

# BROWN COUNTY RESOURCE RECOVERY



## *2021 Annual Report*



# Message from the Director

**During 2021, the Solid Waste Management Board and staff worked toward meeting the goals and objectives of the 2017 Resource Recovery Strategic Plan and the overarching mission and vision for the Brown County Resource Recovery Department.**

For more than 40 years, the Department has been providing cost-effective, efficient and environmentally responsible solid waste management services for Brown County and, more recently, northeastern Wisconsin. As an Enterprise Fund, Brown County Resource Recovery uses revenues solely gathered through operations to fund its activities. In 2021, even with COVID-19 impacts, the Department had a busy year with a number of activities accomplished to increased the Department's solid waste management services.

*The Department is focused on providing effective solid waste management services and excellent customer service with a focus on resource recovery.*

Construction of South Landfill (SLF) occurred throughout 2020 and 2021. In 2021, a \$2.2M architectural bid was let to Bayland Builders for the construction of the maintenance and storage buildings, and scale house. A \$10M civil bids was let for the remaining bulk excavation, clay liner installation, geo-synthetic liner installation, leachate drainage system, tank and pump house, drop-off unloading area, and road construction.

Necessary landfill and transfer station equipment was acquired, including a compactor, three front-end loaders, two bulldozers, two sweepers, a skidsteer, a water truck, and plow and equipment trucks. Other pieces of equipment were delayed due to supply chain issues or cost implications that included a roll-off truck, steel dumpsters, mower, and fuel skid. Utilities including; fiber optics, power, gas and water were installed. Service contracts were negotiated for shingles, appliances, freon, tires, scrap metal, fuel, grease, leachate hauling and others. More will be negotiated in 2022. The De Pere leachate unloading station was upgraded. An agreement was signed with Town of Ledgeview for additional leachate discharge unloading capacity. The East Landfill unloading station design is being prepared.

Staff worked to fill the table of organization with 14.0 FTE new positions and 8.0 FTE existing positions of 28 total FTE. The new positions are related to operating the South Landfill and Solid Waste Transfer Station. The positions included a Landfill Manager, Accountant, Technician, Heavy Equipment Operators (9), Mechanic and Associates(1.5). Overall, only eight existing staff members remain in their positions from 2020. The Department is focused on training and instilling the existing team based culture in the new employees with a focus on retention, professional development and institutional knowledge sharing. The team will continue pursuing new strategic business development opportunities while providing cross training and an improved team environment.

The SLF will start operations in January 2022 and will be open to the public in February 2022.



In 2020, a new revised and restated Brown, Outagamie and Winnebago (BOW) Agreement was executed. The 20-year BOW partnership has saved municipalities and private companies \$48 million dollars over the first 18 years of the original agreement. The new BOW Agreement adds a new landfill at Outagamie County; shares out-of-county waste, alternative daily cover and beneficial use waste streams; and, shares in transfer station operating and hauling costs over the next 25 years. Tri-County staff worked throughout 2021 to determine mechanisms for implementing the terms of the agreement.

The volume of material moving through the Recycling Transfer Station hit the highest tonnage on record in 2021 with more than 35,000 tons led by a surge in residential curbside collections. A recycling push wall was constructed at the Recycling Transfer Station adding needed storage capacity. The Hazardous Material Recovery Facility continued to accept material throughout the year with shorter wait times for users of the facility. For the 2<sup>nd</sup> year, the program saw a record number of users with more than 10,700 residents making use of the facility in 2021.

I am very proud of this team in physically completing construction of South Landfill, acquiring the necessary equipment, and hiring and training new staff necessary for this new start-up venture. At face value this was a heavy lift further complicated by Covid-19, supply chain issues and inflation. Looking forward to 2022, the Department will do everything it has done in the past and face the new challenges of operating the new South Landfill and the Waste Transfer Station in 2022. In conclusion, Brown County will continue to strive to provide effective solid waste management services and excellent customer service.



