

# BROWN COUNTY RESOURCE RECOVERY

2023 Annual Report



# Message from the Director

**During 2023, the Solid Waste Management Board and staff worked toward meeting the goals and objectives of the updated 2023 Resource Recovery Strategic Plan and the overarching mission and vision for the Brown County Resource Recovery Department.**

For more than 45 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 raised through operations to fund its activities.

In 2023, the Department had another busy year with a number of activities accomplished to increase the Department's solid waste management services. During the year, staff prepared a 5-year construction plan for the South Landfill that includes design of the future landfill gas collection system, excavating and constructing Phase Two, and intermediate cover of the outside slopes of Phase One.

The South Landfill received 461,000 tons of solid waste in 2023. Phase One is 26 acres and waste began being placed in the third lift. The horizontal gas/leachate collection system, planned for the third lift was designed and materials were acquired with installation planned in 2024. Additional landfill equipment including a refurbished Tana compactor, D5 dozer, off-road truck and sheep-foot roller were purchased. Staff used existing equipment to move almost 60,000 CY of clay from Phase Two to the west side of the property for the future gas extraction and destruction facility. Some additional clay, topsoiling and seeding of the disturbed areas will be completed in Spring 2024.

At the Waste Transfer Station, a skid steer was purchased in 2023 as was an additional front-end loader allowing the oldest front-end loader to serve as a backup during breakdowns and scheduled maintenance. The Transfer Station handled over 175,000 tons in 2023. A new Gate Rate Tipping Fee was established as part of the budget process allowing a higher tipping fee during road weight limits in an effort to financially encourage users to redirect their waste to the South Landfill.

The volume of material moving through the Recycling Transfer Station was down slightly with 31,600 total tons of recycling.

Lithium batteries continue to be a fire hazard at waste & recycling transfer stations and processing facilities throughout the state. In response, Brown County residents are now able to dispose of all household batteries for free at the Hazardous Material Recovery Facility. Infrared camera technology capable of detecting hot spots on the Recycling Tip Floor is expected to be installed in 2024. If successful, IR cameras will be installed at the Waste Transfer Station. The cameras will also allow 2-way communication with customers using the Recycling Transfer Station.

The Hazardous Material Recovery Facility volume of hazardous material collected was down from 2023 with the number of customers served down as well. After seeing a record number of users in 2021, the program saw just over 8,500 residents making use of the facility in 2023 consistent with the program's long-term average participation.

Overall an excellent team of staff continue to do everything it has done in the past while additionally moving into more in-house construction. In conclusion, Brown County will continue to provide cost effective solid waste management services with excellent customer service.

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

**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 the South Landfill, Solid Waste Transfer Station, 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 provides 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 managing cost-effective and environmentally sound programs and 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 agreement between Brown, Outagamie and Winnebago Counties known as BOW. BOW is currently using Outagamie County’s Northeast Landfill and Brown County’s South Landfill. In 2020, a newly revised and restated Brown, Outagamie and Winnebago (BOW) Agreement was executed. The initial 20-year BOW partnership saved municipal, industrial and commercial customers \$48 million dollars in avoided tipping fees over the first 18 years. Additional savings are being realized every year. The new BOW Agreement adds a new Northwest landfill at Outagamie County in 2025; 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 has a state-of-the-art single stream recycling facility located in Outagamie sharing administrative and operational costs. The Tri-County Material Recovery Facility is one of the largest publicly owned and operated single stream recycling facilities in the country. Staffing the recycling facility is an on-going challenge.

***“Brown County Resource Recovery’s vision is to provide competitive, cost-effective and environmentally sound management systems for solid waste, recyclable and hazardous materials for Brown County communities, residents, businesses and industry.”***

## Mission

A new *Strategic Solid Waste Management Plan* was adopted for the department in 2023 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 Brown County Port & Resource Recovery Department will meet the solid waste disposal needs of local communities, residents, businesses and industry through methods that are environmentally sound, technically feasible and economical. These methods may incorporate waste reduction, material reuse, recycling, composting, hazardous material treatment and disposal, solid waste disposal and waste-to-energy.”*



