

Phase 2 MRF Report

Request for Information - Key Findings

Chippewa Falls, Wis.

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Phase 2 MRF Report
Request for Information - Key Findings
Chippewa Falls, Wis.

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Chippewa County

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Executive Summary

The Chippewa County RU governing body, the Chippewa County Land and Conservation and Forest Management Committee, directed the Recycling Division to evaluate the feasibility of pursuing joint contracting arrangements for recycling and/or waste management services. The purpose of this report is to provide Chippewa County RU municipalities with information they need to evaluate the potential risks and benefits of working together in a coordinated approach to solid waste collection, recycling collection, and recycling processing.

A Request for Information (RFI) was issued to area haulers, transfer station operators, and material recovery facility owners in order to obtain information about the current market place for recycling and solid waste collection and recycling processing. The RFI was prepared to provide the basis for future business based management decisions by the RU and participating municipalities. Eight (8) firms responded to the RFI.

Key Findings from RFI

Recyclable and Waste Collection

- The respondents verified managed competition is feasible. Private sector responses confirmed they would participate in managed services through a Request for Proposal.
- The private sector haulers are willing and capable of providing services to all identified communities within the targeted service areas.
- There is interest in providing combined recycling and solid waste collection services
- The largest differential in recycling collection costs when comparing the costs proposed by respondents in the RFI and the current costs for recycling collection in 18 gallon totes was an average of 30% higher cost for 350% more capacity by switching to larger sized carts.

Recycling and Waste Transfer

- There is waste and recycling transfer capacity and capabilities in the area.
- The private sector would expand/improve the transfer capability, if necessary.
- The private sector has sufficient transfer capability & interest in responding to a joint contract.

Recyclables Processing

- The respondents verified that there is capacity for processing recyclables and a willingness to bid on processing services.
- Respondents are willing to negotiate revenue sharing arrangements with municipalities.

Conclusion

- Previous reports suggest managed competition can be used to reduce service cost and allow for revenue sharing. Respondents indicated their willingness to respond to a formal Request for Proposal for the identified services.
- The range of collection costs that were stated are consistent with other contracted costs for single stream cart based curbside collection.
- The cart based collection costs stated by the respondents were higher than the current costs for recycling collection in 18 gal totes.
- The tip fees for processing recyclables ranged from \$20-\$80 per ton with the lower costs not including revenue sharing while the higher costs included a revenue share as high as 80%.

Key Issues

- The results of the RFI indicate that the private sector would respond to an RFP for solid waste & recycling services.
- Chippewa County municipalities, especially those identified in the targeted service area, need to determine if it is feasible to capitalize on the opportunity for managed competition and the willingness of the private sector to formally bid on a suite (recycling and garbage) of services.

- The key issue is the decision by a key group of municipalities that moving forward with a formal process to cooperatively procure service through a Request for Proposal (RFP) is the desired management program.

If the decision is to move forward with an RFP process, then the participating municipalities need to determine the management structure, organizational relationship and contractual framework under which the RU communities would participate in cooperative procurement of collection and processing services.

Each participating municipality will have to state their willingness to commit their Municipal Solid Waste (MSW) and recyclable volumes as a condition of issuing an RFP. The final decision to participate will be based on the results of the RFP with specific pricing on collection costs, processing costs and revenue sharing that provide each municipality with a higher level of service at a competitive price.

Recommendation

Given the results of the RFI, the recommendation is to proceed with a coordinated approach for Solid Waste and Recycling Collection. Suggested steps include:

1. Develop and Issue a Request for Proposal (RFP) for a combined Solid Waste and Recycling Collection system, including end market revenue sharing, that will identify specific bid pricing for services;
2. Review and develop an agreement similar to the current County agreements to act as the Responsible Unit for participating municipalities
3. Implementation of an agreement based on the results of the (RFP) for a combined Solid Waste and Recycling Collection system assuming favorable bid results. Favorable bid results may include higher quality of service and/or lower costs for same or equal level of service.

The “Phase 2 MRF Report – Recommendations and Framework for Collaboration” describes a set of operating assumptions which should be met for a collaborative approach to solid waste and recycling collection and processing services.