**Dean Haen**

Port & Resource Recovery Director



# Department Overview

The Resource Recovery side of the Port & Resource Recovery Department offers solid waste management services which include operating a Solid Waste Transfer Station and the South Landfill with resource recovery activities, a Single Stream Recycling Transfer Station, a regional Hazardous Material Recovery Facility, maintenance of two closed landfills, and coordination of household sharps and pharmaceutical collection and disposal programs. The Department also has provided resource recovery programs, when markets are available, for shingles, construction & demolition (C&D) material, clean wood waste, old concrete, tires, Freon-containing and other appliances and electronics. The success of these programs is based on a forward-thinking Solid Waste Management Board and staff that build and maintain long-term relationships with the public and private sector. These relationships have resulted in long-term agreements for solid waste, recycling and other resource recovery activities. The Solid Waste Management Board and staff are committed to learning about and pursuing emerging solid waste management technologies that are economically and environmentally beneficial.



The Department is part of the Tri-County regional solid waste and recycling agreements between Brown, Outagamie and Winnebago Counties known as the BOW. The three counties coordinate their waste disposal sequentially starting with Winnebago County's landfill. We are currently using Outagamie County's landfill, and eventually will be using Brown County's South Landfill. In 2020, a new revised and restated Brown, Outagamie and Winnebago (BOW) Agreement was executed. The 20 year BOW partnership has saved municipal, industrial and commercial customers \$48 million dollars in avoided tipping fees over the first 18 years of the original agreement. The new BOW Agreement adds a new landfill at Outagamie County; shares out-of-county waste, alternative daily cover and beneficial use waste streams; and, shares in transfer station operating and hauling costs over the next 25 years.

BOW also has a state-of-art single stream recycling facility located in Outagamie sharing administrative and operational costs. The Tri-County recycling facility is one of the largest publicly owned and operated single stream recycling facilities in the country.

***Brown County Resource Recovery's vision is to provide Brown County municipal, commercial and industrial customers cost-effective and sustainable solid waste management systems with the focus on resource recovery primarily through recycling, repurposing and energy recovery.***

## Mission

The 2017 Brown County Strategic Solid Waste Management Plan serves as a long range guiding document that identifies strategic issues to address while establishing goals and objectives to strive toward. This annual report helps to ensure the strategic plan's goals and objectives are being advanced. The Department's mission statement is as follows:

*"The Port & Resource Recovery Department will meet the solid waste management needs of local communities, residents and businesses through methods that are environmentally sound and economical. These methods incorporate waste reduction, material reuse, recycling, household hazardous materials treatment and disposal, composting, solid waste disposal and waste-to-energy to the extent that these practices are technically feasible and economically appropriate."*





