



## I. Message from the Director

This past year of 2014 was another successful year of advancing the new mission and vision for the Brown County Port & Resource Recovery Department. The Department is focused on providing effective solid waste management services, excellent customer service with a focus on resource recovery. The Department is also focused on professional development of staff, enabling us to better pursue new strategic business development opportunities while providing cross training and an improved team environment.

## II. Overview: Management & Facilities

The Port & Resource Recovery Department is an Enterprise Fund, solely using revenues gathered through operations to fund its activities. The resource recovery side of the operation offers solid waste management services to municipal, commercial and residential interests. 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.

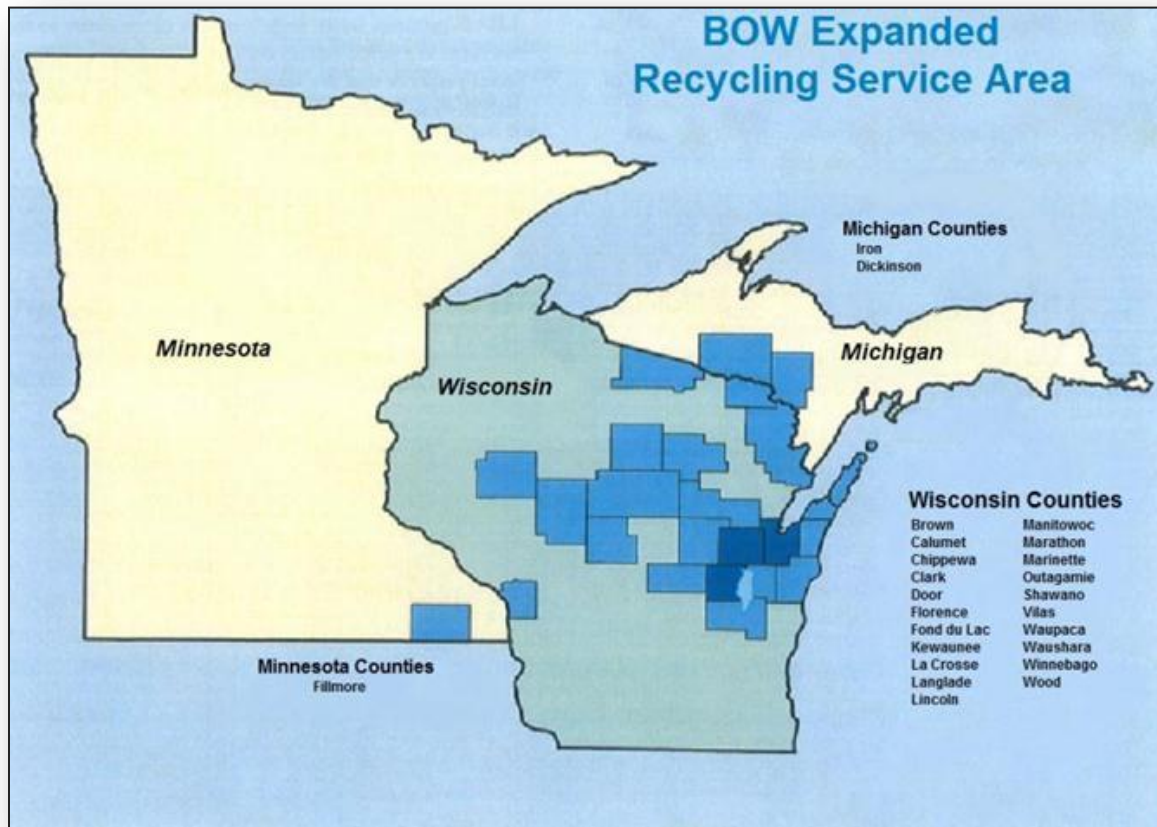
The Department services include operating a Solid Waste Transfer Station with resource recovery activities (tires, appliances, scrap metal, construction & demolition (C&D), shingles, etc.), a Single Stream Recycling Transfer Station, a regional Household Hazardous Waste Facility, East Landfill Gas-to-Energy Facility, maintenance of two closed landfills and coordination of household sharps and pharmaceutical collection and disposal programs. The Department also provides recycling programs for shingles, C&D material, tires, Freon-containing and other appliances, electronics and a drop-off food waste program. The success of all 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 long-term relationships have resulted in long-term agreements for solid waste, recycling and other waste resources. The Solid Waste Management Board and staff are committed to learning about and pursuing emerging solid waste management technologies that are economical and environmentally beneficial.

