# BROWN COUNTY RESOURCE RECOVERY

## 2022 Annual Report













## Message from the Director

During 2022, 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 raised through operations to fund its activities.

In 2022, the Department had another busy year with a number of activities accomplished to increase the Department's solid waste management services. Brown County began operating the new South Landfill and took over operation of the Waste Transfer Station. Necessary equipment and personnel were acquired.

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

The South Landfill was constructed over 2020 and 2021 and opened to the public January 3, 2022. Staff acquired a compactor, two D6

dozers, an excavator, a rock truck, a front-end loader, a water truck, a plow truck, a sweeper, a fuel tank and a skid steer to operator the landfill. Heavy equipment operators, scale operators and a mechanic were hired and trained to run the landfill, in addition to the landfill manager, accountant and technician who were hired in 2021. In 2022, the landfill received 392,000 tons of solid waste. Phase one of the landfill is 26 acres and the waste filled a full 10-foot lift and half of the second lift in 2022. Even though the landfill is still new, staff is preparing a 5-year construction plan that includes design of the future landfill gas collection system and excavating Phase two. In addition, a second compactor, roller and dozer will be purchased in 2023.

Transfer Station operations were assumed by Department staff on February 1, 2022. In preparation, heavy equipment operators were hired and two front end loaders, a roll-off truck, a sweeper and a plow truck were purchased. The transfer station handled over 177,000 tons in 2022. In 2023, another front-end loader and a skid steer will be purchased in 2023.

The volume of material moving through the Recycling Transfer Station was down slightly from the 2021 record with slightly less than 33,000 tons with a decline in commercial recycling tonnages.

Due to continued staff shortages the Hazardous Material Recovery Facility ended Saturday collections, but made Tuesday a permanent year around collection day. The volume of hazardous material collected was up from 2021 while the number of customers served was down. With one less collection day, the program saw a reduced number of users with just over 9,000 residents making use of the facility in 2022.

I am very proud of this team in successfully starting up the South Landfill and assuming operating responsibilities for the Waste Transfer Station. This was a heavy lift complicated by labor shortages, supply chain issues and inflation. Looking forward to 2023, the Department will do everything it has done in the past and transition to some operational normalcies. 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 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 new 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 recycling facility is one of the largest publicly owned and operated single stream recycling facilities in the country. The continuing challenge is staffing the recycling facility.

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. 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.

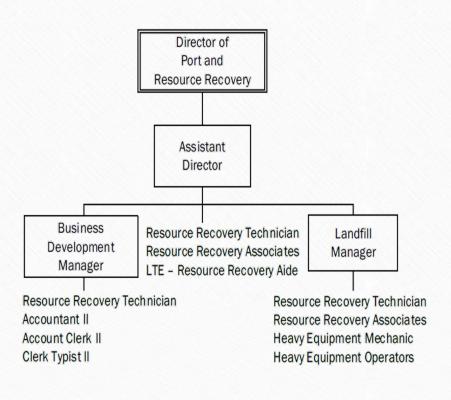
#### Solid Waste Board Members

John Katers, President Mark Vanden Busch, Vice-President

Norb Dantinne Dave Landwehr Michael Lefebyre Sean Gehin (Oct-Dec) Doug Martin (Jan-Aug) Bill Seleen

Mike VanLanen John Myers

#### Port & Resource Recovery Table of Organization



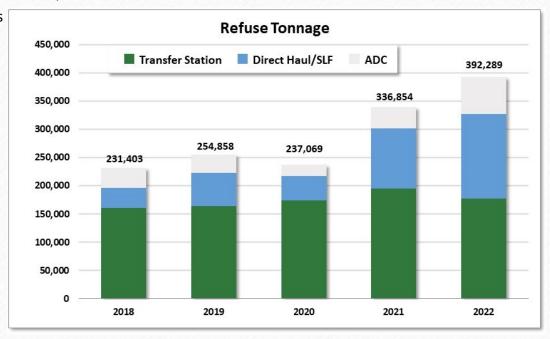
Dean Haen, Director Chad Doverspike, Asst. Director Mark Walter, Business Dev. Mgr Ben Hintz, Landfill Manager Theresa Slavek, Accountant II Chris Blan, HMR Technician Jon Logan, Landfill Technician Derek Tess, Landfill Technician Melissa Martens, Acct. Clerk II Katie Platten, Clerk Typist II Travis Pagels, Operator Brian Cunningham, Operator Daymond Williams, Operator Curtis Gossen, Operator Josh Linssen, Operator Kyle Snyder, Operator Guillermo Flores, Operator Kelly Stewart, Associate Jon Gareis, Associate Laura Lackey, Associate Grayor Thomas, Associate Ian Schlitz, Associate Stanley Kaczmarek, Mechanic