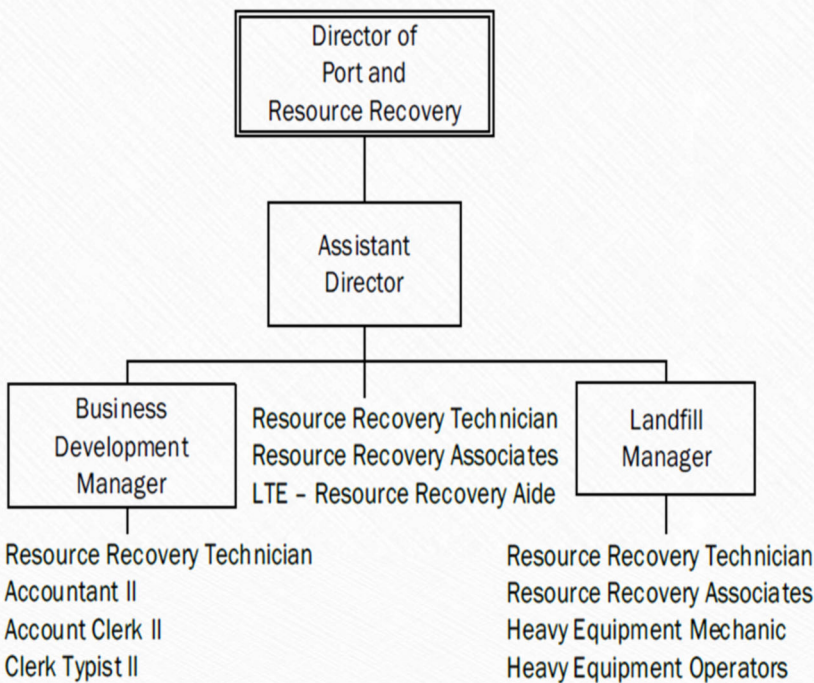
# Solid Waste Management Board

The Brown County Solid Waste Management Board (SWMB) sets policy for the Department’s services. It is authorized by Wisconsin State Statute Chapter 59.70 (2) and Chapter 12 of the *Brown County Code of Ordinances*. The nine members of the SWMB are appointed by the County Executive and serve as an oversight committee of the County Board. The County Board’s Planning, Development and Transportation Committee oversees the SWMB and the Department. Three members of the SWMB are from within the city of Green Bay, three are from incorporated non-Green Bay municipalities and three are from unincorporated areas of the County. Two SWMB members are County Board Supervisors. SWMB members serve three-year terms. Minutes of the Solid Waste Management Board meetings are reviewed and approved by the County Board.

## Solid Waste Board Members

- |                                   |                  |
|-----------------------------------|------------------|
| John Katers, President            | Michael Lefebvre |
| Mark Vanden Busch, Vice-President | Doug Martin      |
| Norb Dantinne                     | Bill Seleen      |
| Dave Landwehr                     | Mike VanLanen    |
|                                   | John Myers       |

## Port & Resource Recovery Table of Organization

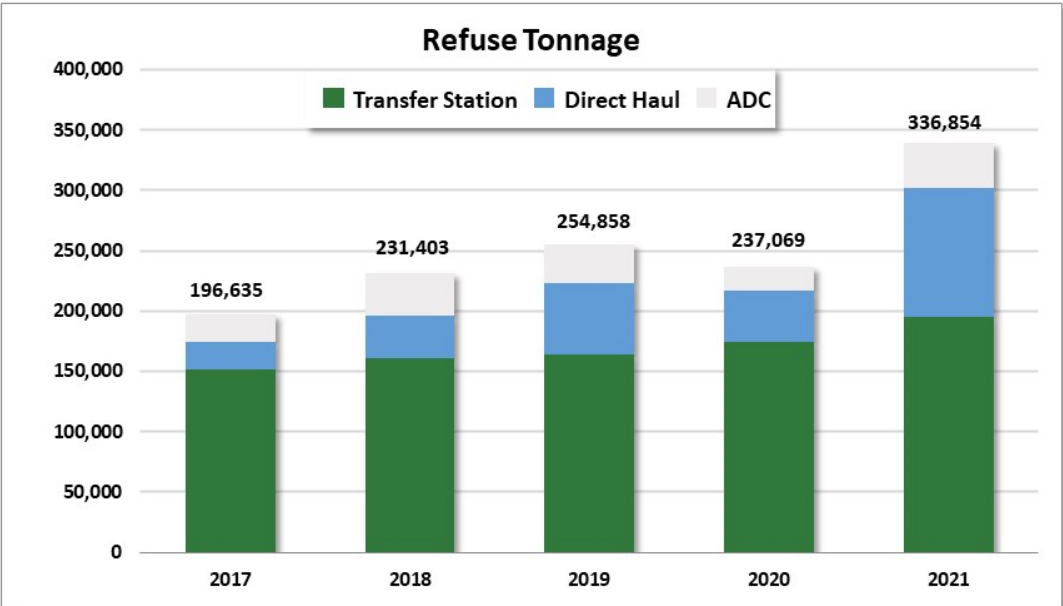


- |                                  |                                 |
|----------------------------------|---------------------------------|
| Dean Haen, Director              | Chad Doverspike, Asst. Director |
| Mark Walter, Business Dev. Mgr   | Ben Hintz, Landfill Manager     |
| Katie O’Connell, Accountant II   | Chris Blan, HMR Technician      |
| Jon Logan, Landfill Technician   | Derek Tess, Landfill Technician |
| Theresa Slavek, Account Clerk II | Katie Platten, Clerk Typist II  |
| Travis Pagel, Operator           | Jacob Shallow, Operator         |
| Jason Lemke, Operator            | Curtis Gossen, Operator         |
| Josh Linssen, Operator           | Kyle Synder, Operator           |
| Guillermo Flores, Operator       | Kelly Stewart, Associate        |
| Laura Lackey, Associate          | Paul Meers, Associate           |
| John Wendricks, Associate        | Jon Garies, Associate           |
| Daymond Williams, Associate      | Raymundo Sanchez, Associate     |