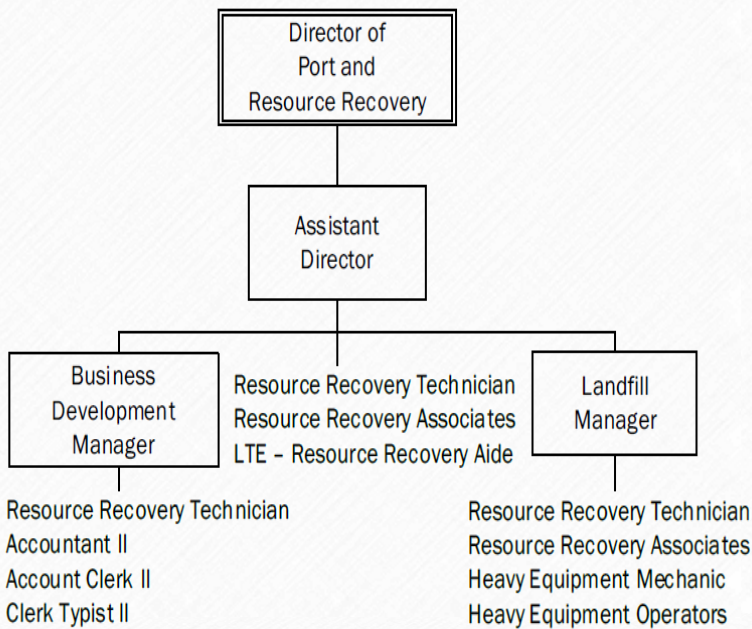
# Solid Waste Management Board

The Brown County Solid Waste Management Board (SWMB) sets policy for the Department. 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	Sean Gehin
Mark Vanden Busch, Vice-President	Bill Seleen
Norb Dantinne	Mike VanLanen
Dave Landwehr	John Myers
Michael Lefebvre	

## Port & Resource Recovery Department Table of Organization

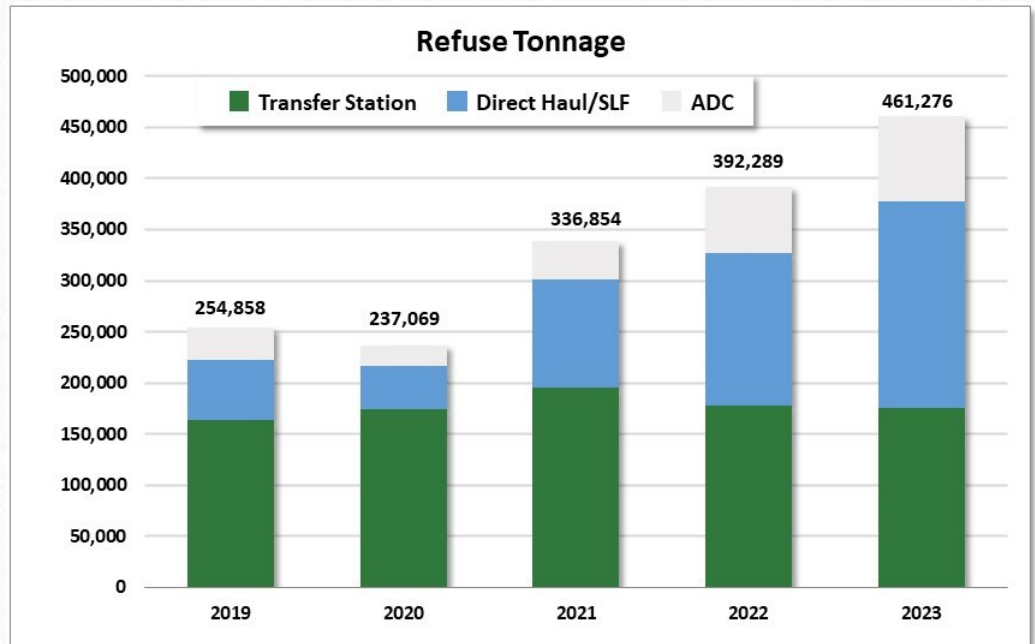


Dean Haen, Director	Kyle Snyder, Operator
Chad Doverspike, Asst. Director	Guillermo Flores, Operator
Mark Walter, Business Dev. Mgr	Todd Kibilowski, Operator
Ben Hintz, Landfill Manager	Stan Kaczmarek, Mechanic
Theresa Slavek, Accountant II	Kelly Stewart, Associate
Chris Blan, HMR Technician	Laura Lackey, Associate
Jon Logan, Landfill Technician	Grayor Thomas, Associate
Derek Tess, Landfill Technician	Ian Schiltz, Associate
Melissa Martens, Acct. Clerk II	Todd Hurwit, Associate
Katie Platten, Clerk Typist II	Edward Artalejo, Associate
Travis Pagels, Operator	1 vacant, Operator
Brian Cunningham, Operator	1 vacant, Associates
Daymond Williams, Operator	1 vacant, LTE RR Aide
Curtis Gossen, Operator	
Josh Linssen, Operator	