## Solid Waste & Resource Recovery

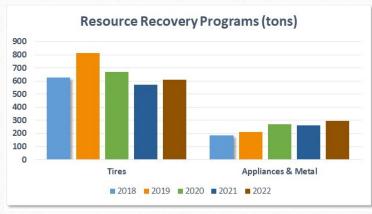
The Department operates the South Landfill that receives the waste from the Solid Waste Transfer Station and direct hauls from residents, municipalities, commercial and industrial customers. The Solid Waste Transfer

Station receives, compacts and transports refuse produced by county residential and commercial customers primarily to the South Landfill. More than 177,000 tons of refuse were processed through the Brown County Solid Waste Transfer Station in 2022 for transport to one of the BOW landfills. Another 150,000 tons of



waste were delivered directly to the landfills for a total of 327,141 tons. Another 65,100 tons of alternative daily cover were delivered to the BOW landfill for a total Brown County tonnage of 392,289 tons. The Outagamie County Landfill accepted 449,002 total tons of material in 2022.

In 2022, 19,137 tons of shingles were recycled, as were 608 tons of tires and 297 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 2022, 40,831 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

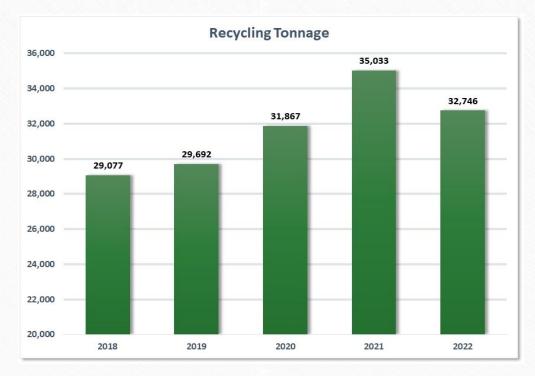


Recovery Facility (MRF) in Outagamie County. This BOW facility is one of the largest municipal MRFs in the country. The MRF processes and markets comingled residential and commercial recyclable containers from the three counties and other Wisconsin communities. In 2022, the BOW developed two new tools to help the public recycle better. The Waste Wizard is an online tool on the recently redesigned Tri-County

Recycling website (wwww.recyclingmoretricounty.org) that allows users to look for locations to get rid of their waste material within the three BOW counties. Additionally, a new mobile recycling app, Betterbin, was developed to allow residents quickly figure out what to do with their waste material. With a quick scan of the barcode, residents can find out the specifics of how to recycle their products.



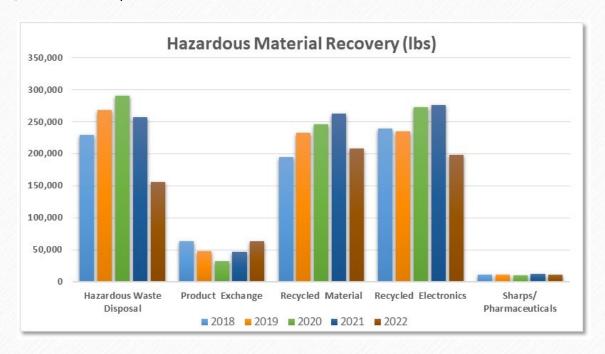
In 2022, **32,746 tons of single stream recyclables** were hauled from the Brown County Recycling Transfer Station to the Tri-County MRF which processed more than **104,800 tons of recyclables**. Single Stream Recycling includes recycling of all plastic bottles and caps, tubs and containers, aluminum 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 cost-effective HMR services to 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.



During 2022, the facility took in **623,451 pounds of hazardous materials** from an estimated **9,288 residential and business sources**. After a near record year in 2021, the number of people using the facility fell in 2022 with 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 **156,248 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.