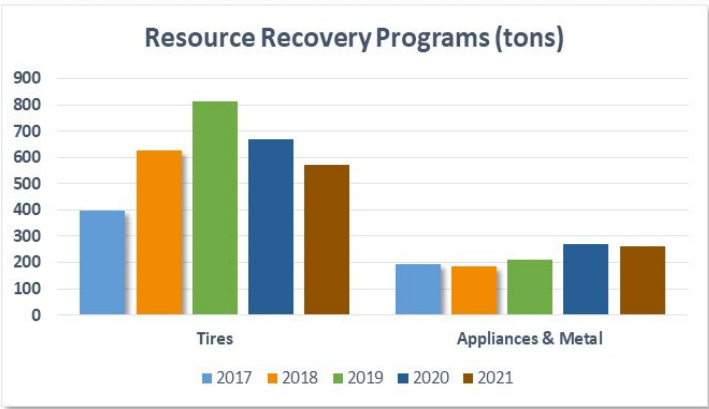


# Solid Waste & Resource Recovery

The Department operates a Solid Waste Transfer Station that receives, compacts and transports refuse produced by county residential, commercial and industrial users to the current BOW landfill. More than **195,000 tons of refuse** were processed through the Brown County Solid Waste Transfer Station in 2021 with another **106,000 tons of refuse delivered** directly to the BOW landfill for a **total of 301,577 tons**. Another **37,720 tons of alternative daily cover** were delivered to the BOW landfill for a **total Brown County tonnage of 336,854 tons**. The Outagamie County Landfill accepted **793,974** total tons of material in 2021.



In 2021, **5,690 tons of shingles** brought to the Solid Waste Transfer Station were recycled, as were **573 tons of tires** and **263 tons of appliances and scrap metal**. Affordable tire recycling prices at Brown County are resulting in a higher delivery of scrap tires. While C&D and wood waste recycling markets were not available in 2021, **39,969 tons of material through the waste transfer station were identified as C&D material**.

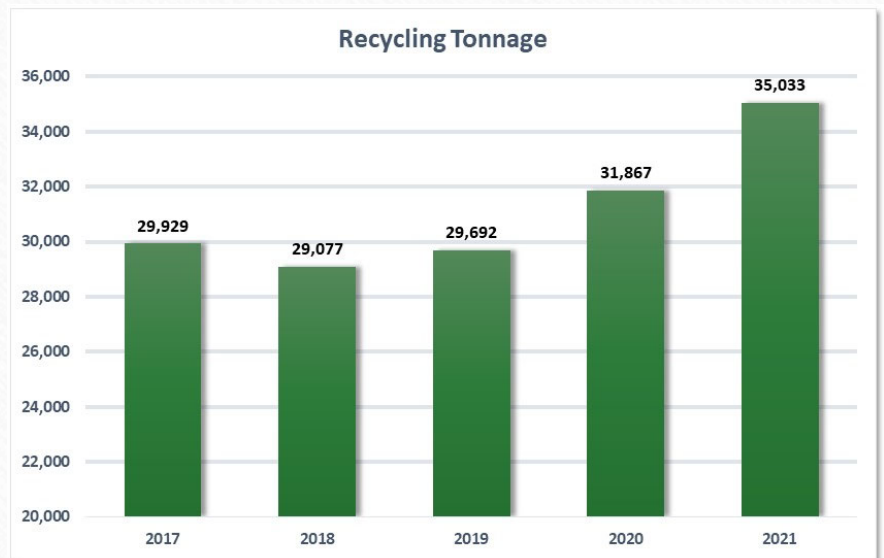




# Recycling

The Department operates a Recycling Transfer Station that collects and transports single stream recyclables produced by residents, municipalities and commercial users to the BOW regional single stream Materials Recovery Facility (MRF) in Outagamie County. This BOW facility is one of the largest municipal MRFs in the country. The MRF processes and markets comingled residential and commercial recyclable containers from the three counties and other Wisconsin communities.