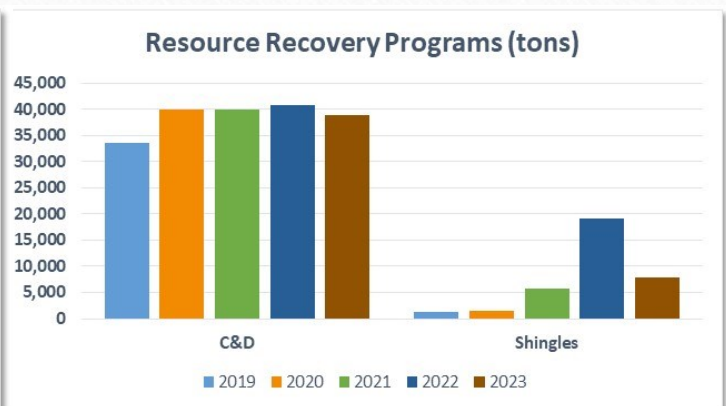
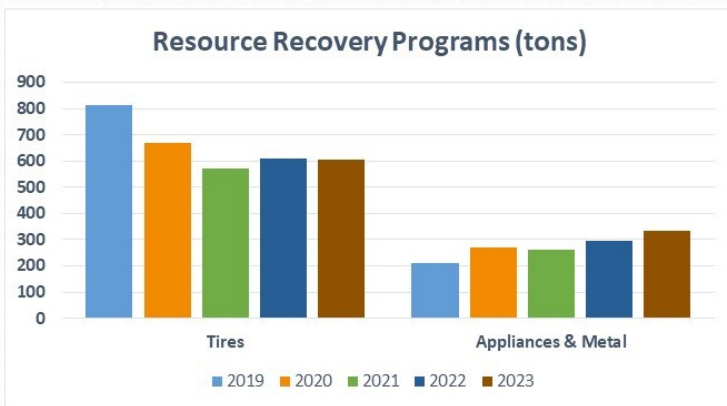
# Solid Waste & Resource Recovery

The Department operates the South Landfill that receives the waste from the Solid Waste Transfer Station and direct hauls from residents, municipalities, commercial and industrial customers. The Solid Waste Transfer Station receives, compacts and transports refuse produced by county residential and commercial customers primarily to the South Landfill. More than



**175,000 tons of refuse** were processed through the Brown County Solid Waste Transfer Station in 2023 for transport to one of the BOW landfills. Another **202,000 tons** of waste were delivered directly to the landfills for a **total of 377,970 tons**. In addition, **83,307 tons of alternative daily cover** were delivered to the BOW landfill for a **total Brown County tonnage of 461,276 tons**. The Outagamie County Landfill accepted **338,890 total tons** of material in 2023.

In 2023, **7,771 tons of shingles** were recycled, as were **605 tons of tires** and **332 tons of appliances and scrap metal**. Affordable tire recycling prices at Brown County continue to promote high number of scrap tires. While C&D and wood waste recycling markets were again not available in 2023, **38,938 tons of material coming 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

IS THAT **REALLY** RECYCLABLE??

Search our web-friendly

**WASTE WIZARD**

RecycleMoreTriCounty.org

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 paper and containers from the three counties and other Wisconsin communities. In 2023, the BOW continued to promote two tools developed in 2022 to help the public recycle better. The **Waste Wizard** is an online tool on that can be found on the Tri-County Recycling website ([recyclemoretricity.org](http://recyclemoretricity.org)) that allows users to look for locations to get rid of