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Solid Waste and Recycling Collection Options

Phase 2 MRF Report

Request for Information - Key Findings

Prepared for Chippewa County

1.0 Background

A benchmark study (Phase One) was completed in 2012 to evaluate the efficiency of the current recycling collection system in Chippewa County and to identify adjustments that might be made to control municipal recycling costs. The study provided baseline information that documented:

- The value of recyclable materials in the global commodity market place
- The volume of recyclable materials generated in Chippewa County
- Management options to consolidate recyclable materials and market them to a Material Recovery Facility (MRF)

The key findings from Phase One were:

1. Single stream recycling is the future of recycling in cities and urban areas. Under the “single stream” method of recycling, household glass, plastic and paper are consolidated into a single recycling container, picked up at the curb and transported to a Material Recovery Facility (MRF), where the materials are processed and separated for the recycling market. The County RU should promote the transition to single stream recycling as the foundation for curbside collection programs.
2. Recyclable materials are a commodity and have market value.
3. The volume of recyclable materials collected will increase and the volume of garbage generated will decrease as municipalities make a transition to single stream curbside recycling.
4. Public funds can be optimized and recycling service costs can be controlled if municipalities in the Chippewa Falls urban area and Highway 29 corridor work together in a competitive market environment to consolidate household recyclables collected from their municipality. In order to do so, the municipality would enter joint service contracts to collect, consolidate and market these materials to a Materials Recovery Facility.
5. In pursuing this market-based approach to recycling, the County RU should consider developing contractual agreements with each participating municipality, a transfer station operator, and a selected MRF for processing and revenue sharing.
6. To achieve greater efficiency and cost savings, the potential for combining residential recycling and waste collection services should be examined, with the objective of moving toward a system of volume based fee garbage disposal services.

Based on these findings the Chippewa County Land Conservation and Forest Management Committee, acting at County RU governing body, directed the Recycling Division to proceed with a “Phase Two” Study to evaluate the feasibility of pursuing joint contracting

arrangements for recycling and/or waste management services, for the purpose of reducing municipal service costs.

2.0 Purpose

The overall purpose of Phase Two is to gather and analyze additional information necessary to pursue a market-based approach to solid waste collection, recycling collection, and recycling processing.

Objectives of the Phase Two Study are to:

- Evaluate the feasibility of collecting, consolidating, and marketing recyclables from the targeted urban service area;
- Evaluate the need for and feasibility of establishing a transfer station to consolidate recyclables and market the recyclables at a MRF; and
- Identify and evaluate a number of different service delivery and processing alternatives that could be provided by the private sector.

3.0 Methods

The following methods were used to meet the objectives of this Phase Two Study:

1. A series of Stakeholder Meetings were conducted to explain the project and to solicit input from stakeholders.
2. A Request of Information (RFI) issued to interested haulers, transfer station operators, and MRFs, as well as an analysis of RFI results to obtain information about the current market place for recycling and solid waste collection and recycling processing.
3. An analysis of Solid Waste and Recycling Collection Options was conducted to provide the municipalities in the targeted area with the various recycling and solid waste service options.
4. A cost comparison was made to provide a basis for comparing the costs of existing services as now are provided to municipalities in the targeted service area to those costs that might be anticipated under the proposed market approach as defined by an RFP.

4.0 Results

4.1 Stakeholder Meetings

The following stakeholder meetings were held in conjunction with the development of this report:

- One pre-bid RFI meeting with solid waste and recycling haulers, transfer station operators, and MRF operators as part of the RFI (2/24/14)
- Three (3) meetings with an RU Advisory Committee comprising representatives from the Targeted Service Area in order to aid in the preparation of the RFI and review of results; (9/18/2013, 1/28/14, 7/22/14). Representatives from each of the targeted service area municipalities attended one or more advisory meetings.
- Municipal Workshop to present analysis and to solicit feedback on range of management options for the RU and municipalities.
- Presentation of phase two key findings to the Chippewa County LCFM Department and County Board of Supervisors; (Fall, 2014)

4.2 Request for Information (RFI)

The purpose of the RFI was to identify and evaluate a number of different service delivery and processing alternatives that could be provided by the private sector. For the purposes of this RFI, a targeted service area was identified. This targeted service area includes the following municipalities: Town of Wheaton, Village of Lake Hallie, Town of Hallie, Chippewa Falls, Town of Eagle Point, Town of Anson, Town of Lafayette, Village of Cadott, Village of Boyd, and City of Stanley (Figure 1).

