



Winnebago County

Solid Waste Management

2022

ANNUAL REPORT

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Winnebago County

Solid Waste Management

Mission Statement

Winnebago County Solid Waste is a comprehensive, integrated solid waste management program located in Oshkosh, Wisconsin. Our mission is to provide competitive, cost-efficient Solid Waste Management services for solid waste and recyclable materials from our Municipal partnerships and other Winnebago County customers.





Winnebago County Solid Waste Management Board

The Solid Waste Management Board (SWMB) was created in 1975 by the Winnebago County Board to provide solid waste management services to all communities, businesses, and industry in Winnebago County. At that time, its sole function was to operate the Snell Road Landfill.

Since its inception, the SWMB has been progressive and responsive to community needs while remaining cost-conscious and environmentally-responsible. Winnebago County Solid Waste (WCSW) has expanded into a comprehensive, integrated solid waste management program consisting of:

- Sunnyview Landfill Residential Drop-off Area
- Solid Waste/Recycling Transfer Station
- Recycling Programs for Tires, Batteries, Appliances, Used Oil, Electronics, Lamps, etc.
- Brush, Leaves and Yard Waste Drop-off Program for Beneficial Use
- Seasonal Household Hazardous Materials (HHM) Facility
- Landfill Gas Collection/Utilization Systems
- Closed Landfill Environmental Monitoring/Maintenance
- Ken Robl Conservation Park Operation/Maintenance

To further the goal of being cost-conscious and environmentally-responsible, Brown, Outagamie, and Winnebago Counties joined forces in 2002 forming the Tri-County Regional Partnership to secure contracts for solid waste and recycling services with municipalities throughout the Tri-County area. The savings realized by the three counties over the 25-year term of the Tri-County Regional Partnership was projected to be over \$50 million.

To reach the projected savings target, the Tri-County Regional Partnership has combined resources to designate and contribute to Regional Landfills and operate a Regional Single Stream Materials Recovery Facility (MRF) in Appleton. More recently, the Tri-County Regional Partnership has shifted its focus to increase waste diversion rates, improve program efficiency, and offer more robust services to meet customer needs.

In early 2020, the Tri-County Regional Partnership completed a study and found that the partnership saved our users within the Tri-County area approximately \$48 million since inception by allowing the shared services to keep tipping fees low for all our users. Due to the success of the partnership, an amended Tri-County Solid Waste Disposal Agreement was prepared and approved by all three counties' committees/boards in the Fall of 2020, extending the Tri-County Regional Partnership through December 2042. Key features of the amended disposal agreement involve the flexibility of a dual landfill operation at Brown and Outagamie Counties, 15 additional years of regional landfill airspace, and continued cost sharing of services to further improve operational efficiencies.