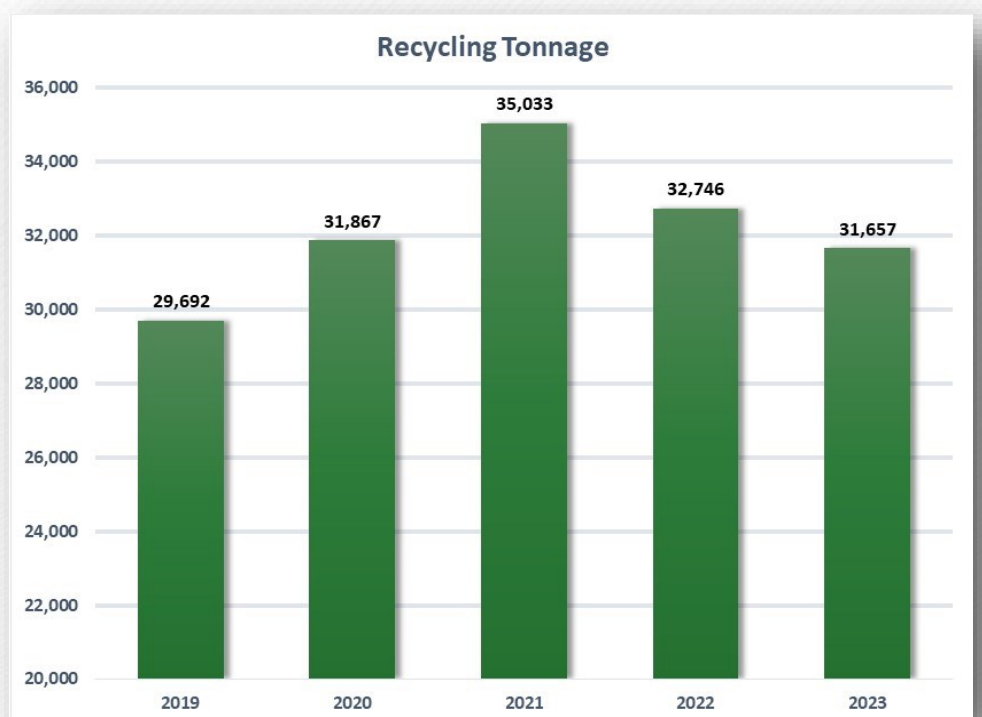
SCAN TO GET OUR NEW APP!

**Betterbin**

Available to residents in Brown, Outagamie and Winnebago Counties.

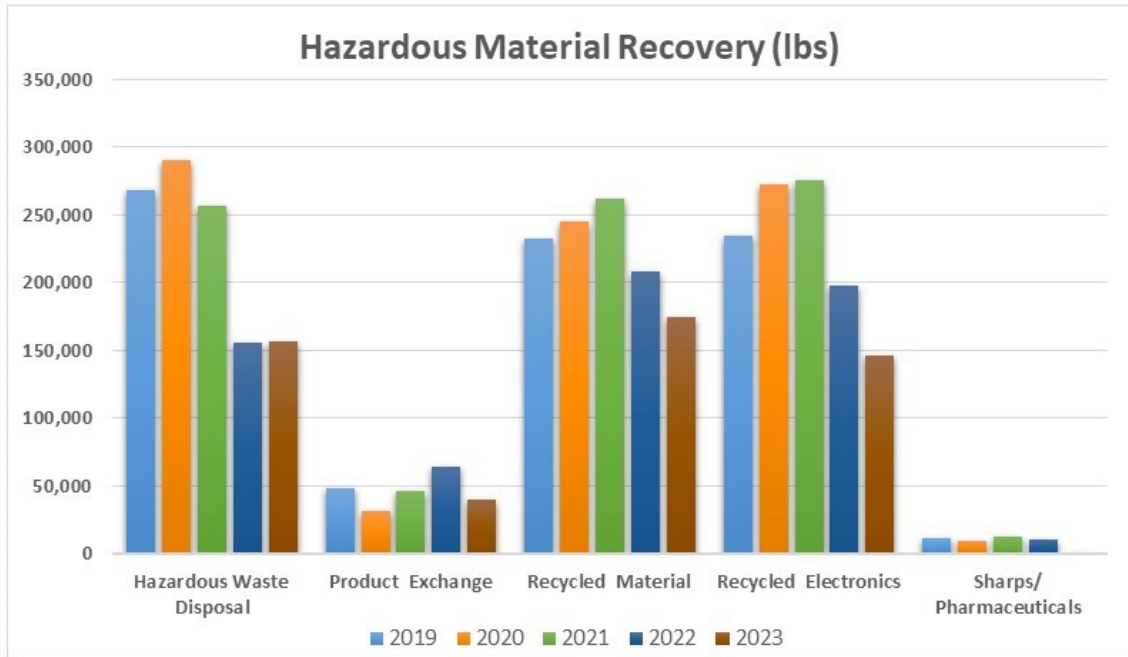
almost any type of waste material within the three BOW counties. Additionally, **Betterbin**, a mobile recycling app, can be used by residents to quickly figure out what to do with their recyclable materials. With a quick scan of the product barcode, residents can find out the specifics of whether a product is recyclable and how to recycle their products within the BOW region.

