid waste plans and projects
 - Actively solicit, review, and respond to all public input
 - Implement activities to gauge the Program's effectiveness, making revisions as necessary

The Community Outreach Program will be a sustained presence that builds trust and demonstrates transparency.

- Attributes of the Community Outreach Program include:
- An emphasis on creating tools that encourage listening and dialogue
 - A focus on authentic communication
 - Accountability for collaboration with various stakeholders
 - Commitment to the approach and the mission
 - Integrity in all aspects of the program

Figure 16 – Community Outreach Infographic

3.0 Solid Waste Quantities and Characteristics

3.1 Regional Overview

According to the Mississippi River Regional Planning Commission (MRRPC), the total municipal solid waste (MSW) generated within the Mississippi River Region in 2013 was 262,718 tons annually. This figure includes several counties that are not part of the La Crosse regional disposal system and does not include two counties which are - Wabasha and Houston counties, both in Minnesota. Using 2010 US Census figures and per capita waste generation figures there are an estimated 197,744 tons of MSW generated within the Lacrosse regional disposal system geographical footprint.

3.2 Historical Waste Deliveries to the La Crosse County Landfill

Figure 17 shows the total annual tonnage and percentage of change for waste deliveries to the La Crosse County Landfill (from 2002 to 2014). Over the thirteen year period, waste deliveries for all categories of materials received at the landfill ranged from 66,844 tons in 2010 to a high point of 114,874 tons in 2006. Significant annual percentage change in waste deliveries occurred between 2002 and 2003 when tonnages increased 33 percent, primarily due to a significant increase in the delivery of special waste materials including impacted soils (petroleum and other) and foundry sand. Between 2008 and 2010, deliveries dropped from 111,191 tons to 66,844 tons, due to a downturn in the regional economy driven by the national recession. More recently, tonnages increased 60 percent over the 5-year period 2010 through 2014. The increases can be attributed to three primary factors: 1) An uptick in the regional economy; 2) A hauler rebate agreement with Waste Management to deliver MSW to the landfill; and 3) Scheduled maintenance at Xcel's WTE facility.

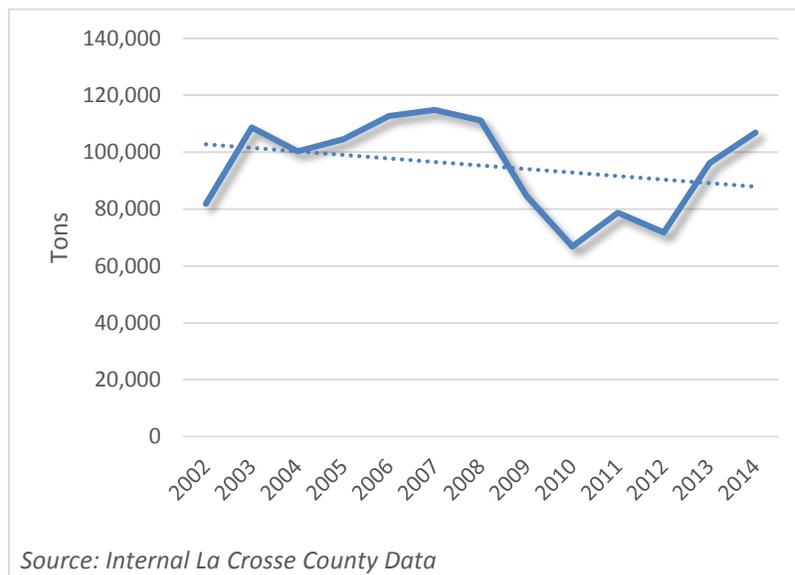


Figure 17 – Historical Total Waste Deliveries to the La Crosse County Landfill

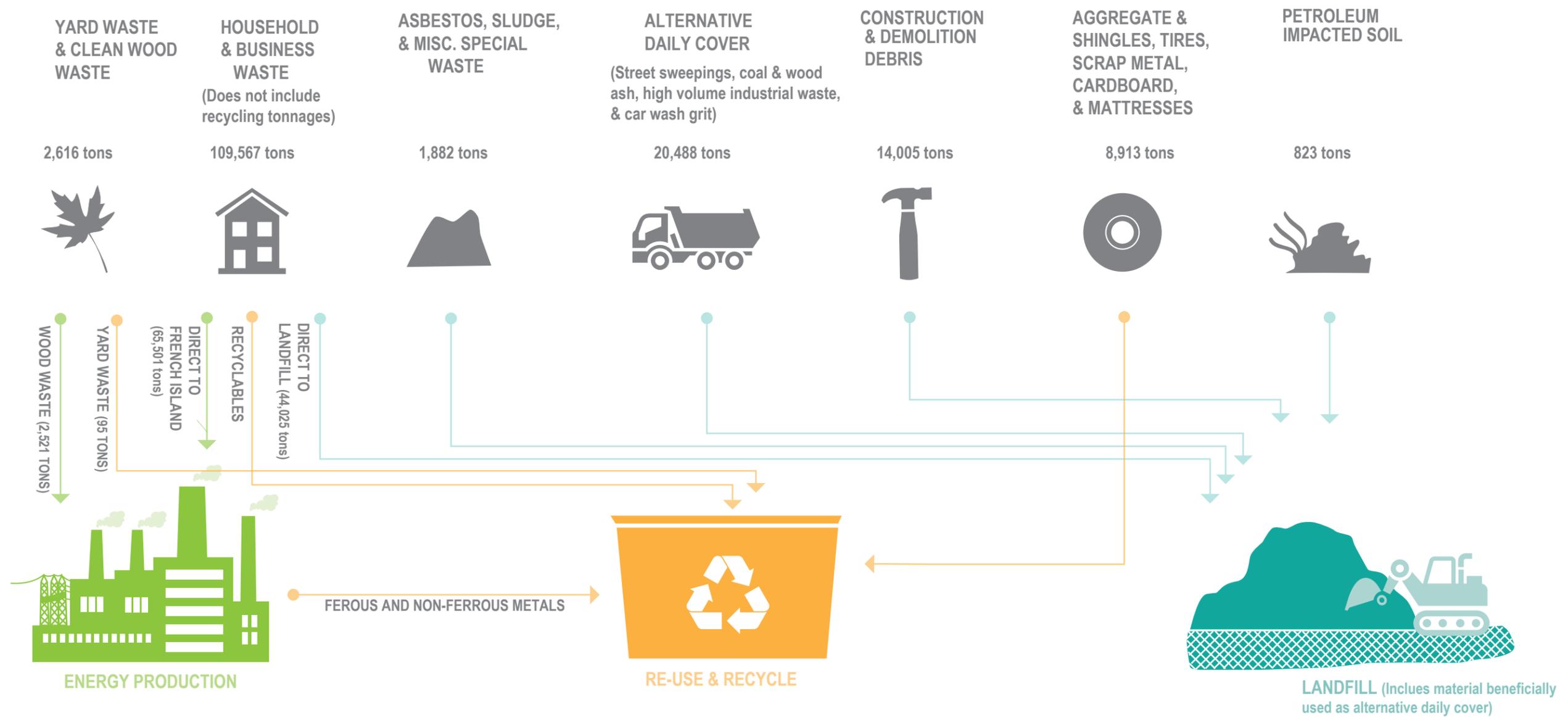
The La Crosse County Landfill collects and maintains waste delivery data on the following categories of materials received and managed within the landfill:

- **Xcel (landfill):** Residue and unacceptable material sorted from the Xcel tipping floor and sent to the La Crosse County Landfill for proper disposal **Direct Landfill:** Unrecoverable or non-recyclable MSW sent directly to the landfill for proper disposal
- **C&D:** Material received from building construction and demolition related activities
- **Asphalt Shingles:** Waste materials received primarily from re-roofing projects throughout the region
- **WTE Ash:** Generally referred to as “fly ash,” a light, powdery material suspended in the flue gas stream and collected in the air-pollution-control equipment or baghouse. Fly ash tends to have higher concentrations of metals and organic materials than bottom ash and comprises approximately 80 percent the overall ash created by Xcel’s WTE facility. The ash is placed in a separate monofill at the landfill.
- **Bottom Ash:** Large and moderate-sized unburnable materials remaining after waste has passed through the combustion chamber, and typically makes-up approximately 20 percent of the ash created by Xcel’s WTE facility
- **Yard Waste:** Residential lawn clippings, leaves, garden waste, and other organic material
- **Clean Wood Waste:** Clean, source-separated wood, such as pallets, crates, and tree trunks. This classification changed in 2013 to being called "wood wastes" that includes wood chips and brush and wood categories
- **Special Wastes:** Includes coal/wood ash, friable and non-friable asbestos, foundry sand, car wash grit, petroleum impacted soil and other soil, and street sweepings

Figure 18 on the next page summarizes how each of the waste streams entering into the system and where they end up.

Figure 18 - Where Does Your Waste Go Infographic

WHAT DO YOU THROW AND WHERE DOES IT GO? (2014 Data)



25%
of system waste was converted to energy at Xcel Energy's French Island Facility

8%
of system waste was diverted or recycled (Does not include residential & commercial recycling tonnages)

67%
of system waste went to the La Crosse County landfill (Approximately 20% of landfill directed material was beneficially used as alternative daily cover)

NOTE: Percentages taken from Annual System Diversion Rate Report, La Crosse County Solid Waste Department

3.2.1 Xcel Energy WTE Landfill Deliveries

Figure 19 summarizes quantities of residue and unacceptable material sorted from the tipping floor of Xcel’s WTE facility and transported to the landfill for disposal. Deliveries to the landfill steadily increased between 2002 and 2007, before falling from 26,447 tons in 2007 to 16,153 tons in 2009. Deliveries over the past 5 years have fluctuated as a result of technology upgrades and scheduled maintenance down time. In 2014, scheduled maintenance shut downs at Xcel’s WTE facility resulted in a significant drop in residual deliveries to the landfill.

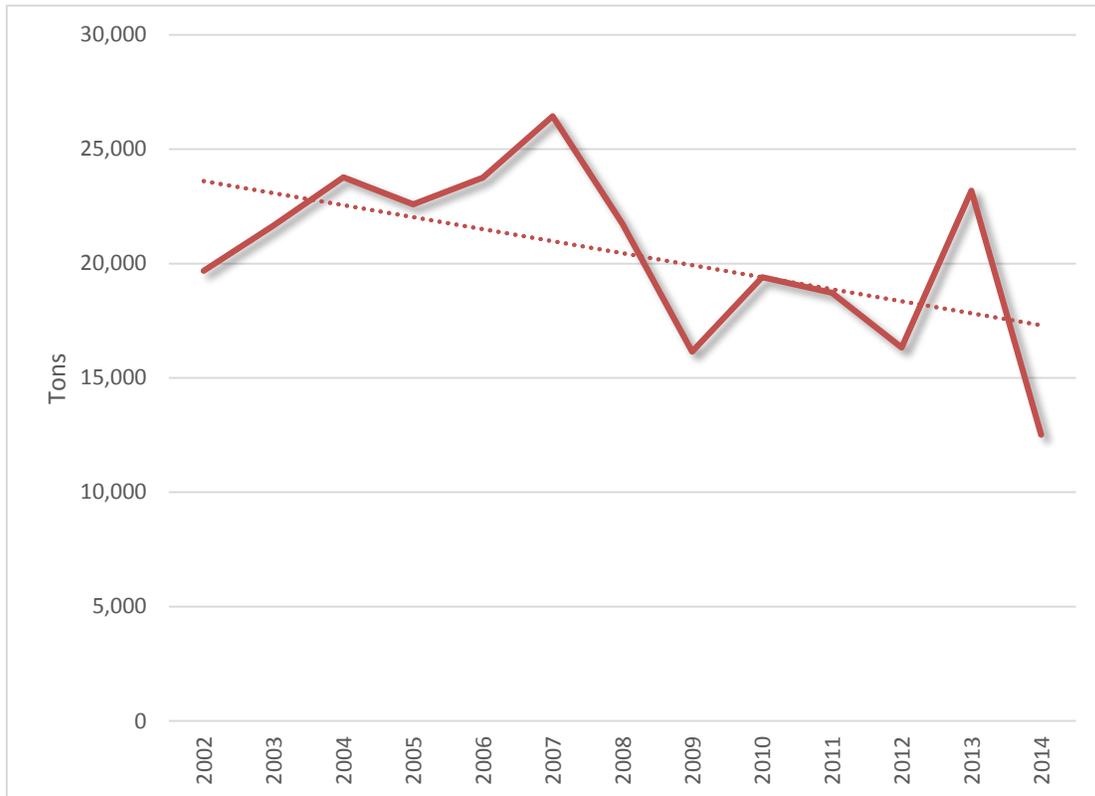


Figure 19 – Historical French Island WTE Landfill Deliveries

Historically, for every ton of MSW received at Xcel’s WTE facility, approximately 70 percent was converted to energy and 30 percent was delivered to the landfill as unburned residual material. In 2014, the county created an incentive program to encourage more efficient processing of MSW at Xcel’s facility (75 percent-80 percent of MSW converted to energy), resulting in a lower percentage of residual waste being re-directed from the WTE facility to the landfill.

Less residual tonnage directed to the landfill from the WTE facility means the county pays less in state fee tipping surcharges for those materials. Both the county and Xcel Energy benefit financially from this arrangement, through an agreement that allows each party to share the cost savings associated with reduced tipping fees as well as the additional revenues associated with more efficient processing of MSW into fuel.

3.2.2 Direct Landfill

Figure 20 provides historic delivery data for unrecoverable or non-recyclable MSW collected throughout the La Crosse County regional system over a thirteen-year period (2002 to 2014) and delivered directly to the landfill. As seen in the figure, direct deliveries fluctuated between roughly 15,000 and 25,000 tons per year between 2002 and 2010. Over the past four years tonnages have risen dramatically, from 14,909 in 2010 to 44,026 in 2014.

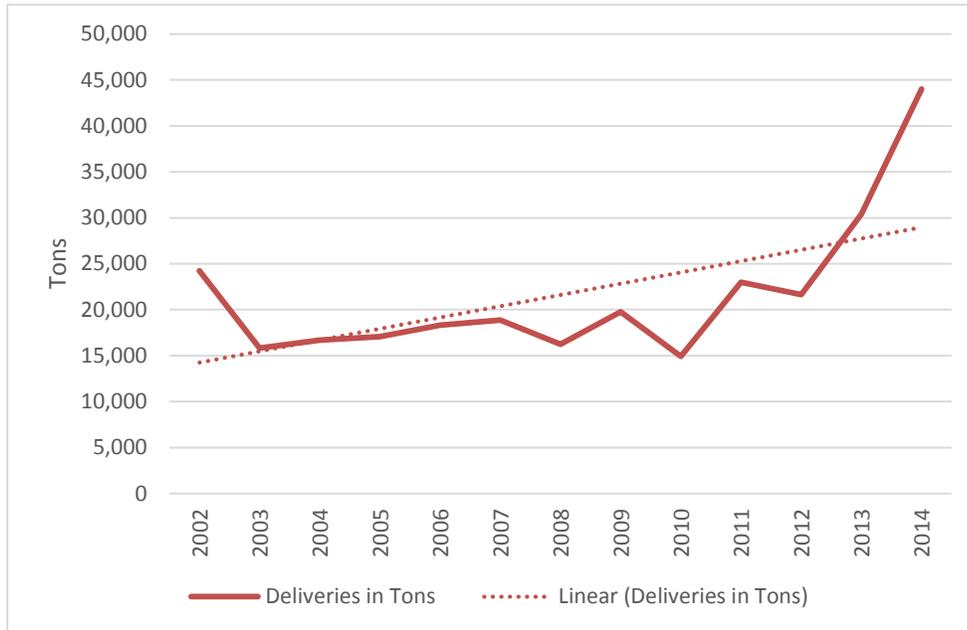


Figure 20 – Historical Direct Landfill Deliveries

The upward trend in direct landfill deliveries can be largely attributed to the successful implementation of the hauler rebate agreement in 2012. The agreement provides an incentive (rebated tipping fee) to haulers which commit to direct all of their waste from within the system to Xcel's WTE facility or the landfill. The agreement resulted in more waste being delivered directly to the landfill from communities not currently under contract to deliver their waste to the system.

A second factor contributing to the upward trend in direct landfill deliveries is related to how large, bulky items delivered to Xcel's WTE facility are being handled. Bulky items delivered to Xcel's WTE facility are set aside and transported to the La Crosse County Landfill. La Crosse County is charged a handling fee by Xcel, which is then passed along to the haulers. The haulers, in turn, have been more diligent with direct landfilling loads containing bulky waste.

The requirements for handling large, bulky items have changed with the implementation of single stream recycling in the cities of Onalaska and La Crosse. Local ordinances now require all solid waste and recyclables be placed in carts for curbside pick-up. Residents are now charged a special fee for curbside pick-up of large, bulky items whereas in the past that service was provided at no additional charge. Furthermore, haulers are now required to bring those items directly to the landfill. With the separate fee for curbside bulky item pick up it is likely that more residents will choose to bring those items to the landfill themselves.

A third factor contributing to the upward trend in direct landfill deliveries is the increase in agricultural bag (ag bag) disposal at the landfill. Ag bags are not accepted at Xcel’s WTE facility. When ag bags are disposed of at the landfill, they often arrive with a mixed waste component.

The percent contributions of direct landfill deliveries by county to the landfill over the period 2003 through 2014 are shown in Figure 21. La Crosse County deliveries comprise, on average, 77 percent of the total deliveries of non-recoverable MSW to the landfill. Of the remaining counties, Houston County annual deliveries make-up 16 percent, followed by Wabasha County (4 percent), other counties (2 percent), Southern Trempealeau Solid Waste Commission (1 percent), and Buffalo County (1 percent).

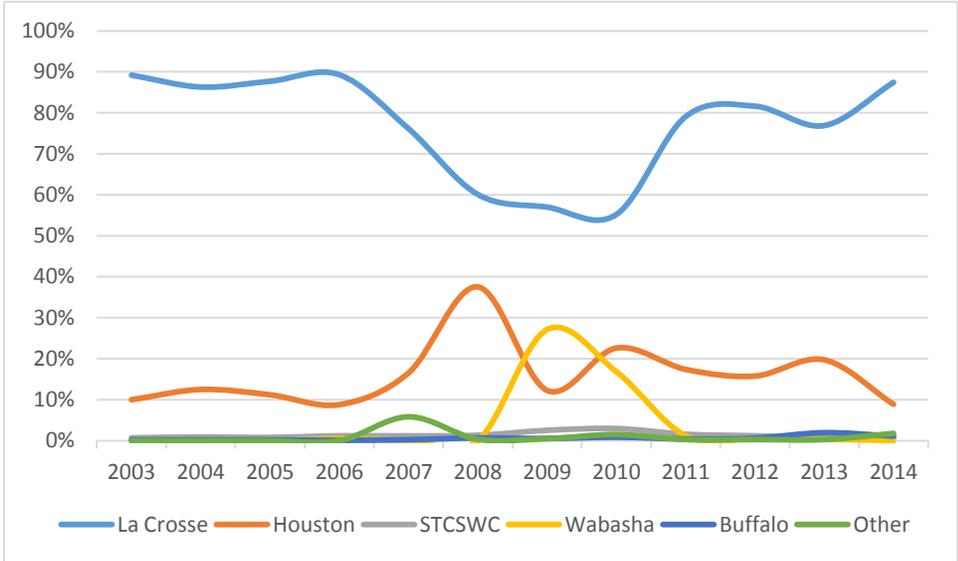


Figure 21 – Percentage of Total Direct Landfill Deliveries by County

Direct landfill tonnages (not including direct landfill MSW or residue and unacceptable material deliveries from Xcel’s WTE facility) comprise several different types of waste. Figure 22 shows historical tonnages for seven waste categories including C&D, asphalt shingles, WTE fly ash, WTE bottom ash, yard waste, wood waste, and special wastes. Special wastes typically account for the most tonnage annually, followed by C&D, WTE fly ash, and asphalt shingles.

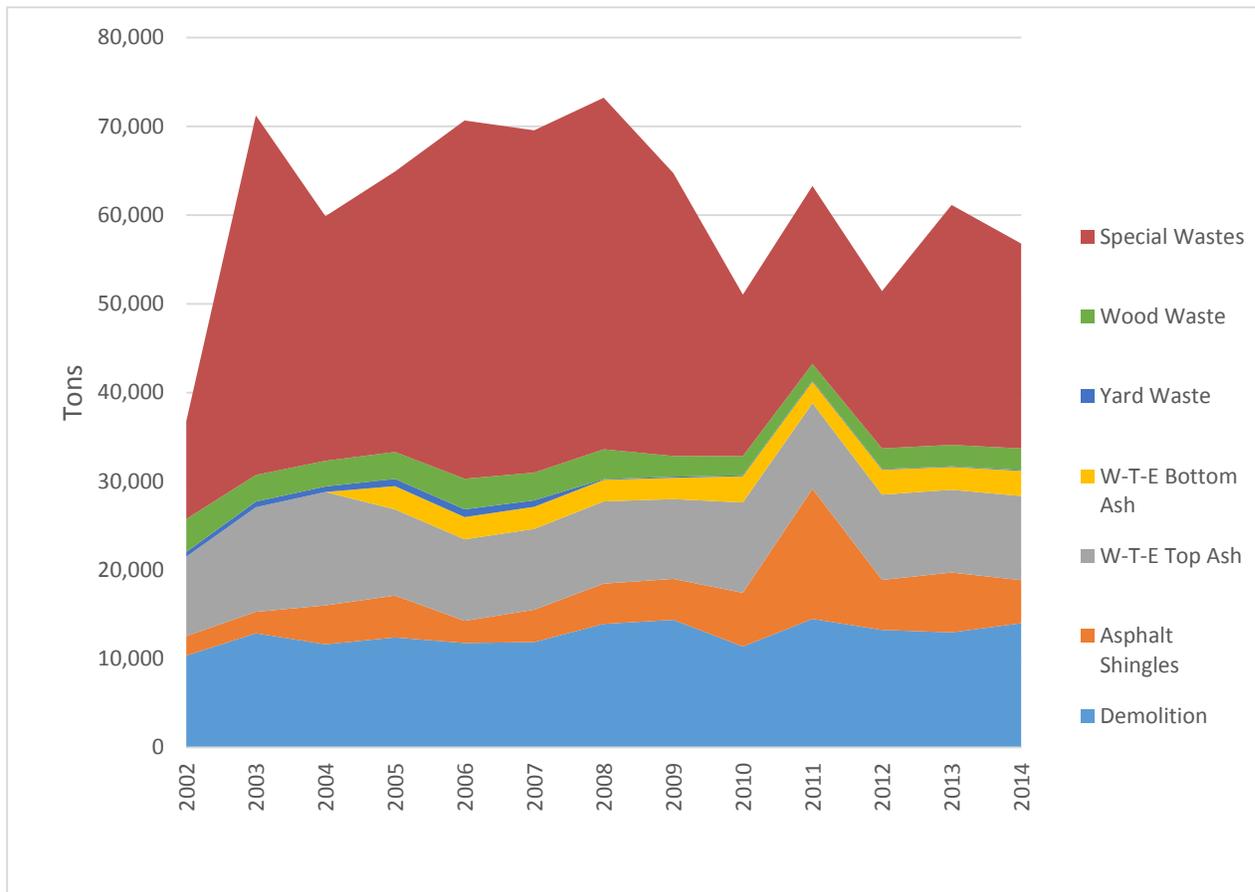


Figure 22 – Historical Landfill Delivery Tonnages by Waste Category (Excluding Direct Landfill and Xcel WTE Deliveries)

3.2.3 C&D

Figure 23 illustrates a trend of steadily increasing deliveries of C&D materials to the La Crosse County Landfill from 2002 to 2014. From 2002 to 2003, deliveries increased by 24.4 percent and then remained relatively flat until 2007. C&D deliveries then rose to 14,388 tons by 2009, followed by a period of fluctuation as the recession impacted the regional economy. Over the five-year period 2009-2014 C&D deliveries averaged 13,221 tons per year. While the La Crosse County Landfill accepts C&D waste, it should be noted there are several other C&D facilities in the region. The landfill does not compete on cost compared to those other facilities, however it does offer a convenient location for disposing of C&D wastes.

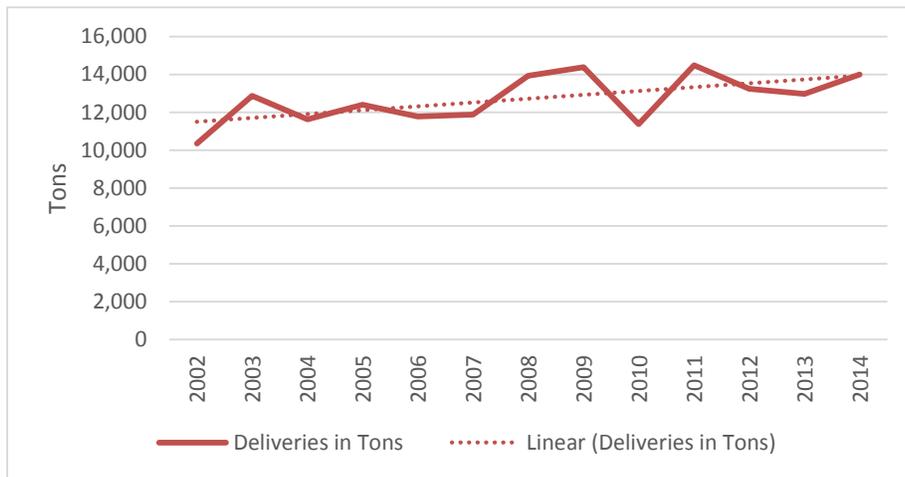


Figure 23 – Historic C&D Deliveries

3.2.4 Asphalt Shingles

There are two asphalt shingle programs at the La Crosse County Landfill. Clean shingles are processed and sold to a private firm for use in asphalt production. Dirty shingles are disposed of in the landfill. Generators are charged a lower rate for disposing of clean shingles at the landfill. They are charged the conventional C&D tipping fee for dirty shingles. Clean asphalt shingle deliveries to the La Crosse County Landfill have steadily risen from 2,200 tons in 2002 to 4,854 tons in 2014, with a large spike in deliveries in 2011, when 14,655 tons were delivered as a result of several major storms which damaged many roofs in the region (Figure 24). Leaving 2011 aside, the 5-year average tonnage for shingle deliveries from 2009 through 2014 was 5,580 tons per year.

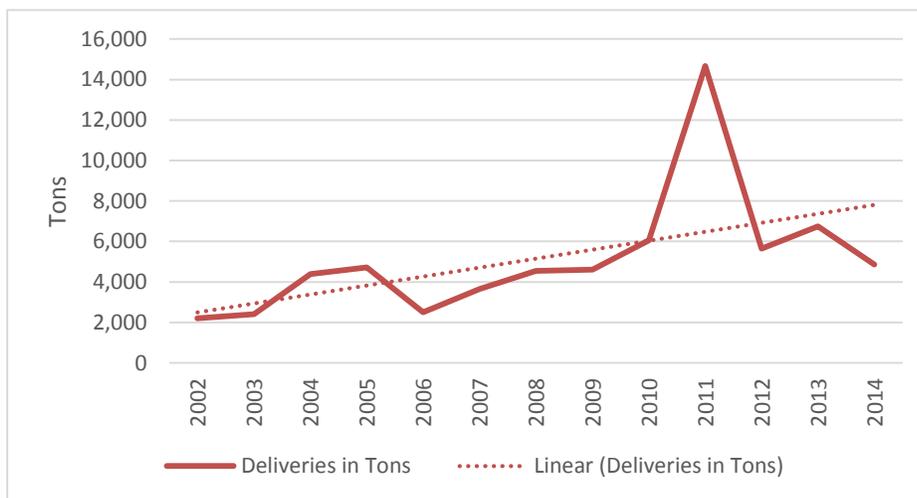


Figure 24 – Historical Asphalt Shingle Deliveries

3.2.5 Xcel Energy WTE Bottom and Fly Ash

Figure 25 shows historical WTE ash deliveries from Xcel’s WTE facility to the La Crosse County Landfill from 2002 to 2014. Bottom ash began to be recorded in 2005. The lowest annual tonnage delivered to the landfill occurred in 2002 (8,957 tons) when Xcel’s WTE facility was partially shut down to upgrade pollution control equipment. Total ash deliveries increased substantially in 2003 (11,781 tons) and 2004 (12,783 tons). The following ten years (2005 through 2014) saw total ash deliveries remain relatively constant, averaging 12,054 tons per year. An average of 2,605 tons of bottom ash and 9,847 tons of fly ash were delivered over that same period.

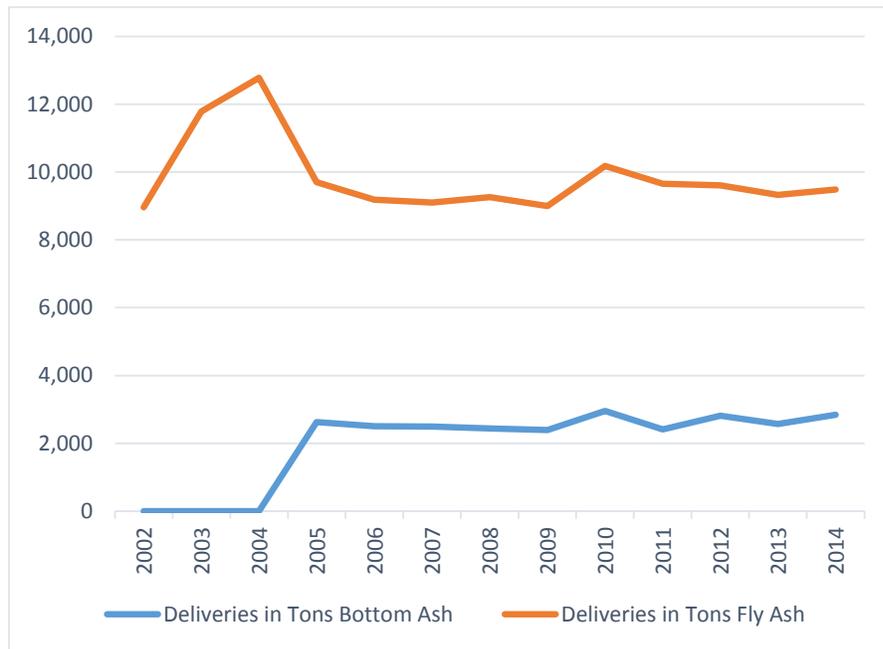


Figure 25 – Historical WTE (Bottom and Fly) Ash Deliveries

3.2.6 Yard Waste

Figure 26 shows deliveries of yard waste to the La Crosse County Landfill dropped off considerably in 2008. Deliveries have remained relatively constant since that time, averaging 97 tons per year. The landfill continues to accept yard waste, however the cities of La Crosse and Onalaska each maintain their own yard waste drop off sites, resulting in less demand for yard waste services at the landfill. Yard waste deposited at the landfill is not processed on site, instead it is taken to a private business, which utilizes it for compost production.

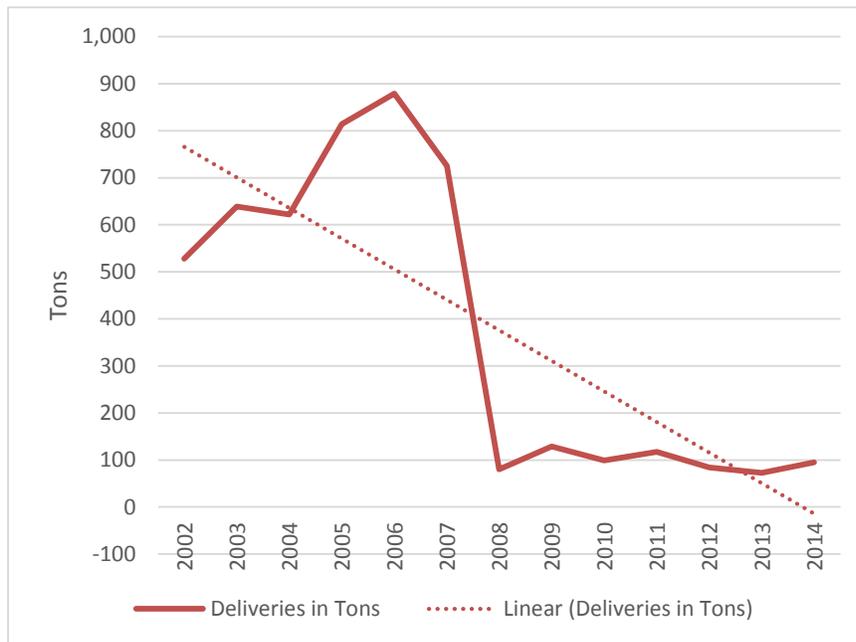


Figure 26 – Historical Yard Waste Deliveries

3.2.7 Clean Wood Waste

The Department accepts clean wood waste materials including pallets, crates, tree trunks, and brush. The material is either sold to Xcel Energy for energy production, processed into material used at the landfill, or as mulch. Figure 27 shows that an average of 2,710 tons of clean wood waste were delivered to the landfill over the thirteen-year period 2002-2014. Events such as large storms contribute to the fluctuation in clean wood waste deliveries from year to year.

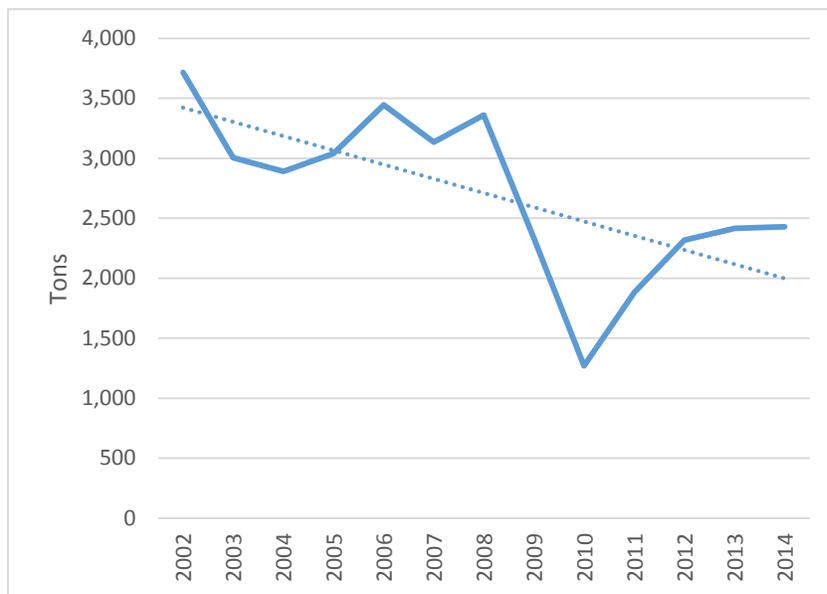


Figure 27 – Historical Clean Wood Waste Deliveries

3.2.8 Special Wastes

This waste category includes twelve types of specialty wastes. Figure 28 shows the percent contribution of eleven special wastes in 2014 as there were no foundry sand deliveries in that year. The three largest shares of specialty waste contributors were high volume industrial waste (39 percent of total), followed by other alternative daily cover wastes (29 percent) and street sweepings (17 percent).