Winnebago County Solid Waste Management Board Members

Pat O'Brien, Chair

Doug Nelson, Vice Chair

Jim Wise, Secretary

Mike Easker

Paul Eisen

Gerald Konrad

Kevin Konrad

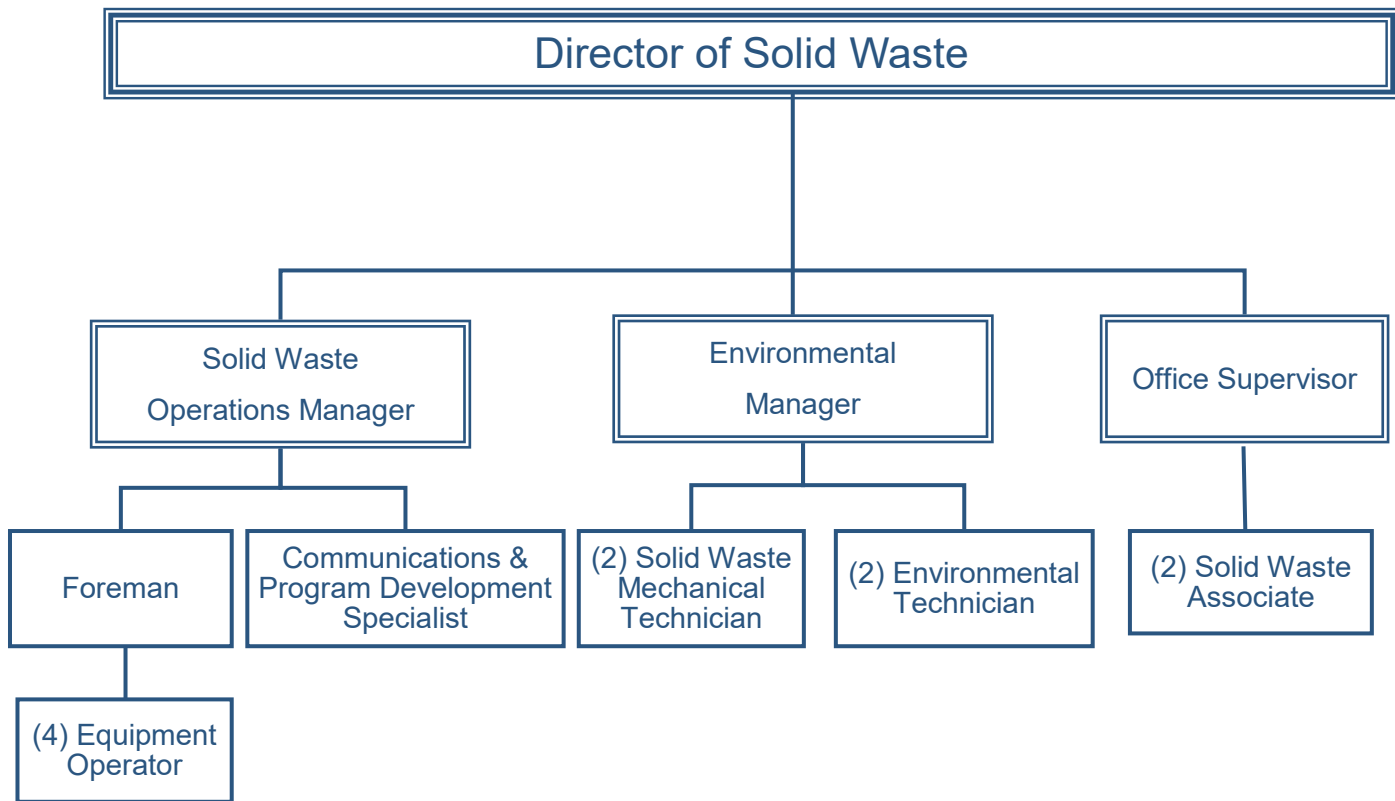
Howard Miller

Shanah Zastera

The SWMB consists of five County Board Supervisors and four citizens from the County whom are appointed by the County Executive. SWMB Members serve staggered three-year terms. The SWMB directs operation of the Landfill Residential Drop-off Area, Solid Waste/Recycling Transfer Station, Diversion Programs, Household Hazardous Materials Collection Facility, Closed Landfill Environmental Monitoring/Maintenance and Landfill Gas-to-Energy Facilities in Winnebago County.

Table of Organization

Winnebago County Solid Waste — 2022



2022 Staffing = 16 FT

2021 Staffing = 16 FT



Landfill/Transfer Operations & Diversion Programs

The Winnebago County Sunnyview Landfill Co-Disposal Site reached capacity in July 2012, after functioning as the Regional Landfill since 2005. WCSW has since focused on operation of a solid waste and recycling transfer station, shipping waste materials to the Regional Landfills (Outagamie and Brown County) and single-stream recycling (SSR) to the Tri-County Recycling Facility in Outagamie County as part of the Tri-County Regional Partnership. In 2022, WCSW directed **203,900 tons of waste** and **14,300 tons of SSR** to our Regional Landfills and Tri-County Recycling Facility, respectively.

WCSW maintained collaboration with University of Wisconsin - Oshkosh (UW-Oshkosh) Biogas Systems to supply chipped brush feedstock for a commercial scale dry fermentation biodigester located in Oshkosh. In 2022, WCSW directed **1,752 tons of ground feedstock material** to the UW-Oshkosh digester (up from 1,624 tons in 2021).

Enhanced Recycling Services

Did you know the Wisconsin Department of Natural Resources (WDNR) has designated certain wastes as banned from landfill disposal because they contain toxic components or highly reusable materials?

WCSW is a WDNR-certified E-Waste Collector and offers a year-round electronics recycling program to residential customers. In 2022, WCSW received **202,244 pounds of household electronics** for recycling (down from 264,364 pounds in 2021).



WCSW also offers a lamp recycling program for residential customers: **5,786 lamps** were recycled in 2022 (slightly down from 5,971 lamps in 2021).