The Department is part of 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 using one of the county landfills and sharing administrative and operational costs. This partnership has created economies of scale that have maintained some of the lowest tipping fees in Wisconsin. The Department operates a Solid Waste Transfer Station that receives, compacts and transports waste produced by county residential, commercial and industrial users to the current BOW landfill located in Outagamie County.

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 commingled residential and commercial recyclable containers from the three counties and other Wisconsin communities (as illustrated below). Late in 2014, the Tri-County MRF underwent upgrades to its sorting and baling capabilities to allow for carton and additional plastic



separation. Single Stream Recycling now includes recycling of all plastic bottles, tubs and containers, aluminum and tin cans, glass and all paper products.



The Department also operates the Brown County Household Hazardous Waste (HHW) Facility 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, Oneida Tribe and other rural municipalities not connected to the NEW Water wastewater treatment facility. In addition, out-of-county collection agreements with Outagamie, Winnebago, Calumet and Shawano counties enable these counties a cost effective HHW program service provided by Brown County. The program also provides regional businesses that qualify as Very Small Quantity Generators (VSQGs) with economical disposal options for hazardous and special waste.

In addition, the Department coordinates the Brown County Household Sharps Collection Program and assists law enforcement in the proper disposal of unwanted pharmaceuticals. Since 1996, the Department and the Brown County Health Department have collaborated in managing the Brown County Household Sharps Program collecting nearly 140,000 pounds of sharps (needles, syringes and lancets). The Department started pharmaceutical collection and disposal in 2006 and the program has evolved to permanent year-round collection points throughout the county including the Brown County Sheriff's Department, and the Green Bay, De Pere, Hobart, Lawrence, and Wrightstown Police Departments. The Resource Recovery Department provides law enforcement with regulatory and disposal guidance along with a low



cost disposal outlet for non-controlled pharmaceuticals. These efforts have led to an average of 3,800 pounds of pharmaceuticals collected each year in the county.

The Brown County Solid Waste Management Board (Board) sets policy for the Department's services. It is authorized by Wisconsin State Statute and Chapter 12 of the Brown County Code of Ordinances. The nine (9) members of the Board are appointed by the County Executive and serve as an oversight committee of the County Board. Three members of the Board are from the city of Green Bay, three from incorporated non-Green Bay municipalities and three from unincorporated areas of the County. Two Board members are County Board Supervisors. Board members serve three-year terms. Minutes of the Solid Waste Management Board meetings are reviewed and approved by the County Board. The County Board's Planning, Development and Transportation Committee oversees the Board and Department.

The *2012 Brown County Strategic Solid Waste Management Plan* continues to serve as a long range guiding document that identified strategic issues to address while establishing goals and objectives to strive towards. An operating report is adopted annually to ensure the strategic plan goals and objectives are being strived for. The following is the mission statement and vision for the Department. The vision statement was revised in 2014.

Mission Statement: *"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 waste treatment and disposal, composting, solid waste disposal and waste-to-energy to the extent that these practices are technically feasible and economically appropriate."*