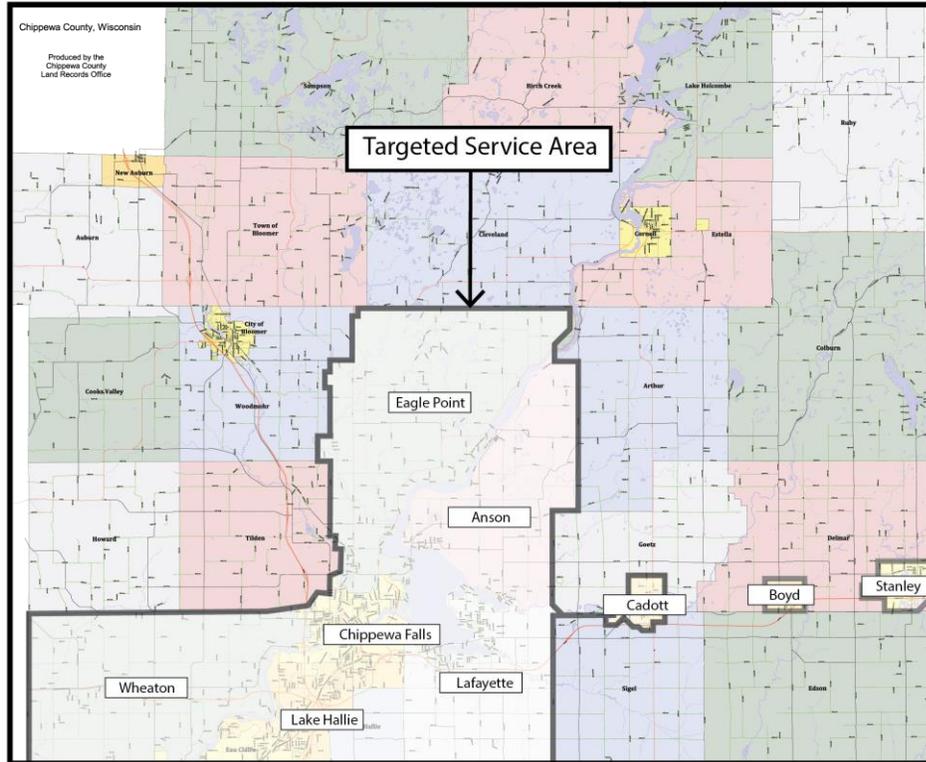


Figure 1 – Map of Targeted Service Area

Table 1 below summarizes how communities in the targeted service area currently provide for solid waste and recycling services.

**Table 1
Current Municipal Solid Waste & Recycling Collections**

	Municipal Collections	Municipal Contracts	Open Collection
Anson	No	Solid Waste & Recycling	
Boyd	No	Solid Waste & Recycling	
Cadott	No	Solid Waste & Recycling	
Chippewa Falls	No	Recycling	Solid Waste
Eagle Point	No	Solid Waste & Recycling	
Hallie	No		Solid Waste, Recycling
Lafayette	No		Solid Waste, Recycling
Stanley	No	Solid Waste, Recycling	

The objectives of the RFI were to:

1. Inform interested parties of the County's recycling and solid waste collection needs and to engage qualified firms in preliminary discussions regarding contracting and business approaches to address those needs.
2. Determine the viability of an approach to solid waste and recycling services that would:
 - a. Be cost effective for the County and municipalities;
 - b. Provide high levels of recycling and waste management services to area residents;
 - c. Increase recycling levels and reduce the volume of waste produced; and
 - d. Provide flexibility to adapt to future changes.
3. Identify any technical, or business and management issues associated with pursuing a contracting/franchise approach toward recycling and solid waste in Chippewa County.
4. Identify those businesses with the experience, financial capability and proven capacity to effectively partner with the County RU and interested municipalities to collect recycling and solid waste in the targeted service area.