In 2023, **31,657 tons of single stream recyclables** were hauled from the Brown County Recycling Transfer Station to the Tri-County MRF which processed more than **97,300 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.



# 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 a cost-effective hazardous waste disposal option for residents of neighboring counties. The program also provides businesses that qualify as Very Small Quantity Generators (VSQGs) with economical disposal options for hazardous, universal and special wastes.



During 2023, the facility took in **507,045 pounds of hazardous materials** from an estimated **8,565 residential and business sources**. Due to changes in staffing, the HMR program no longer provides contracted services to surrounding counties resulting in a drop in the number of people using the facility in 2023 and a corresponding drop in hazardous material collected. The facility was able to recycle or make available to the public more than a third of the collected material while **156,638 pounds of hazardous waste** was kept out of the environment and properly destroyed. The HMR program and staff provided assistance to other counties in the region serving as a disposal outlet for material collected outside of Brown County.

In 2023, the Department initiated it's **Batteries NOW Included** campaign in an effort to educate the public about proper disposal of batteries and battery containing devices. Recycling and waste facilities throughout the country have been experiencing an increase in fires due to batteries being disposed of improperly, creating a health and safety hazard for the facilities and their workers. The program provides a free option for residents to properly dispose of any type of household battery. In the first three months of the program, more than **12,800 pounds of batteries** were collected from the public.



# BATTERIES NOW INCLUDED



Brown County Hazardous Material Recovery Facility  
2561 S. Broadway  
Green Bay, WI 54304  
(920) 492-4950

RR.HHW@BrownCountyWi.gov

The Brown County Hazardous Material Recovery facility now accepts household batteries & battery containing devices from Brown County residents

## Batteries are FOR FREE! EVERYWHERE!

### What are Household Batteries?

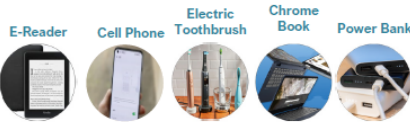
- Alkaline
- Button Cell
- AA, AAA, C, D, F
- Nickel Cadmium
- Nickel Metal-Hydride
- Lithium Ion
- Any Rechargeable Battery



### What are Battery Devices?

#### • Battery Containing Devices

Devices powered by batteries where the battery **IS NOT** designed to be replaced by the consumer are accepted for free.



#### • Battery Powered Devices

For devices powered by batteries where the battery **IS** designed to be replaced by the consumer the **battery** is accepted for free



If a device makes noise, moves or lights up without plugging it in, it has a battery. Batteries, even built in ones, can cause fires if they end up in trash or recycling.

**STOP** these batteries and devices from hitting your trash or recycling bins!

For batteries that can be removed from devices, tape off terminals with non-conductive tape and store in a non-metal, leak proof container before dropping off at the HMR.

Tuesday: 9AM - 3PM  
Thursday: 12 PM - 6PM  
[www.BrownCountyRecycling.org](http://www.BrownCountyRecycling.org)

Help protect yourself and others by bringing your household batteries and battery devices to the Brown County Hazardous Material Recovery facility for **FREE** from Brown County residents!

Brown County Hazardous Material Recovery  
2561 S. Broadway, Green Bay  
(920) 492-4950  
RR.HHW@BrownCountyWi.gov



**BATTERIES NOW INCLUDED**

**Open to the Public:**  
Tuesday: 9 am - 3 pm  
Thursday: Noon - 6 pm  
[BrownCountyRecycling.org](http://BrownCountyRecycling.org)

09/2023

# T E R I E S O W C L U D E D



### EVERYWHERE!

For batteries that can be removed from devices, tape off terminals with non-conductive tape and store in a non-metal, leak proof container before dropping off at the HMR.

### Household Batteries and Battery Devices!

#### Do Not Put Them in Your Garbage or Recycling!



Devices is substantial to better changes in es are especially gh they have the ce no longer meets no longer capable of are often thrown in ing bin where they the home, in trucks l recycling, and aste.