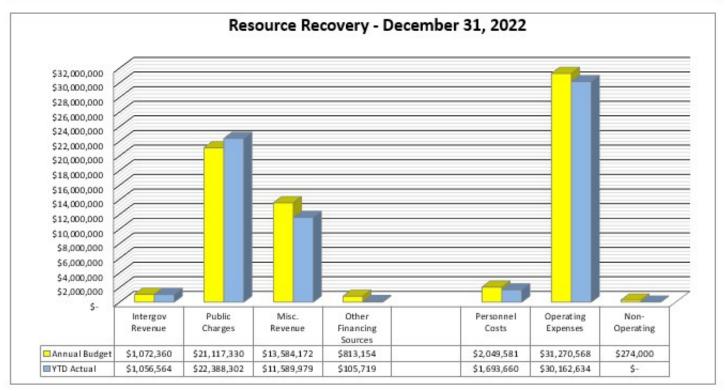
#### Sharps & Pharmaceutical Collection Programs

The Department and the County Health Department collaborate in managing the Brown County Household Sharps Program collecting nearly **233,000** pounds of sharps (needles, syringes and lancets) with nearly **10,944 pounds** collected in 2022. 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, 2022

	Annual Budget	YTD Actual	YTD %	YTD Total	Comments Public Charges are slightly higher than budget due
Intergov Revenue	\$ 1,072,360	\$ 1,056,564	99%	5-	to increased tonnage and commodity prices during 2022. <b>Other Financing Sources</b> is include at the close of 2022 financials a intrafund budget transfer to HMR of \$410,000 and \$274,000 for cost of capital. A transfer is done at the end of the year between Resource Recovery, General and the HMR. <b>Personnel Costs</b> continued to trend lower than budget due to unfilled
Public Charges	\$ 21,117,330	\$22,388,302	106%		
Misc. Revenue	\$ 13,584,172	\$ 11,589,979	85%		
* Other Financing Sources	\$ 813,154	\$ 105,719	13%		
				\$35,140,564	
, Personnel Costs	\$ 2,049,581	\$ 1,693,660	83%		cost of capital calculation estimated at \$274,000 for the SLF assets.
Operating Expenses	\$ 31,270,568	\$ 30,162,634	96%		
Non-Operating	\$ 274,000	\$ -			
				\$31,856,295	



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



#### 2022 Goals

#### Completed

#### Begin County Operation of South Landfill

- 1. Installed fluff layer and transition ADC and other waste. Open to public 1/3/22.
- 2. Implemented necessary technology and financial systems for Brown County and BOW
- 3. Acquired outstanding pieces of equipment
- 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. Managed snow removal, litter picking, drop-off area and other operational needs
- 7. Established and complied with new standard landfill and environmental compliance operating procedures
- 8. Filled majority of remaining open positions

#### Begin County Operation of Waste Transfer Station

- 1. Acquired Equipment and hired staff
- 2. Acquired additional equipment for sweeping, snow, dumpster management, etc.
- 3. Operated site, including transfer station, snow, mowing, sweeping, shingles, drop off area, etc.
- Issued Waste Transfer Station & Recycling Transfer Station Hauling RFP and negotiated new 5-year contract.

#### In Progress

- Executed Ledgeview Leachate Agreement and constructed leachate metering tank discharge. Designed metering tank with construction happening in spring 2023
- 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.

#### **Brown County Resource Recovery**

2561 South Broadway, Green Bay, WI 54304 Phone: 920-492-4950 | Fax: 920-492-4957

www.BrownCountyRecycling.org



#### 2023 Goals

#### Advance Operation of South Landfill

- 1. Acquire Tana compactor and D6 Dozer
- 2. Produce a 5-year South Landfill construction plan
- 3. Develop Gas Management Plan and Timeline
- 4. Excavate and place 60,000 cy from Sequence 2 west of sequence 1 for future gas collection and flare system and build haul road for Sequence 2 clay to north stockpile area
- 5. Design horizontal gas system to be trenched into 3rd lift in Sequence 1
- 6. Explore relationship with Dynamics for future gas clean-up and transmission
- 7. Consider issuing a request for proposals from potential users of future landfill gas
- 8. Develop performance metrics as targets or goals for staff to strive for
- Implement a text/email communication system to reach all customers regarding changes to regular service hours
- Explore ways to communicate with residents using the residential recycling drop-off door at the Recycling Transfer Station
- 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.

#### Adopt new 2023 Resource Recovery 5-year Strategic Solid Waste Management 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
- Construct East Landfill metering tank for South Landfill leachate
- Install new gas skid at East Landfill to flare methane gas
- Train and instill the existing team-based culture in new employees with a focus on safety, retention, professional development and institutional knowledge sharing.











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