In doing so, the RFI assessed:

1. The options for collecting curbside recyclables and garbage for materials processing;
2. The options and alternatives for consolidating recyclables and garbage at a single transfer station to be located in the Chippewa Falls urban area; and
3. The options for marketing these materials to a regional Materials Recovery Facility (MRF).

Key variables to consider included: refuse and recycling collection preferred service area, single stream recycling collection cost, combined recyclables & refuse collection costs, recyclables transfer services facility information, transfer facility management, value of recyclables for revenue sharing, Materials Recovery Facility (MRFs) capabilities and any other innovative approach to material recovery.

The RFI was sent out to 8 recycling haulers, 4 transfer station operators, and 14 MRFs.

4.2.1 RFI Responses

Eight (8) firms responded to the RFI, however only 6 provided actual data or cost estimates. A breakdown of the type of service providers that responded to the RFI is shown in Table 2.

Table 2
RFI Respondent Categories

RFI Respondent	Recycling/Solid Waste Haulers	Transfer Station Operators	Processors (MRFs)	Declined To Answer RFI (<i>but indicated would respond to RFP</i>)
A	X	X		
B			X	
C	X	X		
D	X			
E			X	
F			X	
G				X
H				X

4.2.2 Key RFI Findings

Key findings from the RFI are organized below by service category.

4.2.2.1 Solid Waste and Recycling Collection

- Currently recyclables within the targeted service area are being collected by at least three different recycling and solid waste collection service providers and transported to at least three MRF's (Outagamie County, Eagle Waste, and the Twin Cities).
- 100% of the recycling and solid waste collection service providers expressed an interest in servicing the entire targeted service area.
- 100% of the recycling and solid waste collection service providers expressed an interest in responding to a formal RFP.
- 66% of the recycling and solid waste collection service providers expressed an interest in dual collection (waste/recycling) vehicles.
- Several recycling and solid waste collection service providers expressed an interest in providing combined waste and recycling collection services.
- The average range of collection costs for single stream recycling or combined waste and single stream recycling, ranged from \$2.30 to \$3.75 per household per month (hhld/mo) and are consistent with other contracted costs for single stream cart based curbside collection.
- The anticipated costs of cart based collection were higher than the current costs for recycling collection using 18 gal totes.
- It was not possible to determine the costs for recycling when the pricing for combined waste and recycling collection were stated. The costs of combined waste and recycling collection ranged from \$15/hhld/mo. to \$24.50/hhld/mo.

Previous reports suggest managed competition can be used to reduce service cost, and a basis from which will allow for revenue sharing. Although the respondents indicated that willingness to respond to a formal Request for Proposal for the identified services

4.2.2.2 Transfer

The transfer operators indicated that there is existing capacity and in evaluating the information provided, a willingness and ability to expand transfer services as needed to by the private sector.

- There was no expressed interest on behalf of the transfer operator or MRF service providers to operate a publically owned transfer facility.
- 100% of the transfer operators expressed an interest in responding to a formal RFP.
- There are currently flexible, alternative transfer station arrangements that can serve the County.
- Respondents identified that recyclables are currently transferred to several MRFs in the Twin Cities and Wisconsin.

4.2.2.3 Processing

There are multiple MRF processors in both Wisconsin and Minnesota interested in receiving Chippewa County recyclables. The following are key findings from the MRF processors:

- 100% of the MRF processors expressed an interest in responding to a future RFP
- There is at least one processor that stated a specific revenue sharing percentage while other processors stated a willingness to bid on processing with revenue sharing if an RFP for services was issued.

- The tip fees for processing recyclables ranged from \$20-\$80 per ton. The lower costs did not include revenue sharing while the higher costs included a revenue share as high as 80%. The average was approximately \$40 per ton with an 89% revenue share, however it was not evident if this included the transfer cost.

In summary, the most significant finding was that all of the haulers and processors that responded expressed an interest and willingness to respond to a future RFP. Table 3 on the following page summarizes cost data by category from RFI respondents.