## Sharps & Pharmaceutical Collection Programs

The Department and the County Health Department collaborate in managing the Brown County Household Sharps Program collecting more than **11,100 pounds of sharps** (needles, syringes and lancets) in 2023. The Department also provides law enforcement with regulatory and disposal guidance along with a low-cost disposal outlet for non-controlled pharmaceuticals.

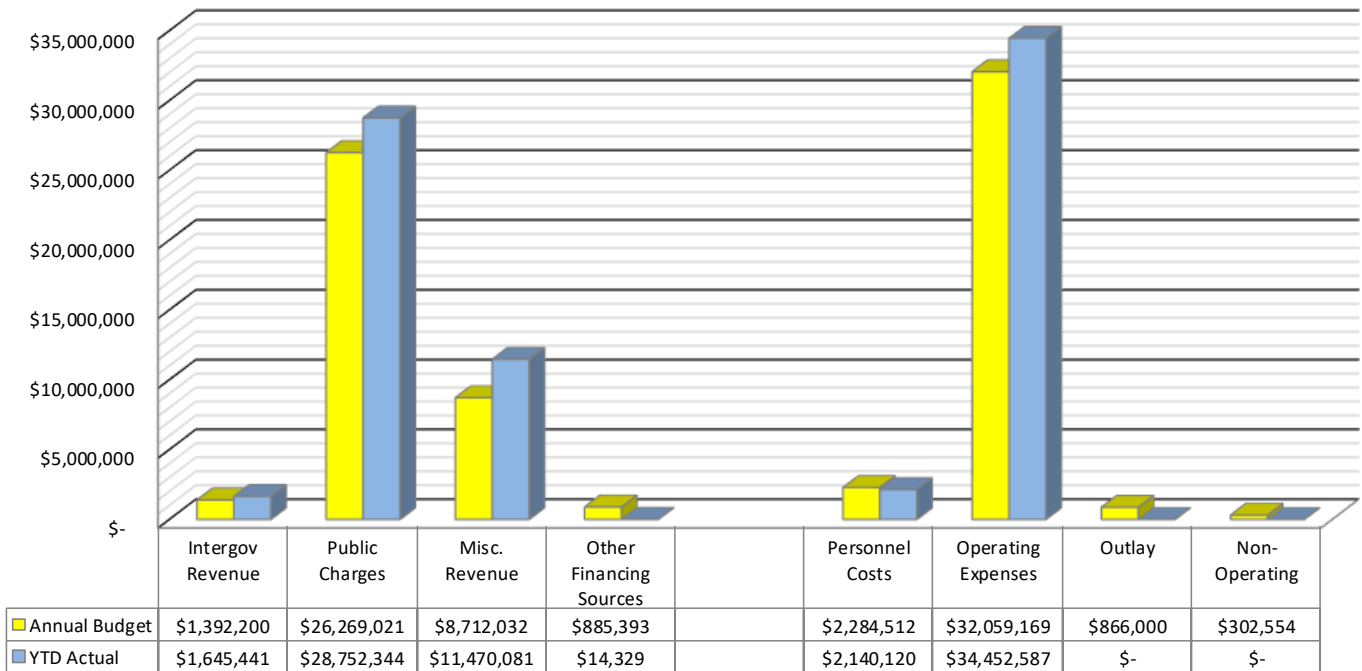




**Brown County Port & Resource Recovery Department  
Resource Recovery Area Budget Status Report (unaudited)  
December 31, 2023**

		Annual Budget	YTD Actual	YTD %	YTD Total	<b>Comments</b>
R e v e n u e	Intergov Revenue	\$ 1,392,200	\$ 1,645,441	118%		
	Public Charges	\$ 26,269,021	\$ 28,752,344	109%		
	Misc. Revenue	\$ 8,712,032	\$ 11,470,081	132%		
	Other Financing Sources	\$ 885,393	\$ 14,329	2%		
					\$ 41,882,195	
E x p e n s e s	Personnel Costs	\$ 2,284,512	\$ 2,140,120	94%		
	Operating Expenses	\$ 32,059,169	\$ 34,452,587	107%		
	Outlay	\$ 866,000	\$ -	0%		
	Non-Operating	\$ 302,554	\$ -	0%		
					\$ 36,592,707	