In 2021, **35,033 tons of single stream recyclables** were hauled from the Brown County Recycling Transfer Station to the Tri-County MRF which processed more than **108,000 tons of recyclables**. Single Stream Recycling includes recycling of all plastic bottles and caps, tubs and containers, aluminum and tin cans, glass and all paper products. The facility serves more than 10 counties in northeast Wisconsin.



## 2021 TRI-COUNTY RECYCLING GUIDE

BROWN • OUTAGAMIE • WINNEBAGO

### PLASTIC

**Goes In Your Recycling:**

- Household bottles, jars & jugs
- Dairy containers & lids
- Produce, bakery, & deli containers & lids

**Does NOT Go In Your Recycling:**

- Plastic bags, wraps & films
- Motor oil bottles
- Styrofoam

### PAPER

**Goes In Your Recycling:**

- Cardboard & paperboard (food boxes)
- Newspapers & inserts
- Office & school paper
- Envelopes, junk mail & catalogs
- Books & magazines
- Milk, juice & soup cartons

**Does NOT Go In Your Recycling:**

- Shredded paper
- Tissue paper
- Pet food bags

### GLASS

**Goes In Your Recycling:**

- Food & beverage bottles & jars

**Does NOT Go In Your Recycling:**

- Window glass
- Ceramics & china
- Drinking glassware

### METAL

**Goes In Your Recycling:**

- Aluminum bottles & cans
- Steel & tin cans

**Does NOT Go In Your Recycling:**

- Propane tanks
- Aluminum pans & foil
- Empty paint cans
- Scrap metal
- Metal cookware

## WHY WE HATE THE UGLY EIGHT

**PLASTIC BAGS**

Plastic bags, wraps & films are our #1 contaminant. Recycle items loosely and not in plastic bags! Take clean and dry plastic bags back to store drop-off collections.

**YUCK**

Putting garbage, liquids & food in the recycling or "wish-cycling" items that you are unsure what to do with makes it difficult and costly for us to sort clean recyclables. When in doubt, visit our Waste Wizard website tool or contact us.

**SHREDDED PAPER**

Shredded paper builds up in our equipment creating unnecessary maintenance & cleanup. Take confidential papers to a shredding event.

**TANGLERS**

These materials are anything that wraps around our sorting equipment, such as cords, hoses & wires, creating unnecessary maintenance. Take these items to a drop-off location for proper recycling or place them in the garbage.

**SHARPS**

Needles, lancets & syringes are the #1 safety concern for our sorting staff. Do not throw sharps in your recycling or trash! Visit: [dnr.wi.gov](http://dnr.wi.gov) and search "Sharps Collections" for proper drop-off locations.

**TANKS**

Tanks & compressed gas cylinders can contain small amounts of fuel and can ignite if damaged. Search "propane tank" in our Waste Wizard to find proper drop-off locations.

**TEXTILES**

Clothing, bedding & towels wrap around sorting equipment creating unnecessary maintenance. Donate textiles or if in poor condition throw them in the garbage.

**BATTERIES**

Batteries & electronics are a fire hazard and should never go in recycling carts. Search "battery" or "electronic" in our Waste Wizard website tool to find proper drop-off locations.