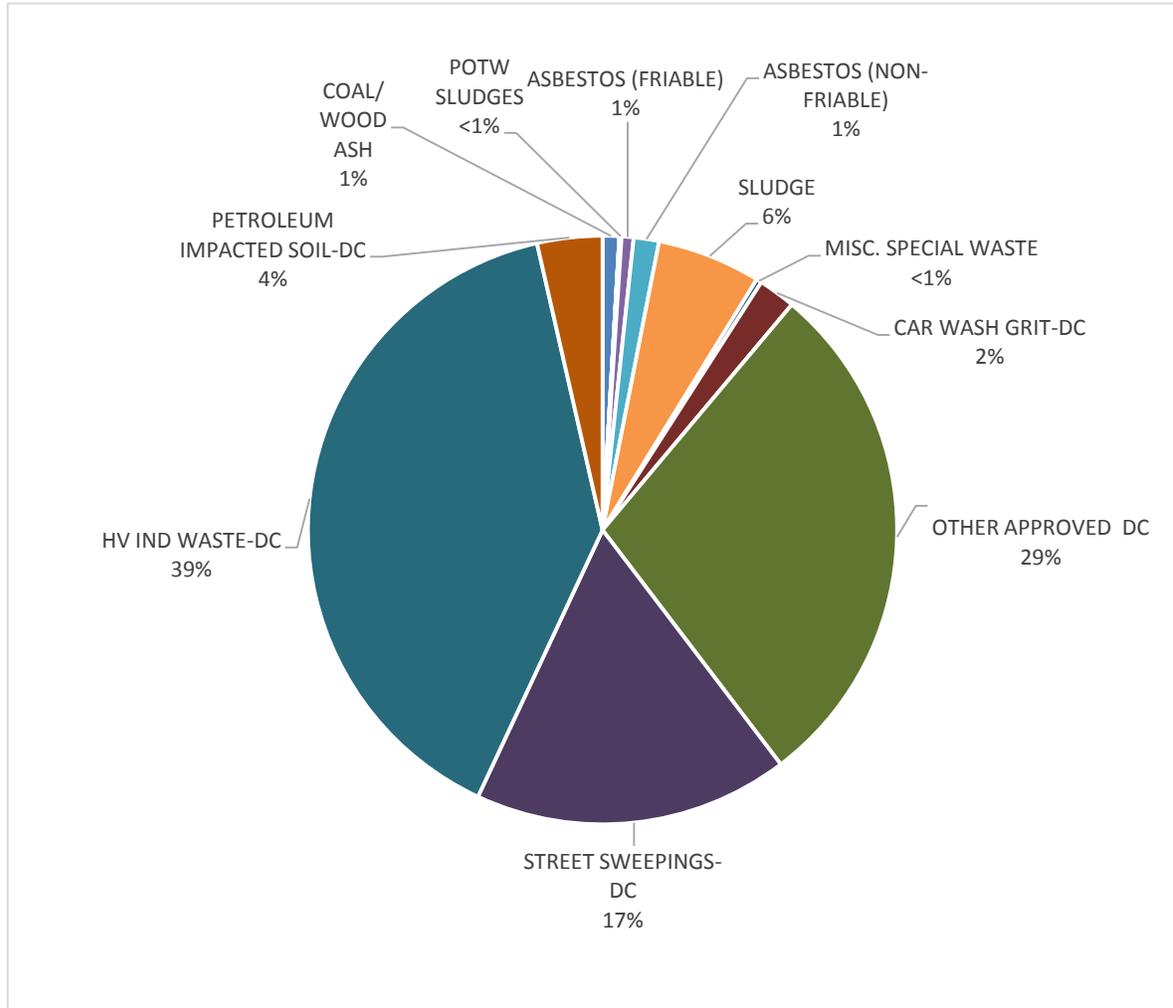


Figure 28 – Composition of Special Waste Deliveries (2014)

Figure 29 shows historical special waste deliveries from 2002 through 2014. As can be seen in the graph, special waste deliveries spike in 2003 then dropped precipitously in 2004. A similar fluctuation occurred between 2008 and 2010, when deliveries dropped from 39,611 to 18,189 tons per year. Large fluctuations in special waste deliveries are primarily due to enormous swings in deliveries of foundry sand and impacted soils (petroleum and other contaminated soils) received at the landfill. In 2014, 23,086 tons of special wastes were delivered to the landfill. The ten-year average delivery from 2005 through 2014 was 28,812 tons per year.

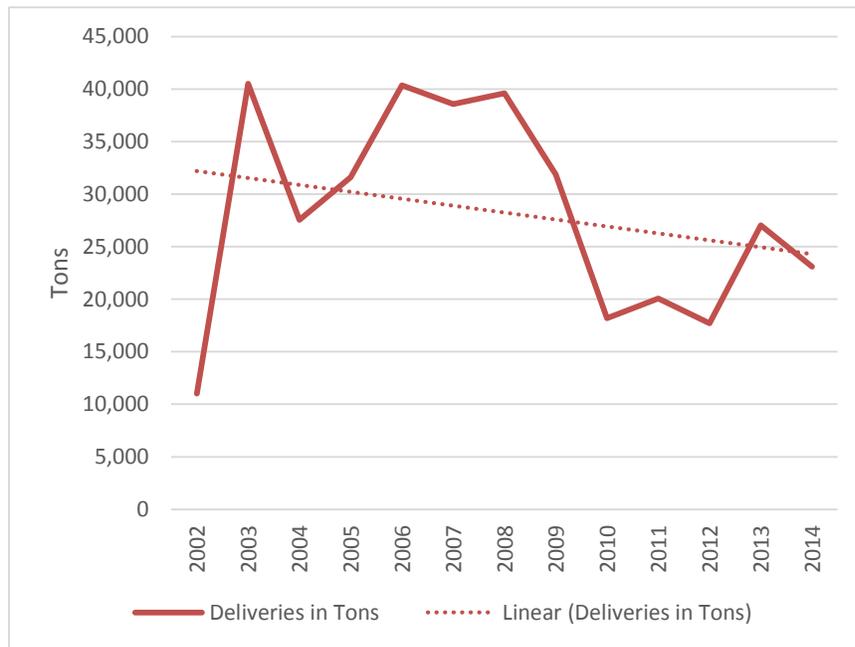


Figure 29 – Historical Special Wastes Deliveries

3.2.9 HHM Deliveries to the La Crosse County HHM Facility

In 2014 the HHM facility collected over one million pounds of material between household and business users.

Figure 30 summarizes household usage of the HHM facility. Both the number of household users (left vertical axis) and the pounds of HHM material collected (right vertical axis) have steadily increased since 2003. In 2014, the Department served 10,955 households, collecting 766,718 pounds of material. Since opening in November 2003, the HHM program has collected and properly disposed of over 4.6 million pounds of material from La Crosse County households.

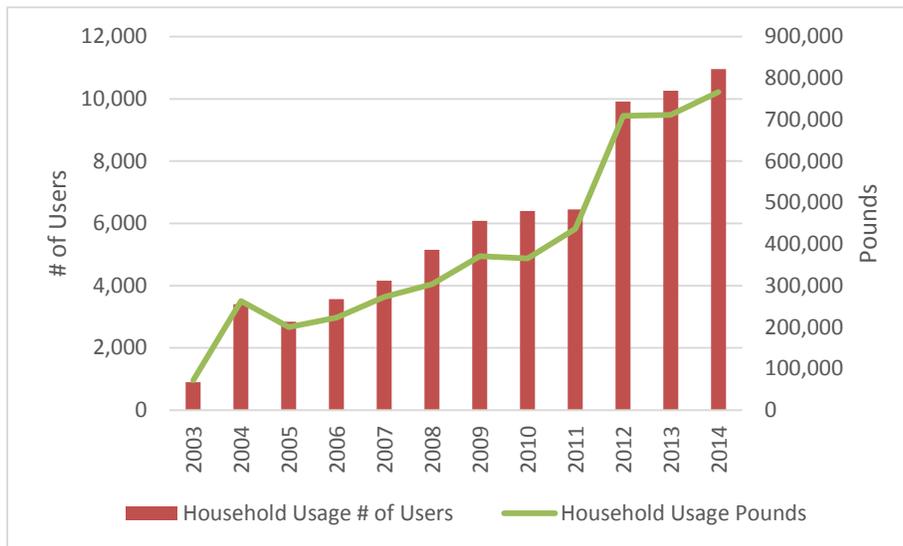


Figure 30 – La Crosse County Household HHM Usage Since Opening

(Source: Annual Reports to Stakeholders, La Crosse County Household Hazardous Materials Program and Annual Green Tier Reports: La Crosse County Solid Waste Department, Internal La Crosse County Data)

In terms of serving area businesses, the HHM facility served 508 businesses in 2014, collecting over 165,000 points of material (Figure 31). Since inception, the HHM program has collected over 1.4 million pounds of HHM from area businesses.

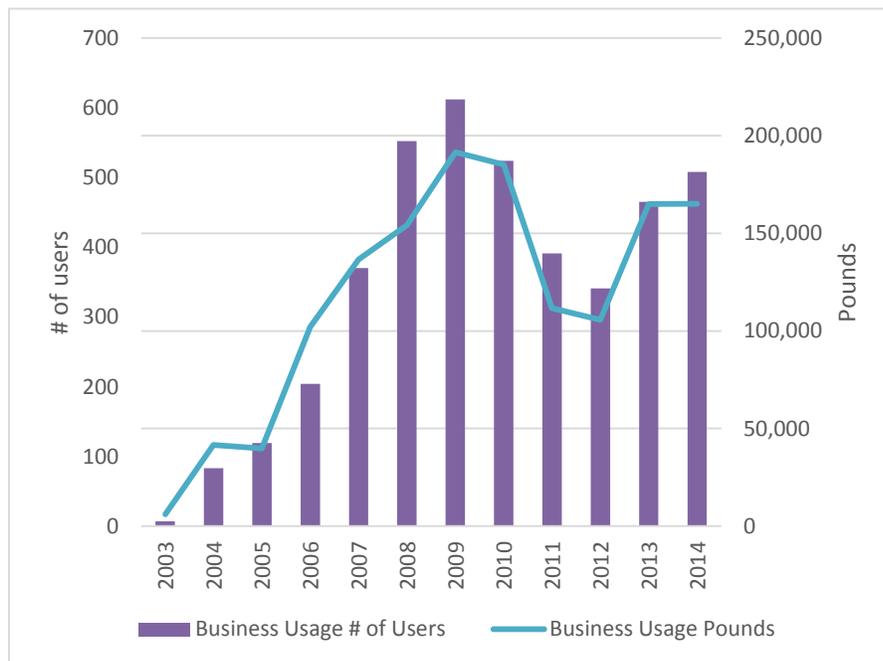


Figure 31 – La Crosse County Business HHM Usage Since Opening

(Source: Annual Reports to Stakeholders, La Crosse County Household Hazardous Materials Program and Annual Green Tier Reports: La Crosse County Solid Waste Department, Internal La Crosse County Data)

3.2.10 Other La Crosse County Recycling Quantities

In February of 2014 the cities of La Crosse and Onalaska, implemented a residential single stream recycling cart system to dispose of its recyclable materials. A 2010 La Crosse County sponsored study provided the impetus for the change. Prior to February 2014, the cities of La Crosse and Onalaska had dual sort recycling systems using an eighteen gallon tote that required citizens to sort their recyclables by newspaper and white paper, glass, aluminum, tin, and plastics (#1 and #2). Single stream recycling, however, has made recycling more convenient, resulting in significant increases in recycling volumes from 2013 to 2014 (Figure 32 and Figure 33).

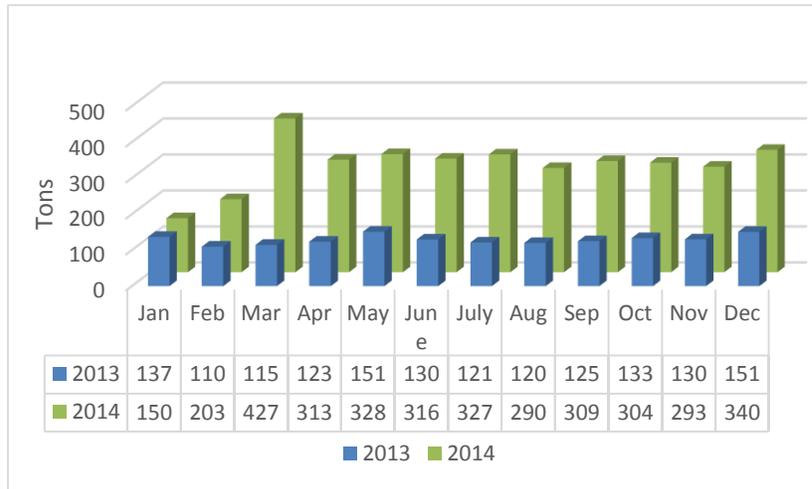


Figure 32 – La Crosse Monthly Recycling Comparison (2013-2014)

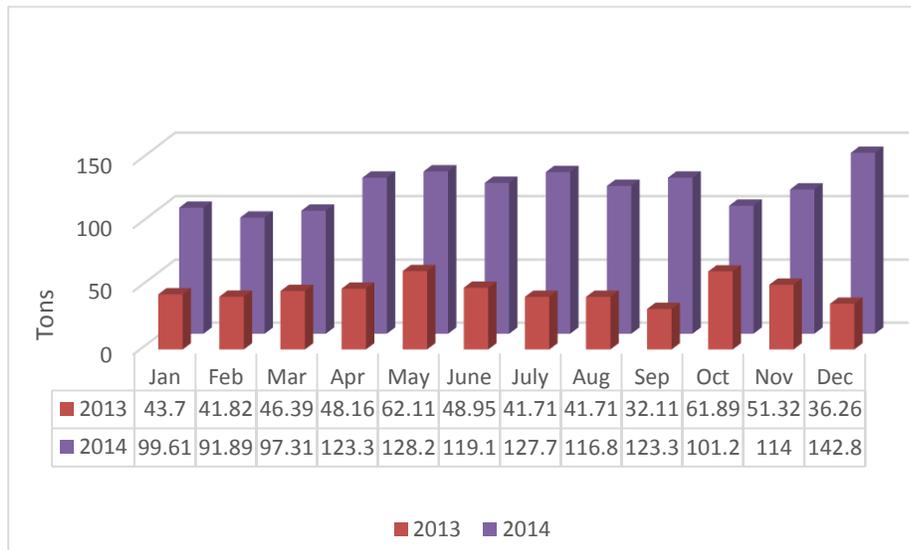


Figure 33 – Onalaska Monthly Recycling Comparison (2013-2014)

3.3 Regional Disposal System Participants

3.3.1 La Crosse County

The following section summarizes WTE and MSW historical tonnage deliveries from La Crosse County to Xcel’s WTE facility and the La Crosse County Landfill. La Crosse County as a whole does not track total volumes of waste by material type, however the total recycling tonnage is provided in Appendix H, “La Crosse County Tonnages,” as well as additional tonnage information from the landfill.

Since 2007, La Crosse County has delivered an average of 59,144 tons of waste to Xcel’s WTE facility (Figure 34). Over that same period the Department has direct landfilled an average of 17,670 tons annually with MSW deliveries have increasing 118 percent since 2012, likely driven by the combination of factors described above in Section 3.2.2.

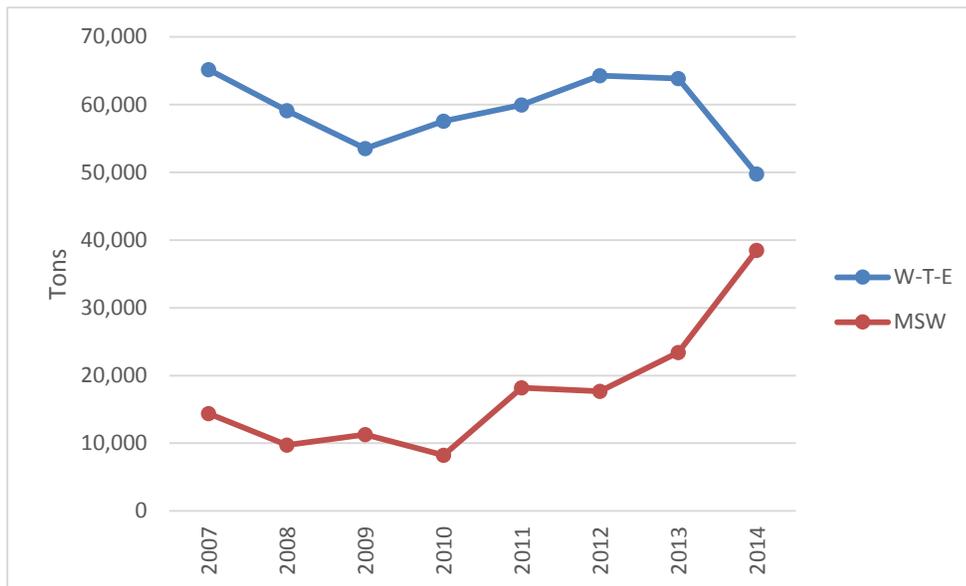


Figure 34 – La Crosse County WTE & MSW Annual Tonnages (2007-2014)

3.3.2 Houston County

The following section summarizes WTE and MSW historical tonnage deliveries from Houston County to Xcel’s WTE facility and the La Crosse County Landfill. Additional county-specific information on recycling tonnages is provided in the Appendix I, “Houston County Tonnages.” For more detailed information see the State of Minnesota’s SCORE report website. The SCORE report is an annual evaluation of the State of Minnesota’s recycling, reduction, and waste management programs.

Houston County’s contract with La Crosse County to deliver acceptable waste to the Xcel WTE facility runs into 2023. Since 2007, Houston County has delivered an average of 5,191 tons of waste to Xcel’s WTE facility (Figure 35). Over that same period of time Houston County has delivered an average of 4,402 tons of MSW to the landfill.

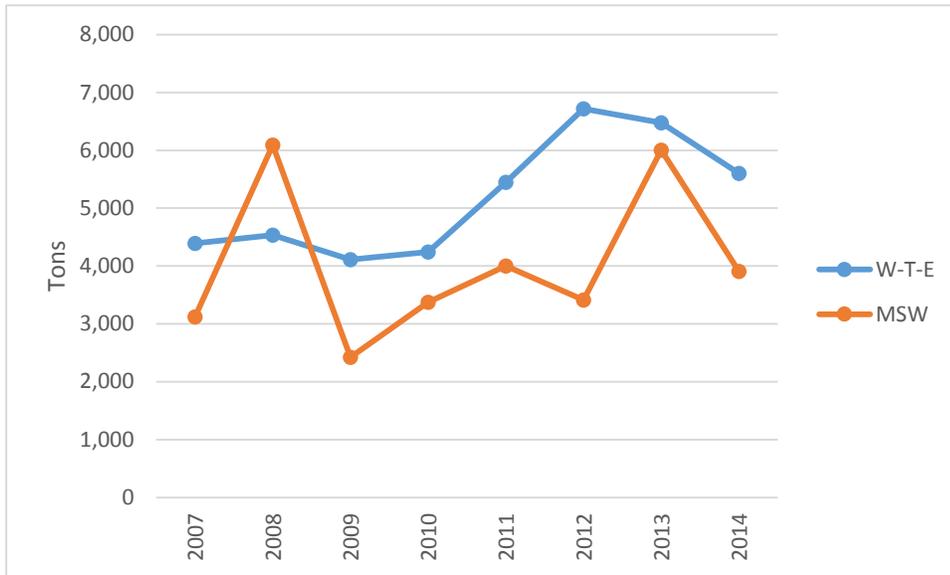


Figure 35 – Houston County WTE & MSW Landfill Tonnages (2007-2014)

3.3.3 Wabasha County

The following section summarizes WTE and MSW historical tonnage deliveries from Wabasha County to Xcel’s WTE facility and the La Crosse County Landfill. Additional county-specific information on recycling tonnages is provided in the Appendix J, “Wabasha County Tonnages.”

Wabasha County delivered an average of 4,566 tons annually to Xcel’s WTE facility from 2007 through 2014. In 2014, Wabasha County contributed 2,890 tons. The county delivered an average of 1,051 tons of MSW annually to the La Crosse County landfill over the same period. Since 2011 Wabasha County has delivered small quantities of MSW to the landfill, including 28 tons in 2014.

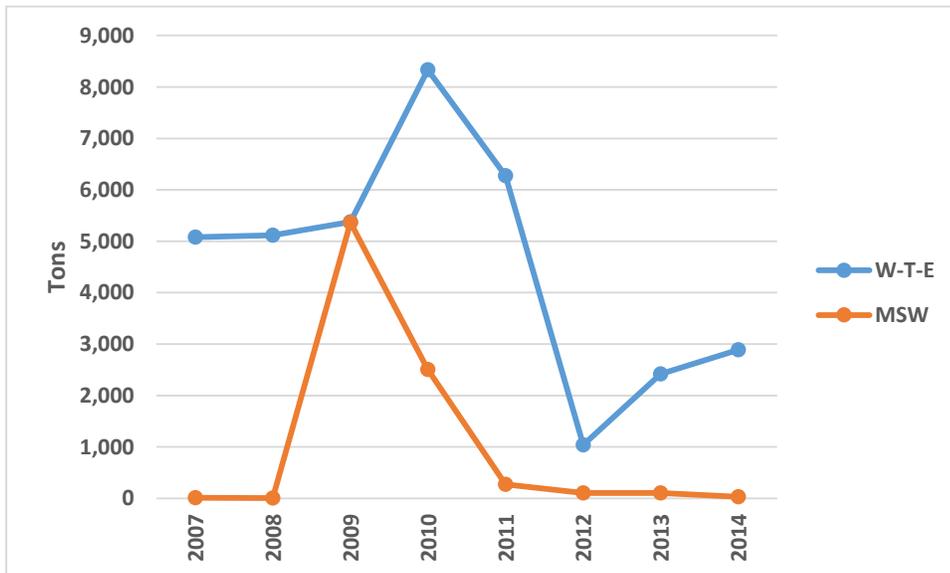


Figure 36 – Wabasha County WTE & MSW Landfill Tonnages (2007-2014)

3.3.4 Buffalo County

The following section summarizes WTE and MSW historical tonnage deliveries from Buffalo County to Xcel’s WTE facility and the La Crosse County Landfill. Additional county-specific information on recycling tonnages is provided in the Appendix K, “Buffalo County Tonnages.”

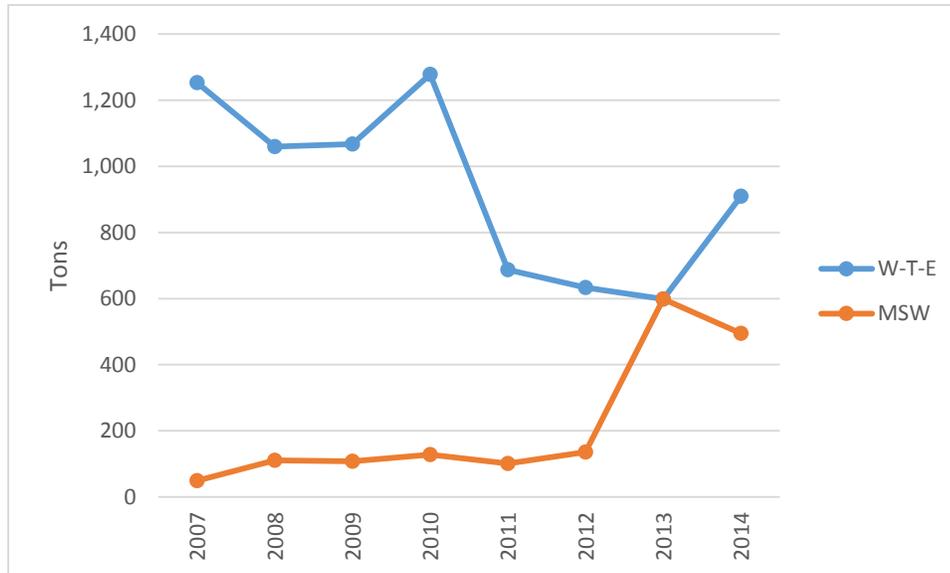


Figure 37 – Buffalo County WTE & MSW Landfill Tonnages (2007-2014)

WTE deliveries from Buffalo County averaged 936 tons per year over the period 2007 through 2014. Compared with 2013, deliveries were up 52 percent in 2014, from 598 tons to 909 tons.

Buffalo County waste deliveries to the La Crosse County Landfill averaged 216 tons over the eight year period from 2007 through 2014. However, Buffalo County averaged 546 tons per year from 2013 through 2014.

3.3.5 Southern Trempealeau County Solid Waste Commission (STCSWC)

The following section summarizes WTE and MSW historical tonnage deliveries from Southern Trempealeau County to Xcel’s WTE facility and the La Crosse County Landfill. Additional county-specific information on recycling tonnages is provided in the Appendix L, “STCSWC Tonnages.”

Haulers collecting MSW within the service area of the STCSWC are required, through a licensing agreement, to deliver waste to a facility within the La Crosse County regional system. STCSWC represents the City of Galesville; villages of Melrose, Trempealeau; and the towns of Caledonia, Dodge, Gale, and Trempealeau.

Deliveries to Xcel’s WTE facility averaged 3,656 tons annually over the period 2007 through 2014. MSW delivery tonnages 320 tons annually over the same period.

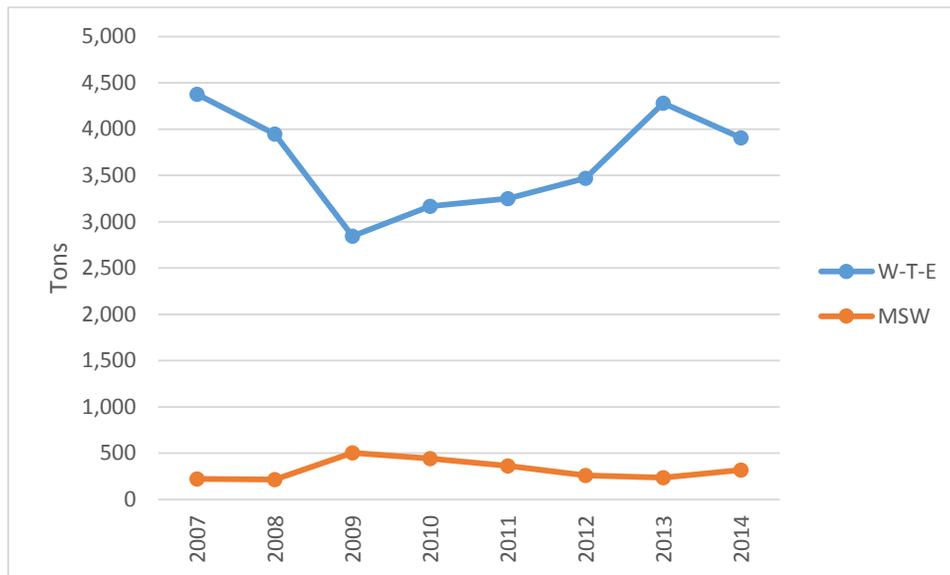


Figure 38 – Southern Trempealeau County WTE & MSW Landfill Tonnages (2007-2014)

3.4 Adjoining County Non-participants

This section of the report highlights a few key statistics from counties adjacent to La Crosse County, but not part of the system.

3.4.1 Monroe County

In 2014, the landfill received 31,082 tons of MSW and 1,433 tons of fee exempt waste for a total of 32,515 tons of waste, according to the WDNR. According to interviews with Monroe county staff, the county also receives approximately 250 tons per year of waste wood. In addition, the county receives and markets an average of approximately 3,000 tons per year of recyclables.

3.4.2 Vernon County

The landfill received approximately 17,377 tons of material in 2014, including 13,045 tons of MSW and 4,322 tons of construction and demolition waste.

3.4.3 Winona County

According to the most recent SCORE report (February 2015), Winona County generated 63,236 tons of MSW in 2013, including recyclables. 34,375 tons or 54 percent of total MSW generated were collected for recycling purposes.

3.5 Acceptable Waste Deliveries to the Xcel facility

La Crosse County’s contract with Xcel Energy guarantees the delivery of 73,000 tons of MSW to Xcel’s WTE facility annually. Since 2003, waste deliveries from La Crosse County to Xcel’s WTE facility have averaged 60,169 tons or 81 percent of total deliveries, followed by deliveries from Houston (4,997 tons, 7 percent of total deliveries), Wabasha (4,547 tons, 6 percent of total deliveries), Trempealeau (3,618 tons, 5 percent of total deliveries) and Buffalo County (1,156 tons, 2 percent of total deliveries) (Figure 39).

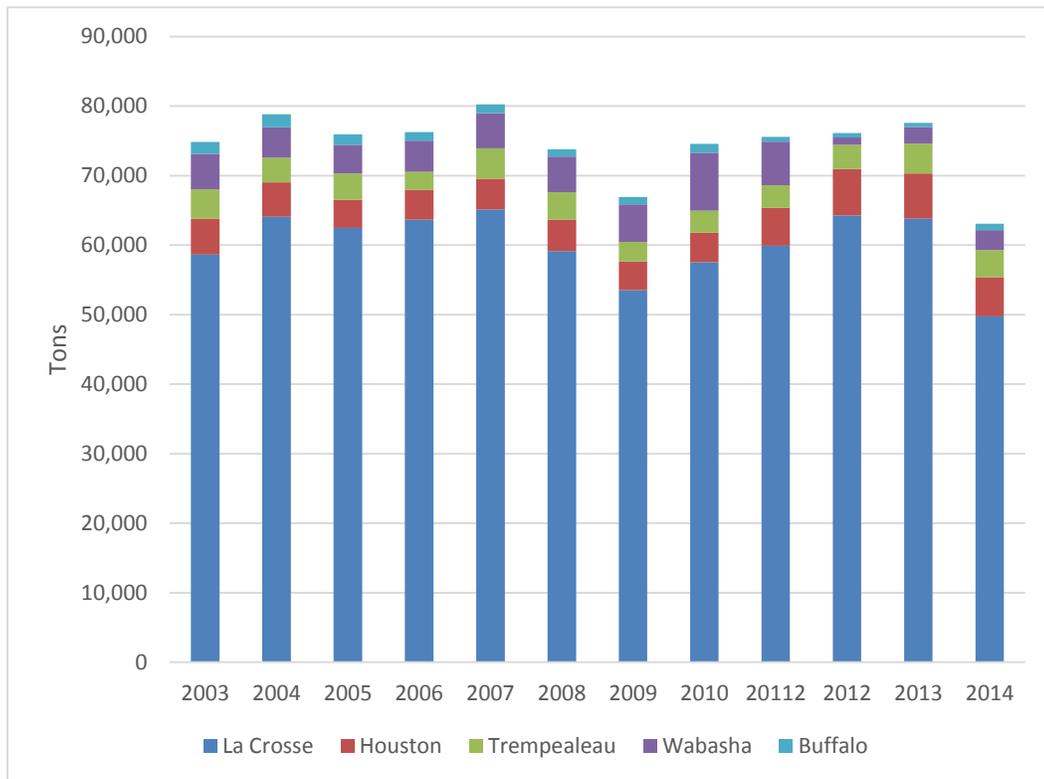


Figure 39 – Historical Waste Tonnage Deliveries to Xcel WTE Facility by County

The combined thirteen-year average annual tonnage of waste delivered to the Xcel WTE facility from 2003 through 2014 was 74,487 tons, almost 1,500 tons more than the required delivery tonnage stipulated in La Crosse County’s agreement with Xcel Energy.

In 2014, the regional system delivered 65,501 tons of acceptable waste, less than the required 73,000 tons. However this was due to scheduled maintenance at the Xcel facility and therefore there was no penalty associated with the lower figure.

3.6 Total System Annual Diversion Rate

Figure 40 shows changes in diversion rates for the system over the period 2005 through 2014. In 2014, 25 percent of all waste was converted to energy, just under 8 percent was diverted, and 67 percent was landfilled. The overall waste diversion rate, which includes waste converted to energy and waste diverted to other uses, decreased slightly from 35 percent in 2013 to 33 percent in 2014.

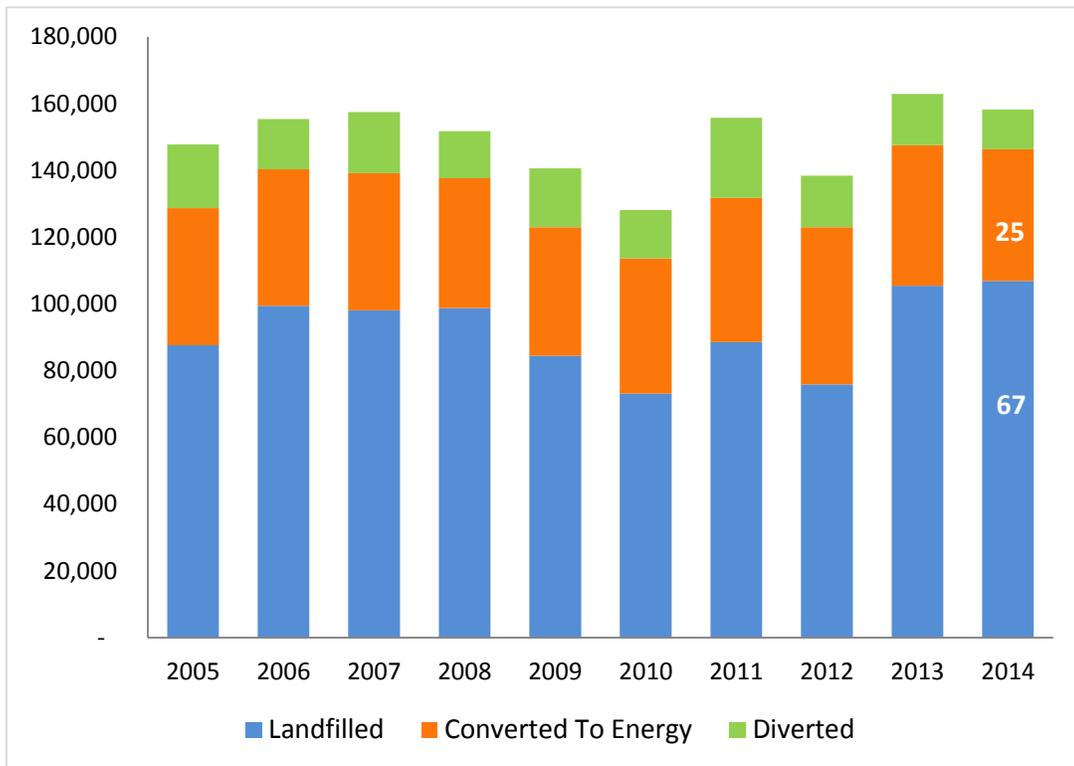


Figure 40 – Total System Annual Diversion Rate (2005-2014)

The successful implementation of single stream recycling contributed to a lower rate by changing the composition of waste delivered to Xcel. A second factor contributing to a lower rate was the scheduled maintenance shut down at Xcel’s facility, which lasted for six weeks.

It should be noted that HHM waste diversion figures began being recorded in 2012 and are reflected in the graph above.

4.0 Key Trends and Growth Projections

4.1 National Waste Management Trends – Municipal Solid Waste

4.1.1 Waste Generation and Composition

According to EPA data, municipal solid waste generation peaked in 2005 in the United States on both a total tonnage and per capita basis, with the waste generation rates for 2013 being the lowest since 1985. This can be seen below in Figure 41.