**Table 3
Average Costs by Category for Respondents**

Cart Size	Per Household per Month (with cart provided)	Per Household per Month (no cart provided)
Refuse Collection		
35 Gal	\$13.40	\$11.40
64 Gal	\$17.40	\$14.20
96 Gal	\$22.10	\$17.10
Recycling Collection		
35 Gal	\$3.00	\$2.30
64 Gal	\$3.50	\$2.60
96 Gal	\$3.75	\$2.90
Combined Refuse/Recycling Collection		
35 Gal	\$16.30	\$15.00
64 Gal	\$20.50	\$18.00
96 Gal	\$24.00	\$22.40
Processing		
Tons		
2700-4500	\$25.00/per ton	0%
2700	\$42.00/per ton	80%
4500	\$40.00/per ton	80%
2700-4500	\$20-80/per ton	Negotiable

4.3 Cost Comparison

In a previous study the private sector companies that provide curbside collection service for both recycling and garbage were contacted to obtain their collection fees and the type of collection container. In almost all cases curbside recycling is provided with 18-gallon bins that are manually picked up. The current cost range for 18-gallon bins curbside collection of recyclables is from \$2.10 per household per month to \$4.50 per household per month.

The highest average stated costs by the respondents for curbside based recycling collection with 64 gallon carts was \$3.75 per household per month but varied dependent on the size of the curbside container with the lowest average cost at \$2.30 per household per month. The comparison of the pricing identified by respondents to the current costs for collection in 18 gallon totes identifies that the largest differential in price was a 30% higher cost for 350% more capacity.

The combined average costs for collection of waste and recyclables ranged from \$15 per household per month to \$24.00 per household per month but varied dependent on the size of the curbside container. The costs when curbside carts were included in the unit charge per month averaged 3.5% higher than when curbside carts were not included.

It was not possible to determine the costs for recycling when the pricing for combined waste and recycling collection were stated. The lowest current costs for an 18 gallon bin is \$1.75 per household per month when combined with garbage collection. Previous studies or data available from the County did not include an analysis of the costs associated with the collection of solid waste so no cost comparison can be made at this time.

Table 4 provides a basis for comparing the costs of existing services as now provided to municipalities in the targeted area to those costs that might be anticipated under the proposed market approach as defined by an RFP.

**Table 4
Current Curbside Recycling Costs (Household per Month)**

Municipality	Hauler	Municipal Contract	Includes Garbage Service	Without Garbage Service	Type of container
Anson	Express Disposal	\$2.30-\$2.50	\$16.50; \$18.50; \$20.00	\$7	18 gal. Bins
Boyd	WM	\$2.22	\$8.01; \$9.19; \$10.38		18 gal. Bins
Cadott	Advanced Disposal	\$2.53 + \$2.72 Drive By Fee	\$5.27; \$7.09; \$9.92		18 gal. Bins or 35 gal. Carts
Chippewa Falls	Normacycle	\$2.14			18 gal. Bins
Cornell	WM	\$3.06			18 gal. Bins
Eagle Point	WM	\$3.61	\$10.41; \$11.37; \$13.59		18 gal. Bins
Hallie	Boxx				18 gal. Bins
	Provyro		\$1.75		18 gal. Bins
	Tambornino		\$3.00		18 gal. Bins
	Advanced Disposal			\$4.50	18 gal. Bins
	WM		\$5.00		18 gal. Bins
Lafayette	Boxx				18 gal. Bins
	Provyro		\$1.75		18 gal. Bins
	Tambornino		\$3.00		18 gal. Bins
	Advanced Disposal			\$4.50	18 gal. Bins
	WM-Drop Off		\$5.00		18 gal. Bins
Lake Holcombe	Express Disposal	\$2.30-\$2.50			18 gal. Bins
Stanley	Express Disposal	\$2.14	\$7.00; \$8.00; \$9.00		18 gal. Bins
Wheaton	Advanced Disposal	Drop Off	\$5.00		18 gal. Bins

Appendix A

Solid Waste and Recycling Collection Options

Solid Waste and Recycling Collection Options

Currently, the communities in Chippewa County have separate waste and recycling collection programs. However, several of the respondents stated a preference for a system that uses dual collection vehicles (waste and recyclables) that allow for the collection of separated waste streams in a single vehicle in a single pass. Previous reports did not address a collection system using dual collection vehicles. Some examples of possible configurations include:

Split-Cart Systems

Split-cart systems utilize automated collection technology. Residents receive wheeled carts with dividers to separate MSW and recyclables. The hopper and vehicle chamber on the collection truck are divided the same way. Crews collect the carts using hydraulic lifting arms operated from the truck cab. As the carts tip into the vehicle hopper, MSW and recyclables flow into the separate compartments. Typically, in a split-cart system, collection crews pick up yard-trimmings separately. In some split-cart systems, residents mix all recyclables (i.e., paper, plastic, metal) together in the designated portion of the cart.