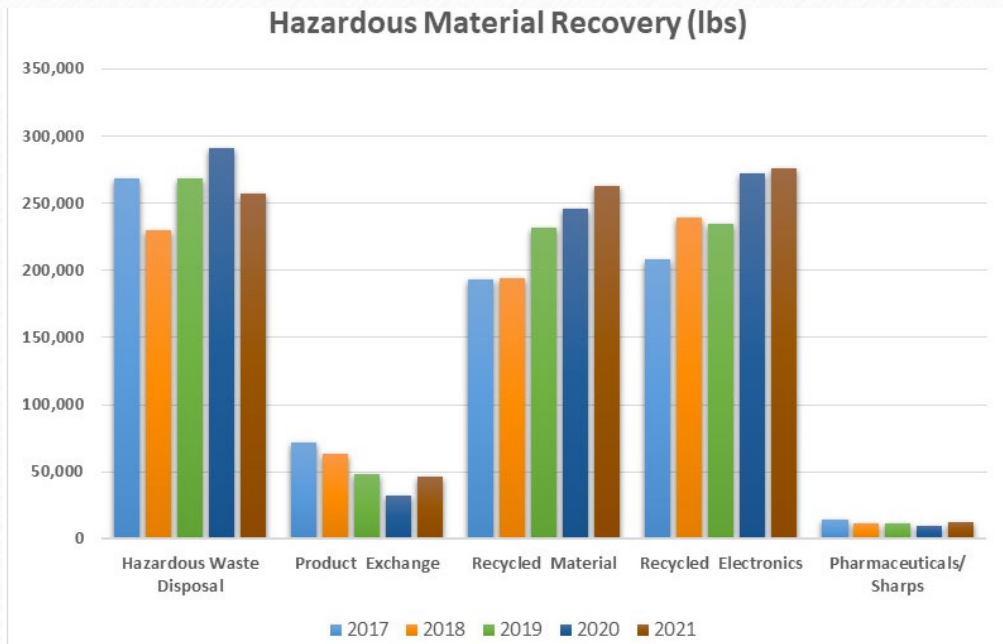
**RECYCLE ITEMS LOOSELY!**  
NO PLASTIC BAGS IN RECYCLING CARTS!

[WWW.RECYCLEMORETRICOUNTY.ORG](http://WWW.RECYCLEMORETRICOUNTY.ORG)

SCAN TO  
USE OUR  
WASTE WIZARD  
WEBSITE  
TOOL!

# Hazardous Material Recovery

The Department operates the Hazardous Material Recovery Facility (HMR) providing an environmentally responsible outlet for hazardous, universal and special wastes for residents of Brown County and northeast Wisconsin. This program is funded in partnership with NEW Water, the Oneida Tribe and other rural municipalities not connected to the NEW Water wastewater treatment facility. Additionally, Brown County provides cost-effective HMR services through out-of-county collection agreements with several neighboring counties. The program also provides regional businesses that qualify as Very Small Quantity Generators (VSQGs) with economical disposal options for hazardous, universal and special wastes.



The HMR facility was open to the public for material drop-off and disposal throughout the year. During 2021, the facility took in **753,308 pounds of hazardous materials** from an estimated **10,708 residential and business sources**. The number of people using the facility was the highest on record following a near record number of participants in 2020. The facility was able to recycle or make available to the public more than a third of the collected material while **257,302 pounds of hazardous waste** was kept out of the environment and properly destroyed. The HMR program and staff provide assistance to other counties in the region which includes managing collection events, providing additional staff for collections and serving as a disposal outlet for material collected outside of Brown County.

## Sharps & Pharmaceutical Collection Programs

Since 1996, the Department and the County Health Department have collaborated in managing the Brown County Household Sharps Program collecting nearly **222,000 pounds** of sharps (needles, syringes and lancets) with nearly **12,340 pounds** collected in 2021. The Department also provides law enforcement with regulatory and disposal guidance along with a low-cost disposal outlet for non-controlled pharmaceuticals.