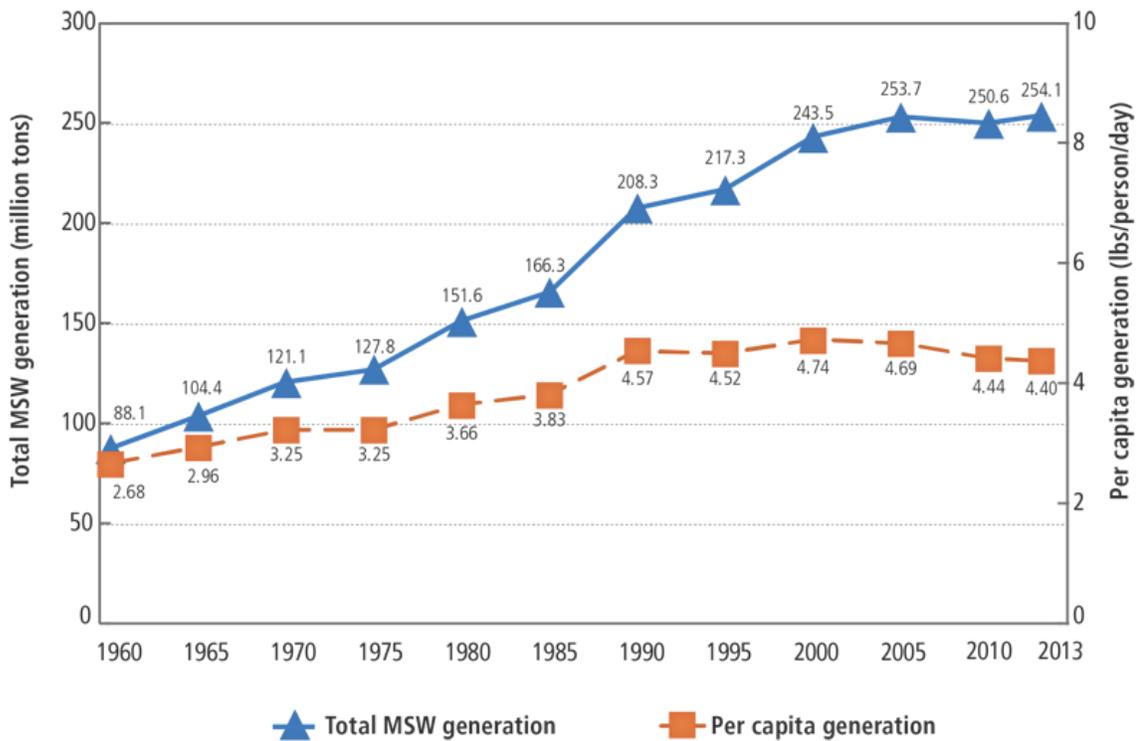


Figure 41 – MSW Generation Rates (1960-2013)

(Source: U.S. EPA, 2015)

The composition of municipal solid waste has been changing due to variations in consumer products and consumption, with the most significant changing occurring for paper and glass, which are decreasing on a percentage basis, and plastics and organics, which are increasing on a percentage basis. Figure 42 shows the material generation on a percentage basis by material for 2013.

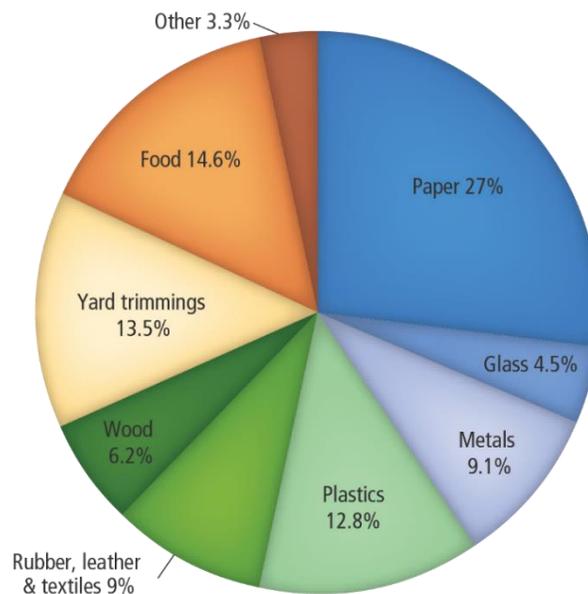


Figure 42 – Material Generation in MSW (2013)

(Source: U.S. EPA, 2015)

It should be noted that a more specific waste characterization study has not been completed in Wisconsin since 2009 while Iowa completed a waste characterization study in 2011. However, previous waste composition studies conducted in Wisconsin have generally been consistent with national waste composition data.

4.1.2 Waste Management

In 2000, landfills accounted for 57 percent of municipal solid waste management, with recovery for recycling and composting (29 percent) and combustion with energy recovery (14 percent) making up the balance. In 2013, disposal in landfills accounted for approximately 53 percent of municipal solid waste management, with the remainder being recovered (34 percent), or combusted with energy recovery (13 percent), which can be seen in Figure 43.

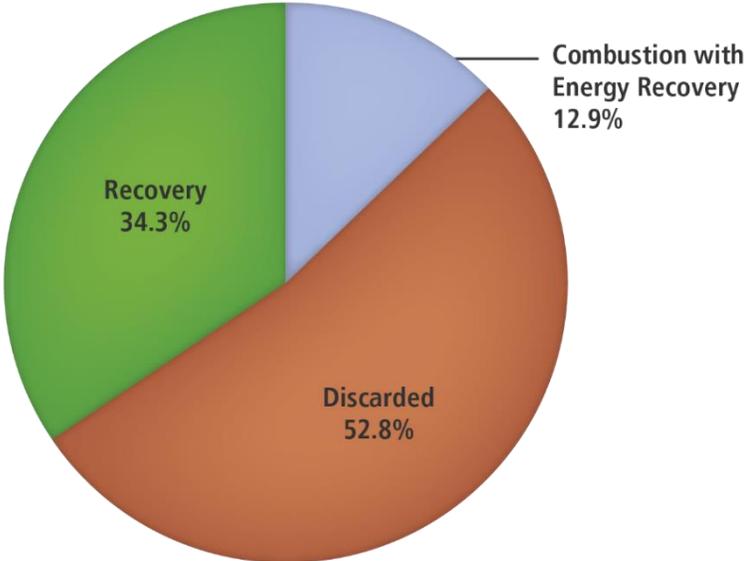


Figure 43 – Management of MSW in the United States, 2013
(Source: U.S. EPA, 2015)

4.1.3 Landfills

In 1970, there were approximately 20,000 landfills with most being unlined dumps. Due to more stringent regulations the number of landfills dropped to 2,893 by 2005 and stood at 1,908 in 2013. Landfill tipping fees at the national level, when adjusted for the Consumer Price Index (CPI), have remained relatively flat in a range of \$42-50/ton since 1995, which can be seen in Figure 44.

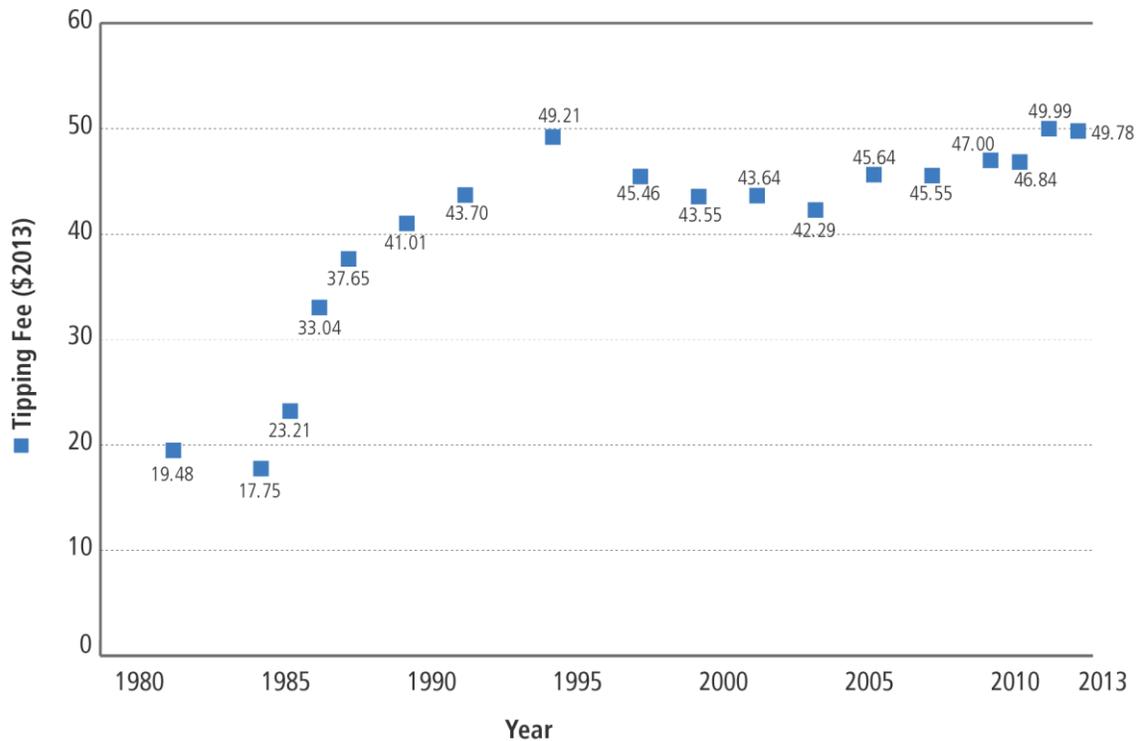


Figure 44 – National Landfill Tipping Fees, 1982-2013 (\$2013 per ton)

(Source: U.S. EPA, 2015)

A regression analysis of landfill tipping fees found that from 1985 to 2010 tipping fees increased by an average of \$1.24 per year. This rate was slightly higher from 1987 to 1995 (\$1.95 per year) and was similar from 2004 to 2010, also at \$1.95 per year. The implementation of Subtitle D regulations or state equivalent standards likely caused these increases.

4.2 National Waste Management - Recycling

4.2.1 Recycling Rates

According to EPA data, municipal solid waste recycling rates continue to increase on a total tonnage and percentage basis, which can be seen in the figures on the next page.

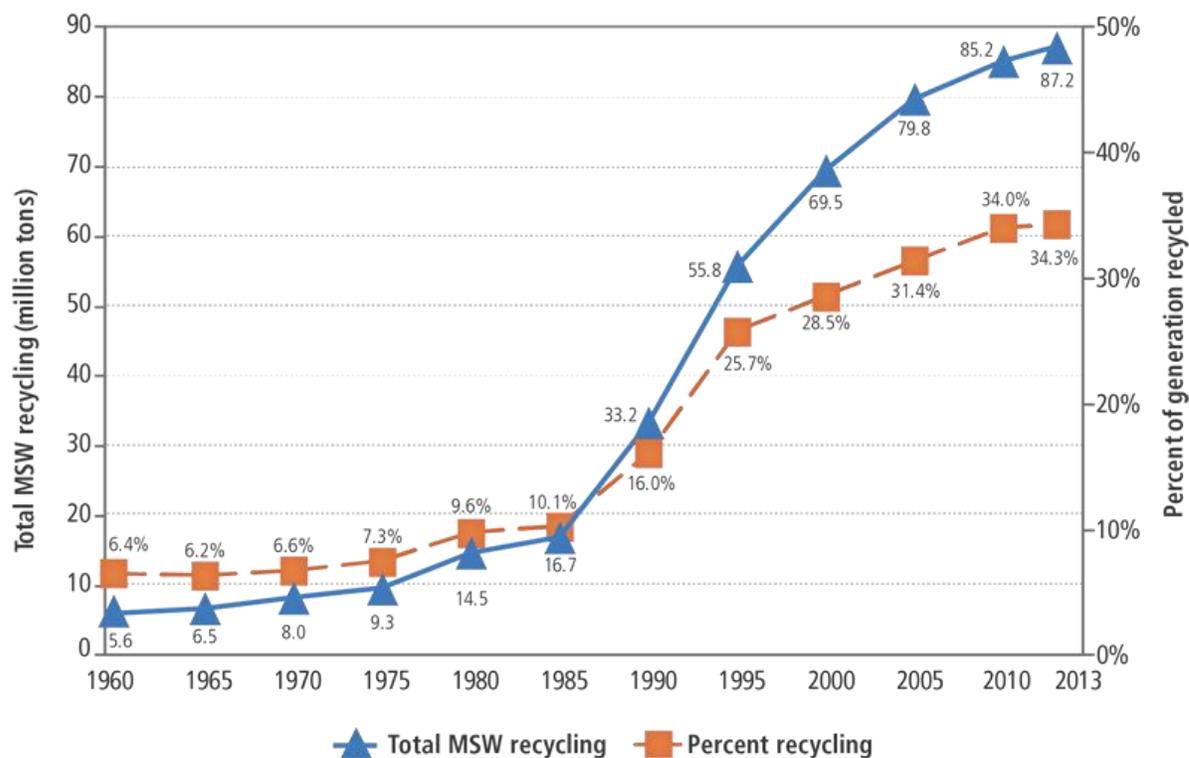


Figure 45 – MSW Recycling Rates (1960-2013)

4.2.2 Recycling Rates by Material

Recycling rates vary widely by material, with batteries (99.0 percent), steel (70.6 percent), paper (67.0 percent), yard waste (60.2 percent) and aluminum (55.1 percent) having the highest recycling rates. Meanwhile, glass and plastic (#1 and #2) have recycling rates that are all below 35 percent. As a means to increase recycling rates for these materials, eleven states (CA, CT, DE, HI, IA, MA, MS, MI, NY, OR and VT) have implemented container deposit rules. Although deposit rules have been found to increase recycling rates, there is still resistance to these programs due to the transactional costs at the point of purchase, with deposits generally being between \$0.05-0.10 per container.

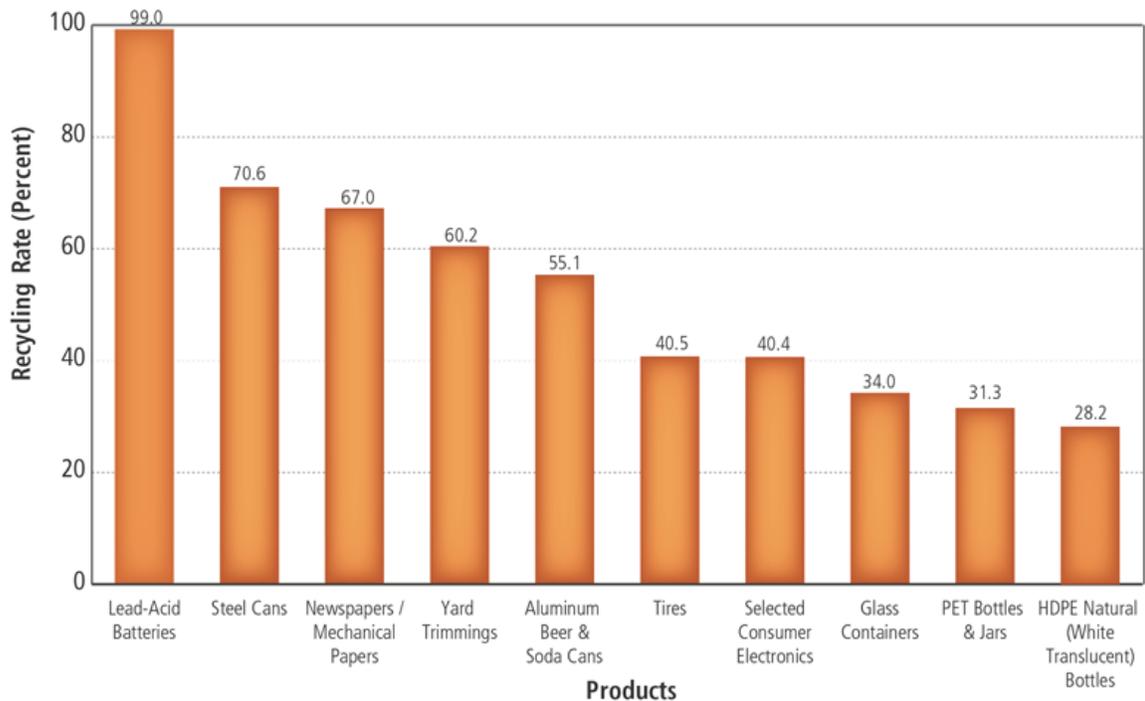


Figure 46 – Recycling Rates of Selected Products (2013)

(Source: U.S. EPA, 2015)

4.2.3 Recycling Rates by State

Similar to the recycling rates by material, the recycling rates by state also vary widely, with the national average being 34.1 percent. According to Biocycle (The State of Garbage in America, 2010), California (64.8 percent), New Jersey (58.7 percent) and Minnesota (44.0 percent) are the reported leaders in recycling, with the next closest state being Vermont at (36.8 percent). This same reports indicates that Wisconsin has a recycling rate of 23.3 percent, which would also place it behind Iowa (29.3 percent) in the Midwest. Other states in the Midwest are reported as having much lower recycling rates, including Ohio, (19.1 percent), Michigan (7.0 percent), Illinois (6.4 percent), and Indiana (6.3 percent). In 2014, Minnesota updated their recycling legislation for the first time in more than 25 years. The updates are intended to expand funding, encourage more composting, and require businesses to follow similar recycling rules as homeowners.

4.2.4 Material Recovery Facilities (MRFs)

There were 797 MRFs in operation in the U.S. in 2013, which is a substantial increase from the 633 MRFs in operation in the U.S. in 2010. Similarly, the estimated throughput of these facilities in 2013 was approximately 140,000 tons per day, as compared with an estimated throughput of 100,000 tons per day in 2010. Similar to landfills, as the technology associated with recycling and material recovery has improved, the size of MRFs has also gotten larger. One example of this would be the single steam MRF constructed in Appleton, in 2008 by Brown, Outagamie and Winnebago counties, which serves approximately 15 percent of the population in Wisconsin.

4.2.5 National Recycling Trends

4.2.5.1 Single Stream Recycling

Given the improvements in sorting technology, single stream recycling is being more widely implemented because of the ease of collection and increased recycling rates that have generally been achieved. Although there was some initial resistance to single stream recycling, primarily from the paper industry, most of their original concerns have not been found to be significant. It should be noted markets for recovered materials have been in decline over the past several years and as one example of this the Brown Outagamie Winnebago (BOW) single stream MRF is currently not providing payments to municipalities for recyclables, a function of deteriorating global economic conditions, which lead to a similar decrease in commodity prices during the economic collapse of 2008-2009.

4.2.5.2 Recycling of Additional Materials

Given that recycling has become a mature industry, many programs have begun to expand and collect additional materials beyond the more traditional recyclables of paper and containers. This would include, but is not limited to, products such as computers and electronics, plastic, shingles and other types of construction and demolition debris, and food scraps. Because organics represent a significant percentage of the waste stream, this has been the focus in several areas, including Madison, Wisconsin, which did a pilot curbside collection study, and Eureka Recycling in Minnesota that commissioned a study by SEH and RSS. It should be noted that Saint Paul did have a new plan to recycle and compost 75 percent of their waste (a 30 percent increase over the current rate), but the mayor did not include the plan in his draft 2013 budget.

4.2.5.3 Organics Recycling

Organics materials are a significant percentage of the waste being disposed in landfills. There has been increased awareness and interest in alternative options for the management of organics, including composting and waste-to-energy. Efforts to more fully utilize these organic materials will likely continue going forward as recycling rates for more traditional recyclables level off.

4.2.5.4 Producer Responsibility Laws

There has been an increased emphasis on producer responsibility, particularly for products such as computers and electronics, compact fluorescent light bulbs, and other materials that can contain hazardous or toxic materials. A number of different models have been implemented in several states for the management of these types of products.

4.2.5.5 Zero Waste

Communities and many large corporations are embracing the concept of zero waste as a mechanism to achieve sustainability. The emphasis of zero waste is to move materials up the waste management hierarchy, which is defined as follows in Wisconsin:

1. Reduce
2. Reuse
3. Recycle
4. Compost

5. Incineration with energy recovery
6. Landfill
7. Incineration without energy recovery

Given that incineration with energy recovery is above landfilling in the waste management hierarchy, this could potentially provide the Department with a competitive advantage as companies in the region seek out opportunities to achieve zero waste.

4.3 Alternatives to Landfills and other Resource Recovery Options

Several alternatives to landfills are increasingly being utilized at the national level and are summarized below:

4.3.1 Composting of organics

Given the increased implementation of municipal recycling programs, yard waste, food waste and other organics have now become a larger percentage of the total material disposed in landfills. Although these materials can generate biogas in a landfill over time, composting often represents a better environmental option. Therefore, composting programs have been expanded to the point that 57.5 percent of yard waste is now recovered at approximately 3,600 facilities in the U.S. However, only about 2.8 percent of food scraps are recovered. Yard waste is banned from landfills in Wisconsin. However, on July 1, 2015, Iowa lifted a ban on landfilling of organics for landfills with gas-to energy systems. Interest in mixed waste composting of unsorted waste has also been increasing nationally, with 12 mixed waste composting operations in the U.S. in 2013 that processed approximately 1400 tons/day.

4.3.2 WTE (WTE, high solids anaerobic digestion)

According to EPA, 32.66 million tons of MSW was incinerated in 2013, the latest date for which figures are available. There were 84 WTE facilities, including four that were considered to be inactive. Sixty-four of these facilities are characterized as mass burn, 13 use RDF and the remaining seven are modular. Sixty-two of these are used for electricity generation, 18 are combined heat and power systems and the remaining four are used for steam production. These facilities are estimated to have a daily throughput of nearly 100,000 tons and a capacity of 2,554 megawatts of electricity. The trends for WTE facilities can be seen in Figure 47.

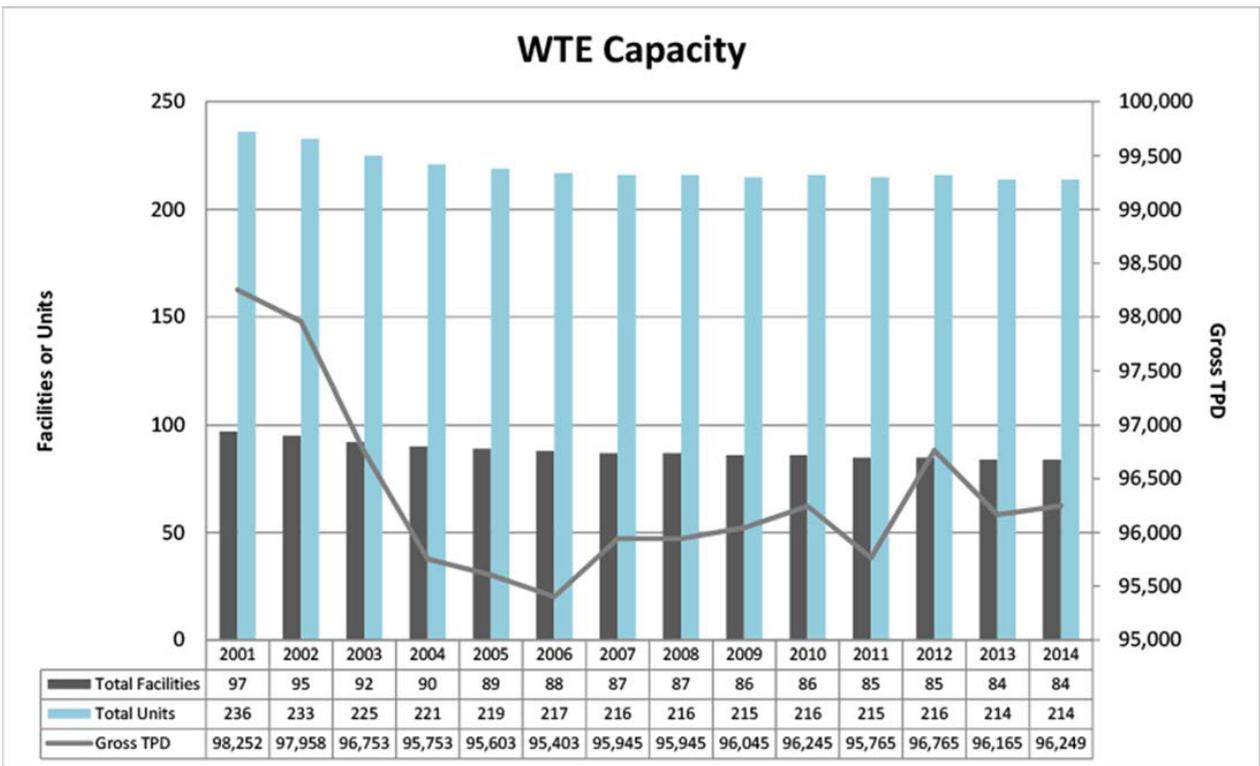


Figure 47 – WTE Capacity

Wisconsin has two WTE facilities, the Barron County WTE & Recycling Facility and the Xcel Energy WTE facility, with 16 additional facilities located in the Midwest. An additional WTE facility was proposed in the Green Bay area, although this project has encountered several permitting issues at the state and local level, resulting in legal action going all the way to the Wisconsin Supreme Court.

Many states continue to define WTE as renewable, which potentially provides a financial incentive for these systems. The states defining WTE as renewable can be seen in Figure 48.

States Defining WTE as Renewable

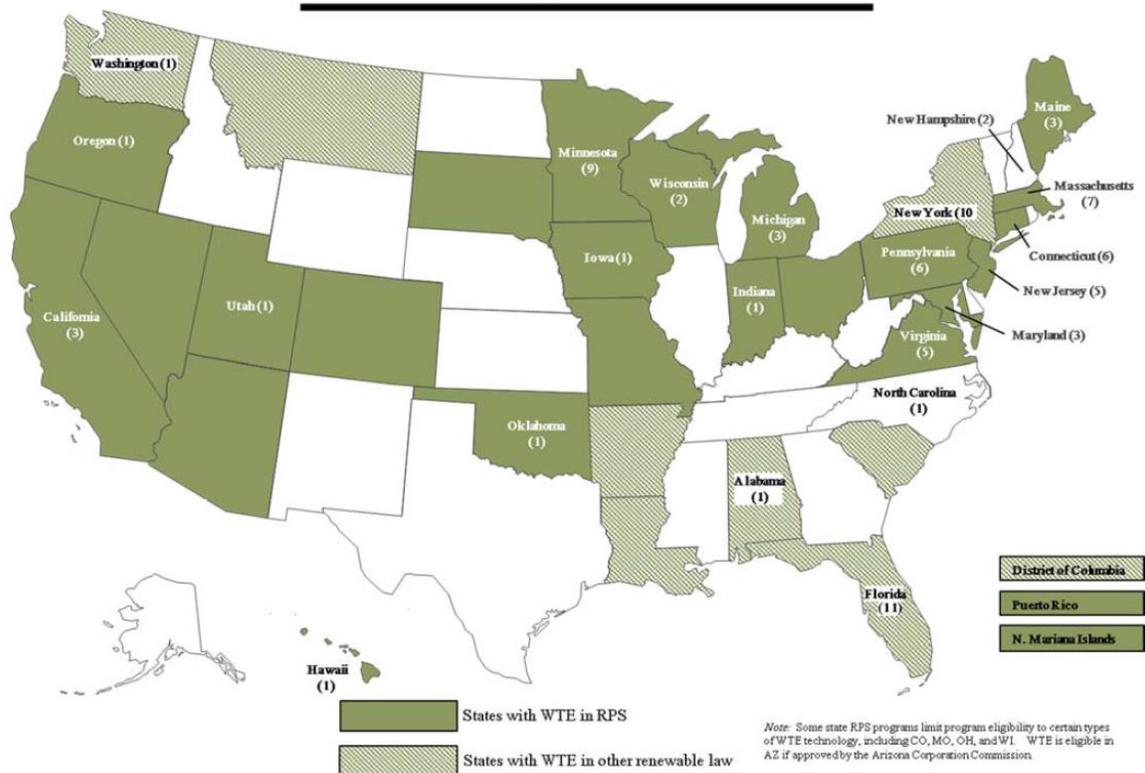


Figure 48 – States Defining WTE as Renewable

From an environmental perspective, a life cycle emissions analysis conducted by the US EPA found that WTE facilities reduce the amount of greenhouse gases as CO₂ equivalents (GHGs or CO₂e) in the atmosphere by approximately 1 ton for every ton of MSW combusted. (<http://www.epa.gov/wastes/nonhaz/municipal/wte/airem.htm#7>) (Figure 49).

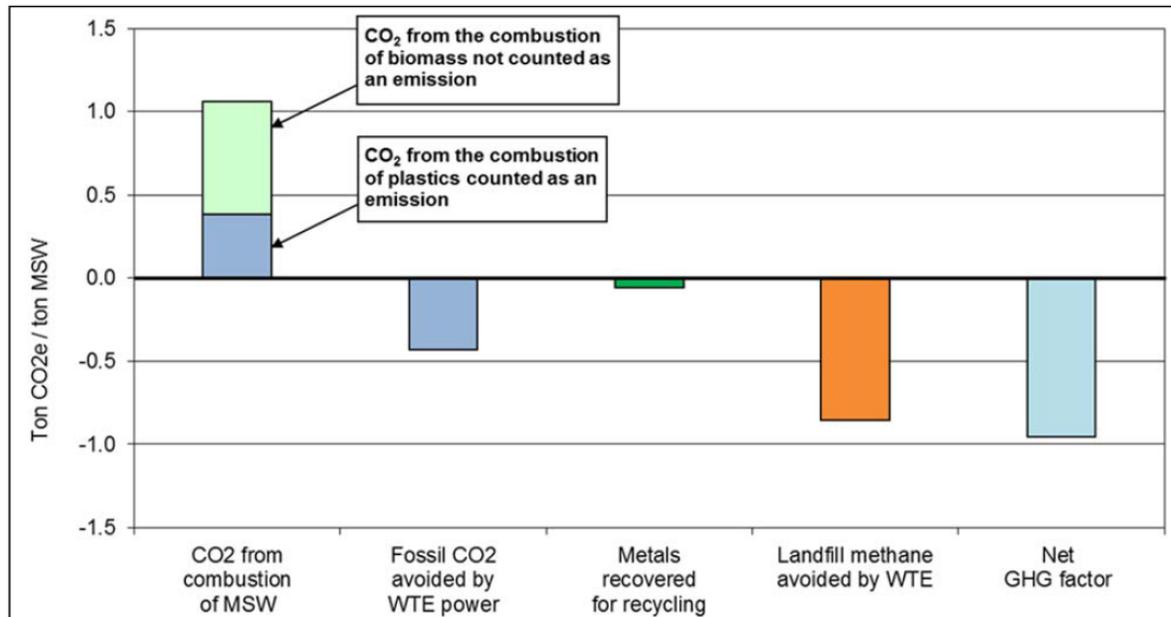


Figure 49 – LCA of WTE

U.S. EPA scientists, in a prominent peer reviewed paper, concluded WTE facilities reduce GHG emissions relative to even those landfills equipped with energy recovery systems.

Several new high solids anaerobic digestion facilities have been constructed or proposed to handle organic materials in Wisconsin, with the Bioferm system that was constructed at the University of Wisconsin-Oshkosh being the first of its kind in the US. Similarly, a \$30 million project was announced for Whitewater, Wisconsin, which would include a high solids anaerobic digester, composting and several other ventures to utilize the compost, power and heat that would be generated by this project. Additional liquid digesters, with the potential to handle some high solids content wastes, have also been constructed by NEW Organics in Denmark, Wisconsin. This is consistent with similar efforts that have taken place in other regions of the US and Canada. However, with the value of Power Purchase Agreements (PPAs) expected to decline in Wisconsin, these types of system may face some economic challenges in the near-term future.

4.3.3 Landfills as Resource Recovery Facilities

Landfills are increasingly being viewed as resource recovery facilities that represent the last opportunity for waste diversion. One example of this approach is in Austin, Texas, which has the following mission statement: “Austin Resource Recovery provides a wide range of services designed to transform waste into resources while keeping our community clean. Our goal is to reach Zero Waste by 2040, which means reducing the amount of trash sent to landfills by 90 percent.” Similar examples can also be found in states with high recycling rates such as California, where Recycling Market Development Zones are being created, which act similar to Tax Incremental Financing (TIF) districts. As landfills become larger, the opportunities for resource recovery become greater because of the aggregation of more materials in one location, which can lead to increased innovation and economies of scale.

4.3.4 Emphasis on Greenhouse Gas Emissions

An EPA report from 2009 titled *Opportunities to Reduce Greenhouse Gas Emissions through Materials and Land Management Practices* indicates that approximately 42 percent of US. greenhouse gas emissions are associated with materials management, which included end of life management of these materials. Emissions from municipal and industrial landfills have decreased 16.2 percent since 1990 according to EPA statistics, but still account for 108 million tons of CO₂ equivalent. This decreasing trend is expected to continue with additional gas-to-energy projects and the increased use of gas destruction equipment. As shown for WTE, the use of tools such as life cycle emissions analysis will increasingly be used to identify opportunities to improve efficiency, with additional reporting of emissions of greenhouse gases likely being required.

4.3.5 Compressed Natural Gas (CNG)

Landfills are increasingly considering the recovery of biogas for CNG, which can be used to fuel vehicle fleets. This can be particularly attractive for some landfills because of the relatively low efficiency achieved by engine-generators currently used to produce electricity from landfill gas, as well as unfavorable PPAs in some states. In addition, refuse vehicles may represent a substantial fleet that can potentially be converted to CNG, although the cost for the conversion can range from \$35,000-50,000 per vehicle.

4.4 Regional and Local Waste Management Trends – Solid Waste

4.4.1 Waste Management in the Upper Midwest

Waste management trends in the Midwest have been similar to the rest of the US. as it relates to the decreasing number of landfills, the increasing size of landfills and increasing tipping fees. The La Crosse County Landfill has not raised its tipping fee since 2008 and actually lowered the rate in 2011, resulting in a current tipping fee that is lower than the 1991 fee. In 2015, the La Crosse County Landfill tipping fee was in the mid-range of tipping fees for all landfills in Wisconsin (Figure 50).

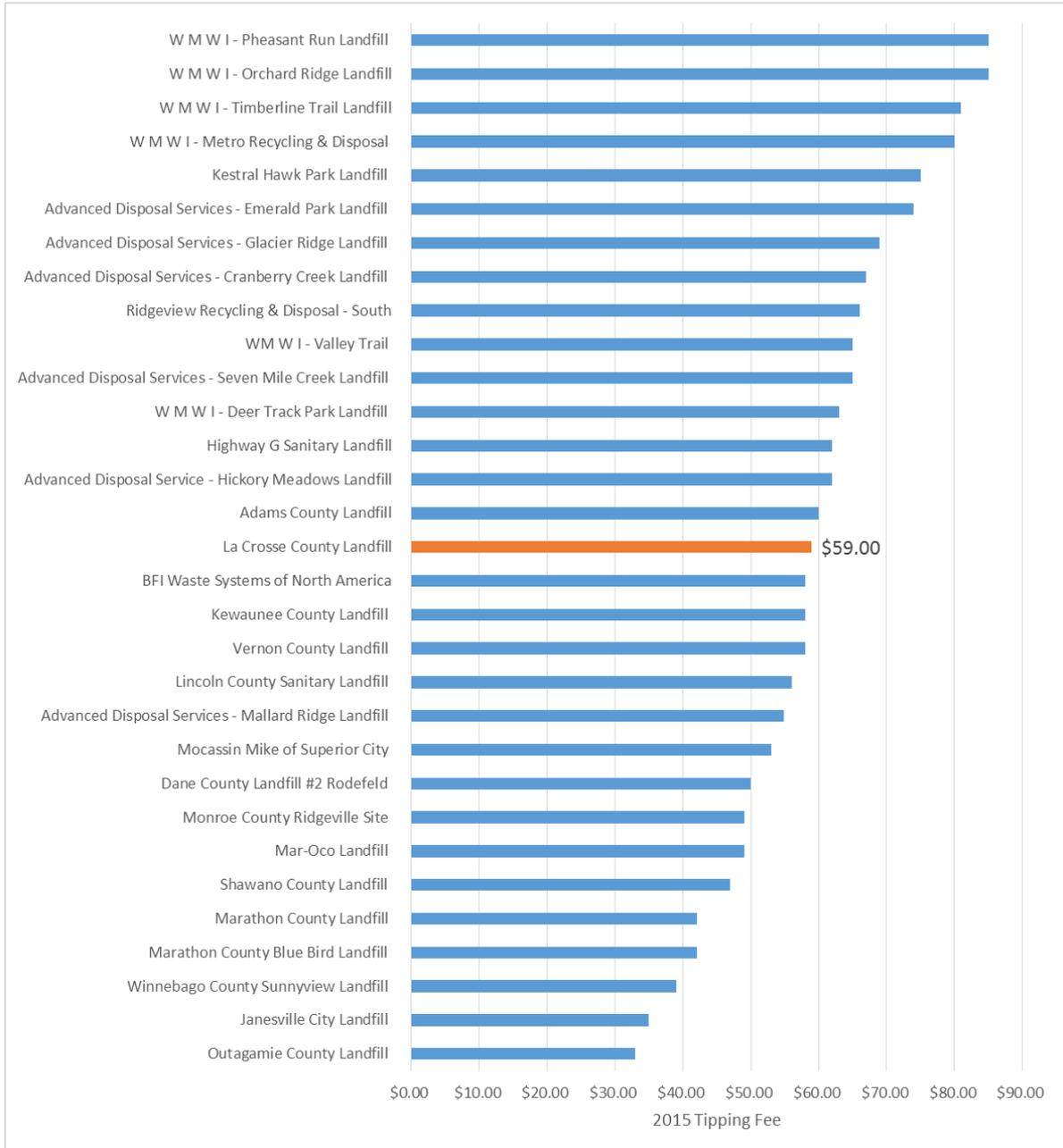


Figure 50 – Average Posted Gate Tip Price (2015)

4.4.2 Decline in out-of-state waste entering Wisconsin

Due to the change in the landfill tipping fee in Wisconsin in 2009, which was increased by \$7.10 per ton, as well as higher fuel costs, the amount of out-of-state waste disposed in Wisconsin decreased substantially in 2010 and in subsequent years, according to the WDNR. This can be seen in Figure 51 below.