Front-Loader “One Pass” Systems

Front-load collection vehicles, normally used for commercial dumpster collection, also might act as dual collection trucks for residential routes. Crews bolt special split containers (modified open-top dumpsters) on the front-load collection arms.

These containers might have compartments for MSW, yard waste, and/or recyclables. Residents set out materials as usual, then collectors load the set-outs into the appropriate compartment. Periodically, crews activate the lifting mechanism and the front-load container tips into the truck’s hopper. A split hopper directs the collected materials into separate chambers in the truck body.

The Benefits of Dual Collection Systems typically include:

- Reduced vehicle and labor needs: Reducing the number of special vehicles needed to provide multiple collection services reduces the total fleet and labor costs.
- Reduced environmental impacts: Fewer trucks mean lower fuel usage, fewer air emissions, and reduced traffic and safety impacts on community streets.
- Increased diversion: Dual collection allows communities to add diversion programs while controlling cost increases.

Chippewa County communities exhibit several of the characteristics that make dual collection a feasible approach. Good candidate communities for dual collection typically have the following characteristics:

- Low residential MSW generation rates.
- Low housing density.
- High driver and/or crew wages.
- High mileage to get to processing or disposal locations.
- High participation rates in your recycling program.
- Processing and disposal locations within 10 miles of each other.

Pros-Cons Analysis of Solid Waste/Recycling Collection Options

A pros/cons analysis was used to describe four solid waste/recycling collection options that could be utilized in Chippewa County. A brief description of each option is described below.

1. Open collection - Under this option municipalities allow independent haulers to sign up individual household subscribers for either or both solid waste and recycling collection services.
2. Municipal Collection - Under this option local municipalities directly provide solid waste and/or recycling collection services. There are currently no municipalities in Chippewa County providing these services with municipal crews and equipment.
3. Municipal contract - Under this option municipalities contract with a hauler to provide solid waste and/or recycling services in the community.
4. Cooperative Collection Contracts- Under this option municipalities coordinate the procurement and contracting for services. The arrangements for contracting can vary based on the organizational and management structure selected for contracting ranging from municipalities independently contracting to designated a contracting agent that contracts for services on behalf of all participating municipalities.

Table 1 summarizes the pros/cons of the different management approaches to procurement of services.

Table 1
Pros and Cons of Alternative Collection Approaches

	Pros	Cons
Municipal Collection	<ul style="list-style-type: none"> • Staff is available to assist with other government operations • No administrative oversight needed for contractor • Direct control over type & level of service to be provided 	<ul style="list-style-type: none"> • Additional capital and operational cost on government balance sheet • Fewer incentives for cost efficient service delivery compared with private sector • Additional training & investment required
Municipal Contracts	<ul style="list-style-type: none"> • Encourages competition and private sector innovation • Reduced truck traffic in neighborhoods • Fewer air emissions • Avoids government employees 	<ul style="list-style-type: none"> • Requires administrative oversight • Current service providers have competitive advantage when municipality issues next RFP • Less control over type & level of service to be provided
Subscription based Open Collection	<ul style="list-style-type: none"> • Households have option to pick own service provider • Little administrative oversight or governmental resources required • Maintains status quo; doesn't threaten existing haulers 	<ul style="list-style-type: none"> • Increases number of service providers sending more trucks through neighborhoods (less safety, more wear and tear on streets) • Reduced efficiency (fewer stops per hour) • Undermines ability of community to provide education and brand waste/recycling efforts
Coordinated or cooperative Collection	<ul style="list-style-type: none"> • Fewer overhead administrative costs associated with contract oversight • Can drive down costs to municipalities through better economies of scale (single larger contract vs. multiple smaller contracts) • Consistency of service throughout larger region = less confusion, greater opportunity to promote recycling & drive down costs to households 	<ul style="list-style-type: none"> • Less local control of Fees and Charges • Customer Service not under Local Control