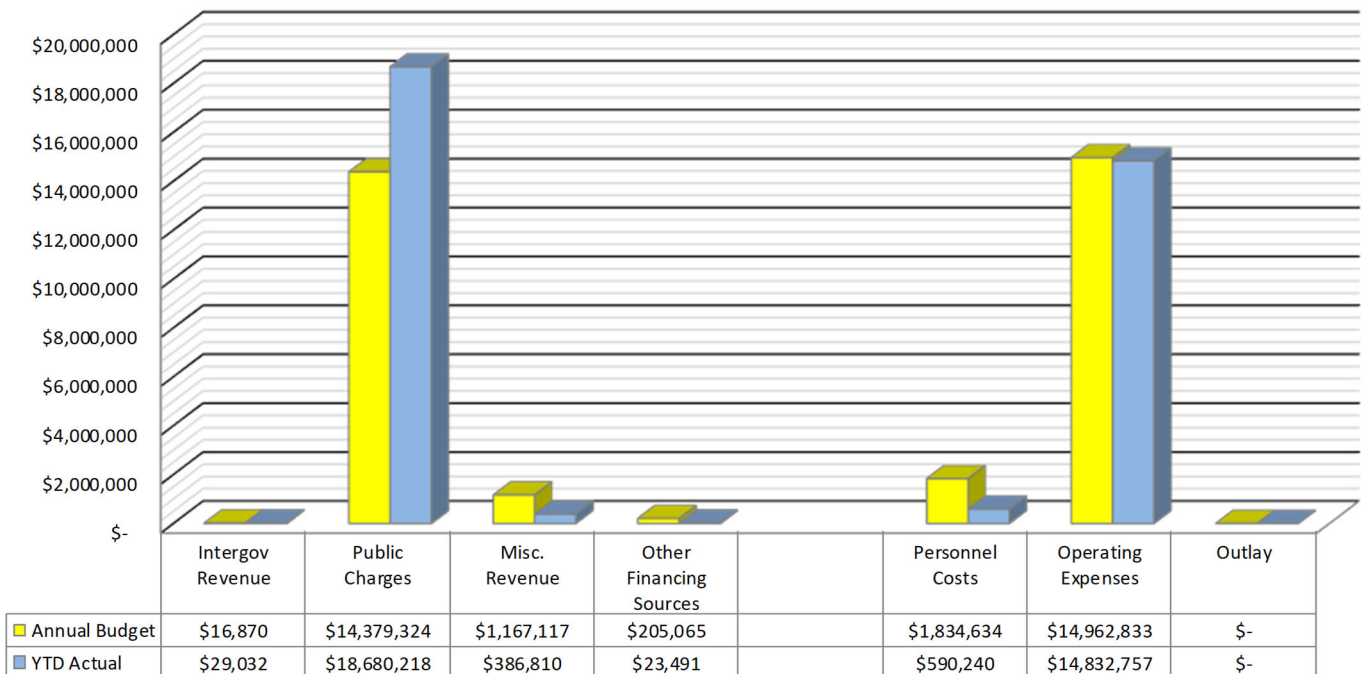




**Brown County Port & Resource Recovery Department**  
**Resource Recovery Area Budget Status Report**  
**December 31, 2021**

		Annual Budget	YTD Actual	YTD %	YTD Total	Comments
Revenue	Intergov Revenue	\$ 16,870	\$ 29,032	172%		<b>Public Charges</b> are higher than budget due to increased tonnage and commodity prices throughout 2021. <b>Miscellaneous Revenue</b> is lower than budget due to projected BOW revenues coming in lower than anticipated and a recognized loss on investments due to a market valuation at the end of 2021. Interest earned includes the market value variability on a specific day. Variations are due to the change in market value not actual cash value. <b>Other Financing Sources</b> is an intrafund budget used to make the HMR whole at the end of the year. A transfer is done at the end of the year between Resource Recovery, General and the HMR. HRM revenues were higher than projected in 2021 reducing the amount of transferred funds needed. <b>Personnel Costs</b> continued to trend lower than budget due to unfilled staff positions.
	Public Charges	\$ 14,379,324	\$ 18,680,218	130%		
	Misc. Revenue	\$ 1,167,117	\$ 386,810	33%		
	Other Financing Sources	\$ 205,065	\$ 23,491	11%		
					\$ 19,119,551	
Expenses	Personnel Costs	\$ 1,834,634	\$ 590,240	32%		
	Operating Expenses	\$ 14,962,833	\$ 14,832,757	99%		
	Outlay	\$ -	\$ -			
					\$ 15,422,996	

**Resource Recovery - December 31, 2021**



*\*Financials are unaudited and will be finalized by the Administration Dept. in March.*