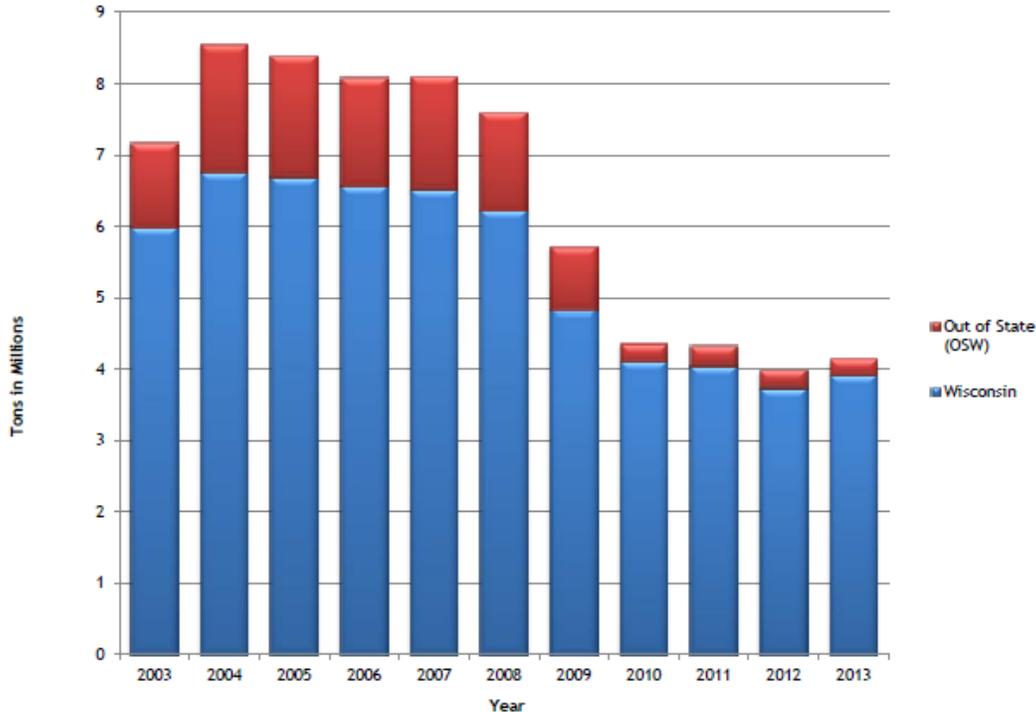


Figure 51 – Decline in Out-of-State Waste

Given the proximity of the La Crosse landfill to Minnesota, changes in tipping fees in Wisconsin and Minnesota are an important consideration.

4.4.3 Major Trends – Midwest Region

Solid waste management trends in the Midwest are likely to be similar to rest of the US and focus on resource recovery projects (including organics recovery and composting), CNG projects and GHG reductions. Barriers may exist in the Midwest for some of these projects, including: low electricity costs, reduced need for utilities to purchase green power to meet renewable portfolio standards, and the lack of public/private funding for what are often large and complicated projects. However, on the positive side, many large businesses such as Wal-Mart nationally and Gundersen Lutheran in La Crosse are embracing these types of options and investments in an effort to become more sustainable.

4.5 Regional and Local Waste Management Trends – Recycling

4.5.1 Future of Recycling in Wisconsin

State and local budgets were significantly impacted by the global recession that began in 2008. With the decrease in tax revenue, funding for recycling became a very contentious issue in Wisconsin. This discussion was further compounded by the fact the program revenue from the sale of recyclables was also adversely impacted by the lack of demand during the recession. Recycling markets and revenue did recover somewhat, but have more recently started to decrease again. Although funding for recycling was ultimately continued at similar levels for the 2011-13 and subsequent biennium, reimbursements for local recycling programs were reduced by \$4 million per year in the 2015-17 budget. It should also be noted that several programs that supported recycling in Wisconsin were also eliminated in the 2015-17 state budget, including the UW Extension Solid and Hazardous Waste Education Center and the UW System Solid Waste Research Council.

According to the most recent large analysis of recycling trends by the WDNR, recycling in Wisconsin has remained relatively consistent since the implementation of the recycling law in 1991. The cost/ton for recycling services has decreased since the early 1990s, although the eligible costs and cost per capita nearly doubled. The total number of RUs has increased as well, from 946 in 1993 to 1,058 in 2010 (Table 2).

Table 2
Recycling Data Comparison: 1993 and 2010

Year	1993	2010
Number of R US	946	1,058
Cost/Ton	\$295	\$242
Cost/Capita	\$8.50	\$14.75
Total Tons	220,000	393,467
Eligible Costs (Millions)	41.7	71.6

More recent data on the materials collected by year, as well as the market value of the recycled materials, can be seen in Figure 52 and Figure 53, respectively.

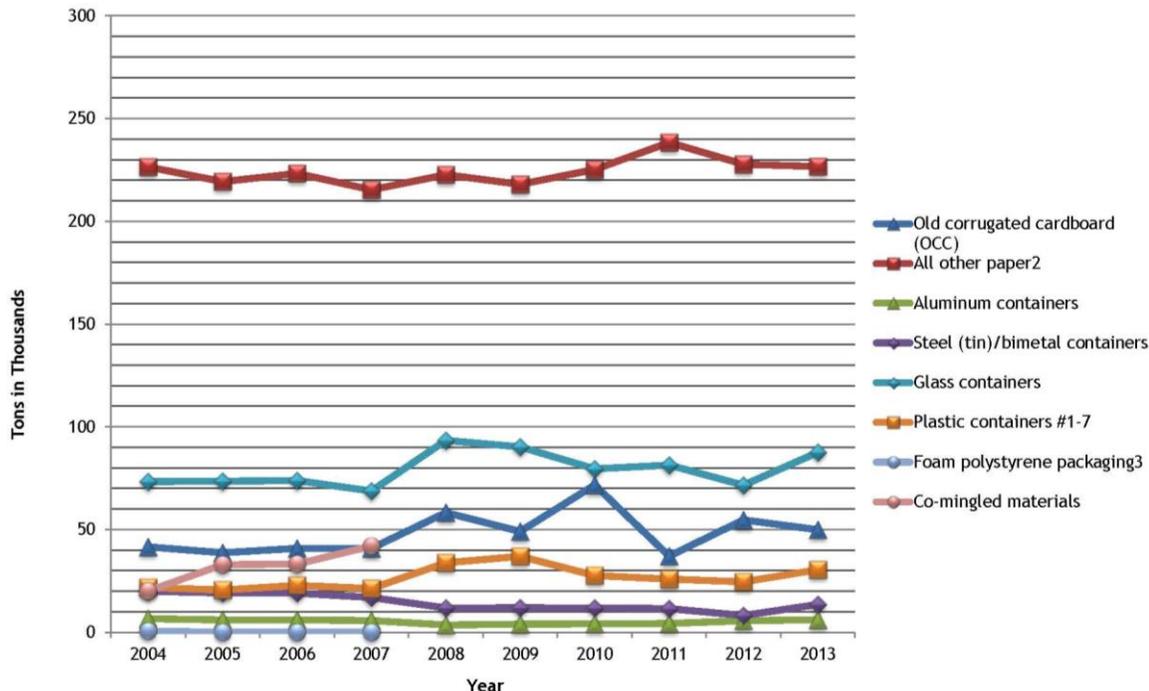


Figure 52 – Recyclable Material by Commodity (2004-2013)

Material	MRF Tons Processed ²	2012 Avg \$/Ton	Market Value
Old corrugated cardboard (OCC)	234,042	\$101	\$23,652,328.99
All other paper ¹	367,312	\$62	\$22,942,318.76
Aluminum containers	8,425	\$1,386	\$11,674,946.16
Steel (tin)/bimetal containers	18,330	\$240	\$4,391,930.30
Glass containers	121,676	\$5	\$575,525.45
Plastic #1 mixed	5,945	\$379	\$2,251,147.71
Plastic #2 clear	3,401	\$722	\$2,455,083.06
Plastic #2 colored	2,876	\$410	\$1,178,330.22
Total	762,008		\$69,121,610.63

¹ Includes some non-banned paper, primarily residential mixed paper

² MRF data includes RU data and other commercial sources. Data does not include Plastics #3-#7 or mixed bales because pricing data is not available for those commodities.

Figure 53 – Revenue from the Sale of Recyclables

4.5.2 Major Trends

4.5.2.1 Single Stream Recycling

Given the improvements in sorting technology, single stream recycling is being more widely implemented in Wisconsin because of the ease of collection and increased recycling rates that have generally been achieved.

4.5.2.2 Resource Recovery Parks and Recycling of Additional Materials

As noted previously, many communities are focusing on zero waste initiatives and therefore determining what additional materials may be diverted from landfills for beneficial reuse. The Eureka Recycling program in Minnesota is one example and Brown County in Wisconsin has also been examining these types of options in conjunction with the future development of a new landfill site that will serve Brown, Outagamie and Winnebago counties. Similarly, a \$1.7 million investment was made at the single stream MRF in Outagamie County to allow for the recycling of additional materials including plastics #3-7 and cartons.

4.5.2.3 Producer Responsibility Laws

Computers and electronics represent one of the first materials to be dealt with this way in Wisconsin, but there are efforts to include other materials in the future.

4.6 Growth Projections

Creation of solid waste is tied to population and economic activity. Typically, more people and more economic activity leads to higher volumes of solid waste requiring management. This section of the report presents waste generation projections from two different sources. The Mississippi River Regional Planning Commission estimated waste generation figures as part of its regional 2014-2034 Comprehensive Plan update. The second set of projections is based on population growth projections within the disposal system service area.

4.6.1 State Projections

The population within the current service area is projected to increase 11 percent over the period 2010 to 2030, resulting in an additional 21,707 people living within the service area (Table 3). Using EPA's estimate of 4.3 lbs. per person per day for waste generation, the net result would be an additional 17,035 tons of waste generated annually as result of population growth.

**Table 3
La Crosse Disposal System Population Projections, 2010 to 2030**

Area	2010 Census	2030 Projection	Numeric Change	Percent change
City of La Crosse	51,320	52,700	1,380	2.7%
City of Onalaska	17,736	21,950	4,214	23.8%
Town of Bangor	615	640	25	4.1%
Town of Barre	1,234	1,450	216	17.5%
Town of Burns	947	950	3	0.3%
Town of Campbell	4,314	4,400	86	2.0%
Town of Farmington	2,061	2,410	349	16.9%
Town of Greenfield	2,060	2,535	475	23.1%
Town of Hamilton	2,436	2,895	459	18.8%
Town of Holland	3,701	4,985	1,284	34.7%
Town of Medary	1,461	1,605	144	9.9%
Town of Onalaska	5,623	6,305	682	12.1%
Town of Shelby	4,715	4,765	50	1.1%
Town of Washington	558	515	-43	-7.7%
Village of Bangor	1,459	1,650	191	13.1%
Village of Holmen	9,005	12,120	3,115	34.6%
Village of Rockland	594	680	86	14.5%
Village of West Salem	4,799	5,565	766	16.0%
Sub-Total of La Crosse County	114,638	128,120	13,482	11.8%
Buffalo	13,587	13,470	-117	-0.9%
Trempealeau	28,816	32,810	3,994	13.9%
Houston	19,027	20,696	1,669	8.8%
Wabasha	21,676	24,355	2,679	12.4%
Sub-Total Regional Partners	83,106	91,331	8,225	9.9%
Total La Crosse County Regional System Population	197,744	219,451	21,707	11.0%
La Crosse County % of Total Population	57.97%	58.38%		
<i>Source: Wisconsin Department of Administration and U.S. Census Bureau</i>				
<i>Minnesota State Demographic Center</i>				

4.6.2 Regional Planning Commission Projections

Table 4 provides estimates and projections on solid waste generated in the nine-county region in 2013 and for the planning year 2034. It should be noted these projections are derived from a broader geographic area than the current La Crosse regional disposal system represents.

Table 4
Mississippi River Region Municipal Solid Waste Generation Projections – 2034

Jurisdiction	2034 Population ¹	Total MSW Generated in Tons Annually ²	Amount Recycled in Tons ³	Amount Composted In Tons ⁴	Amount Combusted for Energy Recovery ⁵	Amount Landfilled ⁶
Buffalo	13,362	9,754	2,926	780	5,443	605
Crawford	17,232	12,579	3,774	1,006	0	7,799
Jackson	23,336	17,035	5,111	1,363	5,281	5,281
La Crosse	129,488	94,526	28,358	7,562	52,746	5,861
Monroe	53,766	39,249	11,775	3,140	2,433	21,901
Pepin	7,165	5,230	1,569	418	0	3,243
Pierce	46,405	33,876	10,163	2,710	0	21,003
Trempealeau	33,154	24,202	7,261	1,936	7,503	7,503
Vernon	35,980	26,265	7,880	2,101	0	16,285
Region	359,888	262,718	78,815	21,017	73,406	89,480
State	6,456,198	4,713,025	1,413,907	377,042	565,563	2,356,512
U.S. ⁷	386,364,400	282,046,012	73,331,963	22,563,681	22,338,044	163,812,324

¹ Population for counties and state of WI are 2013 U.S. Census Estimates. Population for U.S. is 2012

² Municipal solid waste generation based on consideration of both EPA 2012 nationwide estimate of 4.38 pounds per person and State of Wisconsin 2013 Estimate of 3.73 pounds per person waste generated, that included out of state wastes. An average of 4.0 pounds per person was used based on average of the two for County and State Estimates. 4.38 lbs was used for U.S. Estimate in 2013 but 2024 U.S. estimate used 4.0 lbs per person per day due to downward trend.

³ Recycling rate based on EPA's 2012 U.S. percentage estimate of 26 percent. Each county and state of Wisconsin percentages were increased to 30 percent due to Wisconsin's recycling law and report stating that communities that use waste-to-energy facilities have higher recycling participation rates.

⁴ Composting rate based on EPA's 2012 nationwide percentage rate of 8 percent.

⁵ Waste to energy rate estimate is based on estimated population in region using Xcel facility: Buffalo County - 90 percent, Crawford County - 0 percent, Jackson County - 50 percent, La Crosse County -90 percent, Monroe County -10 percent, Pepin County – 0 percent, Pierce County – 0 percent, Trempealeau County – 50 percent, Vernon County – 0 percent. Percentages are applied after reduction in each county for recycling and composting. U.S. Projection and State of WI are based on 2012 EPA Report of 12 percent of total waste generated.

⁶ Landfilled estimate is the amount of waste remaining after reduction for recycling, composting and energy recovery

⁷ All U.S. data is based on figures and percentages in 2012 EPA Report for Nation.

It is projected that total solid waste generated in the region will grow from 233,139 tons to 262,718 tons per year or about 13 percent over this time period. Recycled wastes are estimated to grow from 69,942 tons to 78,815 tons per year. Composting is also expected to increase commensurately with population growth increasing from 18,651 tons to 21,017 tons per year. The amount of waste in the region that will be burned for energy recovery at Xcel's WTE facility is expected to increase from 66,053 tons to 73,406 tons or 11 percent based on the percentage estimate of waste that is delivered to Xcel's WTE facility from each county after, accounting for recycling, and composting. The remaining amount that will be landfilled in 2034 is expected to increase by 10,985 tons a year, (from 78,495 to 89,480 tons), which would represent a 14 percent increase over current levels.

4.6.3 Conclusion

Based on population projections it is estimated that waste generation within the current contracted communities will increase by over 17,000 tons annually by 2030. The MRRPC projections show an increase of 29,579 tons of MSW generated annually by 2034. This figure includes other counties outside the current La Crosse regional disposal system.

It appears that total solid waste generation in the La Crosse regional disposal system has been and will continue to increase in the future, however accurate projections for future landfill demand is challenging due to the large number of assumptions which must be made regarding competition, waste flow, recycling trends, and changes in technology.

5.0 Strategic Issues and Recommendations

This section of the report summarizes key issues facing the La Crosse County regional disposal system over the next five years and beyond. For each issue a set of strategic recommendations was identified. Through annual work planning and on-going priority setting exercises with system partners, specific initiatives will be developed and implemented based on the recommendations contained in this SWMP update and others.

As part of Phase I of this planning process, personal interviews were conducted with representatives of various stakeholder groups, including representatives from:

- La Crosse County staff and local elected officials
- La Crosse County Administrator
- La Crosse County Finance Director
- Contract holders in the region
- The surrounding counties of Monroe, Vernon, and Winona
- Private companies such as waste haulers and Xcel
- State and regional officials

Based on the results of the stakeholder engagement activities, discussion with Department staff, prior document review, and a review of recent trends impacting the system, a set of strategic issues was identified. Listed below are the key challenges, or strategic issues, facing the system over the next five year time period and beyond. They include:

1. **Financial Stability** – how can the Department maintain financial stability while remaining competitive?
2. **Xcel Energy’s WTE facility**– how can the Department strengthen its current partnership with Xcel Energy to the benefit of both parties and the regional disposal system as a whole?
3. **Waste Stream Security** – how can the Department secure an adequate waste stream now and in the future to achieve its financial objectives?
4. **Regional Cooperation** – how can the Department strengthen regional partnerships and better serve the region?
5. **Moving from Public Relations to Community Outreach** – how can the Department pro-actively engage its stakeholders and partners to better meet their needs?
6. **Operational Effectiveness and Efficiency** – how can the Department gain efficiencies and better meet the needs of its users through new technologies?
7. **Succession Planning and Institutional Knowledge** – how can the Department retain and attract talented, innovative staff with visionary leadership?
8. **Land Use** – how can the Department maintain and manage the long range vision for the landfill site as identified in the La Crosse County Landfill Master Land Use Plan.

5.1 Strategic Issue No. 1 – Financial Stability/Sustainability

How can the Department maintain financial stability while remaining competitive?

5.1.1 Background

- The Department is in good financial shape today, however it faces several significant financial challenges over the next 5 year period.
- A mix of expenditure reductions and revenue increases is currently being employed.
- The County’s current financial management tools and software are not well suited to meet the needs of the Department, which utilizes an enterprise fund and therefore has distinct needs compared with other County’s departments.
- The HHM program is currently running a deficit and the one dollar per capita funding agreement is set to expire in 2017.
- To maintain the current level of service, the HHM program needs a sustainable model that provides a higher level of funding. A decision needs to be made to find additional funding or change the level of service to match current funding levels.
- The contract with Xcel Energy, the Department’s largest source of revenue, is set to expire in 2023. This contract is very important to the financial stability of the System.

- Expenses are exceeding revenues on an annual basis (as of 2014), requiring the Department to use reserve funds to balance accounts. There has been some discussion about increasing the landfill tipping fee, which in turn could make the landfill less competitive in the market place.
- The County recently decided to re-finance some of its current debt obligations, including those of the Department, resulting in lower annual principal and interest payments through 2026. The intent is to manage reserve funds so that the Department can “pay as it goes” for the next 5-10 year period.

5.1.2 Why it is Important – Consequences of Not Addressing the Issue

- The Department is run as an enterprise fund, so financial stability is critically important in order to maintain operations and continue providing a high level of service.
- If the Department is not managed well it will go out of business, and stakeholders will not enjoy the benefits of a locally managed, environmentally sound waste disposal and resource recovery option.
- The HHM program needs a sustainable funding model in order to continue.
- Equity considerations are important – maintaining a system that is “fair” to all.

5.1.3 Strategic Recommendations

1. Develop a Tipping Fee Management Plan. The Department regularly reviews its tipping fees to determine if and when increases should occur. Key factors which are considered include a comparison to other landfill tipping fees, competitiveness, and elasticity of price. However, the current approach is reactionary and does not provide long term guidance. Therefore, there is a need to develop a well thought out policy statement with input from the County and stakeholders. The policy will need to reflect a number of factors, including the expectation that the reserve fund is going to be used to fund capital improvements over the next 5 to 10 year period. The policy should define the relationship between the amount of reserves and the appropriate tipping fee. For example, the policy would establish reserve thresholds, and indicate how the tipping fee should be adjusted based on future reserve levels.
2. Decide on how to continue private operation of the landfill versus switching to public operation of the landfill. A study was conducted in 2015 to look at the cost savings potential of bidding out or extending the current contract, versus internalizing landfill operations. The study concluded the private contractor is providing good value to the County and recommended that the County negotiate an extension of the current agreement, rather than operate the landfill internally or re-bid the landfill operation.
3. Develop a sustainable funding model for the HHM program. Under the current intergovernmental agreement, which expires in 2017, eighteen municipalities in La Crosse County contribute \$1/per capita toward the HHM program. Those funds are then matched by La Crosse County. Looking beyond 2017 a new funding model must be developed to maintain the current level of programming. Program funding needs are between \$400,000 and \$450,000 per year. It is recommended that the Department continue to update and utilize the existing white paper “Future of the La Crosse County HHM Program” in order to develop a new funding model in 2016.

4. Develop improved financial management tools. The current accounting system which the Department utilizes could be improved. The Department manages its budget through an enterprise fund, which is different from other County departments. For example, the Department needs to factor the amortization of its assets into its decision-making process. Predictive financial management tools and capabilities are needed to more effectively forecast longer range financial impacts and alternatives available to the Department.
5. Continue to monitor and evaluate all available financing options to ensure the long-term fiscal health of both the County and the Department. The County recently refinanced a portion of the Department's debt, and intends to re-finance another bond in 2016. The Department should continue to stay engaged in these and other financial management discussions to ensure its interests are understood and well represented.
6. Bring in additional waste from outside the region (also see waste security issue). This strategy may necessitate a greater investment in business development and marketing. There is an opportunity for increased revenue, however this is also a two edged sword. Additional waste will decrease the life of the landfill, open up the County to fees assessed by Xcel for overage under current contract, and result in increased operational costs.
7. Evaluate options for alternative daily cover. The Department should identify opportunities to increase alternative daily cover (ADC) tipping rates or limit select materials currently received as ADC. Such a strategy could provide additional revenue, however it could also result in a potential loss of customers if pricing were too high.
8. Identify other on-site revenue generators. The Department has been very proactive in terms of identifying and implementing cost saving measures. A similar, on-going focus, should identify additional on-site revenue generation opportunities.
9. Increase revenue from Landfill gas sales. Prior to the Gundersen agreement expiring in 2027 the County should explore other revenue generation opportunities related to landfill gas production. For example, the County should evaluate of the potential for utilizing LFG for compressed natural gas (CNG) vehicles.

5.2 Strategic Issue No. 2 – Relationship with Xcel Energy

How can the Department strengthen its current partnership with Xcel Energy to the benefit of both parties and the Disposal System as a whole?

5.2.1 Background

- Xcel Energy is a very large and important partner, and its current contract expires in 2023. Xcel Energy is looking at a contract extension to align with other contracts they have in place at Minnesota WTE facilities.
- Xcel Energy and the County have started discussions to extend the current contract to 2030.
- Xcel's facility is a cornerstone of the system, and provides an alternative to constructing more landfills.
- The system is only as strong as the relationship between the Department and Xcel Energy.

- The transition to single stream recycling in the cities of La Crosse and Onalaska has led to increased recycling volumes, which in turn has led to a decrease in the BTU/lb. of RDF at Xcel's WTE facility.
- The changing nature of the waste stream may at some point result in waste that is of such low quality that it is no longer financially feasible to burn.
- Large and bulky items delivered to Xcel's WTE facility are an issue. The Department currently pays handling fees for couches, pallets, tarps, other items that can't be processed with current equipment. There may be an opportunity in the future to convert these items into refuse derived fuel.
- There may be a trade-off between system stability and revenue generation. For example, extending the contract with Xcel Energy would provide greater stability to the system, however depending upon the conditions of the agreement it could limit the County's ability to adjust pricing in the future.
- The Department recently requested a change in state legislation asking for an exemption from the RDF residue charge (\$13/ton on 20 percent of tonnage coming from Xcel). The request was not successful, and the Department will therefore continue to incur approximately \$190,000 in annual costs related to the residue charge.
- The Department has received approval from the WDNR to place ash in the MSW landfill as an overlayment.
- The federal government has taken bold action to reduce GHG emissions by 2030. The executive actions will likely have a major impact on the electric utility industry. At the same time, the EPA continues to tighten air emission restrictions to address environmental concerns.

5.2.2 Why it is Important – Consequences of Not Addressing the Issue

- Extending the Xcel contract provides stability, allowing for investments in other parts of the system which may not be feasible without a long term agreement in place.
- If WTE is eliminated from the current system, it would have a significant impact on landfill operations. For example, if the region's waste is no longer combusted and more solid waste is sent directly to the landfill, the remaining air space at the landfill would be depleted at a much faster rate, thereby reducing the effective lifespan of the landfill.
- If Xcel chooses to send its ash elsewhere after the current contract expires the Department will lose out on a large revenue source. This is also related to the long-term debt issue that was presented earlier.
- The consequences of losing such an important facility could include: the need to manage larger amounts of additional waste at the landfill, the need to adjust tipping fees higher, and the need for additional air space. The loss of the WTE facility would also impact stability and cost control from an overall system standpoint.
- There is risk to the system associated with federal actions that change the economics of electric utility production, as well as future changes to air emissions requirements. If the Department does not maintain a close relationship with Xcel it may fail to anticipate future changes that may either undermine or strengthen the financial viability of Xcel's WTE facility.

5.2.3 Strategic Recommendations

1. Continue to benchmark the La Crosse Regional Disposal System's WTE Rate Structure. A comparison of rates with similar systems across the U.S. should be made in order to determine how cost effective the current arrangement is for the Department and its partners.
2. Pursue a contract extension with Xcel to reduce long term uncertainty. The negotiations may take up to several years and Xcel is currently proposing a 7-year extension to 2030. The Department should identify opportunities to increase allowable tonnages. If an agreement is reached, and depending upon terms of the agreement, the 2023 to 2030 time period may see a cash influx into Department as the current debt obligations will expire by 2023. This reduced uncertainty may place the Department in a stronger position to negotiate with other parties on items such as regional partnerships and long-term agreements.

The Department should encourage Xcel to consider transitioning the WTE facility to 24/7 operations to utilize more RDF and biomass from the region. This would provide an opportunity to bring in additional waste from other counties outside the current system boundaries thereby strengthening the overall system. It could also create a new operating environment for Xcel that could positively impact the Department by providing more flexible terms and conditions for the amount of waste the Department is required to deliver to Xcel on an annual basis. It should be noted that moving to a 24/7 operation would require significant capital investment and operational changes at the WTE facility.
3. Continue to develop trust and transparency between Xcel Energy, the County and the general public. The Department would like to know more about Xcel Energy's financial requirements at the WTE facility, which would help the Department negotiate more knowledgeably with Xcel, help the Department plan more effectively, pursue partnerships more effectively, and justify system costs and benefits to stakeholders.
4. Pursue legislative changes to get residue exempted from regulatory tipping fees. This strategy would provide cost savings for the system.
5. Evaluate partnership(s) with Xcel to determine if they would have financial benefit to the system. There may be additional front end processing opportunities that could be incorporated into the existing system. For example, the potential for utilizing the RDF facility and/or landfill to serve as a regional convenience center for pre-sorting and bulky waste should be examined to identify the potential for increasing shared revenue streams, increase waste diversion, and waste security. A jointly financed study with Xcel to evaluate and make recommendations is recommended.
6. Identify and evaluate alternatives to Xcel's WTE facility. The County and its regional partners should continue to assess alternatives to WTE by monitoring technology advances and investing in on-going professional development opportunities for staff, SWPB, and County Board members. Considering the current volume of waste which is directed to Xcel's WTE facility, there are twenty-seven years of remaining air space at the La Crosse landfill. Without the Xcel facility, there are approximately sixteen years of remaining air space at the landfill.
7. Secure waste from businesses that have "zero waste" policies. More and more businesses are developing policies to reduce their waste streams, as well as the

amount of waste material they send to landfills. Therefore, these businesses may find the System attractive, providing an opportunity to secure waste from outside the traditional service area. Where it is not financially feasible to ship waste from outside the System due to longer hauling distances, waste trades can be structured. These agreements allow waste generators with a desire to utilize WTE to “swap” waste with other waste generators closer to the system which are currently sending their waste to other landfills.

8. More strongly advocate for WTE. The federal government has recently set GHG reduction targets for 2030, which provides an opportunity for the system to position itself as a part of the solution to meeting those targets. The Department should strongly advocate for WTE at the state and federal levels by communicating how WTE can and should be an important component of policy efforts to reduce GHG emissions. It should also continue to communicate the multiple benefits of WTE locally, including enhanced resource recovery, GHG emission reductions, diminished need for landfilling, job creation, and economic development.

5.3 Strategic Issue No. 3 – Waste Stream Security

How can the Department maintain an adequate waste stream now and in the future to achieve its financial objectives?

5.3.1 Background

- Laws around flow control continue to change and be tested over time.
- Fuel costs, and the related transportation cost fluctuations may make securing waste from outside counties more or less economically viable.
- Increased recycling has led to lower BTU values of the RDF. To offset the BTU decrease, either more RDF must be incinerated, the efficiency of processing MSW into RDF needs to increase, or higher BTU quality waste must be delivered to Xcel’s WTE facility to generate equivalent revenues from energy production.
- Recycling continues to divert waste from the landfill, which translates into less revenue & need to secure more waste.
- There are currently changing perceptions of “waste” including both municipal and private sector publicized efforts to move toward “zero waste.” As a result, landfills increasingly seen as resource recovery facilities that represent the last opportunity for waste diversion.
- As more components of the traditional waste stream are diverted to other uses, there is potentially less overall waste available, resulting in the need to secure additional waste to keep the system financially viable.
- Uncertainty over what type of waste needs to be “secured.”
- Increase in producer responsibility laws. There is uncertainty regarding what the impact on the La Crosse regional disposal system and Xcel’s WTE facility will be.

5.3.2 Why it is Important – Consequences of Not Addressing the Issue

- There are significant financial implications associated with a changing market place for waste, one in which more and more material historically considered waste is removed from the waste stream. For example, lower BTU values result in a lower energy credit. There is also more competition for waste, resulting in lower fees.

- The financial viability of the Xcel WTE facility may deteriorate if there is not a sufficient amount of suitable waste available for RDF production.
- The County's contract obligations with Xcel stipulate the need to provide 73,000 tons/year of MSW. The ability to meet this obligation becomes more challenging as more and more waste is removed from the waste stream.
- There is a need to adjust the system to reflect the changing nature of waste – the Department must balance efforts to increase diversion with the need to secure waste in order to remain financially viable.

5.3.3 Strategic Recommendations

1. Within the next five years complete a white paper to examine the issue of flow control from a national, regional, and state perspective. The Department should continue to track local, state, and federal policies as they relate to flow control and be prepared to act on the issue when changes occur that could affect the system. Based on the results of the paper, the Department should schedule opportunities to educate stakeholders on the importance of waste stream security and current status of flow control policies.
2. Continue to assist haulers with educating their customers. Continue to assist haulers with educating their customers regarding which types of waste should go to which facility.
3. Find additional incentives that enhance waste security. As part of on-going continuous process improvements, the Department should continue to evaluate current programs, such as the hauler rebate program, in order to optimize program efficiency and value. At the same time, it should also identify new incentives that enhance waste security. These may include other types of incentives, not necessarily financial, such as those related to service and convenience.
4. Provide support to Trempealeau and Buffalo, Wisconsin, Wabasha, Minnesota and other Minnesota counties. The Department should first identify what each county's specific needs are as they relate to promoting more active involvement with the system. The Department should then pro-actively support the counties by providing the right tools for them to direct waste into the system. These tools may include, but are not limited to potential capital projects, technical presentations, and participation in strategic meetings.
5. Remove barriers to other counties becoming part of the La Crosse regional disposal system. Key barriers include: reluctance to bring additional users into the system for fear of diminishing the lifespan of the landfill, the lack of sense of urgency, satisfaction with current arrangement, and lack of awareness regarding need to secure additional waste. There is a need to more effectively promote system benefits to industry, counties, and municipalities. The Department, with backing of the SWPB, should also identify opportunities to secure waste from non-participating counties in the region and/or other potential regional partners.
6. Market system benefits more effectively and pro-actively to secure more business waste customers from outside the system. There are businesses located outside the system with strong commitments to sustainable practices which may find the system attractive. For example, businesses with zero waste policies may wish to utilize Xcel's WTE facility. The Department should encourage the participation of these businesses in the system. The Department should also leverage its reputation and success with superior environmental

performance to engage and attract more customers beyond those specifically focused on zero waste.

7. Evaluate the impact of expanded single stream recycling within the region. In order to understand the impact on Xcel's WTE facility, the Department and its partners should evaluate the cumulative impact of expanded recycling efforts that will likely result in a continued drop in RDF BTU values. Steps should be taken to quantify what the potential gap in fuel supply will be in 5, 10, and 15 years under different diversion scenarios. This effort may be a good project for a university student similar to the analysis conducted for the cities of La Crosse and Onalaska switch to single stream recycling.
8. Continue to investigate organics diversion partnerships. There is a growing trend is looking at the diversion of food waste and other organics from the waste stream. If the County is not in the front of this trend they are at risk of losing out on this waste stream coming into landfill. Organics diversion and processing could provide value to both system customers, stakeholders, as well as the landfill itself.

The Department completed an organic recovery pilot study in 2012 and has had discussions with municipal partners to evaluate the potential for incorporating organic wastes into an existing operation such as the City of La Crosse Wastewater Treatment Plant (WWTP). However, while there is an unmet need, and a growing trend which may provide a growth opportunity, the business model for organics collection and processing is unclear at this time. Therefore, it is recommended the Department and its partners periodically re-visit the organics processing opportunity to assess when the time is right to further pursue the opportunity.

If and when conditions do change and there is interest in exploring the concept further, it is recommended the Department engage additional stakeholders in future planning such as the following: local haulers, Western Wisconsin Technical College, Viterbo, UW-La Crosse, Wal-Mart, Kwik Trip, the Reinhart Foundation, Organic Valley, and the UW-La Crosse Foundation. These entities all have a stake in regional sustainability issues and may have fewer financial constraints than some municipalities, as well as the ability to utilize any available tax credits and incentives.