WCSW continues to accept tires, Freon and non-Freon appliances, used motor oil, oil filters, oil absorbents, antifreeze, lead-acid batteries, rechargeable batteries, scrap metal and propane tanks from residential customers for recycling at the Sunnyview Landfill Facility.



Landfill Gas Collection & Utilization

Landfill gas, a renewable energy source, is generated as trash and organic materials decompose. Methane, a primary component of landfill gas is captured at the Sunnyview and Snell Road Landfills and burned to generate power and heat.

The WCSW Landfill Gas Facility operates a total of three engine/generators (2.6 MW of generation capacity) to burn the collected landfill gas and produce power and heat. The electricity produced from landfill gas is sold to a local utility. Landfill gas is also used at the Winnebago County Highway Department for direct use in two boilers. Excess landfill gas is burned in candlestick flares to maintain WDNR air permit compliance. Electricity and direct use **landfill gas revenues exceeded \$1.1 million** in 2022 to offset operational expenses.

In 2022, WCSW used landfill gas to generate enough electricity to power approximately 1,200 residential homes!

Closed Landfill Environmental Monitoring & Maintenance

The Sunnyview (Co-Disposal and Sludge Sites) and the Snell Road Landfills are closed and require ongoing monitoring and maintenance to comply with WDNR permits. Closed landfill monitoring requires continued analysis of underground and surface conditions along with air quality to assess landfill site compliance.

In 2022, WCSW continued groundwater, gradient control, leachate and surface water monitoring and WDNR reporting for Sunnyview and Snell Road Landfills. Monthly landfill gas monitoring, quarterly surface emissions monitoring and reporting were also completed to maintain WDNR air permit compliance for Sunnyview and Snell Road Landfills. WCSW also continued horizontal groundwater extraction system monitoring and WDNR reporting at Snell Road Landfill.

A maintenance project was completed at the Sunnyview Landfill Co-Disposal Site in 2022 to repair a section of landfill gas collection system piping and geomembrane boots to improve landfill gas quality and maintain WDNR compliance.

In 2022, 3,069 pounds of useable product were made available free to the public in the Product Exchange Room.



Household Hazardous Materials Facility

In 2022, WCSW contracted with Veolia Environmental Services for operation of the Household Hazardous Materials (HHM) Facility open on select days from May through October. This was a free, drop-off service for Winnebago County residents with household-sourced material. There were 22 HHM operational days in 2022. In addition, Winnebago County with the help of Municipal Public Works Staff, held two satellite HHM collections in the Villages of Fox Crossing and Winneconne. The satellite collections were also offered as a free service to Winnebago County residents.



In 2022, the WCSW HHM Facility and satellite collections were used by **1,032 customers** who properly disposed of **nearly 44,000 pounds** of household chemicals and cleaners, paints and stains, pesticides and insecticides (2021 totals: 813 users with nearly 46,000 pounds of HHM).

Revenues earned from the sale of single-stream recycling and Wisconsin Department of Agriculture, Trade and Consumer Protection (DATCP) grant funds are used to offset HHM program costs.

Rechargeable Batteries

(Li-ion, Ni-Cd, Ni-MH, SSLA, etc.) are easily damaged and cause fires in Waste and Recycling Facilities. Do not put them in waste and recycling carts.

Instead, take them to a drop-off battery recycler.

Sharps Disposal Program



In 2022, WCSW continued participation in the Outagamie & Winnebago County Sharps Disposal Program. The cooperative effort focuses on public awareness for proper sharps disposal and expanded sharps disposal opportunities, to reduce solid waste/recycling workers risk of accidental needle sticks.

In 2022, Roundy's Pick 'n Save Pharmacies continued to host the program's free residential sourced sharps collection services. Over **1,040 lbs. of medical sharps** were received at the Neenah and Oshkosh locations in 2022 (down from over 1,280 lbs. in 2021). Program details are available at www.winnebagopublichealth.org.

Holiday String Light Recycling Program

The 2022-2023 holiday season was the third year of WCSW's Holiday String Light recycling program. WCSW coordinated efforts with 14 Municipal offices to offer convenient drop-off locations across Winnebago County. In 2022, **996 lbs. of string lights were properly recycled** and kept out of recycling carts. (vs. 300 pounds in 2021.)

Why take to a drop-off collection instead of cart? String lights, cords, hoses, and wires, known as "tangles" that are placed in recycling carts end up at the Tri-County Recycling Facility. Tangles wrap around sorting equipment, which creates regular, unnecessary downtime for maintenance. The sorting equipment does not work effectively if tangles are left to build up within the system. With this drop-off program residents can keep string lights out of recycling carts, which saves time and reduces curb-side recycling costs; a savings that we share with our Municipal Partners.