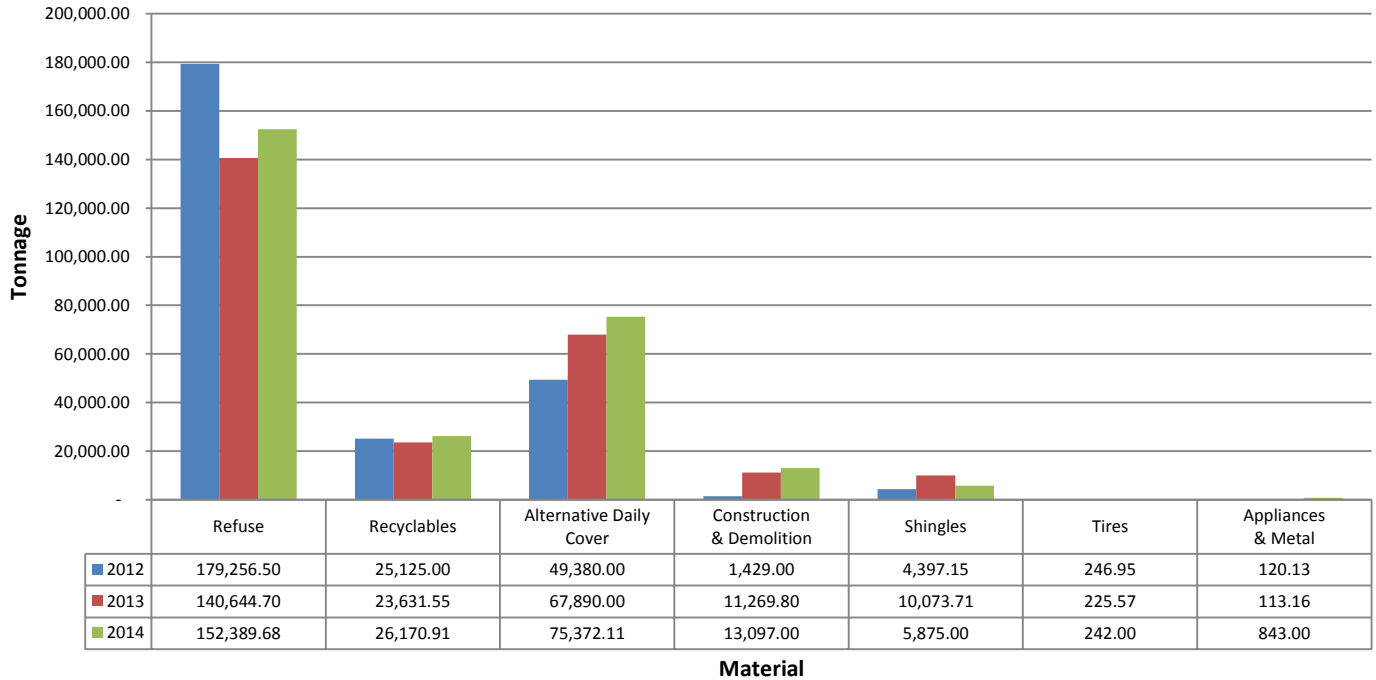
Vision: *"To provide Brown County municipal, commercial and industrial customers cost-effective and sustainable solid waste management systems with the focus on resource recovery primarily through recycling, repurposing and energy recovery."*

### III. Business Activity

Business activities in 2014 included processing more than **130,000 tons** of solid waste through the Brown County Transfer Station. In addition, another 21,000 tons of solid waste and 75,000 tons of alternative daily cover were delivered directly to the BOW landfill. Beginning in June 2012, a shingles recycling program was started. Approximately 10,000 tons were recycled in 2013 and 5,800 tons in 2014. Also in late 2012, a C&D recycling program was started resulting in 11,000 tons of C&D being recycled in 2013 and 13,000 tons in 2014.