# 2021 Goals

## Completed

- ◆ Constructed the South Landfill, which include a \$10M civil bid. Construction included the following: excavation, clay liner; geo-synthetic liner; leachate lines and tank; scales and scale house; acquisition of dozers, compactor, water truck, tractor/mower, etc.; maintenance building, drop-off site construction; and, utilities and connectivity
- ◆ Oversaw South Landfill Architectural Bid and \$2.2 million in work constructing Maintenance Building, Scalehouse and Equipment Storage Building.
- ◆ Filled 7 of 14 positions in new Table of Organization and back filled any internal applicants that advanced. Provided the necessary training to be operational January 1, 2022. Balance of positions to be filled in 2022.
- ◆ Implemented Equipment Acquisition Strategy (\$3-\$4 million) that included developing specifications for new acquisitions and used pieces of equipment to operate both the South Landfill and Waste Transfer Station. Equipment includes compactor, front-end loaders, dozers, box truck and eight boxes, sweepers, mower, water truck, fuel skid and plow trucks.
- ◆ Negotiated new South Landfill contracts for shingles, appliances, freon, tires, scrap metal, fuel, grease, leachate hauling and others as may be needed.
- ◆ Figured out South Landfill utilities and construction (fiber optics, power, water, cameras, holding tank).
- ◆ Formulated 2022 budget and determined BOW and Brown County tipping fees (factoring in shared ADC, out-of-county, new South Landfill, Waste Transfer Station operated by Brown County, Waste Transfer Station hauling costs).
- ◆ Executed an easement with Dynamic Group.
- ◆ Constructed De Pere Leachate Unloading Station tank installation.
- ◆ Implemented BOW Agreement changes including sharing out-of-county waste, alternative daily cover waste, and transfer station hauling and operating costs.
- ◆ Implemented a Vape and E-cigarette Collection Program.

## In Progress

- ◆ Negotiate new Solid Waste Management Services Agreements for Preferred and Contracted Customers that merge solid waste, recycling and other programs into one agreement. Utilization of the Rate Stabilization fund will be negotiated under the new Agreements. As of December 2021 executed Solid Waste Agreements (26 municipal, 20 private). A few more agreement will be executed in early 2022
- ◆ Purchase equipment & supplies for South Landfill Maintenance Building and Scalehouse (vehicle lift/jib crane/hydraulic hose crimper/desks/fuel tank/hand tools).
- ◆ Execute Ledgeview Leachate Agreement and construct leachate metering tank discharge. Designed metering tank and evaluating cost benefit of constructing. Any construction would happen in 2022

## Deferred

- ◆ Issue Waste Transfer Station & Recycling Transfer Station Hauling RFP and negotiate contract. Expected to be released in February 2022





# 2022 Goals

## ♦ Begin County Operation of South Landfill

1. Install fluff layer and transition ADC and other waste. Open to public
2. Implement necessary technology and financial systems for Brown County and BOW
3. Acquire outstanding pieces of equipment and boxes
4. Set up accounting system for \$18M in new revenue with \$16M in new expenses and performed BOW financials
5. Set up financial systems to manage DNR reporting and fees and reporting and fees under the Host Community Agreement
6. Manage snow removal, liter picking, drop off area and other operational needs
7. Establish and comply with new standard landfill and environmental compliance operating procedures
8. Fill remaining positions

## ♦ Begin County Operation of Transfer Station

1. Hire two (2) heavy equipment operators and utilize two (2) acquired front-end loaders.
2. Operations begin February 1, 2022.
3. Assemble necessary equipment to operate and maintain facility and site (front-end loaders, sweeper, snow removal equipment, etc.)
4. Manage site including; snow removal, sweeping, liter picking, drop off area and other operational needs

## ♦ Develop 2022 Resource Recovery 5-year Strategic Plan

1. Identify Strategic Issues in Recycling, Solid Waste, BOW and HMR
2. Revisit Vision and Mission Statement
3. SWOT Analysis
4. Goals and Objectives

- ♦ The Department is focused on training and instilling the existing team based culture in the new employees with a focus on retention, professional development and institutional knowledge sharing. The team will continue pursue new strategic business development opportunities while providing cross training and an improved team environment.
- ♦ Issue Waste Transfer Station & Recycling Transfer Station Hauling RFP and negotiate contract. Expected to be released in February 2022 with February 2023 start date.

### **Brown County Resource Recovery**

2561 South Broadway, Green Bay, WI 54304

Phone: 920-492-4950 | Fax: 920-492-4957

[www.BrownCountyRecycling.org](http://www.BrownCountyRecycling.org)





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