9. Continue to evaluate resource recovery and re-use opportunities at the landfill and across the region. The Department and its partners should continue to evaluate resource recovery and re-use opportunities by comprehensively characterizing potential waste streams in the region, identifying waste generators and special needs. An important goal should be to match businesses' existing waste products with other businesses' supply chain needs. Similar studies have been completed in northeast Wisconsin resulting in new business opportunities for private industry. Working with UW-La Crosse and/or other higher learning entities, the county and its partners should jointly examine opportunities to strengthen partnerships that support resource recovery, as well as also identifying new opportunities for private industry and academia to profit and learn from such endeavors.
10. Within the next five years conduct an audit of the system to determine what percentage of waste is being captured from within the region. The study should be structured to answer key questions such including: 1) What is the current amount of waste being captured from within the region? 2) Is an

adequate amount of waste being captured from within the region? 3) What is the right amount of waste to be captured from within the region? 4) Where is the greatest amount of waste leakage occurring?

5.4 Strategic Issue No. 4 – Regional Cooperation

How can the Department strengthen regional partnerships and better serve the region?

5.4.1 Background

- The State of Wisconsin's support for solid waste and recycling education and outreach ebbs and flows as a function of changes in state government, creating opportunities for regional cooperation and industry associations to provide leadership.
- Partnerships are important to the system. Significant changes are anticipated across the region over the next decade as existing managers retire and landfills run out of space.
- There is a growing demand for HHM services regionally. Collection of HHM, e-waste, and unused pharmaceuticals is currently handled by the Department, a value-added service to La Crosse and other counties.
- A need for public convenience center drop-offs was identified by stakeholders, but not clearly defined. This service is well established in some areas of the region and non-existent in others. There are other issues (ag bags, succession planning, yard waste, and changing funding levels) that are common to municipalities in the region and lend themselves to cooperative approaches.
- The Department does not currently have an active role in the collection of solid waste and recyclables from residences. This is handled by municipal governments. However, many counties in Wisconsin and in Minnesota play a stronger role coordinating collection services.
- Winona County, MN recently coordinated implementation of county-wide single stream recycling collection. Case studies such as Dunn County, Winona County and Outagamie County suggest there are potential cost saving approaches for collection such as coordinated contracting. The La Crosse County has been a catalyst for significant positive changes to the system, for example the collection study which led to the implementation of single stream recycling in La Crosse and Onalaska.

5.4.2 Why it is important – Consequences of Not Addressing the Issue

- To tackle big challenges, partners need to work together to achieve critical mass (such as addressing the ag bag issue).
- By not providing a greater level of service regionally, the environment as a whole suffers because more waste is disposed of improperly (HHM, for example).
- Without more regional cooperation the Department will miss out on opportunities to grow the system and help contribute to the triple bottom line of the region.
- The periphery of the system may be at risk as waste is siphoned off to other transfer stations and landfills.
- Without more regional cooperation waste stream security becomes a bigger challenge.

- Pursuing opportunities such as extending the life of area landfills by making greater use of Xcel's WTE facility will require strong regional cooperation.

5.4.3 Strategic Recommendations

1. Initiate formal discussions with surrounding counties and municipalities to gauge interest in a regional solid waste authority. Formation of a regional solid waste authority would provide an opportunity to achieve efficiencies on a regional basis while leveraging the existing assets of the region.

A desired outcome of the meetings will be to achieve alignment among key county and municipal-decision-makers regarding the approach and value of a regional system. If there is interest in pursuing the concept further, an approach such as the following is recommended.

- a. Identify the benefits and risks of stronger collaboration regionally
- b. Characterize current and anticipated needs as they relate to 1) Administration 2) Operations and 3) Public education and community outreach
- c. Catalogue existing assets

The results of the analysis described above should then be communicated broadly among regional SWPBs and elected officials. Pending the outcome of further discussions the Department and its partners should evaluate whether or not to proceed further with the concept of a regional solid waste authority. It may be appropriate to involve regional organizations such as the Mississippi River Regional Planning Commission (MRRPC) and 7 Rivers Alliance in these early discussions.

2. Identify an organizational framework. If there is interest in pursuing the solid waste authority concept, the Department and its partners should develop an agreement that strengthens regional collaboration in the short term, while also setting the stage for a potential future regional solid waste authority. Stakeholders should review and discuss documents like the Brown-Outagamie-Winnebago counties agreement that could be used to establish the framework for consolidation. This agreement has now been in place for 13 years and extends through 2027.
3. Offer to provide a greater level of waste management service to individual municipalities in the county. Stakeholder input identified several potential areas where the Department could provide additional service to municipalities. Opportunities include but are not limited to: serving as the RU for individual municipalities, assisting with contracting, and providing leachate management services.
4. Initiate discussions with municipalities to gauge their interest in coordinated contracting. The Department can be a resource to help municipalities save money and provide a higher level of service to area households, while simultaneously strengthening intergovernmental relationships. Case studies from other communities should be used to show the benefits of doing so. If there is interest in pursuing the concept further, the Department could begin by cataloguing existing contractual agreements, and then assisting interested municipalities with coordinated contracting. The Department could assist a group of municipalities with development of Request for Proposals (RFPs) for both recyclables collection services and recyclables processing and marketing services.

5. Use HHM services to incentivize additional regional cooperation. HHM is a service that many communities value. Strengthening and expanding the service to include additional communities, as well as marketing the service to smaller generators and commercial businesses should support related initiatives to enhance regional cooperation. The Department is currently working on developing a sustainable business model for the HHM service. Once the model is complete it could serve as a framework for developing additional cooperative regional services.
6. Continue to identify partnerships with the private sector, WDNR, and municipalities to improve and expand existing services and develop new ones. There is great potential for continuing to solve key issues with help from partners. The Department should continue to invest staff and resources into developing strong public-private partnerships to more effectively manage waste streams in the region. As was discussed in the section on Waste Security, a regional study to characterize existing waste streams could help identify new business opportunities for the private sector as well as for the La Crosse regional disposal system partners.
7. Initiate regional roundtable discussions and applied research that focuses on innovative waste management solutions. The Department and its partners should proactively engage with the MRRPC, the 7 Rivers Alliance, WI DNR, county planners, the UW System, and others to assist with exploring complex regional policy issues related to waste management. These issues may include sustainability, organics recycling, HHM services, energy independence, economic development, and others. Having other regional entities involved may help gain broader support, and build leadership to plan and implement new approaches to solid waste management in the region. A framework for initiating these types of discussions was identified by the SWPB during development of this plan. It calls for holding discussions around key issues, inventorying regional assets, and identifying potential partners for specific initiatives.
8. Provide assistance to priority regional initiatives and continue to work on regional issues. The Department should continue to provide leadership on topics such as waste diversion and beneficial re-use including ag plastic bags, mattresses, shingles, and C&D recycling. While the Department continues to identify new partnerships and regional opportunities it should continue to support existing efforts to solve waste management challenges that are common across the region.
9. Provide leadership to support new partnerships among industry associations, state agencies, and publically owned landfills. As fewer state resources are made available to support solid waste and recycling research and outreach, there is an opportunity for organizations such as Wisconsin Counties Solid Waste Management Association, Solid Waste Association of North America – Wisconsin Badger Chapter, Associated Recyclers of Wisconsin, and others to work together on important issues facing the industry.

5.5 Strategic Issue No. 5 – Move from Public Relations to Community Outreach

How can the Department pro-actively engage its stakeholders and partners to better meet their needs?

5.5.1 Background

- The Department currently does a significant amount of solid waste related education and outreach.
- Continue to shift from public relations to community outreach, to build trust and demonstrate transparency.
- Overall, there is a high level of satisfaction with the system as expressed by key stakeholders interviewed during the solid waste planning process.
- The Department and the system overall both have a demonstrated long history of successful performance.
- The Department has moved from a vendor to partner mentality.
- Support for the La Crosse County regional disposal system is stronger when citizens, haulers, customers, and other key stakeholders are engaged in on-going, interactive dialogue with the Department and the County.

5.5.2 Why it is Important – Consequences of Not Addressing the Issue

- People support that which they help create.
- Maintaining and expanding positive relationships are the key to business success. Neighbors, businesses, media, regulators, system stakeholders, and the public must be engaged in order to ensure long term support for the system.
- The Department can and does play a significant role helping individuals, municipalities, and businesses operate more sustainably.
- A purely public relations approach creates little sense of community ownership, which is critical to long term success. Strong relationships provide the foundation for expanding collaboration around new activities, programs, participants.

5.5.3 Strategic Recommendations

1. Continue to encourage varied and continuing public involvement. Continue to pursue outreach opportunities throughout solid waste planning, program development, and operations. Likewise, continue to pro-actively plan and design meaningful, two way dialogue that informs on-going planning activities related to various SWMP updates. Consider use of tools that encourage two way, on-line, real time listening and dialogue such as on-line public engagement tools such as MySidewalk.Com and NextDoor.Com.
2. Create a scorecard to more effectively communicate the economic, environmental, and social (triple bottom line) benefits of the system. Climate change has become an increasingly important issue for policy makers and corporate leaders, influencing regulations and investment across broad sectors of the economy including waste management and energy. The Department should proactively respond to this trend by taking steps to further position itself as a bold leader on environmental issues. An environmental scorecard which highlights efficiency gains in operations will help the Department and its partners communicate the benefits of the system, while also serving an important marketing function by helping attract and retain waste streams from clients that recognize the system's environmental benefits.

However, the use of new and emerging frameworks to capture the full range of system benefits (beyond environmental to include economic and social) could help the system more effectively communicate its value proposition to stakeholders. Many private sector companies have developed easy to read

Sustainability Scorecards that convey key results from specific initiatives, ie, energy generated from renewables, carbon emission reductions, creation/enhancement of green space areas for public use, as well as the cumulative impacts of their operations (for example, dollars re-circulated in the local economy, jobs created or retained).

The Department should use private sector scorecards as benchmarks in creating a disposal system scorecard. It should also consider incorporating operational benchmark recommendations from the 2015 Landfill Operations/Contract Review study. Finally, the scorecard should be designed to capture and communicate progress relative to other existing Plans such as the City/County's joint Sustainability Plan, the Master Land Use Plan, and the Department's Green Tier status.

3. Continue to encourage regional system supporters and engaged stakeholders to advocate for the system. Provide them with data and other tools so they can easily articulate benefits. Continue to provide more pro-active education and promote more consistent communication with the public. Continue to evolve tactics to reflect current communication trends.
4. Continue building relationships, partnerships with community groups. (Outdoor Recreation Alliance, Chamber of Commerce, tourism organizations, 7 Rivers Alliance, building contractors, and higher education institutions). Utilize the draft Natural Resources Management Plan and Trails and Recreation Master Plan to engage the broader community in ecological restoration, recreational, and educational initiatives and projects. Continue to identify and pursue applied research projects that leverage faculty expertise and student labor from area universities.
5. Identify and engage a broader audience to build understanding and support for increased regional collaboration. This is a critical step to implement in conjunction to initiating discussions regarding formation of a regional authority. The Department should initiate this, even if the long-term result is not clear at the moment.
6. Advocate Green Tier participation for La Crosse regional disposal system customers. The Department should be the leader in the region for moving these efforts forward. Consider forming a partnership with the City of La Crosse, WDNR, and Gundersen to provide training and educate others on the benefits of Green Tier. This could also include a partnership with faculty at UW-La Crosse that would be doing research in this area. This becomes a way to get students involved and potentially address the long-term staffing/talent issues.
7. Work more closely with the Wisconsin Chapter of the Solid Waste Association of North America (SWANA), WCSWMA, AROW and other industry associations. The Department and its partners should identify opportunities to support the industry by proactively anticipating and responding to key trends impacting the La Crosse regional disposal system and the state as a whole. This opportunity is especially relevant given changes to the 2015-2017 biennial state budget, which zeroed out funding for several statewide solid waste and recycling specialists. La Crosse County and other systems have the opportunity to support important initiatives with their own funding.

5.6 Strategic Issue No. 6 – Enhance Operational Effectiveness and Efficiency

How can the Department improve its operational effectiveness, and gain efficiencies while continuing to meet the needs of its users?

5.6.1 Background

- The La Crosse County landfill is not just a cookie cutter landfill. It is a community asset guided by a long-term plan to provide recreational opportunities, environmental services, and other benefits to the broader community.
- Operations are viewed highly favorably by stakeholders.
- However there are high expectations and cited opportunities for improvement including perceived safety issues (entrance in particular), citizen drop off area, entrance configuration, waiting times at the scale, and air/water quality.
- The Department is the one and only landfill member of the WDNR Green Tier program and has taken steps to achieve superior environmental performance.
- There is growing regional demand for specialty services such as HHM and zero waste at Xcel's WTE facility.
- Citizens, businesses, and governmental agencies are increasingly demanding more sustainable practices in the marketplace. Concepts such as 'zero waste' are becoming more and more mainstream, as are efforts to reduce greenhouse gas emissions.
- 42 percent of US GHG emissions are associated with materials management according to the US EPA.
- Area businesses are increasingly interested in beneficial re-use opportunities.

5.6.2 Why it is Important – Consequences of Not Addressing the Issue

- Customers have choice, they may leave if they have reason to.
- Failure to address the issue of operational effectiveness and efficiency could result in missed opportunities to reduce expenditures or increase revenues.
- There is still a lot of material not being disposed of properly, do not want to miss out on opportunities to secure more "waste" for system, including for diversion and beneficial use.
- There are still significant opportunities to increase recycling volumes in service territory.
- There are potential liability concerns if safety issues are not addressed.
- Without operational effectiveness and efficiencies you can't be providing good services.

5.6.3 Strategic Recommendations

1. Improve safety-citizen drop off area, scale area, ingress/egress. A proposed frontage road by the City of La Crosse will require access changes to the existing site. Therefore, an alternate location for the scale, citizen drop-off area, and container storage area was investigated in 2015. The County, in collaboration with the City, should move ahead in the planning and design process to ensure adequate space is available in order to utilize the existing scale, preserve right of way required for the frontage road, coordinate construction, provide temporary connections.

2. Review and implement recommendations identified in the 2015 Landfill Operations/Contract Review Study. The primary purpose of the 2015 Landfill Operations/Contract Review study was to provide a third party review of the County's own landfill operations internalization report, review the existing agreement between the Department and the contractor, and evaluate the operational performance of the contractor. The Department should review the recommendations, decide which are priorities, and identify them as action items in future work plans.
3. Develop a mechanism to regularly review, monitor, and implement priority recommendations. The Department conducts its own studies and commissions a variety of studies on an on-going basis. Each study presents its own findings and recommendations. It is recommended that the Department establish a more formalized framework for regularly assessing, prioritizing, and implementing those recommendations so decisions are made as holistically as possible. As part of this effort the Department should continue meeting with the landfill operator to identify and implement improvements.
4. Re-evaluate yard waste operations (revenues vs. expenditures, value to key customers). Yard waste operations have decreased over time. Continue to evaluate trends and opportunities to increase efficiencies and expand services. Monitor state level efforts such as Iowa changing legislation to allow yard waste to go into landfills with landfill gas to energy systems.
5. Strengthen the wood waste, shingles, and demolition waste programs. Continue to evaluate the operational effectiveness studies of these programs on an annual basis. Work with partners that may be able to utilize painted and treated wood, therefore potentially diverting additional material from the landfill and creating beneficial re-use opportunities. Track other demolition processing facilities to identify upcoming new markets for materials not currently being used. Enhance shingles recovery through additional education and outreach, with a focus on reaching one time users which may not be aware of best practices. Currently any material not source separated is being landfilled.
6. Expand the HHM program. The HHM facility is a tremendous resource that provides significant value to the region. Given the growing importance of this program, the Department should take steps to stay ahead of trends and identify and implement a sustainable funding model. It is recommended that the Department convene a focus group to discuss opportunities to improve the facility. Key corporate and public stakeholders such as Gundersen and others should be invited to attend. In addition the Department should pursue collaboration opportunities with other regional HHM facilities to share best practices and identify cost savings opportunities, such as joint contracting for services. Note: Any expansion of the HHM program is dependent upon first developing a sustainable financial model for providing service.
7. Continue existing and develop new waste diversion programs and partnerships. Through innovative partnerships including landfill gas to energy and mattress recycling the La Crosse regional disposal system can more effectively meet the needs of resident and business stakeholders. See Strategic Issue No. 4 for a longer description of this recommendation.

8. Investigate private sector partnerships to provide construction and demolition processing. There is an opportunity to divert more construction and demolition waste from the landfill which would provide environmental benefits while minimizing air space consumption. The Department should consider this opportunity as it plans for the reconfiguration of the current citizen drop off area.
9. Investigate and seek recognition of the La Crosse County landfill based on exceeding industry norms. Explore the use of ENVISION, a new rating system for sustainable infrastructure developed by the Institute for Sustainable Infrastructure. Identify other similar tools to differentiate the landfill from others in the market place. Seek opportunities to establish the standard for high performing landfills.

5.7 Strategic Issue No. 7 – Succession Planning and Institutional Knowledge

How can the Department retain and attract talented, innovative staff with visionary leadership?

5.7.1 Background

- As Department staff, other industry staff, and knowledgeable policy makers within the region grow retire, the system will lose decades worth of solid waste knowledge.
- Within the Department, as newer staff come on board and as other staff retire over time, there is less and less institutional knowledge.
- Solid waste is a niche industry, without a large pool of skilled, experienced available in the market place. There is competition for talent at all levels (top to bottom).
- Retention and recruitment of talented, innovative, visionary staff is critically important.
- Retention and recruitment is becoming increasingly difficult in the public sector in Wisconsin, in part because wages and benefits have been relatively flat over the past decade. This turnover in HHM technicians is evidence of this trend.
- Succession planning is especially important for smaller organizations where much of the leadership is provided by one or two individuals.
- Over time there is less and less institutional knowledge of how the La Crosse regional disposal system evolved into what it is today. Fewer and fewer people understand and appreciate the current system.

5.7.2 Why it is Important – Consequences of Not Addressing the Issue

- As time goes on more and more people forget about the origins of the system, why it exists today.
- Without a knowledge of where you've come from, it is very difficult to make good decisions about how to move forward.
- Several key, lead solid waste management staff in the region are nearing retirement. The loss of key experienced staff could affect the ability to maintain quality public waste management services.
- Due to budgetary concerns, there may be pressure on elected officials and managers to combine solid waste positions with other local government positions.

- This could result in reduced focus on solid waste management leading to eroded service and higher costs.
- There is a small pool of experienced solid waste and recycling managers in the state, many of whom are nearing retirement. As these managers retire there will be increased competition for talent in the industry, therefore making it more challenging to attract and retain the talent in the industry.

5.7.3 Strategic Recommendations

1. Invigorate membership of the SWPB. The Department should consider hosting a solid waste conference or providing tours at the landfill in coordination with events such as the Wisconsin Integrated Resource Management Conference (WIRMC) and other conferences. The Department and the SWPB should develop a 'hot list' of potential board members to serve on the SWPB and the PWI Committee. They should also consider inviting non-voting members, including younger people, to take part in SWPB discussions in order to cultivate future leadership. Finally, La Crosse County should consider increasing the terms of the County Board Supervisors on the PWI Committee and the SWPB. Incentives should be identified to encourage active and engaged participation among committee and SWPB members.
2. Continue efforts to seek out opportunities to engage young people in the solid waste industry. The Department has made significant efforts to expose young people to the solid waste industry and should continue to do so through a variety of means including educational tours, student projects, participation in industry conferences and networking events, internships, and presentations to university students.
3. Empower the SWPB to pro-actively promote the regional system. The Department staff should develop tools and educational materials that will improve the SWPB's understanding of the regional system including its history. The SWPB should identify opportunities to more effectively advocate for the system and report on those efforts regularly.
4. Prepare a written historical narrative describing the La Crosse regional disposal system. The Department should develop a written history of the system's origins and rationale for existence so current and future stakeholders do not lose that institutional knowledge. A compelling narrative of the system is important for educating decision makers as well as helping guide sound decision making into the future.
5. Consider staff incentive and/or recognition program(s). The Department should consider pursuing strategies to create an engaged work place, such as providing incentives, additional recognition, and career development opportunities to staff.
6. Periodically place succession planning on the SWPB agenda. The SWPB should budget time annually to hold proactive discussions regarding future staffing needs and address any needs identified.
7. Develop and execute a strategy to retain and employ top level people in the Department from an increasingly shrinking pool of top performers. For example, continue to develop relationships with UW campuses developing talent in this area – UW-Green Bay, UW-Stevens Point. Continue efforts to get UW-La Crosse more involved - like the students that attended WIRMC. Prepare a written succession plan for the Department by the end of 2016.

8. Identify and quantify future solid waste management workforce needs regionally. In conjunction with efforts to strengthen regional collaboration an analysis of existing and future workforce needs should be conducted with an emphasis on identifying when staffing gaps will need to be filled and what types of skill sets will likely be required to fill future positions.
9. Provide on-going Internships for students. In conjunction with efforts to use the La Crosse landfill as a “living lab,” the Department and its partners should identify specific opportunities to engage students as interns to assist with analysis of issues and opportunities, while also exposing them to potential careers in the industry.

5.8 Strategic Issue No. 8 - Land Use

How can the Department implement the long range vision for the landfill site as identified in the La Crosse County Landfill Master Land Use Plan (MLUP) and related documents?

5.8.1 Background

- The landfill sits on 350 acre site with high aesthetic, recreational, and ecological value.
- The MLUP, which is being updated, provides a unique opportunity to protect, plan, and develop the landfill’s outdoor recreational and ecological assets.
- The Department recognizes that the landfill can provide community benefits beyond waste disposal.
- There is increasing development pressure adjacent to the landfill.
- The Department is actively participating in organizations such as the 7 River Region Outdoor Recreational Alliance, which has wide-spread interest in restoring the site and leveraging its natural assets.
- The draft vision statement derived from feedback during the Natural Resource Management planning efforts states: “The La Crosse County Landfill is a national model for demonstrating to and educating the public about the sustainable management of waste, while simultaneously providing exceptional interpretive and recreational opportunities for the community.”

5.8.2 Why it is Important – Consequences of Not Addressing the Issue

- La Crosse County may be burdened with a significant long term cost if the Department does not continue to pro-actively plan for the landfill post-closure. Developing and beginning to implement the land use plan today will help minimize future costs.
- The landfill site offers tremendous potential in terms of providing a wide range of social and environmental benefits. The location near the confluence of three rivers, its large acreage, diverse landforms and habitats, provide an opportunity for additional ecological restoration, environmental education, and recreational programming.
- The landfill could offer a wide array of quality of life benefits to residents and the region.
- The landfill is a conservation and open space hub for the region, a vital part throughout the County’s overall open space and recreational plan.
- Effective implementation of the MLUP will strengthen support of the system.

5.8.3 Strategic Recommendations

1. Create a La Crosse County Landfill Land Use Advisory Committee. The committee would oversee implementation of the MLUP, tasked with engaging the public and building support for the plan's recommendations related to land use at the landfill, as well as making land use related recommendations to the PWI Committee and County Board. The committee should comprise representatives from the La Crosse County supervisors and Parks Department, City of La Crosse and Onalaska Parks Departments, and several members from communities neighboring the facility.
2. Continue to expand and refine funding strategies for recreational asset development. The current plan includes directing revenue from the citizen drop off and sustainable forestry sales to recreational development. The Department and its partners should continue to identify and engage other private and public sector partners to assist with this effort on an on-going basis. The site vision and funding plan should be used as tools to pro-actively engage additional potential funding sources.
3. Provide more interpretive opportunities. As identified in the Department's draft Natural Resource Management and Trail and Recreation plans, the Department should provide more on-site interpretive opportunities related to waste reduction, sustainable lifestyles, the sites' unique history and ecology, and ecological restoration.
4. Implement ecological restoration activities and trails/recreation at the landfill. The Department has taken steps and should continue to enhance the aesthetic and natural beauty of the site, while also improving wildlife habitat through ecological restoration as shown in the MLUP and related documents.
5. Every 5 years update the MLUP. The Department and its partners should regularly update the goals and opportunities identified in the MLUP based on changes in the natural environment as well as changes in policy and stakeholder preferences ("adaptive management"). Likewise, they should regularly re-affirm and modify as necessary land use related provisions contained in the following documents: Comprehensive Plans, Zoning Code, Plan of Operation, Stormwater Management Plan, and the Natural Resource Management and Trail and Recreation plans.
6. Engage with educational institutions to use the landfill as a "living lab". As identified in related documents, work with various educational institutions to use the landfill as a scientific learning center. Engage students, faculty, and public in hands on opportunities to both study and actively participate in ecological restoration activities (a "living lab").
7. Identify appropriate beneficial re-use opportunities adjacent to the landfill. The Department should encourage companies that can leverage the landfill's resources to develop in the areas adjacent the landfill. At the same time it should discourage uses that may not be compatible with the landfill's operations over time and future plans.
8. Identify stormwater management and other environmental service opportunities. The Department should develop an agreement to serve the stormwater needs of development which occurs to the north and east of the landfill. It should identify similar opportunities to promote the ecological integrity of the site and preserve buffer zones, while meeting business needs.

9. Become a hub and connector for a variety of local and regional trails. The MLUP provides a roadmap for future trail development. The Department should continue to pursue that objective, and take additional steps to position the landfill as a popular destination in the region over the next several decades.

6.0 Implementation Framework

Many of this updated SWMP's recommendations are under the purview of the SWPB, while others are staff level responsibilities which can be executed directly by the Department. Some actions may require the approval of the PWI Committee and/or the County Board. Department staff should review the SWMP's recommendations at least annually, and fold relevant recommendations into annual work plans and budgeting processes. Ultimately, the Department Director is accountable for ensuring the SWMP's recommendations are implemented through appropriate staffing, work planning, employee evaluations, and development of the annual budget.

Department staff should create and maintain a dashboard illustrating progress toward completion of the SWMP's recommendations. The dashboard will serve as a tool to guide SWPB discussion and ensure that each of the Plan's recommendations are followed through on, or discussed and modified as required by changing conditions in the operating environment. The Department will develop specific initiatives to satisfy the requirements of this Plan on an annual basis. Progress toward completion of the initiatives will be reviewed during the annual meeting.

For several land use related recommendations, the SWMP recommends establishing a Landfill Land Use Advisory Committee. The committee should comprise representatives from the La Crosse County supervisors and Parks Department, City of La Crosse and Onalaska Parks Departments, and several members from communities neighboring the facility. The committee would oversee implementation of the MLUP, tasked with engaging the public and building support for the plan's recommendations related to land use at the landfill. It would also provide land use related recommendations to the PWI Committee and the County Board.

Appendix A

La Crosse County Landfill Master Land Use Plan (2011)

Note: At the time of this Plan update the County was in the process of updating its Master Land Use Plan. See the County's website for the most recent version.

LA CROSSE COUNTY LANDFILL MASTER LAND USE PLAN



TABLE OF CONTENTS

1. **Land Use Plan - cover PP1**
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8. **Alternative Concepts Pp 13**
9. **Approved Concept PP 14**
10. **Implementation PP 15**

EXISTING CONDITIONS REPORT

1. CHAPTER OVERVIEW

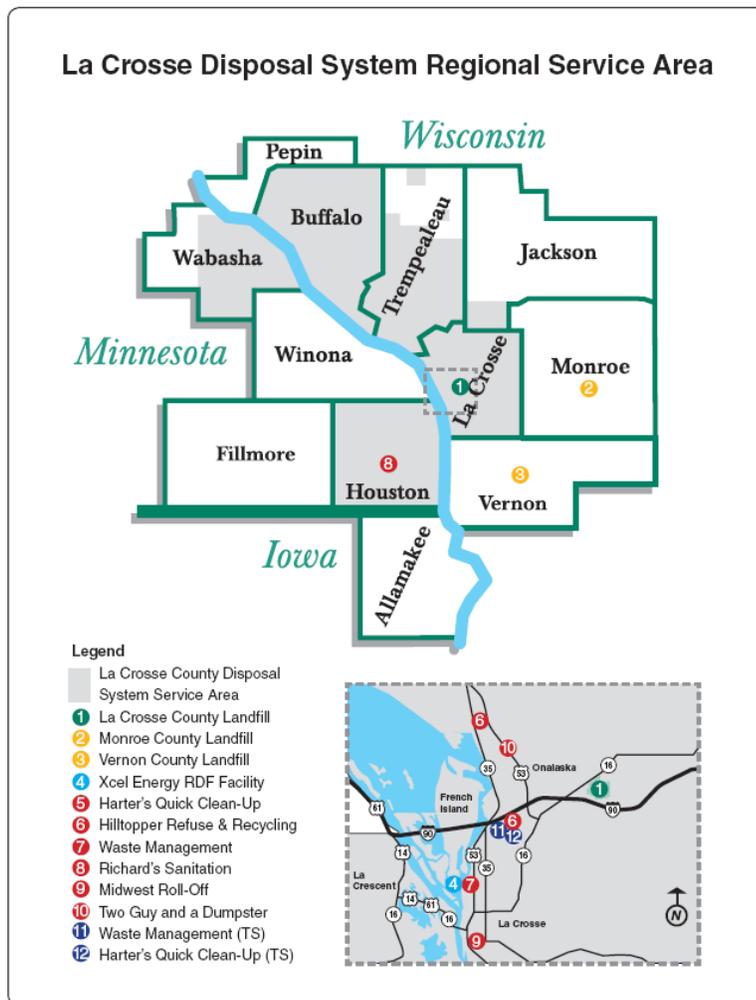
This chapter is intended to give an overview of The La Crosse County Landfill, help describe the setting and provide the general context for future Land Use planning at this site. Due to very recent efforts by the Solid Waste Department and their current consultant, Foth; there is significant data regarding existing conditions in the Solid Waste Plan of Operations adopted in 2005. The data in this chapter is supplemental to that existing data.

Chapter Contents

1. Chapter Overview
2. Regional Context
3. Units of Government
4. Solid Waste Projections
5. Land Use and Development Trends
6. Solid Waste Infrastructure
7. Site Features

2. REGIONAL CONTEXT

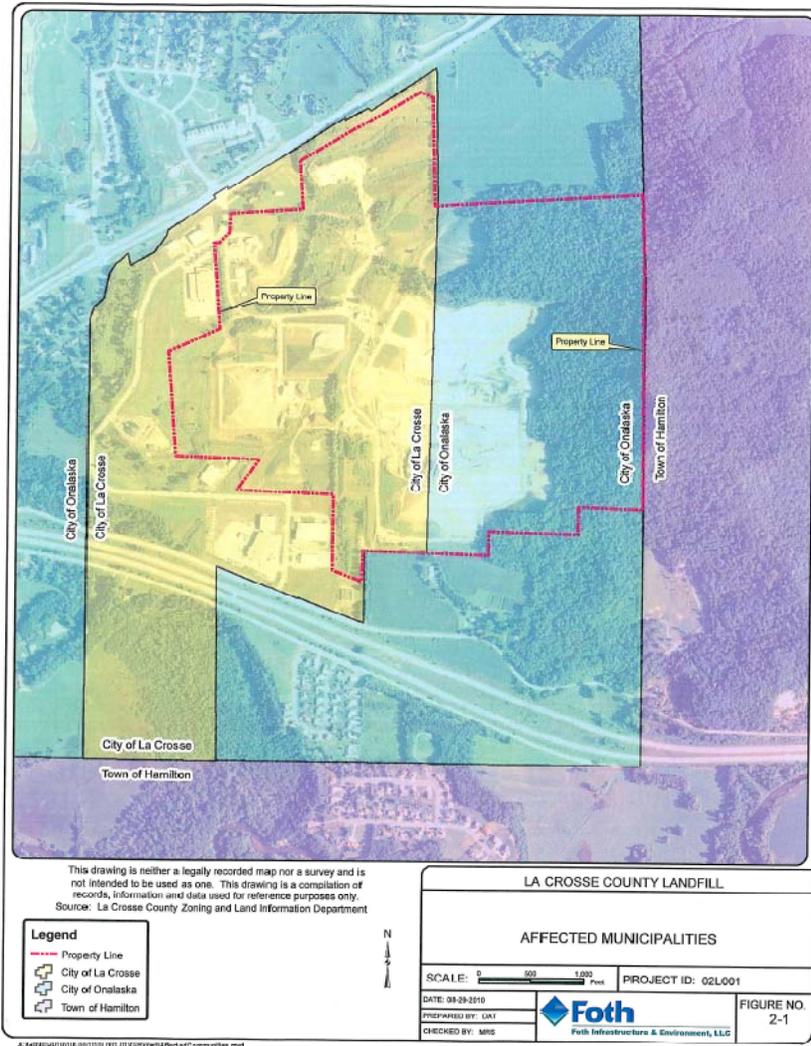
The solid waste facility is located in west central La Crosse County, Wisconsin. The City of Onalaska and Towns of Onalaska and Medary border it to the north, and west, The City of La Crosse to the west, and south, and the Town of Hamilton to the east.



3. **UNITS OF GOVERNMENT** WITHIN THE SOLID WASTE FACILITY SERVICE AREA, THERE ARE 12 TOWNS, 2 CITIES, AND 4 VILLAGES (MAP 1 AND TABLE 2-1).

Table 2-1. Civil Divisions

Town	City	Village
Bangor	La Crosse	Bangor
Hamilton	Onalaska	Holmen
Barre		Rockland
Holland		West
Burns		Salem
Medary		
Campbell		
Onalaska		
Farmington		
Shelby		
Greenfield		
Washington		



4. **SOLID WASTE PROJECTIONS** CURRENTLY 30 YEARS OF CAPACITY

Table 3-11 Summary of Phase Quantities

Phase	Airspace (cy)	Estimated Phase Life (yrs) 2
Phase 1	830,000	0.83
Phase 2 - Filling Sequence 1	303,000	1.9
Phase 2 - Filling Sequence 2	513,000	3.3
Phase 3 - Filling Sequence 1	1,082,000	6.9
Phase 3 - Filling Sequence 2	965,000	6.1
Totals 3,	3,693,000	19.05

1Includes approx. 706,000 cy of airspace to be used for Waste Relocation Sequence 3

2Phase life based on an annual airspace utilization of 157,800 cy (from Feasibility Report)

3Does not include airspace intended for Waste Relocation Sequence 3

4 Does not include a portion of the vertical expansion filled prior to Phase 1 construction Total created airspace for the Contiguous Expansion is 3,853,000 cy

5 Includes remaining airspace from the Active Landfill

There is additional property available at the Landfill Complex for airspace additions in the future. Projecting landfill life is subject to many variables such as future waste delivery quantities, future processing, service area size, future land use practices in the area, and the compatibility of the landfill with the area. With continued use of the Xcel facility or some similar solid waste processing facility, the landfill life will last well over 50 years and then a different, but necessary land use for 50 years beyond that first 50. This nearly 100 Years of commitment must be appropriately planned to benefit its citizen. Future concerns, land use conflicts, or lack of waste processing could reduce the projected landfill life. Ultimately, the site is limited to the currently owned property. While operating the landfill for the next 30 years, and planned expansion of an additional landfill cell adds landfill life of 20 years, and a required 40 years of long-term care; and it's clear that the County vision must look nearly 100 years into the future. During this same period, it is likely that urban growth and industrial development adjacent to the landfill property will consume surrounding land. Because of this very real likelihood, planning now must be visionary to re-couple ecosystems and to assure the protection, restoration and maintenance of the land for habitat and recreational uses both within and adjacent to the landfill. Making this commitment now is the only way to ensure these lands remain accessible and become part of the fabric of the community as time goes on.