### Annual Tonnages for Refuse and Recycling Transfer Station

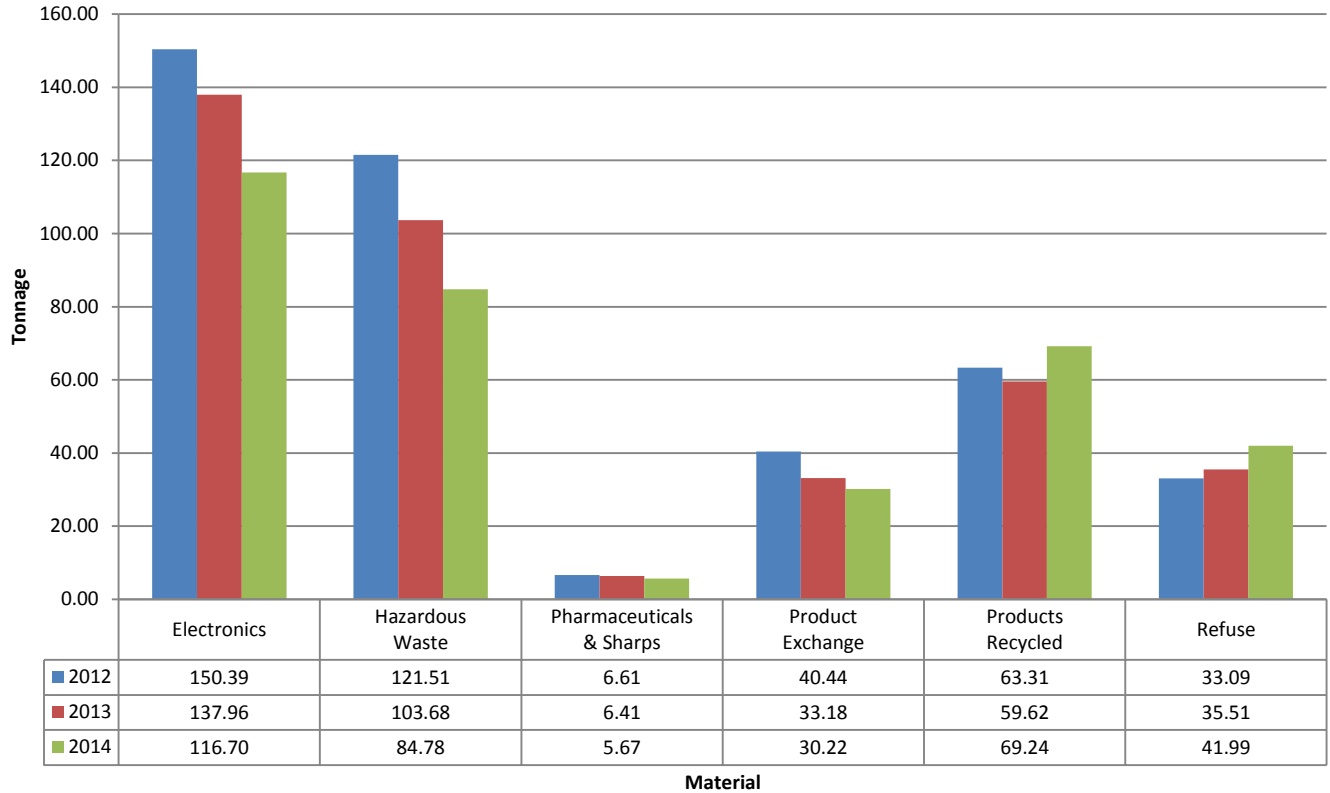


More than 26,000 tons of single stream recyclables were hauled from Brown County to the BOW recycling facility and more than \$347,000 was returned to customers as a recycling rebate in 2014.

During 2014, the Brown County HHW facility took in 720,000 pounds of hazardous materials from 7,300 residential and business sources. The HHW facility was able to recycle or make available to the public more than half of the collected material while 402,000 pounds of hazardous waste was kept out of the environment and properly destroyed. HHW staff managed several adjoining counties’ collection events, assisted another county with its collections, and served as a disposal outlet for material from an additional county’s HHW program. The charge for acceptance of latex paint (\$1.00 per gallon) as well as more companies handling electronics disposal have led to a drop in the amount of waste handled.

More than 10,050 pounds of sharps were safely destroyed through the Brown County Household Sharps Program. Brown County HHW assisted law enforcement in Brown County with disposing of over 1,700 pounds of over-the-counter, non-controlled and controlled medications.

### Annual Tonnages for Household Hazardous Waste Facility



In 2014, the East Landfill Gas-to-energy facility produced 4,854,557 kW of electricity. Although the West Landfill gas is not being beneficially used, the monitoring requirements were reduced after the Hazardous Air Pollutants were modeled and shown to be performing below NR 445 requirements.

#### IV. Environment

The Department’s resource management services provide cost-effective and environmentally sound means of managing waste materials once generated. Whether through collection and disposal of hazardous waste through the Household Hazardous Waste program, single stream recycling or treatment of leachate from the East and West Landfills, our solid waste management practices prevent discarded items from negatively impacting our environment. Through many different recycling programs, materials are diverted from landfill disposal to be reused as raw material for new products. In addition, the waste that has been placed in the East Landfill is being used to produce enough energy to provide electricity for more than 1,000 homes in Brown County.

