



Audit of  
Solid Waste and  
Recycling Services Division

Office of the County Auditor

Audit Report

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**County Auditor**

**Conducted by:**

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**Report No. 19-05**  
**November 29, 2018**



**OFFICE OF THE COUNTY AUDITOR**

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Honorable Mayor and Board of County Commissioners

We have conducted an audit of the Solid Waste and Recycling Services Division. Our audit objectives were to determine the cost-effectiveness of operations and whether receipts and disbursements are handled properly and fees are appropriate.

Except as noted in this report, we conclude that receipts and disbursements are handled properly; however, improvement is needed regarding the cost-effectiveness of operations and establishment of fees. Opportunities for Improvement are included in the report.

We conducted this audit in accordance with Generally Accepted Government Auditing Standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives.

We appreciate the cooperation and assistance provided by the Solid Waste and Recycling Services Division throughout our audit process.

Respectfully submitted,

A handwritten signature in blue ink that reads "Bob Melton".

Bob Melton,  
County Auditor

cc: Bertha Henry, County Administrator  
Andrew Meyers, County Attorney  
Thomas Hutka, Director, Public Works Department  
Jeff Turpin, Acting Director, Solid Waste and Recycling Services Division

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# INTRODUCTION

## Scope and Methodology

The Office of the County Auditor conducts audits of Broward County's entities, programs, activities, and contractors to provide the Board of County Commissioners, Broward County's residents, County management, and other stakeholders unbiased, timely, and relevant information for use in promoting government accountability and stewardship and improving government operations.

We conducted an audit of Solid Waste and Recycling Services Division (SWRS). Our objectives were:

1. To determine the cost-effectiveness of operations
2. To determine whether receipts and disbursements are handled properly and fees are appropriate
3. To determine whether any opportunities for improvement exist

To determine whether operations are cost-effective, we reviewed recorded revenues and expenditures, reserves, Property Appraiser unincorporated area property records, landfill physical access controls, staffing levels, and the annual Flow Control survey.

To determine whether receipts and disbursements are handled properly and fees are appropriate, we reviewed landfill transactions, accounts receivable records, cash handling controls, residential and commercial franchise fees, and residential and commercial solid waste hauler invoices.

We conducted this audit in accordance with Generally Accepted Government Auditing Standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives.

Our audit included such tests of records and other auditing procedures as we considered necessary in the circumstances. The audit period was fiscal years 2016 and 2017, as well as a review of transactions in January through April, 2018. However, transactions, processes, and situations reviewed were not limited by the audit period.

## Overall Conclusion

Except as noted in this report, we conclude that receipts and disbursements are handled properly; however, improvement is needed regarding the cost-effectiveness of operations and establishment of fees. Opportunities for Improvement are included in the report.

## Background

The SWRS operates the Broward Landfill, manages waste and recycling services for the Broward Municipal Services District (BMSD), and offers a menu of optional services to participating municipalities. These services include the Household Hazardous Waste & Electronics Recycling Collection, Bulk Waste and Yard Waste, Keep Broward Beautiful, Field Inspection, and Disposal Contract Management programs. Municipalities may participate in any of these optional services. The SWRS also performs recycling outreach activities and provides recycling services for County-owned buildings and parks. Each function is discussed in the below sections.

The Broward Landfill (formerly Southwest Regional Landfill) currently accepts materials from Broward County residents and businesses, including construction materials and bulky waste which cannot be processed at other facilities. It also accepts yard waste, which is transferred to a third-party processing facility. The Broward Landfill operated at a \$2,605,983 deficit in 2017, inclusive of \$449,230 in allocated administrative costs and \$1,341,547 in allocated depreciation expenses.



*Entrance to Broward Landfill*

According to management, in addition to its current daily operations, the Broward Landfill is kept open as a contingency disposal method in the event that other municipal solid waste disposal options become unavailable. As a Class I landfill, it may accept all types of municipal solid waste.

The BMSD is responsible for the collection and disposal of residential solid waste and recyclables, and for the monitoring of commercial solid waste, for customers in the unincorporated area of the County. In this regard, it functions in the same manner as one of the 31 municipalities in Broward County with the same responsibilities to residents. The BMSD includes 4,184 residential and 323 commercial customers which collectively include industrial, institutional, governmental and commercial residential (buildings with greater than 10 living units such as apartment buildings) properties. The residential customers pay for services by a non-ad-valorem special assessment (an annual solid waste fee). The commercial customers contract directly with haulers, who are licensed by and pay franchise fees to the County.

The Household Hazardous Waste & Electronics Recycling Collection program provides residents of the BMSD and participating municipalities with services to properly dispose of household hazardous waste (such as paint, household chemicals, fertilizer, etc.) and electronics. The purpose of the program is to remove heavy metals and other hazardous materials from the waste stream.