5. LAND USE AND DEVELOPMENT TRENDS

Land Use Supply: The supply of land to support development is based on several factors including physical suitability, land use regulations, and community goals. Intergovernmental agreements and annexations also become considerations when looking at the land supply at the community level. At the County level, land physically suited for development exists throughout. A conservative estimate, based on a study performed by the University of Wisconsin-La Crosse, indicates there are nearly 190,000 acres that could be physically suited for development. The policies developed in this Plan and subsequent community plans will help guide how growth is managed in these areas.

Land Use Demand:

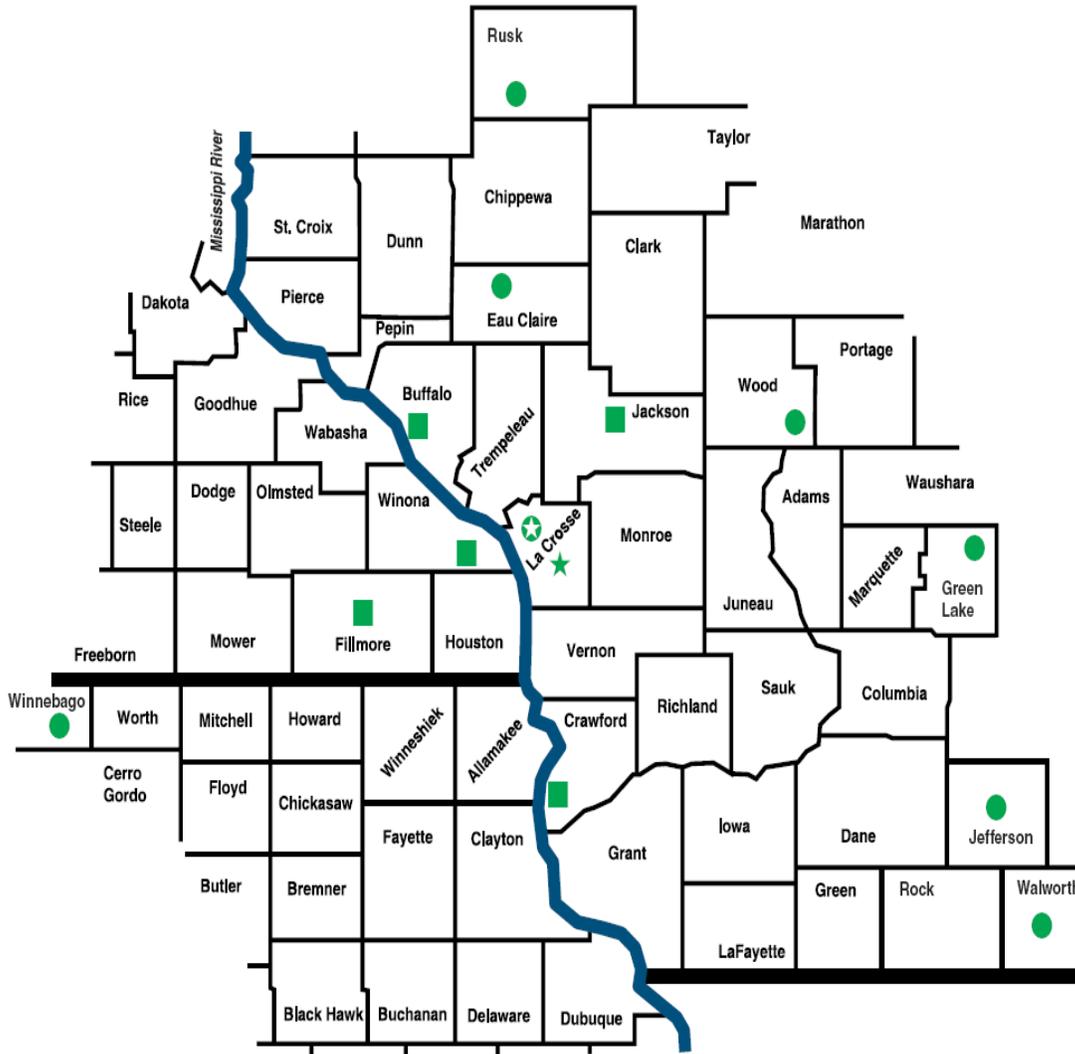
A. As development pressures increase, the demand for developable land also rises. An analysis of building trends in the 1990s indicates that approximately 3% of the County's farmland was converted out of an agricultural use between 1990 and 1997. Not surprisingly, this conversion factor was higher for Towns on the western side of the County. Towns surrounding Holmen, Onalaska, and La Crosse had close to 8% of their agricultural acreage converted to other uses.

B. Based on growth and housing projections provided by the State's Demographic Service Center, the County may need to accommodate nearly 5,000 acres of new residential, commercial, and industrial land along with additional acreage needed for infrastructure, parks, community facilities and similar uses.

Land Surrounding the Landfill Complex: This land has developed densely within the past 10 - 15 years, due to annexation, and significant public infrastructure improvements including sanitary sewer extensions, water and storm sewer improvements, and roads. The value and development pressure have significantly increased in this area of La Crosse County. There are additional investments that need to be made in public infrastructure projects, to continue this trend, including water reservoirs, booster stations and lift stations for sanitary sewer. However, the value and

pressure to develop this land into a more efficient, dense and compact nature will continue to drive the property values of these adjacent properties up and make the expenditure for additional public infrastructure feasible.

6. SOLID WASTE INFRASTRUCTURE



- Private Landfill
- Transfer Station
- ★ XCEL WTE Facility
- ★ La Crosse Landfill

7. SITE FEATURES

- The land is stunningly beautiful and has extraordinary character associated with its diversity - from the high quality forests on the ridge tops, primarily dominated by native plant communities, to the vistas over the larger landscape from the site and from nearby roads.
- The property is a conservation and open space *hub*, and will increase in conservation value as it is closed and reclaimed. We also see it as a *connector* that, once restored, could become a vital link in the County's open space preservation and park and recreation programs. By "hub", we mean the property could very well serve as a large conservation center from which radiating "spokes" link the forested ridge tops, roadways with restored native landscapes, the La Crosse River corridor, and perhaps restored open spaces and habitats in adjacent private properties such as the proposed International business park and/or the agricultural lands along the northeast property line. By linking conservation areas, the property has potential to significantly increase in conservation and recreational values.
- Whether it is viewed as hub or connector, the property can certainly be viewed as a conservation *seed*, able to inspire and leverage the growth of relationships with adjacent private properties, corporate lands and other public lands, thus increasing the publicly available open space and protected conservation areas in La Crosse County.
- We acknowledge that landfills have an unfortunate stigma as nearly worthless "dumps" in the U.S., but this is not the case in most other countries where the open space become vital to the parks and recreation systems. In many areas, closed, restored landfills are providing some of the most valuable wildlife habitat within urban areas and even in agricultural landscapes. The value of such properties for these purposes has dramatically increased in recent years as such vital habitats decline due to increasing urbanization and land development. For this reason, the La Crosse landfill should be considered a valued future public trust investment. It should be guarded to ensure it is not bartered or sold for development without significant recompense. We believe that any adjacent proposed development that might consider asking the city for some of the land should come in with overcompensating offers to provide comparable land of high aesthetic values, adjacency and connectivity with other public conservation areas and passive recreation lands. We have seen in other areas of the country that, without careful and visionary foresight, deals can be cut and future long-term public recreation and conservation values can be easily traded away without fair compensation. Fair compensation for long-term value is not the equivalent of trading land for jobs or an increased tax base.

PLANNING PROCESS

PUBLIC PARTICIPATION ACTIVITIES:

1. PUBLIC INFORMATIONAL MEETINGS, CUSTOMER APPRECIATION DAYS
2. INTERNET SITE WITH COMMENTS SECTION
3. FEEDBACK FORM AVAILABLE TO THE PUBLIC AND TO CLIENTS
4. SOLID WASTE POLICY BOARD MEETINGS
5. STAKEHOLDER INTERVIEWS
6. ANNUAL DISPOSAL SYSTEM MEETINGS
7. SOLID WASTE NEWSLETTER

RESULTS OF PUBLIC PARTICIPATION ACTIVITIES:

1. "WALKING TRAILS ARE IMPORTANT ON THIS SITE"
2. "AESTHETICS, BOTH ON-SITE AND OFF-SITE VIEWSHEDS ARE IMPORTANT"
3. "TRAFFIC SAFETY ESPECIALLY AT THE NORTH ENTRANCE, BERLIN DRIVE."
4. "STORM WATER MANAGEMENT IS IMPORTANT, MAJOR DRAINAGE AREAS, IDENTIFICATION OF WETLANDS, AND BEST MANAGEMENT PRACTICES."
5. "MANY COMMENTED THAT THEY WEREN'T AWARE THAT THIS SITE WAS A LANDFILL, OR THAT IT WAS THIS LARGE."
6. "CURRENTLY AN ATTRACTIVE PROPERTY AND SHOULD REMAIN AS OPEN SPACE"

LAND USE PLAN GOALS AND OBJECTIVES

1. THIS SITE IS OVER 350 ACRES OF VALUABLE LAND. TO PLAN FOR SITE UTILIZATION, AND CONSERVATION. TO PROVIDE SERVICES TO THE PUBLIC AND PROTECT THE NATURAL RESOURCES BOTH DURING OPERATIONS AND AFTER CLOSURE.
2. TO DEVELOP THE FOUNDATION OF APPROPRIATE RECREATION BOTH DURING OPERATIONS AND AFTER LANDFILL CLOSURE.
3. PRESERVE A BUFFER FROM ADJACENT RAPID DEVELOPMENT PATTERNS AND TO PROVIDE MUCH NEEDED OPEN SPACE IN A RAPIDLY DEVELOPING AREA.
4. RECOGNIZE THE UNIQUE NATURE OF THE SITE AND ITS SIGNIFICANT TRANSITIONS FROM PRAIRIE TO FOREST, MEADOW TO BLUFF.

5. UTILIZE THIS PLANNING PROCESS TO ASSIST POLICY MAKERS IN SUPPORTING COLLABORATIVE DECISION MAKING ALIGNED WITH ADJACENT MUNICIPAL AND COUNTY-WIDE PLANNING EFFORTS.
6. CONTINUE TO INVOLVE THE PUBLIC IN LAND USE DECISIONS.
7. WORK WITH STAKEHOLDERS, ESPECIALLY ADJACENT LANDOWNERS ON COLLABORATIVE LAND USE PROJECTS.
8. MINIMIZE THE COST IMPACT BY EMPHASIZING TIMELY USE OF THE SITE. PROMOTE PHASING OF ACTIVITIES. UTILIZE THE LARGE TIME HORIZON OF THE OPERATIONS OF THE SITE TO ESTABLISH PRESENT AND FUTURE ACTIVITIES.
9. CREATE A BASE MAP FOR THE LANDFILL AND POTENTIALLY ADJACENT PROPERTIES
 - A. MAP THE ECOLOGICAL RESOURCES
 - B. MAP ADJACENT LAND USES AND COMPATIBILITIES, NECESSARY BUFFERS.
 - C. MAP THE SERVICE DELIVERY NEEDS AND FUTURE SPATIAL NEEDS.

SITE VISION

- SHORT TERM - CURRENT PROJECTS 0-5 YRS
 - METHANE COLLECTION AND UTILIZATION
 - STORAGE FACILITY
 - COMPLETE THE MASTER PLAN
- MEDIUM TERM - LIFE OF THE LANDFILL 5-30YRS
 - INVESTIGATE THE PURCHASE OF ADDITIONAL RIGHT-OF-WAY AND THE REDESIGN OF THE ENTRANCE, SCALE, AND PUBLIC DROP OFF AREA
 - ECONOMIC DEVELOPMENT ADJACENT TO SITE
 - INCREASE CAPACITY AT ASH MONOFILL
 - INCREASE CAPACITY IN SOLID WASTE LANDFILL
 - BEGIN DESIGN AND CONSTRUCTION OF RECREATIONAL ACTIVITIES
- LONG TERM - LANDFILL CLOSED 30-90 YRS
 - FINALIZE DESIGN AND INSTALLATION OF CLOSED LANDFILL LAND USE
 - FIND ALTERNATIVE LOCATION FOR SOLID WASTE FACILITY

HABITAT AND ECOSYSTEM DEVELOPMENT

Start Today, Build Upon Strengths Planning for habitat restoration can begin quickly, progressively and sequentially. Building upon the strengths of the site, restoration can start at the perimeter of the property and move inward on land that is not planned for expansion of cells. Eventually restoration can progress through each closed cell until the whole area is restored. Reasonably good quality natural areas such as the forested slopes and ridges, drainage ways and open, grassed lands can be converted to native prairie, savanna, forests, and wetland ecosystem types that represent an example of the strengths of the site. These areas, largely occurring around the north, northeast and west perimeters of the site, can easily be restored to improved ecological health. And they can be opened promptly for public passive recreational uses such as hiking and bird watching. Along the south border is a closed area that contains berms of stockpiled topsoil and other materials. The removal of these stockpiles (and perhaps their sale which could generate revenues to support conservation initiatives and restoration closure strategies), would result in a larger area of the perimeter being available for restoration to colorful native prairie wildflowers and grasslands. Since this area is adjacent to the International Business Park and future development zones to the south and northeast, this restoration would serve as an example of natural landscaping that can be emulated in these off-site areas. This would be the first perimeter ring, and coincidentally, this would also be the public face on the project. Working inward, the second ring where restoration could occur could be areas with stockpiles of topsoil, subsoils and sand. These stockpiles could be consolidated into singular areas on the top of several landfill cells to surcharge the cells and create more airspace and landfill cell life. These stockpiles could also be used to create sculpted landforms designed to emulate in character the shapes of the mounds and ridge tops so that the final form of the closed landfill fits the aesthetic character of the Natural landforms. A third ring can be the final closure of areas with long term monitoring wells, operating landfill cells, access roads and facility buildings and other infrastructure (e.g. gas flares, recycling center, composting operation, household hazardous materials facility, etc.). Once these are restored, with the exception of some strategic access control (e.g., monitoring wells, flare locations, leachate collection wells, etc.) the site can become available for public access, passive nature appreciation and recreation. Some areas can become more formalized for an educational center or nature center, and for active recreational uses.

Creating Off-Site "Greenfingers" Simultaneously, as you continue the inward progression of restoration and conservation toward the center of the landfill property, you can also work outward with neighbors to create "greenfingers" that extend the conservation lands outward crossing the landscape through abutting parcels. Partnering with adjacent private landowners could help them protect and restore abutting back lots and even small swatches of existing open space (such as rights of ways, drainage-ways, stormwater management areas, utility easements, etc.). A variety of incentives have been developed for this kind of activity, including tax incentives, development density bonuses and a range of private/public partnerships, for example. The landfill could also work with its neighbors to deploy alternative stormwater management designs (e.g., creating habitat restorations such as wetlands instead of expensive stormwater detention basins), and perhaps by creating their stormwater management needs on landfill property in exchange for tradeoffs of more open green space in their developments. These ideas would represent but a few of the creative ways the valuable landfill property can be leveraged to expand the net conservation acreage over time. Greenfingers can radiate like spokes from the hub of a bicycle wheel, with the La Crosse landfill as the conservation hub that could inspire neighbors to participate in a conservation vision for the land.

A New Educational Nature Center?

Once closed, landfills are increasingly becoming important regional nature centers and outdoor educational facilities. In this location, the story of the history of the community lies beneath the ground in the landfill wastes. The story of the landfill operation, closure, restoration and beneficial reuse - the stories of how nature comes back - could be told within the walls of a new Nature Center. These are invigorating stories that the community will appreciate and celebrate. If such a facility has a modern conferencing center, it can become a profit center available for lease. The miles of trails for passive wildlife viewing, walking, jogging or biking can make such settings highly esteemed destinations. One project we have been involved with has established a nature center, bird banding station, and a raptor and wildlife rehabilitation center in association with a landfill closure. As a result the landfill is now a community center of culture, particularly conservation and science and is inspiring a new generation of connections between young persons and wildlife, through learning hands-on about conservation. One of our projects has a new Audubon nature center adjacent to the landfill. This unique partnership also includes a greenhouse (heated by landfill gas and electrified by landfill gas powered turbine) where fish and hydroponic vegetables are produced and sold for public food.

Next Steps - Moving Forward

These tasks would typically be conducted in Year 1 of this long-term process:

1. Conduct a natural resource inventory
2. Prepare a closure and restoration plan with a conservation vision and linked recreational plan, with a phased timetable
3. Involve the public in hands-on design of the park and conservation outcomes.
4. Prepare budgets
5. Conduct fundraising and public education activities
6. Create relationships with neighbors to expand the *Greenfingers* concept and conservation outcomes.
7. Create several public conservation design planning sessions about *Greenfingers* and linkages.
8. Create an overall park master plan linked to the conservation vision for the land.

The following tasks are typically conducted in Years 2-10:

1. Create a strategic plan for partnering and fundraising to support inducement and incentives.
2. Design and implement demonstration projects with neighbors such as native plantings in idle space in adjacent business parks.
3. Design and implement shared stormwater infrastructure and conservation development designs with willing adjacent landowners to demonstrate cost savings of conservation development and to facilitate partnering around such items as shared stormwater management areas.
4. Begin and complete the cleanup and restoration of the outer perimeter lands.
5. Begin cleanup and restoration of the next inside perimeter ring.
6. Establish an on-site tree nursery for producing stock for plantings, including locals to collect local native tree seeds for propagation through a partnership with local native plant nurseries.
7. Stake-out and provide on-site signage for future improvements such as trails, gathering locations, observation points, etc., to insure best placement and future implementation.
8. Create and disseminate communication collateral to inform media, community leaders and the public of the ongoing site efforts.
9. Establish a right-sized fund reserve dedicated to implementing the vision.

The following tasks are typically undertaken in Years 10-30:

1. Continually promote the landfill ecological restoration by establishing a program or event, and/or coordinating with an existing program or event, for the purpose of communicating the restoration vision for the landfill property.
2. Every 10 years revisit the vision to re-align implementation with the established vision.
3. Ensure a dedicated reserve fund is sufficient to carry out maintenance and capital projects.
4. Revisit opportunities to include ecological restoration of the cap with restored buffer areas.

Miscellaneous Ideas to Consider

1. Restore landscapes for beauty, stormwater management benefits and wildlife habitat
Many areas in and around the landfill are currently infested with invasive weedy plants that present a significant need for high-cost maintenance. Large areas of parsnips, stinging nettles, European brome grass and Tartarian honeysuckle could all be converted to native grassland, wetland, savanna and forests, as could fencerows with garlic mustard and fencerows with deteriorating planted pine stands. Once restored, the maintenance needs would be minimized and costs would be reduced.
2. Disperse the management of stormwater in many small, scattered wetlands rather than large detention ponds in nature, stormwater is "managed" (infiltrated and/or stored) close to where precipitation hits the ground. In contrast, man's tendency is to concentrate it in pipes and ditches, and store it in steep-sloped, often unstable detention ponds which adds cost and creates risks and safety issues. We should strive to design stormwater management systems to emulate smaller, decentralized restored landscape features that can serve as wildlife habitat and park features.
3. Re-contour the landscape to create stable, natural looking grades frequently in earth-moving projects; stockpiles and berms have blocky angular looking features rather than the beauty and natural flow and form of the land found in a natural landscape. In conducting the final closure, we should work toward creating the gentle, stable landforms found in nature.
4. On the re-contoured final surface of the landfill, create defined drainage-way features that add to the aesthetic charm of the landforms. Most landfills have engineered drainage features that don't make the land easily reusable or aesthetically appreciated when re-purposed for parks and habitat features. We could consider re-grading natural forms for drainage features over the landform slopes and plant these with pattern-distinguishing native trees and shrubs such as American hazelnut and bur oak that would typically be found growing on hills in the protection of the draws and drainage ways.
5. Create secluded and quiet places with landforms and, these could be planted to augment the calm and peace one feels (and that wildlife experience) in such settings.
6. Create safe overlooks, promontories and observation areas on ridge tops, linked with trails and walking paths. The promontories are important, spell-binding locations and should be intentionally integrated for the future.
7. Restore bedrock features and dry prairies in sand overburden materials. The closure has the opportunity to include some very unique habitat types including dry prairie and bedrock prairie plantings. These habitats are increasingly rare habitat types that can be easily restored on this landfill upon closure.
8. Restore tree cover for forest and savanna restoration by direct seeding rather than planting individual trees Direct seeding creates thickets of dense woody vegetation that deters browsing deer and their damaging effects. This approach is far less expensive than planting thousands of trees and having to protect each in tree tubes. It also ensures the quick development of dense masses of trees.
9. "Re-grow" healthy soils on the site by constructing a soil mixing and creation staging area. The landfill has a range of materials that are not being handled as efficiently as they could if an end-use and streamlining process for fabrication (chipping, mixing, etc) could be made available. A full range of organic materials can be staged adjacent to each other, and appropriate mixes can be

blended and used for re-building soils on the final landforms of the landfill during closure and restoration. Doing this will beneficially reuse some materials that would otherwise take up airspace, and it also greatly increases the success of re-vegetation on the final landforms.

10. Design the site for public access in the near future and sequentially open newly restored areas. Public acceptance of, and support for, the conservation design of the landfill property is best achieved by giving the public access to some strategic areas early on in time. The value of this outcome cannot be overstated and it should not be underappreciated.

ALTERNATIVE CONCEPTS

COMMON CAPPED LANDFILL USES:

DOG PARK, WALKING TRAILS,
NATURE RESERVE....

SOME LAND POSSIBLY USED BY
INDUSTRIAL PARK NEAR BY

NATURE AND HABITAT AREA

HIKING TRAILS

PARK AND SPORTS FIELDS

GOLF DRIVING RANGES

GOLF COURSE

COMMERCIAL
DEVELOPMENT/INDUSTRIAL PARKS

SCULPTURE OR BOTANICAL GARDEN

SLEDDING SLOPES

PUBLIC WORKS OR OTHER MUNICIPAL
FACILITIES

AMPHITHEATER/STADIUM

CEMETERY

RECYCLING CENTER

SOLAR FARM

NATURAL WILDLIFE HABITAT

GOLF COURSE

KAYAK RODEO PARK

GOLF COURSE OR A BMX TRACK

WALKING TRAIL AROUND NATURAL
LANDSCAPE

CONVERT INTO GREEN AND WOOD
WASTE FACILITY

IMPLEMENTATION

1. **Plan Adoption - Solid Waste Policy Board, Public Works and Infrastructure Committee.**
2. La Crosse County will base its land use decisions against this plan's goals, objectives, policies, and recommendations including decisions on private development proposals, public investments, regulations, incentives, and other actions.
3. La Crosse County can expect gradual change in the years to come. Although this Plan has described policies and actions for future implementation, it is impossible to predict the exact future condition. As such, the goals, objectives, and actions should be monitored on a regular basis to maintain concurrence with changing conditions.
4. The plan should be updated at least every 5 years. Staff, and Policy Board should periodically review the plan and identify areas that might need to be updated.
5. The Solid Waste Department updates its Capital Improvement Plan annually. This plan takes a long term look at investments for the site. It is a five year plan updated annually
6. **Action Plan.** The plan implementation table below provides a detailed list and work schedule of major actions that the county should complete as part of the implementation of this plan. It should be noted that many of the actions require considerable cooperation with others, including the citizens of La Crosse County, county staff, solid waste companies, local/state governments, and adjacent property owners. The completion of recommended actions in the timeframe presented may be affected and or impacted due to competing interests, other priorities, and financial limitations facing the county.

Table 9.1: Action Plan

Action	Who is responsible?	Schedule
ADOPT SOLID WASTE MASTER LAND USE PLAN	SOLID WASTE POLICY Bd.	2011
INVESTIGATE THE LAND PURCHASE FOR ENTRANCE AMENDMENTS	COUNTY BOARD	2012
DESIGN, ENTRANCE AMENDMENTS	STAFF AND CONSULTANT	2012
POTENTIAL INSTALLATION OF ENTRANCE AMENDMENTS	DEPARTMENT THROUGH COUNTY BOAR	2015
ANNUAL CAPITAL IMPROVEMENT PLAN	DEPARTMENT	ANNUALLY

Appendix B

La Crosse County Code of Ordinances Chapter 15 Solid
Waste Management (05/02)

CHAPTER 15

SOLID WASTE MANAGEMENT CODE

15.01	Declaration of Policy
15.02	Definitions
15.03	Administration
15.04	Powers and Duties of the Solid Waste Department
15.05	Permits for Management of Solid Waste
15.06	Permit Renewal
15.07	Large Hauler Discount Fee
15.08	Solid Waste Flow Control
15.09	Solid Waste Committee
15.10	Fees
15.11	Appeals
15.12	Prohibited Activities
15.13	Enforcement and Penalty

SOLID WASTE MANAGEMENT CODE 15.01

15.01 DECLARATION OF POLICY. It is hereby declared to be the purpose of this Code to regulate the storage, collection, transport, processing, recovery, and disposal of solid waste in order to protect the present and future public safety, health, welfare, economic stability and the environment of the people of La Crosse County. Nothing in this Code shall be interpreted to restrict the County from activities of recycling or household hazardous waste. This Code is enacted pursuant to ss. 59.52 and 59.70(2) and (3), Wis. Stats., and any amendments thereto.

15.02 DEFINITIONS. For the purpose of this Code, the following words and phrases shall have the meaning given herein unless their use in the text of the Code clearly demonstrates a different meaning.

(1) Acceptable Waste. All solid waste, garbage, trash, rubbish and refuse that is normally disposed of by, or collected from residential, commercial, and institutional establishments, and those certain types of industrial, construction or demolition waste described in, and complying with the requirements of Appendix I of the Service Agreement between La Crosse County and Northern States Power Company dated March 18, 1986, except that Acceptable Waste shall not include: Unacceptable Waste (as defined hereinafter) and shall also not include:

(a) Any waste defined as hazardous in 40 C.F.R. Section 261.3 (1983), or in any successor regulations, or by the U.S. Environmental Protection Agency, or classified as toxic substance or toxic waste or prohibited for incineration by any local, state or federal agency having jurisdiction over the facility;

(b) Radioactive waste or materials or hazardous waste regulated under 52 U.S.C. Section 6921-6925 and regulations adopted thereunder, or any other federal, state or local law;

(c) "Hazardous substances" defined in 42 U.S.C. 6901 et seq. and any regulations promulgated thereunder;

(d) Masonry, brick, concrete, stone, or any other industrial, construction or demolition waste not approved as Acceptable Waste, except as the Company may elect to accept the same in accordance with the Service Agreement between La Crosse County and Northern States Power Company;

(e) All wastes requiring special handling to comply with the applicable local, state or federal law, including but not limited to, (A) pathological, infectious, or explosive material, (B) oil sludges, (C) cesspool or human waste, (D) animal remains or waste;

(f) Any item of waste exceeding 4 feet in any 1 dimension or exceeding 100 pounds in weight;

(g) Any type of waste either smoldering or on fire or at its kindling point or in the process of initiating combustion; or

(h) Any item of waste that might damage the project, or in the combustion of which can be likely to impose a threat to health or safety in violation of any judicial decision, or order, or action of any federal, state or local government, or any agency thereof, or any other regulatory authority or applicable law or regulation.

SOLID WASTE MANAGEMENT CODE 15.02(2)

- (2) Animal Remains. Remains from dead animals, except wild game and fish caught for non-commercial human consumption or small household pets such as parakeets, goldfish, hamsters, an individual dog or cat, but not including livestock.
- (3) Animal Waste. Residues remaining from the commercial processing of animals or excrement from commercial animal operations, such as kennels, feedlots, veterinarian clinics and farms.
- (4) Ash. Solid residue remaining after ignition of combustible materials.
- (5) Biohazardous Waste. Pathological wastes and other biological materials that by state law are regulated differently than solid waste due to their increased biological threat to human health and which have not been treated to minimize their risk to human infection.
- (6) Biological Waste. See definition of Biohazardous Waste.
- (7) Bulky Waste. Items whose large size precludes or complicates their handling in residential, mixed solid waste compaction collection, processing, or disposal methods, including any item of waste exceeding 4 feet in any one dimension or exceeding 100 pounds in weight.
- (8) Collection. The act of removing solid waste from the central storage point at the source of generation.
- (9) Commercial Waste. Solid waste generated from stores, offices, and other activities that do not create a product.
- (10) Company. Northern States Power Company, d/b/a Xcel Energy Corporation. (referred to as Northern States Power Company in this Code)
- (11) Contract Community. La Crosse County, Wisconsin, a political subdivision of the State of Wisconsin.
- (12) Contract Service Area. Defined as the geographical area of the entities described below. This may change from time-to-time.
 - (a) La Crosse County, Wisconsin, (all) which includes: Town of Bangor; Town of Barre, Town of Burns; Town of Campbell; Town of Farmington; Town of Greenfield; Town of Hamilton; Town of Holland; Town of Medary; Town of Onalaska; Town of Shelby; Town of Washington; Village of Bangor; Village of Holmen; Village of Rockland; Village of West Salem; City of La Crosse, and City of Onalaska.
 - (b) Buffalo County, Wisconsin, (all) which includes: Town of Alma; Town of Buffalo; Town of Canton; Town of Cross; Town of Dover; Town of Gilmanton; Town of Lincoln; Town of Maxville; Town of Milton; Town of Modena; Town of Mondovi; Town of Montana; Town of Naples; Town of Nelson; Town of Wamandec; Village of Cochrane; Village of Nelson; City of Alma; City of Fountain City; City of Mondovi.

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(c) Trempealeau County, Wisconsin, (partial) which includes: Town of Arcadia; Town of Burnside; Town of Ettrick; Village of Eleva; Village of Strum; City of Arcadia (excludes wood waste from Ashley Furniture and all solid waste generated by St. Joseph's Hospital); City of Independence; City of Whitehall; and Perrot Work Unit (DNR).

(d) Southern Trempealeau County Solid Waste Commission, which includes: Town of Canton; Town of Dodge, Town of Gale, Town of Trempealeau; Village of Trempealeau; City of Galesville; and Jackson County – Melrose (& North Bend).

(e) Wabasha County, Minnesota, (partial) which includes: Elgin City, Elgin Township; Glasgow Township; Greenfield Township; Highland Township; Kellogg City; Lake Township; City of Lake City; Millville City; Minneiska Township; Oakwood Township; Pepin Township; Plainview City; Plainview Township; Wabasha City; Watopa Township; and West Albany Township.

(f) Houston County, Minnesota, (all) which includes: Black Hammer Township; Brownsville City; Brownsville Township; Caledonia Township; Crooked Creek Township; Eitzen City; Hokah City; Hokah Township; Houston City; Houston Township; Jefferson Township; La Crescent City; La Crescent Township; Mayville Township; Money Creek Township; Mound Prairie Township; Sheldon Township; Spring Grove City; Spring Grove Township; Union Township; Wilmington Township; Winnebago Township; and Yucatan Township.

(13) Demolition Landfill. The area designated by La Crosse County for the disposal of demolition wastes.

(14) Demolition Waste. Waste material and rubble from construction, remodeling, repair and demolition operations on pavements, buildings and other structures.

(15) Director. The duly qualified and appointed person in charge of the Solid Waste Department which is responsible for the administrative management of this Code.

(16) Facility. That portion of the La Crosse County – Northern States Power Company resource recovery project constituting the Resource Recovery Facility for the weighing and processing of solid waste into refuse derived fuel.

(17) Facility Site. The portion of the Northern States Power Company French Island Plant site on the south end of French Island in the City of La Crosse, La Crosse County, Wisconsin on which the Facility is located.

(18) Hazardous Waste. Waste defined as hazardous by local, state or federal law from time-to-time.

(19) Hospital Waste. The portion of solid waste from a hospital that exhibits infectious waste characteristics and are regulated by state law separately from other solid waste.

(20) Human Waste. Residues from waste water treatment plants or domestic sewage tanks.

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(21) Industrial Waste. The portion of solid waste remaining from the production of goods and cannot be used in the La Crosse County Resource Recovery Facility.

(22) Infectious Waste. The portion of waste from a hospital, laboratory, or clinic which at the time of disposal contains human pathogens in significantly greater concentration than residential solid waste.

(23) Institutional Waste. Solid waste generated from institutions such as schools, hospitals, research institutions and government buildings.

(24) La Crosse County Landfill Complex Facilities. The solid waste and recycling facilities and operations controlled by La Crosse County which are presently located at 6500 State Road 16, La Crosse, Wisconsin. These facilities and operations may change from time-to-time. The facilities include: sanitary landfill; pallet, crate and clean wood processing; asphalt shingle processing; aggregate processing; the demolition landfill; the yard waste site; tire recycling; asbestos disposal; and bioremediation of petroleum impacted soils.

(25) La Crosse Disposal System. The La Crosse County Landfill Complex, the Facility, and any other solid waste recycling facility, or program made available by La Crosse County to the Contract Service Area. These facilities and programs may change from time-to-time.

(26) Major Appliance. A residential or commercial air conditioner, clothes dryer, clothes washer, dishwasher, freezer, microwave oven, oven, refrigerator, furnace, boiler, dehumidifier, water heater or stove.

(27) Medical Waste. Containers, packages and materials that contain infectious waste or that are from a treatment area and are mixed with infectious waste.

(28) Non-Processable Waste. Waste which cannot be processed by the Facility due to its physical characteristics or potential harmful effects, including but not limited to: steel banding; baling wire; solvents; tree trunks; or logs greater than 6 inches in diameter or 4 feet in length or other overweight or bulky waste; gasoline; kerosene; propane tanks in any size; aerosol cans in quantity; pressurized tanks; tires in quantity; fencing materials; pesticides and insecticides in quantity; plastics in quantity; motor vehicles or major parts thereof; trailers; agricultural equipment; marine vessels or similar items; farm or other large machinery; liquid wastes; nonburnable construction mixed or separated material; and waste, except for paper products, from the following establishments: service stations, auto paint shops, chemical plants, plastic processing plants and textile plants.

(29) Pathological Waste. See infection waste.

(30) Permittee. Any entity issued a permit by the Solid Waste Department pursuant to this Code.

(31) Person. Any individual, corporation, limited liability company, partnership, association, local governmental unit as defined in s. 66.299(1)(a), Wis. Stats., state agency or authority or federal agency.

(32) Processing. Any method, system, or other treatment designed to beneficially change the physical form or chemical content of solid waste.

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(33) Putrescible Waste Trailer. Any trailer with physical interior space capacity greater than 100 cubic yards which is used to transport any wastes capable of being decomposed by microorganisms with sufficient rapidity to cause nuisances from odors and gases. Kitchen wastes, restaurant wastes, offal, and any wastes containing garbage are examples of putrescible wastes. Not included in this definition are agricultural wastes, lawn care wastes, manures and sewage sludge. Any trailer containing solid waste which is off loaded at a sanitary landfill is presumed to be a putrescible waste trailer unless proven otherwise.

(34) Recovered Resources. Materials which still have useful physical or chemical properties after serving a specific purpose and can, therefore, be reused or recycled for the same or other purposes.

(35) Recovery. The process of obtaining material or energy resources from solid waste.

(36) Recycling. The process by which recovered resources are transformed into new products in such a manner that the original products lose their identity.

(37) Refuse Derived Fuel (RDF). Material which is produced by the processing of Processable Waste at the Facility which is intended to be burned as a source of energy.

(38) Rejects. Non-processable waste.

(39) Residential Waste. Discarded materials originating from residences but excluding demolition waste or any other waste specifically regulated separately from residential waste. Also called domestic or household refuse.

(40) Resource Recovery. The conversion of solid waste into fuel or energy.