#### V. Economics

The Department services are among the least expensive and most complete services offered by any operation in the State of Wisconsin. The Department operates as an Enterprise Fund, solely using revenues gathered through operations to fund its activities. The low cost of solid waste disposal is an economic engine to the economy of northeastern Wisconsin. Landfill

tipping fees are low and help keep local municipal budgets stable while keeping businesses, especially manufacturing businesses, strong and located here. Single stream recycling programs continue to be operated successfully with significant recycling rebates are returned to our municipal and private customers. Additional recycling programs have and will be implemented in the future.

## VI. 2014 Goals and Accomplishments

### ◆ Re-engineer future South Landfill/Design Resource Recovery Park

**In-Progress:** An RFP was developed for an engineering consulting services and Foth Companies was retained in late Fall 2014. Monthly progress was made during 2014. Project completion is expected in March 2015. The effort involves re-engineering the future South Landfill incorporating the concept of establishing a Resource Recovery Park on-site as part of a long-term strategy of economically redirecting the amount of waste going to landfills and turning it into marketable, saleable materials.

### ◆ BOW Single Stream Recycling Facility Expansion

**Complete:** Installed a second baler and additional sorting equipment and storage hopper at BOW Single Stream Recycling Facility that will better the facility's performance while expanding collection of all plastics bottles, tubs and containers as well as aseptic packaging. Capital investment was \$1.9M and construction was completed in November 2014. BOW developed and will be implementing educational marketing materials and advertisements for recycling all plastic bottles, tubs and containers as well as aseptic packaging in early 2015. BOW also evaluated bale storage and implemented a LEAN solution of staging trailers rather than expanding the warehouse.

### ◆ BOW Compactor at Brown County Recycling Transfer Station

**In-Progress:** Sloan & Vasquez completed a financial analysis and evaluated the compactor and building expansion's rate of Return on Investment (ROI). Guidelines on BOW transportation and capital investment were established by Schenck & Associates. An administrative letter of understanding was executed by the BOW Directors that established eligible capital and O&M costs, procedures and repayment provisions. Foth Companies conducted an evaluation determining the best location for the compactor. A bid was developed and will be issued in January 2015. Construction will be completed by July 2015. BOW repayment will be based on available retained earnings from the BOW single stream recycling facility performance. The project is expected to cost \$525,000. The compactor will result in an annual savings of \$105,000 per year resulting in a ROI of less than 5 years.

### ◆ BOW Waste Diversion Technology Committee

**Complete:** As required by the *BOW Strategic Solid Waste Management Plan*, in May 2014 BOW established a Waste Technology Committee to review and stay on top of emerging solid waste diversion technologies. Three (3) meetings were held. Membership consists of BOW representatives and UW-Extension. Mark Walter is the chairman. A UWGB student



prepared the 2014 final report of available technologies with a focus on Anaerobic Digestion.

◆ Evaluate BOW Landfill Consolidation Opportunities

**Deferred:** Due to the workload related to expanding the BOW recycling facility and installing the Brown County compactor this effort was deferred. The landfill gas monitoring and environmental monitoring was preliminarily discussed by the BOW directors and decided not to proceed.

◆ Improve Financial Performance

**Complete:** Brown County Treasurer, Finance and Executive offices internally agreed to separate Port and Resource Recovery funds between long-term from short-term investments when figuring out the interest earned. This change increased interest earned by the Department from 0.5% to 1.5-2.0%. This strategy improves the financial performance of designated Department funds as identified by Schenck and Associates policy goal of a two percent (2%) return on investments necessary to meet future needs of the South Landfill.

In addition, Brown County as a whole desired to improve its financial performance. The Department participated in an RFP process to select PFM Asset Management, LLC to improve performance (including the Departments) all County investments.

◆ Research a drop-off organic recycling program and determine the feasibility of implementing a program in Brown County.