2022 Drop-Off Bin Hosts

- City of Menasha - 2 locations
- City of Neenah
- City of Omro
- City of Oshkosh - 2 locations
- Village of Fox Crossing
- Village of Winneconne
- Town of Algoma
- Town of Black Wolf
- Town of Neenah
- Town of Vinland
- Town of Winchester
- Town of Winneconne

Used Cooking Oil Program Launched



NOW ACCEPTING:
USED COOKING OIL

Recycled Vegetable Oil Only
Blue Honey Bio-Fuels

Available:
7a - 3p Mon-Fri
7a - 12p Sat.

FREE TO THE PUBLIC.
Small businesses and large vendors, please call (920) 232-1802 to check availability.

*****DO NOT MIX YOUR WASTE COOKING OIL WITH OTHER MATERIALS.*****

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Launched in May 2022, the used cooking oil recycling program is a drop-off service, offered free to the public and local small business owners. The 300-gallon collection tank is located in our Sunnyview Landfill Residential Drop-off Area and available during regular operational hours. Users of this program should check-in at the scale office prior to entering the Facility to report their material and receive drop-off instructions.

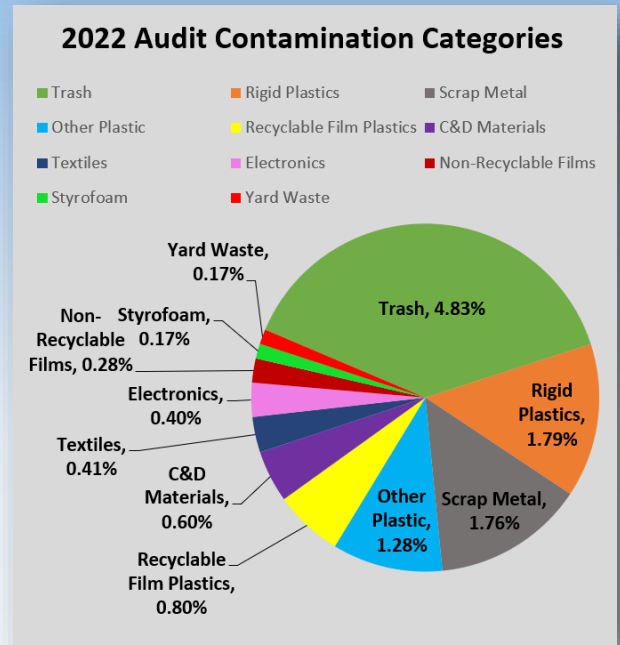
WCSW uses Blue Honey Bio-fuels, which collects and refines the used cooking oil into an alternative fuel. Dropping off used cooking oil, instead of landfilling it, supports cleaner burning fuels and enhanced fuel economies in across Wisconsin. Approximately **380 gallons of used cooking oil** was collected in 2022.

2022 Municipal Recycling Audits

The Tri-County Material Recovery Facility located in Appleton, WI averages an 8-9% contamination rate. In effort to assess recycling quality of materials collected in Winnebago County, WCSW conducted six recycling load audits between May and October, 2022. Small samples were taken from random Municipal recycling loads and analyzed for contaminants vs. recyclables. Contaminants were removed and sorted into 11 categories (see pie-chart). Recyclables were processed with other recyclable materials.

The end result revealed that Winnebago County residential recycling routes are **averaging closer to 12.5% contamination**; 350 lbs. of the 2,800 lb. combined sample weight, consisted of items that are

not accepted in Winnebago County's curbside recycling program. The audit also revealed that 5% of the contaminants *could* have been successfully recycled if residents brought it to the correct drop-off location, such as metal to a scrap metal yard or plastic bags returned to a grocery store. ***We and our Municipal Partners will continue to encourage residents to keep trash, scrap metal, and non-accepted plastics out of the recycling stream through use of clear, consistent, and ongoing messaging. Better Recyclers make a more successful Recycling Program.***



UW-Oshkosh Biogas System Partnership

Since 2014, WCSW has sustainably managed its brush, leaves and grass clippings, “yard waste”, by sending it to UW-Oshkosh’s Anaerobic Biogas System. Before leaving our facility, yard waste materials are processed with a horizontal wood waste grinder, resulting in a consistent feedstock ready for use in the UW-Oshkosh Biodigester. UW-Oshkosh mixes this feedstock with additional food and farm waste, then lets it ferment in the Biodigester. Methane gas, a byproduct of this process, is collected during this process and used as a renewable energy.