(41) Responsible Unit. A municipality, county, another unit of government, including a federally recognized Indian tribe or band in this state, or solid waste management system under s. 59.70(2), Wis. Stats., that is designated under s. 287.09, Wis. Stats., or any amendments thereto.

(42) Roll-Off Container. A steel box with wheels used to collect waste at a site that can be rolled onto a truck using a winch and then taken to another location for discharge.

(43) Sanitary Landfill. The land area where mixed solid wastes are disposed of under state and/or federal regulatory authority.

(44) Service Fee. The estimated monthly service fee as well as the actual annual service fee payable by the County to Northern States Power Company as provided in Section VI of the Service Agreement.

(45) Sharps. Waste items from institutions, industry, and commercial establishments that can induce subdermal inoculation of infectious agents, including needles, scalpel blades, pipettes and other items derived from human or animal patient care, blood banks, laboratories, mortuaries, research facilities, teaching facilities, and other like facilities.

SOLID WASTE MANAGEMENT CODE 15.02(46)

(46) **Solid Waste.** Any garbage, refuse, sludge from a waste treatment plant, water supply treatment plant or air pollution control facility and other discarded or salvageable materials, including solid, liquid, semisolid, or contained gaseous materials resulting from industrial, commercial, mining and agricultural operations, and from community activities, but does not include solids or dissolved material in domestic sewage, or solid or dissolved materials in irrigation return flows or industrial discharges which are point sources subject to permits under Chapter 283, Wis. Stats., or source material, as defined in s. 254.31(10), Wis. Stats., special nuclear material, as defined in s. 254.31(11), Wis. Stats., or by-product material, as defined in s. 254.31(3), Wis. Stats., or any amendments to these sections.

(47) **Solid Waste Management Plan.** A plan which addresses present and future solid waste management programs within the La Crosse County Solid Waste Disposal System.

(48) **Tipping Fee.** A charge to unload waste material at the facility, the sanitary landfill, the yard waste site, the demolition disposal site, or any other solid waste disposal site.

(49) **Transport.** The movement of solid waste subsequent to collection.

(50) **Transfer Station.** A site at which solid waste is concentrated after collection and before processing or disposal.

(51) **Unacceptable Waste.** Waste which poses a threat to health or safety or which may cause damage to or materially adversely affect the operation of the facility, including but not limited to, explosive, hospital, pathological and biological waste, hazardous waste, chemicals, or animal remains, street sweepings, ash from commercial or industrial sources, mining waste sludges, asbestos in identifiable quantities, demolition debris, waste with excess moisture, and hazardous refuse of any kind, such as cleaning fluids, crank case oils, cutting oils, paints, acids, caustics, poisons, drugs or other materials that may be agreed upon from time to time by La Crosse County and Northern States Power Company. If any governmental agency or unit having appropriate jurisdiction shall determine that certain chemicals or other substances which are not as of the effective date of this section considered harmful or of toxic nature or dangerous, are harmful, toxic or dangerous, such chemical or other substances shall be unacceptable waste.

(52) **User Fee.** Any fee charged by the Solid Waste Management Department for solid waste management.

(53) **Yard Waste.** Leaves, grass clippings, yard and garden debris and brush, including clean, woody, vegetative material no greater than 6 inches in diameter, not including stumps, roots or shrubs with intact root balls.

(54) **Yard Waste Site.** The area designated by La Crosse County for receipt of some yard waste, limited to leaves, grass clippings, and other vegetative matter approved by the Solid Waste Committee.

15.03 **ADMINISTRATION.** The Solid Waste Department shall be responsible for the administrative management of this Code and the rules and regulations authorized in s. 15.04.

15.04 POWERS AND DUTIES OF THE SOLID WASTE DEPARTMENT.

(1) Solid Waste Management Plan. The Director, in cooperation with any other person(s) as approved by the Solid Waste Committee and with the advice of the Solid Waste Committee, shall review the solid waste management practices affecting La Crosse County and its Disposal System and shall prepare a Solid Waste Management Plan. The Plan shall show relevant management activities and recommended management strategies for the future, taking into consideration population growth, solid waste generation, land development regulations, affect on economic development, affect on local economy, and overall system management including organizational, financing, and regulatory capabilities. The Plan shall consider the qualitative and quantitative changes in the solid waste expected to be generated within the area affected from residential, commercial, industrial, and agricultural sources, and shall be submitted to the State for review and approval. The Plan developed should consider regional approaches, and be environmentally acceptable and economically efficient.

(2) Solid Waste Management System. The Director shall provide or encourage other entities to provide for a solid waste management system consistent with the Solid Waste Management Plan, consisting of storage, collection, transport, processing, separation, recovery, and disposal through public ownership, or through one or more private entities for a part or all of such solid waste system, or the Director may, through the permits provided in s. 15.05, authorize any person to manage the solid waste which the person generated within the management system pursuant to the terms of this Code.

(3) Rules and Regulations. The Director may adopt, revise, revoke and enforce rules and regulations governing the administration of this Code, subject to approval of the Solid Waste Committee.

(4) Permits. The Director is hereby authorized to issue permits for all elements of solid waste management referred to in s. 15.05. There shall be restrictions on transferability of such permits. Permits shall be for a term of 1 year or less and shall be subject to the fees set forth in s. 15.10. All permits so issued shall be conditioned upon observance of the laws of Wisconsin, and all applicable county ordinances and regulations.

15.05 PERMITS FOR MANAGEMENT OF SOLID WASTE.

(1) Permit for Solid Waste Collection and Transportation.

(a) No person, firm, entity or corporation shall engage in the collection and transportation of solid waste for deposit in the La Crosse Disposal System, or in the business of collection and transportation of La Crosse County generated solid waste or the handling of any other solid waste, regardless of where generated, where such waste is unloaded or reloaded in La Crosse County, without first securing a permit for every vehicle and putrescible waste trailer utilized in this activity within La Crosse County. Any person, firm, entity or corporation which is required to pay the large hauler discount fee under this Code shall receive a permit for each and every vehicle and putrescible waste trailer accounted for in the monthly large hauler discount fee.

(b) The Director, with input from the La Crosse County Health Department, shall prepare application forms for all such permits for vehicles and putrescible waste trailers transporting, collecting or receiving waste in La Crosse County, requiring the following information:

1. The name and address of the owner or owner's representative, indicating owner's legal identity (individual, partnership or corporation);

SOLID WASTE MANAGEMENT CODE 15.05(1)(b)2.

2. The business street address of the owner or owner's representative;
3. The specific routes used for the movement of solid waste through collection, transport, transfer station, processing, recovery and disposal by haulers with a Wisconsin DNR operating license under NR 502.06, except routes exclusively collecting demolition waste or routes collected exclusively with roll-off containers greater than 10 cubic yards in volume. Route information provided under this section shall be presumed confidential pursuant to s. 19.36(5), Wis. Stats.;
4. Permittee schedules of routes, including specific name of transfer station and destination facility, used by haulers with a Wisconsin DNR operating licensed under NR 502.06. Changes in routes, collection dates or destination facility are to be transmitted via tele-facsimile to the Solid Waste Department as soon as changes are known and prior to vehicles being redirected;
5. An inventory of all vehicles and putrescible waste trailers to be used in such collection and transportation, including the solid waste capacity in cubic yards and tonnage, and the make, model, year, and license plate number. Solid waste cubic yard and tonnage capacity for roll-off trucks shall be the legal limit of containers designed for the roll-off truck;
6. All other information required by the Director to fulfill the intent of this Code.

(c) The following conditions shall apply regarding all vehicles and putrescible waste trailers issued a permit pursuant to this section:

1. All solid waste collected or transported in La Crosse County shall be entirely enclosed or, when not practical, secured, and shall comply with all other rules and regulations issued by the La Crosse County Solid Waste Department.
2. Any person, firm, entity or corporation issued a permit under this section hereby consents to the inspection of solid waste vehicles, putrescible waste trailers, storage containers, processing facilities, solid waste/recycling transfer station(s) by La Crosse County personnel in accordance with the County's neutral enforcement plan or La Crosse County policy for purposes of verifying compliance with applicable County ordinances. Failure to consent to inspection of any vehicle, putrescible waste trailer, storage container, processing facility or solid waste/recycling transfer station issued a permit under this section shall be grounds for revocation of the permit.
3. Permittees in good standing may transfer a permit between vehicles. The fee for transferred permits shall be 1/12 of the annual permit fee.
4. Permit holders must comply with all applicable laws and regulations, including rules and regulations adopted by the Solid Waste Committee or the Solid Waste Department.
5. All acceptable waste shall be deposited at the Facility. All other non-recycled solid waste shall be deposited only in a licensed landfill, approved demolition landfill or other site in compliance with local, state and federal solid waste regulations. If the delivering of unacceptable waste to the Facility results in additional expense to the County, the County may charge the permit holder or generator of waste for such expense, based upon an average or actual expense to the County for handling such unacceptable waste, at the County's discretion.

SOLID WASTE MANAGEMENT CODE 15.05(1a)

(1a) Permit for Solid Waste/Recycling Transfer Stations.

(a) No person, firm, entity or corporation shall maintain any building, premises or structure in any unincorporated area in La Crosse County as a solid waste/recycling transfer station without securing a permit for the facility. A solid waste/recycling transfer station is defined as a facility that receives and consolidates solid waste or recyclable materials that are loaded upon trailers, barges or other vehicles for transport to another disposal facility.

(b) The Director, with input from the La Crosse County Health Department, shall prepare the application forms for all permits for solid waste/recycling transfer stations in La Crosse County, requiring the following information:

1. The name and address of the owner or owner's representative, including owner's legal identity, such as individual, partnership or corporation or otherwise;
 2. The business street address of the owner or owner's representative;
 3. The specific address for the solid waste/recycling transfer facility;
- and
4. A copy of the application for any licenses required by the Wisconsin Department of Natural Resources or other applicable state agencies.

(c) The applicant shall pay an annual permit fee, which shall pay for administrative costs of inspection and other costs related to monitoring compliance with the conditions of the permit.

(d) The following conditions shall apply regarding any transfer station issued a permit required under this section:

1. The station shall not abut a property zoned or planned for residential use.
2. The site shall be maintained free from litter or any other undesirable materials, shall be cleaned from loose debris on a daily basis and shall be secured from unauthorized entry and removal of materials when attendants are not present.
3. The premises and all structures thereon shall only be used for the purposes as set forth in the permit granted under this section and the business of the transfer station shall be carried on in a sanitary manner, shall contain no fire hazards, and shall be arranged to allow inspection at any time by proper health, fire, building, or law enforcement authorities.
4. For a period of 36 months, the permit holder shall be required to keep records of all tonnage of each load brought to the station, including the source of the waste load by county of origin, and records of all tonnage of each load removed from the station, specifying tonnage and site where said waste is finally disposed. To the extent the permit holder salvages material from the waste, detailed records will be maintained that allow La Crosse County to verify the amount of salvaged material.

SOLID WASTE MANAGEMENT CODE 15.05(1a)(d)4.

The permit holder shall keep records of waste types in accordance with the waste categories used by La Crosse County. All records shall be available for inspection by La Crosse County or any other municipality with jurisdiction over said station. The station shall submit summaries of verifiable tonnage records in a format and on a schedule and deadline determined by the Solid Waste Department.

5. Any person, firm, entity or corporation issued a permit under this section hereby consents to the inspection of the solid waste/recycling transfer station by La Crosse County personnel for purposes of verifying compliance with applicable rules and regulations of the La Crosse County Solid Waste Department and applicable County ordinances. Failure to consent to inspection of any station issued a permit under this section shall be grounds for revocation of the permit. La Crosse County has the right to perform 12 annual random waste screenings of loads delivered to or loaded from the transfer station. The permit holder will assist in the load inspection in a timely fashion by providing a safe place for the inspection and by spreading the waste in a manner requested by La Crosse County representatives. The permit holder shall not be entitled to compensation from the County for costs related to the inspections.

(2) Permits procedure.

(a) Issuance. If the application for any permit shows that the applicant might not perform the activity in conformity with this Code and all applicable rules and regulations, the permit(s) shall not be issued. If, in the opinion of the Director, modifications can be made which will bring the application within the intent and purpose of this Code, the Director shall notify the applicant or applicants in writing, setting forth the adjustments and/or additions to be made and the time in which such changes shall be completed.

(b) Denial. If the applicant fails to make the changes pursuant to the notice given under (a) within the time limit specified therein, or, if the application does not clearly show that the applicant will perform activities in accordance with the permit conditions, applicable law, or without health hazard or adverse effects on the environment, the application shall be denied and the applicant notified, in writing, of the reasons for the denial. Nothing in this section shall prevent any applicant from reapplying after the rejection of his application, provided the requirements of this Code are met.

(c) Display. All vehicles and putrescible waste trailers operating under any permit required by this Code shall display the Director approved permit number or numbers on the driver's side of the vehicle cab and putrescible waste trailer in a location acceptable to the Director. Such numbers are to be clearly legible, easily seen and not less than 2 inches high. In addition, all permitted vehicles must display the current permit sticker issued by the County on the driver's side window. Permitted putrescible waste trailers must display the current permit sticker issued by the County adjacent to the approved permit number(s).

(d) Term. Annual, 12 calendar month permits will be valid the month preceding the permit year through the permit year, without the requirements of a fee for said preceding month. All permits shall expire December 31st, except for permits issued under s. 15.05(3).

(e) Revocation. Permits may be revoked for violation of any of the provisions of this Code. Revoked permit(s) may be reinstated by the Director at such time as the Director is satisfied that violations are corrected or as provided under s. 15.10(2)(b).

(3) Special Permit Provisions.

(a) There shall be a 3 consecutive day permit available for payment of 1/12 the annual permit fee. This permit shall only be valid for use of the La Crosse County Landfill Complex Facilities. In this section, 3 consecutive days means 3 consecutive days when the Landfill Complex Facilities are open for business.

(b) The Solid Waste Director may issue 1-time disposal authorizations without a permit fee for trial loads or where unique circumstances apply.

15.06 PERMIT RENEWAL.

(1) Any permit holder desiring to renew an existing permit and avoid a permit lapse shall complete and submit to the Director an application thereof not more than 45 nor less than 5 calendar days before the expiration date of said permit and shall tender with each application form such permit fees as are required. The Director shall have up to 5 calendar days to approve new permit applications.

(2) At the discretion of the Solid Waste Director each application for a new or lapsed permit shall be accompanied by a certified check or money order for the permit fee, which fee shall be set by the La Crosse County Solid Waste Committee and adjusted from time to time as the Committee deems appropriate.

15.07 LARGE HAULER DISCOUNT FEE.

(1) No person, firm, private organization, or corporation shall engage in the collection or transportation of acceptable waste or any other solid waste in excess of 1,000 cumulative tons per year without paying the large hauler discount fee for each permitted vehicle and putrescible waste trailer to the La Crosse County Solid Waste Department. In addition, no person, firm, private organization or corporation that is required to obtain a Wisconsin Department of Natural Resources operating license under Wisconsin Administrative Code, NR 502.06, shall engage in the business of collecting and transporting La Crosse County generated solid waste from La Crosse County or of unloading and reloading such waste in La Crosse County without paying the large hauler discount fee to the La Crosse County Solid Waste Department for every vehicle and putrescible waste trailer which is utilized in this activity within La Crosse County. This fee shall not be required of vehicles and putrescible waste trailers which exclusively transport solid waste for deposit at La Crosse County solid waste disposal facilities through a county or municipal agreement.

The large hauler discount fee shall be set by the La Crosse County Solid Waste Committee and shall be adjusted from time-to-time as the Solid Waste Committee deems appropriate.

(2) Large Hauler Discount Fee Provisions.

(a) The initial determination of whether a large hauler discount fee applies to any entity shall be made by the La Crosse County Solid Waste Director. Parties may appeal the decision of the Solid Waste Director in accordance with s. 2.05 of the La Crosse County General Code and Chapter 68 of Wisconsin Statutes.

SOLID WASTE MANAGEMENT CODE 15.07(2)(b)

(b) The Solid Waste Committee may establish disposal fee discounts for vehicles and putrescible waste trailers which pay the large hauler discount fee.

(c) The Solid Waste Committee may exempt the large hauler discount fee in situations where haulers exclusively utilize the La Crosse County disposal system for waste utilized by the system. Haulers which are excluded under this section are not entitled to the disposal fee discounts as provided in (2) of this section.

(d) Large hauler discount fee shall be payable in accordance with s. 15.10 of the La Crosse County General Code and shall be paid monthly. Monthly large hauler discount fee payments shall be first applied to the discount fee owing and then to other fees.

(e) Large hauler discount fees shall not include the permit fee for each vehicle that is required to be permitted in accordance with s. 15.05 of the La Crosse County General Code. The permit fee shall be in addition to the large hauler discount fee.

15.08 SOLID WASTE FLOW CONTROL.

(1) Facility Description. The Facility designated is declared to be the La Crosse County Resource Recovery Facility located adjacent to the Northern States Power Company, French Island Generating Plant located at the south end of French Island in the City of La Crosse, La Crosse County, Wisconsin.

(2) Geographic Area Affected. The geographic area subject to this flow control, and for which a required use order may be issued pursuant to s. 144.794(11), Wis. Stats., (now numbered s. 287.13(11), Wis. Stats.) shall constitute all areas located within La Crosse County, Wisconsin.

(3) Type and Quantities of Solid Waste. The types and quantities of solid waste, which shall be subject to this flow control ordinance and for which a required use order may be to, shall include all residential, commercial and industrial acceptable waste generated in La Crosse County, Wisconsin.

(4) Persons Subject to Ordinance. The persons who are subject to this flow control ordinance and who may be required to use the Resource Recovery Facility under a required use order are the following:

a. Any local unit of government, occupant of a single family or multi-family residence, retail business, commercial business or industry or any other legally recognized entity located in or collecting solid waste within the area of La Crosse County.

(5) Tipping Fees/Rates and Charges. The tipping fee to be charged to the required users of the facility will include the service fee formula between La Crosse County and Northern States Power Company as calculated pursuant to Section VI of the Solid Waste Disposal Service Agreement (Service Agreement) between said parties.

(6) Effective Period. The effective period for enforcement of this municipal waste flow control ordinance shall be from January 25, 1998, through June 30, 2023. The effective date of this solid waste flow control ordinance is January 25, 1988.

SOLID WASTE MANAGEMENT CODE 15.08(7)

(7) Authorization. The County Board Chair and County Clerk are hereby authorized, empowered and directed to issue a required use order pursuant to the intents and purposes of the Solid Waste Disposal Service Agreement between La Crosse County, Wisconsin and Northern States Power Company. Said order to conform with the provisions of Chapter 287 of the Wisconsin Statutes (previously Chapter 144). Said required use order to direct delivery of the described types of solid waste to the La Crosse County Resource Recovery Facility.

(8) Exceptions to Required Use. At such time that deliveries, including non-La Crosse County generated deliveries, to the Facility exceed the delivery commitments as provided in the County's service agreement with the Company, or any amendments thereto, and the Director has evidence to substantiate that such delivery commitments will continue to be exceeded annually by at least 2%, La Crosse County, by written agreement with any permittee approved by the Solid Waste Committee, may allow the permittee to deliver a described amount of La Crosse County generated non-residential acceptable waste to a site other than the Facility as long as the calendar year-to-date waste delivery schedule for deliveries to the Facility does not drop below 98% of January's commitment or 100% of the year-to-date waste delivery schedule through the remainder of said calendar year. Any such permission shall only be in accordance with policies and standards adopted by the La Crosse County Solid Waste Department.

15.09 SOLID WASTE COMMITTEE.

(1) Appointment. The County Board Chair shall appoint 7 Supervisors of La Crosse County to be the Solid Waste Committee, as well as the Chair of the Committee. The County Board Chair shall also fill all vacancies, however created. Any vacancy shall be filled for the unexpired term in the same manner as the original appointment.

(2) Term. Members of the Solid Waste Committee shall serve for a term of 2 years, beginning the 3rd Tuesday in April of even numbered years, provided the terms of those first appointed shall begin immediately upon appointment and end upon the 3rd Tuesday of April or the next succeeding even numbered year.

(3) Organization. The Solid Waste Committee shall, within 45 days after its full appointment, hold a meeting and establish its regular monthly meeting schedule. The Committee shall meet not less than 1 time quarterly each year. The Chair or a quorum of the Solid Waste Committee may call a meeting at any time. The Committee shall have a Chair and a Vice-Chair.

(4) Powers and Duties. The Solid Waste committee shall have the following powers and duties:

(a) Shall advise the Director in the preparation of the solid waste management plan, including the selection of solid waste management sites.

(b) May review permit application forms and direct revisions which shall be consistent with the terms of this Code.

(c) Employ public and private firms or individuals to assist and advise the Solid Waste Committee and Director.

SOLID WASTE MANAGEMENT CODE 15.09(4)(d)

(d) Approve property sites and the building of facilities, including the use of equipment and buildings related to the implementation of this Code, by contract between the County Board and any other party.

(e) Charge user fees for participation in the solid waste management system. User fees may cover capital costs, operation costs, maintenance costs, depreciation costs, administration costs, equipment costs, site purchase and site development costs, applicable buildings and scales, long term care environmental fees, mandated fees, insurance costs, solid waste program development costs, public information costs, planning costs, and reserves for solid waste management activities. A solid waste disposal site tipping fee is 1 user fee which may or may not satisfy all costs incurred for an individual solid waste disposal site. La Crosse County may assess other user fees, including but not limited to, permit fees, fixed price fees, variable price fees, and special assessments.

(f) Exclude unpermitted public and unpermitted private entities from bringing solid waste to the solid waste disposal sites for disposal, unless such waste is to be beneficially used or recycled.

(g) Allow exceptions for use of solid disposal sites by issuing special use allowances upon application to the Solid Waste Committee, provided a sufficient security or surety requirement is fulfilled.

(h) Contract with private collectors, transporters or municipalities, with approval of the County Board, to receive and dispose of waste.

(i) Contract with private waste collectors/transporters, entities, or municipalities to lease solid waste containers or other equipment or to provide discounts regarding the fee charged, upon approval of the County Board.

(j) Any other management oversight function deemed appropriate by the Solid Waste Committee.

15.10 FEES.

(1) Establishment and payment. The Solid Waste Committee shall establish such fees as are necessary to meet all costs of operating, maintaining, promoting and perpetuating the solid waste management system facilities and programs. All such fees, including subsequent revisions, shall be paid by the permittee or its designee to the La Crosse County Treasurer within the calendar month after the calendar month when the charges were originally incurred. To avoid delinquency charges the fees must be received and recorded by receipt in the La Crosse County Treasurer's office by 5:00 p.m. the last working day the County Treasurer's office is open for business of the calendar month in which the fees are due. In the event the permittee or its designee requests fees to be billed to another person, that person must agree and provide information requested by the Director for the purpose of billing. Any unpaid fees, including delinquency charges, incurred by any person designated for billing will be the responsibility of the person who delivered the solid waste; however, in any case where the person who delivered the waste is not the person billed, the permit(s) of the person who delivered the waste shall not be revoked for the other person's delinquency in paying fees until the permittee receives written notification from the Director of the other party's delinquency, and the revocation shall occur if not paid within 60 days of receipt of notice.

(2) Delinquency.

(a) All unpaid fees shall become delinquent upon the expiration of the time specified in (1) and (5) and shall bear interest at the rate of 1.5% per calendar month until paid.

(b) All permits issued under this chapter shall be revoked for permit holders having an unpaid bill for longer than 2 calendar months after the charges were originally incurred, unless an extension of time to pay is granted by the Solid Waste Committee and except where the billed party is not the permittee as provided in (1). After a permit is revoked, bills shall be paid to current status before such permits shall be reinstated.

(3) Collection. The Director or his designee shall notify the Corporation Counsel office of all delinquent accounts not more than 8 days after the end of each calendar month and the Corporation Counsel shall take action as deemed necessary to collect such accounts.

(4) State or federal government reimbursed projects. For state or federal government reimbursed projects, where it is not possible to process payment of the bills within 1 calendar month as provided in (1), such bills will be delinquent only if not paid within 3 calendar months after the calendar month when the charges were originally incurred. The disposal permits for such government permit holders shall only be revoked if the bill is unpaid for longer than 4 calendar months after the charges were originally incurred.

15.11 APPEALS.

(1) Any person who feels aggrieved by any action of the Director or any of the employees of the Solid Waste Department, may request that the decision be reviewed within 30 days of notice of the decision or action. The request shall be made to the officer or employee who made the determination. Requests shall be in writing and state the ground or grounds upon which the person aggrieved contends that the decision should be modified or reversed.

(2) The Solid Waste Committee shall, within 15 days of the date of the request, review the initial determination and may either affirm, reverse or modify the initial determination and mail the person aggrieved a copy of the decision on the review, which shall state the reasons for such decision.

(3) Any person aggrieved by the Director's decision may appeal the decision to the La Crosse County Administrative Board of Review by requesting such a review within 30 days of notice of the Director's decision. The appeal must be in writing and either filed with or mailed to the office of the Director. Any hearing of the La Crosse County Administrative Board of Review shall conform with the requirements of s. 68.11, Wis. Stats., and s. 1.63 of this Code.

15.12 PROHIBITED ACTIVITIES.

(1) It shall be unlawful to place animal remains or animal waste in a container for solid waste collection without the consent of the Director.

(2) It shall be unlawful to store, collect, transport, transfer, recover, incinerate or dispose of any solid waste within the boundaries of La Crosse County contrary to the provisions of this Code.

SOLID WASTE MANAGEMENT CODE 15.12(3)

(3) It shall be unlawful to transport any solid waste in any vehicle or trailer which permits the contents to blow, sift, leak or fall from said vehicle.

(4) It shall be unlawful for any person to interfere with any employee of the La Crosse County Solid Waste Department or any employee of the contractor under contract with La Crosse County while in the performance of duties authorized by this Code.

(5) It shall be unlawful for any person to scavenge any solid waste within the boundaries of La Crosse County Landfill Complex Facilities, without written authorization from the Director.

(6) It shall be unlawful for any person to make false statements in any application required by this Code.

(7) It shall be unlawful for any person to display any permit number unless the person displaying such number or numbers holds a valid permit or permits for said number(s).

(8) No person shall place any hazardous waste in any container for collection, transport, processing or disposal unless such use of hazardous waste has been approved by the applicable authorizing authority.

15.13 ENFORCEMENT AND PENALTY.

(1) Except as provided under (2) below, any person who shall violate any provision of this Code or any regulation, or order made hereunder, shall, upon conviction thereof, be subject to a penalty provided by s. 25.04 of this Code.

(2) Any person who shall violate the provisions of s. 15.08 of this Code, or any regulation, rule or order made thereunder, including any required use order issued pursuant to this Code shall, upon conviction thereof, be subject to a penalty, which shall be calculated as follows:

(a) **Penalty Based Upon Volume Capacity.** Any person who shall violate any provision of s. 15.08 of this Code, including any regulations, rule or other made under said section, including any required use order issued pursuant to this Code, shall be subject to a penalty equal to the tonnage capacity of the truck or container divided by 3, multiplied by the tipping fee per ton then in effect at the facility. If the tonnage capacity is not known, then the cubic yard capacity shall be divided by 3 for conversion to tons. This penalty shall be in addition to the base penalties imposed under s. 15.13(2)(b), (c) and (d) of this Code.

(b) **First Offense Penalty.** Any person who shall violate any provision of s. 15.08 of this Code, or any regulation, rule or order made thereunder, including any required use order issued thereunder, shall forfeit \$1000 plus the additional fee imposed by s. 15.13(2)(a) of this Code, together with the cost of prosecution and, in default of payment of such forfeiture and cost, shall be imprisoned in the County jail until such forfeiture and costs are paid, but not exceeding 90 days.

SOLID WASTE MANAGEMENT CODE 15.13(2)(c)

(c) Second Offense Penalty. Any person who shall violate any provision of s. 15.08 of this Code, including any regulation, rule or order issued thereunder, including any required use order made hereunder, who shall previously have been convicted for a violation of the same Code within 1 year shall, upon conviction thereof, forfeit \$2,000 plus the additional fee imposed by s. 15.13(2)(a) of this Code together with costs of prosecution and, in default of payment of such forfeiture and cost, shall be imprisoned in the County jail until such forfeiture and cost of prosecution are paid, but not exceeding 6 months.

(d) Third or Greater Offense Penalty. Any person who shall violate any provision of s. 15.07 of this Code, including any regulation, rule or order issued thereunder, including any required use order issued thereunder, who shall previously have been convicted more than once of a violation of the same Code within 2 years shall, upon conviction thereof, forfeit \$4,000, together with costs of prosecution and, in default of payment of such forfeiture and cost, shall be imprisoned in the County jail until such forfeiture and the costs of prosecution are paid, but not exceeding 6 months.

(e) Non-Exclusivity of Remedy. The penalties provided herein shall be in addition to any other remedies in law or in equity which the County may have against any person found guilty of violation s. 15.08 of this Code, or any required use order issued pursuant to s. 15.08 and ss. 144.794(11) and (12) (now ss. 287.13(11) and (12)), Wis. Stats., and shall not preclude the County from seeking injunctive relief to enforce compliance with this Code, including the issuance and enforcement of any special enforcement order issued pursuant to s. 15.08 of this Code and s. 144.794(12), Wis. Stats., (now s. 287.13(12)), or from seeking revocation of any license or permit issued to said person, subject to the provision of Chapter 68 of Wisconsin Statutes.

(f) Separate Violations. Each vehicle, putrescible waste trailer or container in violation of this Code shall constitute a separate and distinct offense.

(g) Applicability of Section 25.04. Except as provided in s. 15.13(b) hereinabove, the provisions of s. 25.04 of this Code shall apply to any person who shall violate any provision of this Code.

(3) The Director shall have the authority to issue citations for violations of the provisions of this Code. In addition to the authority to issue a citation, the County may also seek injunctive relief in circuit court to obtain compliance with the provisions of this Code or to prohibit further violations of this Code as appropriate.

Appendix C

La Crosse County Residential Collection System Summary

La Crosse Recycling System Overview

Government Unit	System	Frequency	Materials	Collection	Collector	C/I Generators
City of La Crosse	Curbside	Bi-weekly	Glass, ONP, tin, UBC	Curbside	Harters Quick Clean up	Contract separately
Town of Campbell	Curbside	Bi-Weekly	Tin, glass, UBC, ONP	Curbside	Richards	Contract separately
Town of Farmington	Drop off @ Town Hwy Shop	8 AM-noon Sat. 1 PM-5 PM Tues.	Glass, tin, 1&2 plastics, Newspaper, aluminum	Drop off	Hilltopper	Reasonable amounts
Town of Greenfield	Drop off	2 days/week	Recyclables, other wastes	Bring to drop-off	Hilltopper	
Town of Hamilton	Drop off	2 days/week	Glass, metal, alum./oil	Drop Off	Hilltopper	Contract separately
Town of Holland	Commingle curbside	Bi-weekly	Newspaper, steel, tin, glass, plastics	Curbside	Hilltopper	
Town of Medary	Curbside	Weekly	Source separated, URC, tin, glass	Curbside	Harters Quick Clean up	Contract separately
Town of Onalaska	Curbside	Bi-weekly	Plastics, tin, glass, paper news	Curbside	Hilltopper	Contract separately
Town of Shelby	Curbside	Bi-weekly	Tin, glass, plastic (1&2); newspaper, magazines, aluminum	Curbside, commingled except for paper	Hilltopper	Contract separately
Town of Washington	Drop-off	Once a week	ONP, UBC, tin, glass	Waste Management	Waste Management	
Village of Bangor	Curbside	Weekly	Tin, glass, paper, plastic	Curbside	Harters	
Village of Rockland	Curbside	Weekly	Tin, glass, alum., plastic, newspaper, cardboard	Curbside	Harters	*Does not include Xcel Energy or appliance
Village of West Salem	Curbside	Bi-Weekly	ONP, UBC, tin, glass	Curbside bins commingled	Hilltopper	Contract separately

La Crosse County Drop Off Sites

City of La Crosse Refuse & Recycling 2000 Marco Drive; West Copeland Park (608) 789-7508 / www.cityoflacrosse.com	Brush, yard waste, leaves – April thru October Mondays - Friday 7:00am - 4:00 pm; 1st & 3rd Saturdays 9:00am – 12:00pm;
City of Onalaska	Brush, yard waste, leaves – April thru October Mondays - Friday 7:00am - 4:00 pm; 1st & 3rd Saturdays 9:00am – 12:00pm;
Village of West Salem; 900 West Avenue N. (608) 786-1858 / www.westsalemwi.com	Brush, yard waste, leaves. Open daily for residents. West Avenue North north of Village Garage
Village of Bangor	No drop-off sites
Village of Rockland 105 W. Center Street, Village Hall Rockland, WI 54653 486-4037 / www.villageofrockland@charter.net	Yard waste drop-off site open 2nd & 4th Saturdays from 8:00–10:00am
Village of Holmen; Empire Street 526-4336	Leaves & yard waste drop-off off of Empire Street. Open spring, summer & fall; Monday & Wednesday 2:00-6:00pm & Saturdays 8:00am – 4:00pm
Town of Bangor; N4400 State Road 162, Town Hall; Bangor, WI 54614	Drop-off open Fridays 1:00–5:00pm; Saturdays 8:00am – Noon
Town of Barre	No drop-off sites for yard waste or recyclables. Three times per year, have a drop-off for large items and demo.
Town of Campbell 2219 Bainbridge Street; La Crosse, WI 54603 783-0050 / campbellwi@charter.net	Behind Town Hall - gates always open. No brush.
Town of Farmington; N8309 State Road 108; Mindoro, WI 54644 (608) 857-3913	Tuesdays 1:00-5:00 pm; Saturdays 8:00am–Noon
Town of Greenfield; W2870 Kreibich Coulee Road; La Crosse, WI 54601	Drop-off open every Saturday 8:00am–2:00pm; also Tuesdays in spring & summer from 4:00-7:00 pm; fall and winter 1:00-4:00p.m.
Town of Hamilton; N5105 N. Leonard Street West Salem, WI 54669 786-0989	Vehicle sticker required. Open every Saturday 7:00am–3:00pm; Tuesdays 9:00am–5:30pm
Town of Holland W7937 County Road MH; Holmen, WI 54636 www.co.la-crosse.wi.us/TownOfHolland	Yard waste drop-off by Town Hall - open during daylight hours
Town of Onalaska N7042 Josie Street in Midway; Town Shop 783-4958 / www.co.la-crosse.wi.us/townofonalaska	Leaves, grass, yard waste can be dropped off any day until 8:30pm Large items (no construction debris) 2nd Tuesdays 7:30-9:30am & variable Saturdays 8:00am–Noon. Closed December - February. Must have vehicle sticker.
Town of Shelby; 2800 Ward Avenue 788-1032 / www.townofshelby.com	Leaves & yard waste drop-off April-November at Town Hall. Large items 2nd Saturday each month from April-June & August-November 7:00am – Noon at Town Hall
Town of Washington W4130 County Road H – Town Hall La Crosse, WI 54601 486-2297 Clerk BoValleySwiss@aol.com	Drop-off for recyclables open on a daily basis at Town Hall
La Crosse County Solid Waste Department; 6500 State Road 16 La Crosse, WI 54601 (608) 785-9572	No appliances, other items accepted at landfill Monday-Friday for a fee. Large items & demo. \$80/ton. Hazardous Materials Facility open varying hours. La Crosse County residents no charge for most items; charge for electronics and TVs. Businesses and out- of-county residents can use the facilities for a fee as well.
Hilltopper Refuse & Recycling W6836 Industrial Blvd. Onalaska, WI 54650 783-6727	Drop-off Monday-Saturday at their business for a fee.
Harter’s Quick Clean-up 2850 Larson St.; La Crosse, WI 54603 782-2082	Drop-off Monday-Saturday at their business for a fee.
Waste Management, Inc. 415 Island St.; La Crosse, WI 54603 784-1095	Drop-off Monday-Saturday at their business for a fee.
Scientific Recycling 659 Commerce St.; Holmen, WI 54636 526-9777 www.scientificrecycling.com	Accept appliances, obsolete equipment, fluorescent lights & ballasts for a fee. Call for appointment and fees.