**Complete:** A survey was completed in spring of 2014 on existing drop-off organics recycling programs. A program design and cost estimate was completed for a Brown County organics recycling program. A website with educational store was developed along with signage. Implementation of an organics drop-off program began in November 2014 with facilities at the solid waste transfer station and recycling transfer station.

◆ Partner with UW-Extension on conducting research review of best practices in educational campaigns to promote recycling using several city of Green Bay routes.

**In-Progress.** A recyclable waste sort was conducted in May 2014 and a follow-up recyclable waste sort will be done in 2015 from the same neighborhood routes to determine the impact of recycling education on recycling rates

◆ Initiate discussions with BOW partners on renegotiating BOW Regional Agreement as required by Agreement no later than 2016

**Deferred:** Winnebago County agreed to lead this effort in 2015.

◆ Sign a Solid Waste Management Services Agreement with the City of Green Bay

**Incomplete.** City of Green Bay continues to be the only municipality of twenty-four (24) in Brown County unwilling to sign.





◆ Renegotiate HHW Agreements with partners.

**In-Progress:** A new agreement was drafted in spring 2014. During 2014 the out-of-county HHW collections procedures and costs were evaluated resulting in some minor program changes and cost increases to partner counties. Negotiations continue with our primary partner NEW Water. Agreements will likely be finalized in 2015 with NEW Water and other partners.

◆ VSQG Growth

**Complete.** Increase the number of Very Small Quantity Generators (VSQG) businesses in Northeast Wisconsin utilizing the Department for their hazardous waste disposal needs by 25 new customers.

Continue to assess the demand and viability of offering a pick-up service to VSQG customers.

◆ Leachate Recirculation Extension

**Complete.** Seek approval for addition two year (2) operation of the Leachate Recirculation at the East Landfill continuing to improve gas production to the gas-to-energy facility.

◆ Pharmaceutical Collection Program

**Deferred.** Continue to research alternative disposal options for controlled substances collected by the pharmaceutical collection program based on Drug Enforcement Agency rules promulgated in 2014.

◆ Implement a public communication plan during 2014

**Complete.** RFP issued and awarded to Leonard and Finco Public Relations firm

◆ Research potential users of East Landfill Gas-To-Energy engine capacity

**Complete.** Identified capacity available and potential users of capacity. Held discussions with select potential users. Discussion continues with one potential user, but the effort is limited by the Power Purchase Agreement's term and lack of confidence is an extension with similar terms.

◆ Explore beneficial utilization of West Landfill methane gas

**Complete.** Unsuccessfully explored possibilities with US Venture.



## VII.2015 Goals

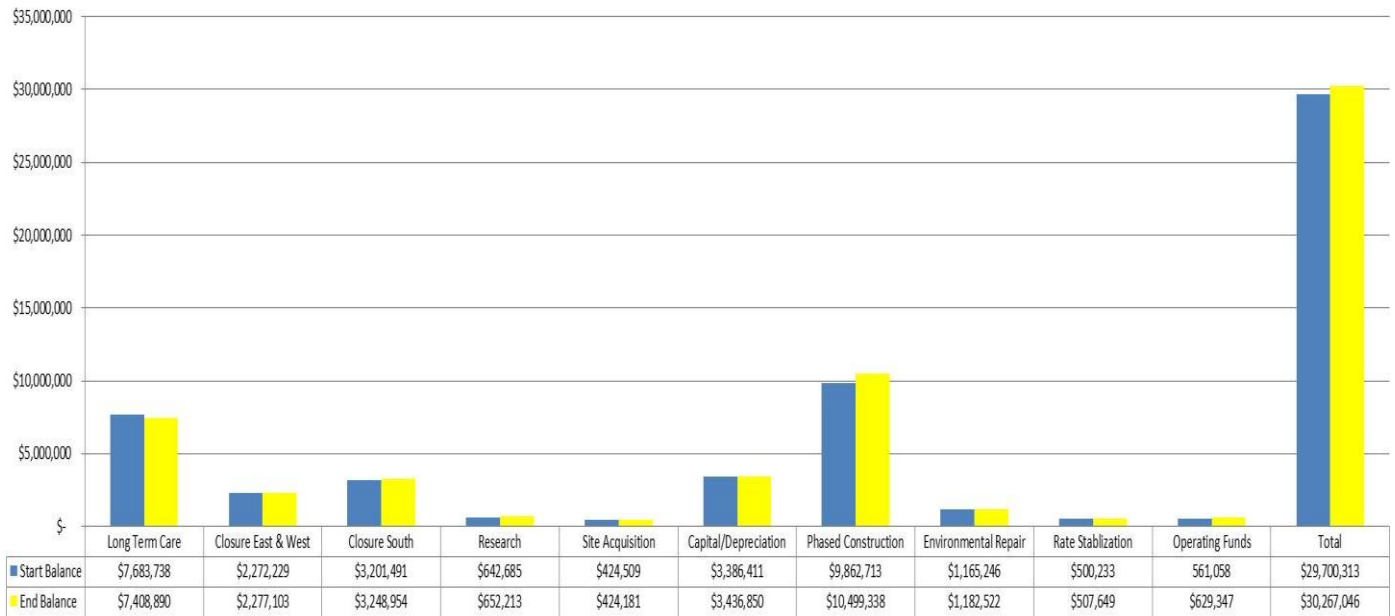
The following list represents some of the Department goals for 2015:

- ◆ Install and Operate a Recycling Compactor at Brown County Recycling Transfer Station
- ◆ Market HHW Services to VSQG Industry Sectors to Expand Customer Base
- ◆ Renegotiate HHW Agreements with Partners
- ◆ Evaluate and Potentially Implement a Pharmaceuticals Collection and Disposal Program
- ◆ Execute new Memorandum of Understandings for Out-of-County Collection Programs
- ◆ Improve Drop-off Organics Program Efficiencies
- ◆ Pursue South Landfill Plan of Operation Approval and Advance Resource Recovery Park
- ◆ Redesign Transfer Station Unloading Area
- ◆ Research and Evaluate Wood Waste Collection Program
- ◆ Extend Operation of Gas-To-Energy Project beyond 2015
- ◆ BOW Waste Technology Committee Research
- ◆ Draft and Negotiate Sharps Collection Program Partner Agreements
- ◆ Evaluate BOW Landfill Consolidation Opportunities
- ◆ Initiate discussions with BOW partners on renegotiating BOW Regional Agreement as required by Agreement no later than 2016
- ◆ Recycling Outreach to Brown County School Districts
- ◆ Research Opportunity for a Wetland Mitigation Bank at South Landfill property
- ◆ Pursue Municipal Extensions to Solid Waste Services Agreements



## VIII. 2014 Financial Highlights

2014 Resource Recovery Fund Balances



These are unaudited fund balances prepared by staff. 2014 Financials will not be finalized until March.



# Brown County Port & Resource Recovery Department Resource Recovery Area Budget Status Report December 31, 2014

Account Descriptions	Annual Budget	YTD Actual	% of Budget
<b>Expenses</b>			
Personnel	\$ 531,041	\$ 454,169	86%
Fringe Benefits	\$ 198,093	\$ 196,220	99%
Operations & Maintenance	\$ 297,540	\$ 467,755	157%
Utilities	\$ 105,814	\$ 109,162	103%
Chargebacks	\$ 212,318	\$ 136,174	64%
Contracted Services	\$ 7,251,240	\$ 7,492,593	103%
Other Expenses	\$ 947,000	\$ 839,687	89%
Transfer Out	\$ 819,492	\$ 662,681	81%
Depreciation	\$ 455,540	\$ 418,869	92%
<b>Revenue</b>			
State Grants	\$ 39,500	\$ -	0%
Sales and Services	\$ 9,240,823	\$ 9,619,837	104%
Rent	\$ 172,639	\$ 166,652	97%
Interest	\$ 163,075	\$ 358,437	220%
Intra-gov. Charges	\$ 628,278	\$ 471,467	75%

**HIGHLIGHTS:**  
**Expenses:** Expense generally under budget. Operation and Maintenance cost exceeded budget as a result of \$125,000 additional cost rebuilding of both Gas-to-Energy engines  
  
**Revenues:** Increased interest revenue due changes in long-term investments. State HHW Grant not yet received.

## RESOURCE RECOVERY AREA -December 31, 2014