Through 2022, WCSW has diverted **nearly 16,000 tons of yard waste** to UW-Oshkosh’s Anaerobic Biogas System. The joint effort allows WCSW to manage incoming yard wastes through a sustainable program, contribute to local renewable energy generation, and support faculty and student research in biogas technology.



Financial Reports

Winnebago County Solid Waste Management Fund

Comparative summary of fund change in net position for the years ended December 31, 2022 and 2021

	<u>2022</u>	<u>2021</u>
<i>OPERATING REVENUES</i>		
Charges for Services Provided to:		
Public	\$ 9,704,385	\$ 10,272,708
Other Governmental Entities	110,264	90,568
Other County Departments	12,828	9,923
Miscellaneous	1,361,271	119,607
Total Operating Revenues	<u>11,188,748</u>	<u>10,492,806</u>
<i>OPERATING EXPENSES</i>		
Salaries, Wages, and Benefits	1,043,939	1,189,885
Materials, Suppliers, and Services	9,634,677	6,509,846
Heat, Light, and Power	357,563	345,388
Depreciation	882,805	977,811
Landfill Closure and Long - Term Care	746,660	(456,046)
Total Operating Expenses	<u>12,665,644</u>	<u>8,566,884</u>
<i>OPERATING INCOME (LOSS)</i>	(1,476,896)	1,925,922
<i>NONOPERATING REVENUES (EXPENSES)</i>		
Investment Income	(2,377,815)	(275,896)
Interest Expense	-	-
Grant Revenue	34,819	-
Gain (Loss) on Disposal of Capital Asset	-	10,866
Total Nonoperating Revenues (Expenses)	<u>(2,342,996)</u>	<u>(265,030)</u>
<i>CHANGE IN NET POSITION</i>	(3,819,892)	1,660,892
Net Position - Beginning of Year	<u>43,261,841</u>	<u>41,600,949</u>
<i>NET POSITION - END OF YEAR</i>	<u>\$ 39,441,949</u>	<u>\$ 43,261,841</u>

The operating loss for the fund was \$1,476,896 in 2022 compared to operating income of \$1,925,992 for the prior year. At the end of the year, the unrestricted cash and investment balance of the fund decreased to \$36,283,937 while restricted cash and investments was \$9,807,376. The restricted cash balance is held for several purposes, but primarily to fund the closure and long - term care of present landfill sites.

Financial Reports (continued)

Winnebago County Solid Waste Management Fund

Retained Earnings Reservation

Fund Goal Authorized by the SWMB

<i>BALANCE AS OF DECEMBER 31, 2021</i>	<u>\$ 34,350,577</u>
 <i>2022 FUND GOAL DESIGNATIONS</i>	
Future Landfill Siting / Development / Technology	\$ 10,000,000
Landfill Gas Utilization / System Upgrades / Renewables / Solar	3,000,000
New Waste / Recycling Transfer Station & Resource Recovery Park	6,000,000
Tri-County Single Stream Recycling Facility Upgrade	2,000,000
Operational Cash Flow / Capital Outlay	3,000,000
Closed Landfill Long - Term Care / Beyond WDNR Escrow	5,000,000
PFAS Impacts to Leachate / Groundwater / Surface Water	5,000,000
<i>TOTAL RESERVED</i>	<u>\$ 34,000,000</u>
<i>SURPLUS / (DEFICIT)</i>	<u>\$ 350,577</u>

2021 - 2022 Tonnage Summary

Winnebago County Solid Waste Department

		<u>2021</u>	<u>2022</u>
<i>SOLID WASTE</i>	Transfer Station	92,653	108,745
	Direct Hauls	25,388	29,693
	ADC/Beneficial Use	74,257	65,479
	Total Tons	<u>192,298</u>	<u>203,917</u>
<i>RECYCLING</i>	Transfer Station	10,883	11,395
	Direct Hauls	3,690	2,946
	Total Tons	<u>14,573</u>	<u>14,341</u>



Winnebago County

Solid Waste Management

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John M. Rabe, Director of Solid Waste

Visit us on the web at:

www.WinnebagoCountySolidWaste.com



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