**Resource Recovery - December 31, 2023**



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



# 2023 Goals

## Completed

### ◆ South Landfill

1. Acquired Tana compactor and D5 Dozer. D5 will be traded in on D6 in 2024
  2. Produced a 5-year South Landfill construction plan
  3. Developed Gas Management Plan and Timeline
  4. Designed horizontal gas system to be trenched into 3rd lift in Sequence 1
  5. Explored relationship with Dynamics for future gas clean-up and transmission
  6. Considered issuing a request for proposals from potential users of future landfill gas
  7. Developed performance metrics as targets or goals for staff to strive for
- ◆ Implemented ReadyOp, a text/email communication system to reach all customers regarding changes to regular service hours due to weather, equipment issues, holidays and other needed communication
  - ◆ Adopted new *2023 Resource Recovery 5-year Strategic Solid Waste Management Plan*
  - ◆ Constructed East Landfill metering tank for South Landfill leachate. Paving deferred until 2024
  - ◆ Installed new gas skid at East Landfill to flare methane gas
  - ◆ Received first Plan Modification approval in Wisconsin from WDNR to utilize tire chips as backfill in gas extraction and leachate recirculation. Estimated to save Brown County approximately \$1 Million over the life of the Brown County South Landfill

## In Progress

- ◆ Executed Ledgeview Leachate Agreement and constructed leachate metering tank discharge. Designed metering tank with construction happening in spring 2023
- ◆ Excavated and placed 60,000 cy from Sequence 2 west of Sequence 1 for future gas collection and flare system. Minimal clay to be moved in 2024 along with topsoiling and seeding. Haul road for Sequence 2 clay to north stockpile area work deferred to 2024
- ◆ Explored ways to communicate with residents using the residential recycling drop-off door at the Recycling Transfer Station. Installation of infrared cameras for fire detection and communication through cameras to occur in 2024
- ◆ Acquire one additional 'Partner County' for the HMR program. "Partner County" agreements provide a county's residents year round access to the Brown County Hazardous Material Recovery facility. The Partnering County pays for hazardous waste disposal on behalf of its residents (at a reduced rate). The residents are charged reduced fees for non-hazardous and universal wastes as result of the partnership.

### **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)



# 2024 Goals

## ◆ South Landfill

1. Acquire articulating D6 Dozer for construction projects
2. Hire additional heavy equipment operators and split crew into construction and landfill teams
3. Construct new landfill access road to strip area and install culverts. Use existing staff to build road using on-site clay and purchased rock and gravel.
4. Complete 2023 clay excavation project; topsoil and seed work area
5. Install horizontal gas/leachate system
6. Begin placing 12" intermediate cover layer of clay on outside slopes
7. Explore relationship with Dynamics for future gas clean-up and transmission
8. Consider issuing a request for proposals from potential users of future landfill gas
9. Design Gas Destruction Facility
10. Build west side haul road and begin excavating Sequence 2 placing material in north stockpile area, as time allows.
11. Continue efforts to incorporate Sequence 2 clay into the South Bridge project
12. Complete construction of vacuum trailer for site clean up of wind blown material
13. Install wash curtain in maintenance building

## ◆ Hazardous Materials Recovery Facility

Acquire one additional 'Partner County' for the HMR program. "Partner County" agreements provide a county's residents year round access to the Brown County Hazardous Material Recovery facility. The Partnering County pays for hazardous waste disposal on behalf of its residents (at a reduced rate). The residents are charged reduced fees for non-hazardous and universal wastes as result of the partnership.

## ◆ Recycling and Recycling Transfer Station

1. Install infrared fire detection cameras with capability to communicate through cameras to customers
2. Expand installation of robots at BOW Material Recycling Facility

## ◆ East and West Landfills

1. Construct new driveway for East Landfill metering tank use
2. Plan West Landfill improvements including; razing barn, paving back road, constructing dumpster storage rental area and maintenance building. Existing staff will be used to strip and grade dumpster storage area in 2024

## ◆ Waste Transfer Station

Prepare compactor replacement bid for installation

## ◆ General

1. Prepare Request for Proposals for 5-year Engineering and Consulting contract
2. Sell 6 acres of property to the Town of Holland for new Town Hall





Brown County Port & Resource Recovery

2561 S. Broadway

Green Bay, WI 54304

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Email: [BC\\_Resource\\_Recovery@browncountywi.gov](mailto:BC_Resource_Recovery@browncountywi.gov)