Appendix D

Houston County Residential Collection System Summary

Houston County Residential MSW Collection Systems

Government Unit	2013 Population Est.	2013 Households	Collection Location	Frequency	Contract?	Collector	Fees	How charged?
Black Hammer Township	233	106	Drop Off	Households without curbside pickup may drop bagged garbage at the drop-off sites for a fee: 30-gallon bag: \$2.00, 45-gallon bag: \$2.50 (\$1.25 minimum). Houston: Sat. 8am-3pm, Monday 10am-6pm; Caledonia, Spring Grove: Saturday 8am-3pm Wednesday 10am-6pm; La Crescent Sat. 8am-3pm, Thursday 10am-6pm; Hokah Sat. 8am-3pm, Tues. 10am-6pm				
Brownsville Township	445	182	Drop Off					
Caledonia Township	627	219	Drop Off					
Crooked Creek Township	280	111	Drop Off					
Hokah Township	482	191	Curbside		yes	Richard's Sanitation	Per Bag Rate	
Houston Township	381	156	Drop Off	See above				
Jefferson Township	130	51	Drop Off					
La Crescent Township	1,299	492	Curbside		yes	Richard's Sanitation	Per Bag Rate	
Mayville Township	398	148	Drop Off	See above				
Money Creek	598	233	Drop Off					
Mound Prairie Township	599	242	Drop Off					
Sheldon Township	256	110	Drop Off					
Spring Grove Township	392	155	Drop Off					
Union Township	375	135	Drop Off					
Wilmington Township	425	159	Drop Off					
Winnebago Township	239	91	Drop Off					
Yucatan Township	317	142	Drop Off					
Brownsville City	462	215	Curbside					
Caledonia City	2,839	1,246	Curbside	weekly - MON	yes	Richard's Sanitation	\$1.45	Per Bag Rate
Eitzen City	243	113	Curbside		yes	Richard's Sanitation	Per Bag Rate	
Hokah City	569	274	Curbside	weekly - FRI	yes	Richard's Sanitation	\$8 to \$10	Per Cart Size
Houston City	978	422	Curbside		yes	Waste Management		
La Crescent City	4,933	2,074	Curbside		yes	Hilltopper	\$2.50	Per Bag Rate
Spring Grove City	1,314	600	Curbside		yes	Richard's Sanitation	Per Bag Rate	
TOTALS	18,814	7,867						

Sources:

Municipality Websites

Minnesota Department of Administration State Demographic Center:

<http://mn.gov/admin/demography/data-by-topic/population-data/our-estimates/index.jsp>

Houston County "The Recycler"

Houston County

Houston County Recycling System Overview

Government Unit	2013 Population	2013 Households	Materials	Collection Method	Collector	Fees	How Charged?
Black Hammer Township	233	106	Households without curbside pickup may take recyclables to the most convenient drop off site, including Houston: Sat. 8am-3pm, Monday 10am-6pm; Caledonia and Spring Grove, Wednesday 10am-6p, Sat 8am-3pm; La Crescent Sat. 8am-3pm, Thursday 10am-6pm; Hokah Sat. 8am-3pm, Tues. 10am-6pm. No charge for recycling drop off.			2.00/Bag	Per Bag
Brownsville Township	445	182				2.00/Bag	Per Bag
Caledonia Township	627	219				2.00/Bag	Per Bag
Crooked Creek Township	280	111				2.00/Bag	Per Bag
Hokah Township	482	191		Curbside	Richard's Sanitation	TBD	Per Household Per Month
Houston Township	381	156	Not Specified			2.00/Bag	Per Bag
Jefferson Township	130	51	Not Specified			2.00/Bag	Per Bag
La Crescent Township	1,299	492		Curbside	Richard's Sanitation	TBD	Per Household Per Month
Mayville Township	398	148	Glass, tin cans, plastics, fiber are accepted at the drop off sites			2.00/Bag	Per Bag
Money Creek	598	233				2.00/Bag	Per Bag
Mound Prairie Township	599	242				2.00/Bag	Per Bag
Sheldon Township	256	110				2.00/Bag	Per Bag
Spring Grove Township	392	155				2.00/Bag	Per Bag
Union Township	375	135				2.00/Bag	Per Bag
Wilmington Township	425	159				2.00/Bag	Per Bag
Winnebago Township	239	91				2.00/Bag	Per Bag
Yucatan Township	317	142				2.00/Bag	Per Bag
Brownsville City	462	215			Curbside	Richard's Sanitation	TBD
Caledonia City	2,839	1,246		Curbside	Richard's Sanitation	TBD	Per Household Per Month
Eitzen City	243	113		Curbside	Richard's Sanitation	TBD	Per Household Per Month
Hokah City	569	274		Curbside	Richard's Sanitation	Included in MSW Rate	Bundled Service Rate + Per Month Per Household
Houston City	978	422		Curbside	Waste Management	TBD	Per Household Per Month
La Crescent City	4,933	2,074	Glass bottles, tin cans, #1-2 plastics, newspaper and magazines	Curbside	Hilltopper Refuse & Recycling Service Inc.	\$3.20 monthly	Bundled Service Rate + Per Month Per Household
Spring Grove City	1,314	600		Curbside	Richard's Sanitation	TBD	Per Household Per Month
TOTALS	18,814	7,867					

Appendix E

Wabasha County Residential Collection System Summary

Wabasha County Residential MSW Collection Systems

Government Unit	2013 pop.	Collection Location	Frequency	Contract?	Eligible to Participate	How charged?	Bulky Items
Elgin	1088	Curbside	Weekly	None	Residents & Businesses	Hauler to Individual	City Cleanups
Hammond	122	Curbside	Weekly	None	Residents & Businesses	Hauler to Individual	City Cleanups
Kellogg	442	Curbside	Weekly	None	Residents & Businesses	Hauler to Individual	City Cleanups
Lake City	4,272	Curbside	Weekly	Yes - Lake City Recycling & Disposal	Residents	City Utility Bill	City Cleanups
Mazeppa	846	Curbside	Weekly	None	Residents & Businesses	Hauler to Individual	City Cleanups
Millville	182	Curbside	Weekly	None	Residents & Businesses	Hauler to Individual	City Cleanups
Plainview	3337	Curbside	Weekly	None	Residents & Businesses	Hauler to Individual	City Cleanups
Wabasha	2507	Curbside	Weekly	None	Residents & Businesses	Hauler to Individual	City Cleanups
Zumbro Falls	196	Curbside	Weekly	None	Residents & Businesses	Hauler to Individual	City Cleanups

Appendix F

Buffalo County Residential Collection System Summary

Buffalo County Recycling & MSW Collection System Overview

Government Unit	Frequency	Materials	Collection Method	Collector	Fees	MSW
Town of Alma	Drop Off Twice Weekly	Cardboard, Paper, Plastic Aluminum, Glass, Tin	Multi-Stream	County	Free	Done by individual municipality
Town of Buffalo	Drop Off	Cardboard, Paper, Plastic Aluminum, Glass, Tin	Multi-Stream	County	Free	Done by individual municipality
Town of Canton	Drop Off	Cardboard, Paper, Plastic Aluminum, Glass, Tin	Multi-Stream	County; set up to use City of Mondovi, many use Gilmantown	Free	Done by individual municipality
Town of Cross	Drop Off	Cardboard, Paper, Plastic Aluminum, Glass, Tin	Multi-Stream	County	Free	Done by individual municipality
Town of Dover	Drop Off Weekly	Cardboard, Paper, Plastic Aluminum, Glass, Tin	Multi-Stream	County	Free	Done by individual municipality
Town of Gilmanton	Drop Off Weekly	Cardboard, Paper, Plastic Aluminum, Glass, Tin	Multi-Stream	County	Free	Done by individual municipality
Town of Lincoln	Drop Off 2x Weekly	Cardboard, Paper, Plastic Aluminum, Glass, Tin	Multi-Stream	Private Hauler	Free	Done by individual municipality
Town of Maxville	Drop Off Weekly	Cardboard, Paper, Plastic Aluminum, Glass, Tin	Multi-Stream	County	Free	Done by individual municipality
Town of Milton	Weekly	Cardboard, Paper, Plastic Aluminum, Glass, Tin	Multi-Stream	County	Free	Done by individual municipality
Town of Modena	Weekly	Cardboard, Paper, Plastic Aluminum, Glass, Tin	Multi-Stream	County	Free	Done by individual municipality
Town of Mondovi	Monthly	Cardboard, Paper, Aluminum, Glass, Tin, Oil, Antifreeze, Fl. Bulbs, yard refuse, appliances, unacceptables	Curbside and Drop Off 3 days/week; City of Mondovi facilities	County	Free recycling of bulk collectables see tipping sheet for unacceptables	Done by individual municipality
Town of Montana	Drop Off 2x Weekly	Cardboard, Paper, Plastic Aluminum, Glass, Tin	Multi-Stream	Private Hauler	Free	Done by individual municipality
Town of Naples	Monthly	Cardboard, Paper, Aluminum, Glass, Tin, Oil, Antifreeze, Fl. Bulbs, yard refuse, appliances, unacceptables	Curbside and Drop Off 3 days/week; use City of Mondovi facility	County	Free recycling of bulk collectables see tipping sheet for unacceptables	Done by individual municipality
Town of Nelson	Drop Off Weekly	Cardboard, Paper, Plastic Aluminum, Glass, Tin	Multi-Stream	County	Free	Done by individual municipality
Town of Waumandee	Drop Off 2x Weekly	Cardboard, Paper, Plastic Aluminum, Glass, Tin	Multi-Stream	Private Hauler	Free	Done by individual municipality
Village of Cochrane, Belvidere Buffalo City	Drop Off Twice Weekly	Cardboard, Paper, Aluminum, Glass, Tin, Oil, Antifreeze, Fl. Bulbs, yard refuse, appliances, unacceptables	Multi-Stream	County	Free recycling of bulk collectables see tipping sheet for unacceptables	Done by individual municipality
Village of Nelson	Weekly	Cardboard, Paper, Aluminum, Glass, Tin	Multi-Stream	County		Done by individual municipality
City of Fountain City	2x weekly	Cardboard, Paper, Aluminum, Glass, Tin, Oil, Antifreeze, Fl. Bulbs, yard refuse, appliances, unacceptables	Curb Side/City Site Multi- Stream	Private Hauler	Free recycling of bulk collectables see tipping sheet for unacceptables	Done by individual municipality
City of Alma	Bi-weekly	Cardboard, Paper, Aluminum, Glass, Tin, Oil, Antifreeze, Fl. Bulbs, yard refuse, appliances, unacceptables	Curbside	Private Hauler	Free recycling of bulk collectables see tipping sheet for unacceptables	Done by individual municipality
City of Mondovi	Monthly	Cardboard, Paper, Aluminum, Glass, Tin, Oil, Antifreeze, Fl. Bulbs, yard refuse, appliances, unacceptables	Curbside and Drop Off 3 days/week	County	Free recycling of bulk collectables see tipping sheet for unacceptables	Done by individual municipality

Source: Buffalo County, municipal websites

Appendix G

Southern Trempealeau Collection System Summary

Southern Trempealeau Recycling System Overview

Government Unit	System	Frequency	Materials	Collection Method	Collector	How Charged?	Commerical Generators
City of Galesville	Curbside	Weekly	OCC, UBC, ONP, Magazines, Tin, Glass,	2 stream	Hilltopper	Grant - Annual Municipal Fee	Contract separately
Village of Melrose	Curbside	Weekly	OCC, UBC, ONP, Magazines, Tin, Glass,	2 stream	Hilltopper	Grant - Annual Municipal Fee	Contract separately
Village of Trempealeau	Curbside	Weekly	OCC, UBC, ONP, Magazines, Tin, Glass,	2 stream*	Hilltopper	Grant - Annual Municipal Fee	Contract separately
Town of Caledonia	Drop Off	Twice per week	OCC, UBC, ONP, Magazines, Tin, Glass,	User sorts	STCSWC	Grant - Annual Municipal Fee	Contract separately
Town of Dodge	Drop Off	Twice per week	OCC, UBC, ONP, Magazines, Tin, Glass,	User sorts	Hilltopper	Grant - Annual Municipal Fee	Contract separately
Town of Gale	Drop Off	Twice per week	OCC, UBC, ONP, Magazines, Tin, Glass,	User sorts	Hilltopper	Grant - Annual Municipal Fee	Contract separately
Town of Trempealeau	Drop Off	Twice per week	OCC, UBC, ONP, Magazines, Tin, Glass,	User sorts	Hilltopper	Grant - Annual Municipal Fee	Contract separately

* May convert to single stream within next year

Residential MSW Collection Systems

County: Southern Trempealeau

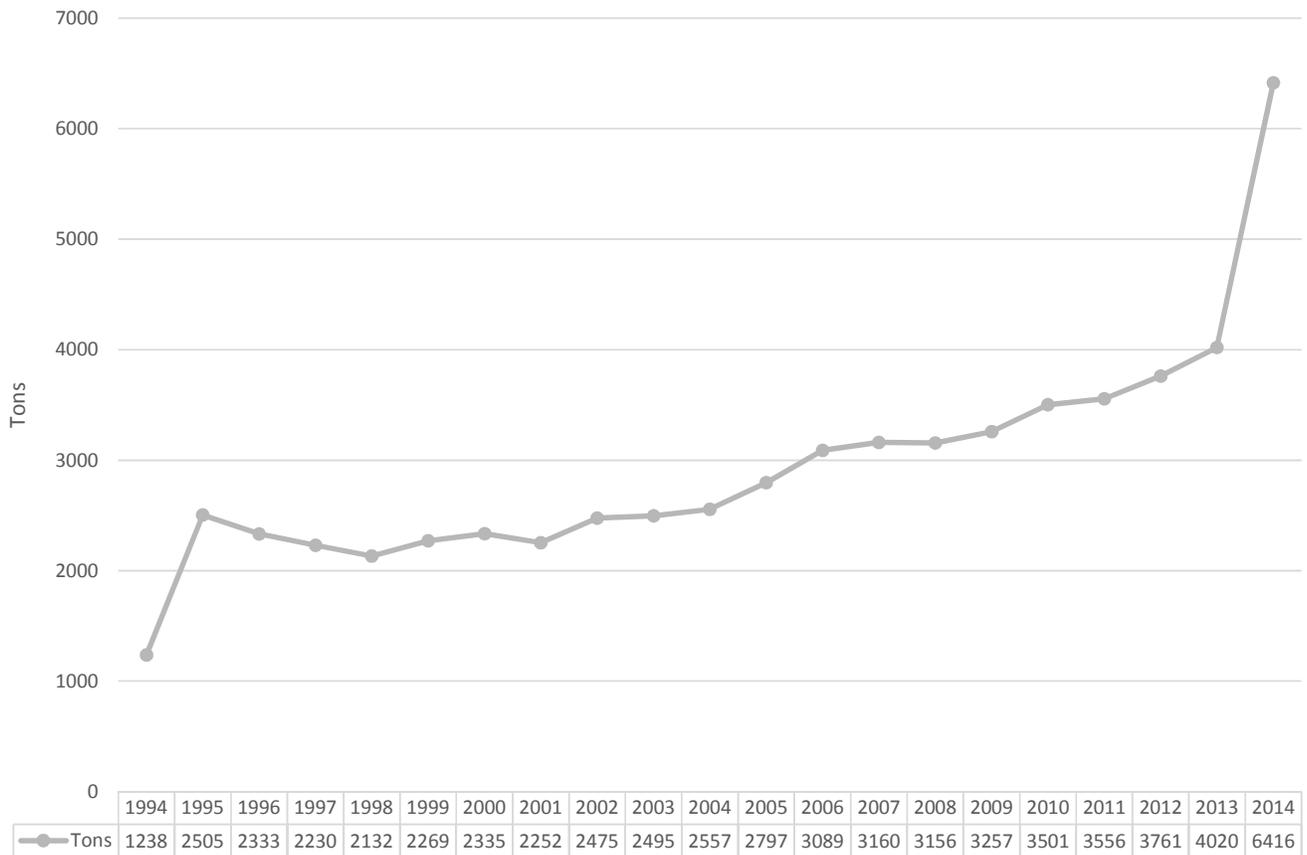
Government Unit	2014 pop.	Collection Location	Frequency	Contract	Designation	Eligible to Participate	Fees	How charged?	Bulky Items*
City of Galesville	1507	Curbside	Weekly	Hilltopper	La Crosse Disposal System	All residential	\$2.75 per bag	Sold at retail establishments	Yes, anything
Village of Melrose	500	Curbside	Weekly	Waste Management	La Crosse Disposal System	All residential	\$2.50 per bag	Sold at retail establishments & municipal building	2 days/year. Small Fee.
Village of Trempealeau	1612	Curbside	Weekly	Hilltopper	La Crosse Disposal System	All residential	\$2.75 per bag	Sold at retail establishments & municipal building	Yes, anything
Town of Caledonia	931	Drop Off	Weekly	Hilltopper	La Crosse Disposal System	All residential	\$2.50 per bag	Sold at retail establishments	Yes, anything
Town of Dodge	390	Drop Off	Weekly	Hilltopper	La Crosse Disposal System	All residential	\$2.50 per bag	Sold at retail establishments	Yes, anything
Town of Gale	1725	Drop Off	Weekly	Hilltopper	La Crosse Disposal System	All residential	\$2.50 per bag	Sold at retail establishments	Yes, anything
Town of Trempealeau	1792	Drop Off	Weekly	Hilltopper	La Crosse Disposal System	All residential	\$2.50 per bag	Sold at retail establishments	Yes, anything

*Service provided at STSWC facility throughout the year

Appendix H

La Crosse County Tonnages

La Crosse Annual Recycling Tonnage (1993-2014)

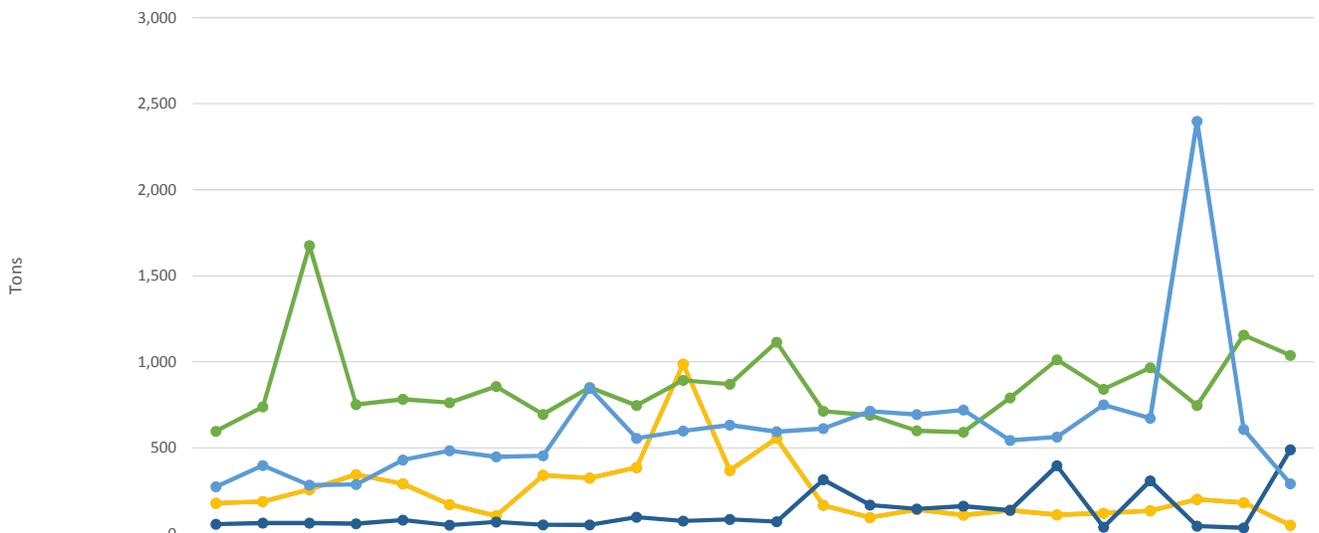


Source: WDNR

Appendix I

Houston County Tonnages

Houston County Recycling Tonnages by Material Type



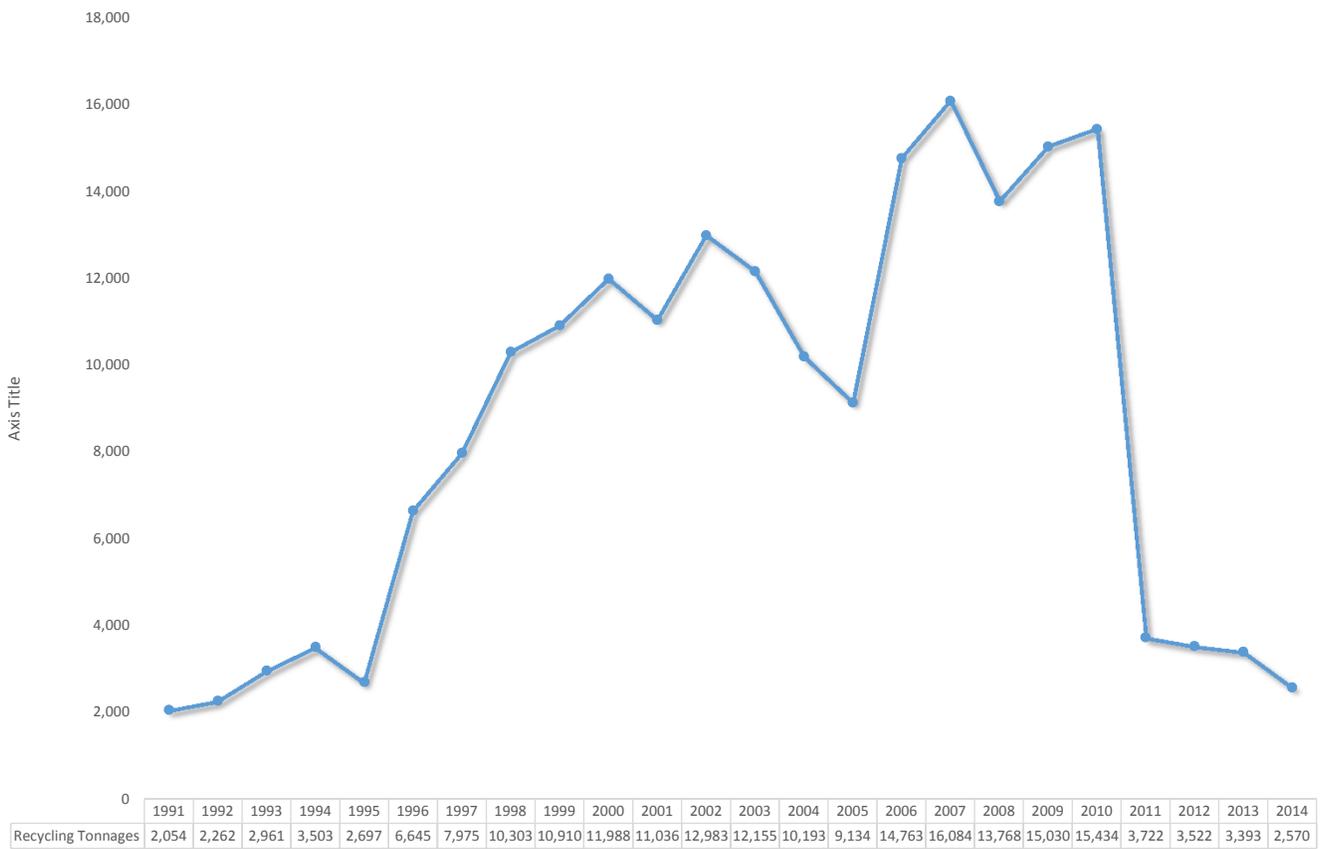
	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
— Glass	179	188	258	345	291	171	106	340	325	386	987	369	556	167	95	141	109	138	111	120	135	201	181	51
— Metals	179	188	258	345	291	171	106	340	325	386	987	369	556	167	95	141	109	138	111	120	135	201	181	51
— Fiber	597	739	1,676	752	782	762	857	695	851	747	893	870	1,115	713	689	599	591	791	1,012	841	966	747	1,156	1,038
— Plastics	56	63	63	59	81	51	70	52	52	97	75	84	71	315	168	146	161	138	396	39	308	46	35	489
— Problem Materials	274	398	283	288	429	484	448	455	846	555	598	632	594	613	714	694	720	543	563	751	673	2,398	607	291

Source: MPCA Annual Score Reports. Textiles, Other, & Organic categories not shown due to incomplete data
 Problem materials include major appliances, used oil, used oil filters, vehicle batteries, waste tires, electronics, flourescent & HID lamps, & HHW

Appendix J

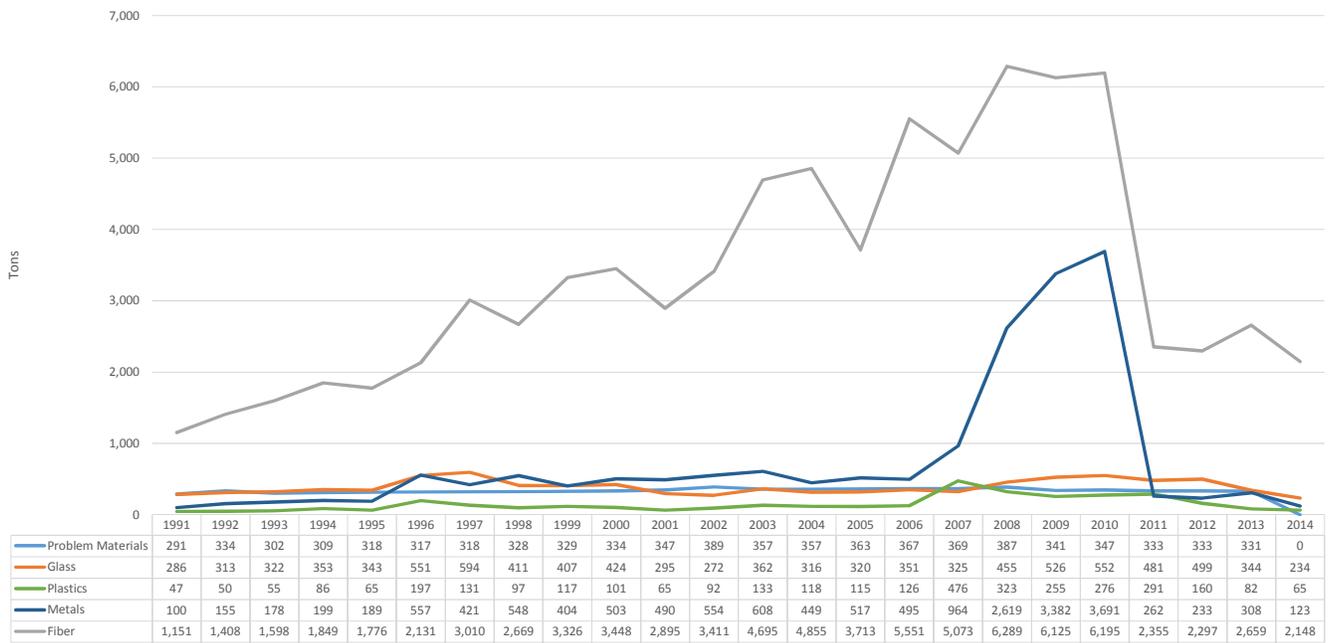
Wabasha County Tonnages

Wabasha County Recycling Tonnages (1991-2014)



Source: MPCA. Variation due to change in definition of recyclable material over time.

Wabasha County Recycling Tonnage by Material Type

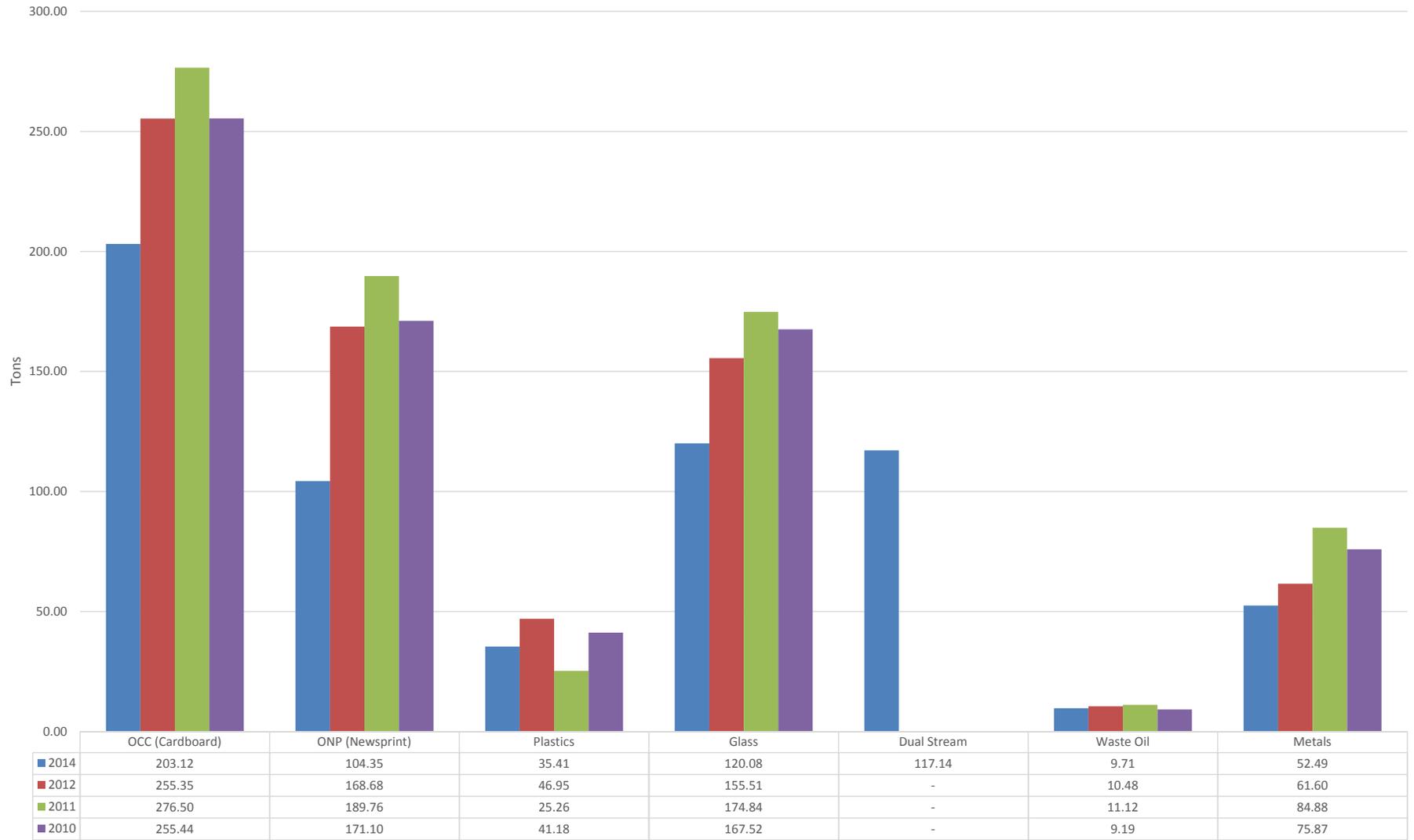


Source: MPCA Annual Score Reports. Textiles, Other, & Organic categories not shown due to incomplete data
 Problem materials include major appliances, used oil, used oil filters, vehicle batteries, waste tires, electronics, fluorescent & HID lamps, & HHW

Appendix K

Buffalo County Tonnages

Buffalo County Recycling Tonnage by Material Type

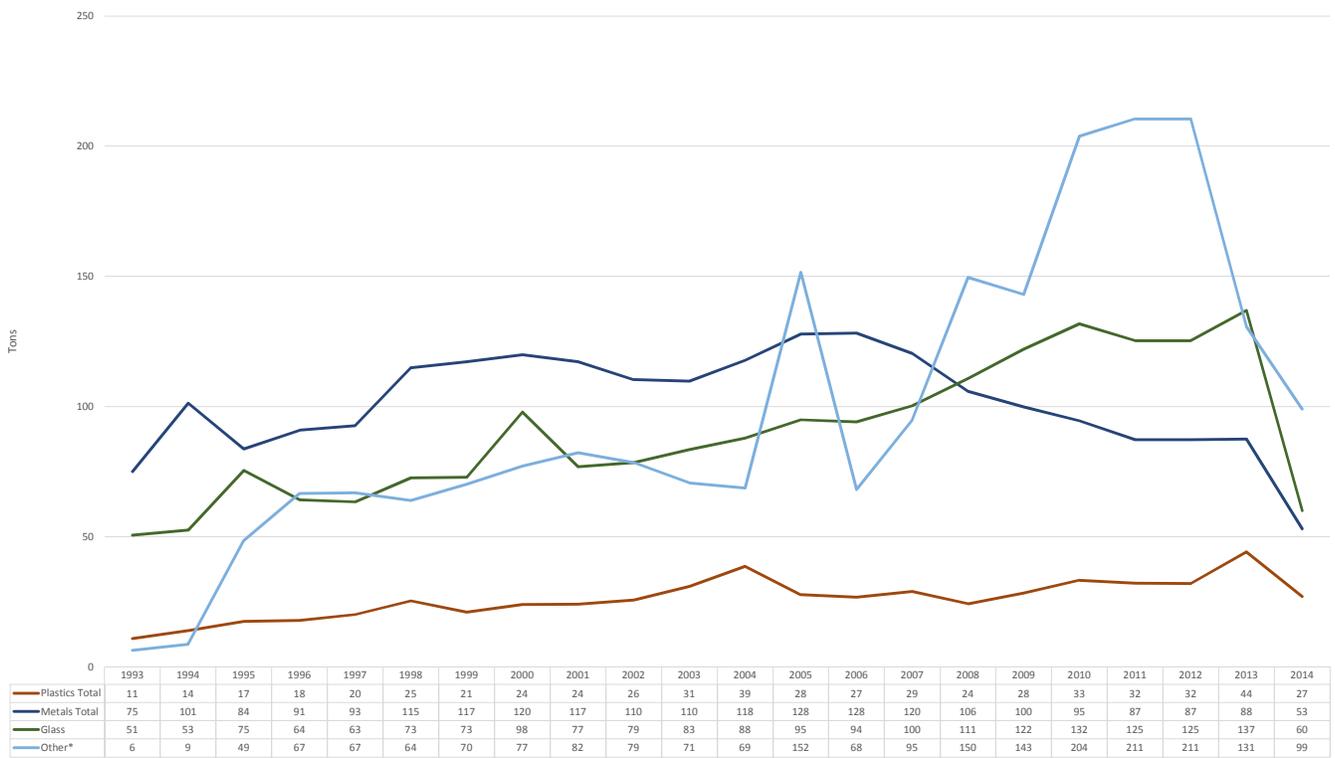


Source: Internal Buffalo County Data

Appendix L

STSWC Tonnages

STCSWC¹ Recycling Tonnages by Material Type



Source: Internal STCSWC¹ Data, WDNR

¹Southern Trempealeau County Solid Waste Commission

*Other miscellaneous recyclables include: clothing, tires, waste oil, antifreeze, computers, appliances, light bulbs, batteries, other hazardous wastes, and carboard