*Household hazardous waste*



*Adopt-A-Street Sample Sign – Keep Broward Beautiful Program*

The Bulk Waste and Yard Waste program operates and maintains a network of collection facilities including three drop-off centers for residential customers within the BMSD and participating municipalities to reduce indiscriminate dumping.

The mission of the Keep Broward Beautiful program is to empower individuals to take greater responsibility for enhancing their communities. Working with Keep Broward Beautiful, local volunteers help keep Broward County clean and green through programs such as Adopt-A-Street.

Field Inspection includes field monitoring of hauling, transfer, and disposal functions within the BMSD and participating municipalities for compliance with hauling contracts and franchise agreements.

As part of Disposal Contract Management, SWRS manages a multi-year waste disposal service agreement with a private contractor, who operates a waste-to-energy facility in Broward County. The program coordinates billing services for the BMSD and participating municipalities, and monitors plant operations for contract compliance.

The SWRS also:

- Provides planning, inspection and oversight for permit compliance, maintenance, and improvement projects for all County properties used or reserved for solid waste management, including the Broward Landfill, wetland mitigation sites, closed landfill sites, and property leased for a waste-to-energy plant.
- Oversees the closure and long-term maintenance requirements for the landfills as established by state law. The Davie Landfill, which closed in 1987, is now the site of Broward County Vista View Park.
 

*Broward County Vista View Park, former Davie Landfill*
- Coordinates the processing of recyclables for County governmental facilities and operates programs to increase recycling and waste reduction throughout Broward County.

Table 1 presents the total actual revenue and expenditures for the SWRS and BMSD for Fiscal year 2017, and the number of budgeted positions.

**Table 1 – Fiscal Year 2017 Revenues and Expenditures, and Budgeted Positions**

	Solid Waste and Recycling Services Division (SWRS)	Broward Municipal Services District Waste Collection (BMSD)
Revenues	\$12,405,656	\$1,448,296
Expenditures	<u>15,200,846</u>	<u>1,349,895</u>
<b>Excess Revenue (Deficit)</b>	<b><u>(\$2,795,190)</u></b>	<b><u>\$98,401</u></b>
<b>Budgeted Positions</b>	<b>39</b>	<b>3</b>

Source: Compiled by Office of County Auditor from data provided by Accounting Division and Office of Management and Budget



### Recent Dissolution of the Resource Recovery System

From 1986 through July 2013, the County and twenty-six municipalities within the County contractually agreed to deliver processable waste to two private contractors operating the North and South waste-to-energy facilities. In 2013, this Resource Recovery System partially dissolved, with certain municipalities entering into contracts with other solid waste disposal providers. Aside from dramatically reducing the amount of waste provided for processing and disposal at the North and South waste-to-energy facilities, the dissolution of the 1986 system led to litigation between the County and eighteen municipalities regarding the equitable distribution of certain assets and liabilities managed by the Resource Recovery Board, the governing body of a dependent special district comprised of the parties to the 1986 agreement. The parties to the litigation reached a settlement involving distribution of over \$32 million to the municipalities and the retention by the County of certain assets and liabilities. In 2015, the County and remaining municipalities agreed to the early closure of the North waste-to-energy facility due to the limited tonnage of processable waste then currently provided.

In fiscal year 2014, the Resource Recovery Fund decreased by approximately \$83 million due to the dissolution of the system and the Solid Waste Fund increased by approximately \$16 million primary due to the transfer of various functions and positions from the Resource Recovery Fund.

### Solid Waste and Recycling Issues Study

In March 2017, a procurement was approved by the Board to engage the services of a consulting firm experienced in the solid waste and recycling services industry to conduct a Solid Waste and Recycling Issues Study. The services required include, the development and delivery of a study that provides unique and targeted strategies to address general solid waste disposal issues, which may include options regarding flow control and potential governance or contractual structures for collaborative management of solid waste disposal, and how a 75% County-wide state-mandated recycling goal may be reached.

# OPPORTUNITIES FOR IMPROVEMENT

Our audit disclosed certain policies, procedures and practices that could be improved. Our audit was neither designed nor intended to be a detailed study of every relevant system, procedure or transaction. Accordingly, the Opportunities for Improvement presented in this report may not be all-inclusive of areas where improvement may be needed.

## 1. Annual Deficits in Optional Services and Governmental Facilities Recycling Services Should Be Addressed.

We noted the following concerns:

- A. Four SWRS Optional Services provided to the BMSD and participating municipalities generated deficits of \$611,530 in fiscal year 2017. These services were 1) Field Inspection, 2) Keep Broward Beautiful, 3) Bulk/Yard Waste, and 4) Household Hazardous Waste (HHW) / Electronics Recovery. Table 2 shows the total revenues and expenditures and resulting deficits for each service for fiscal year 2017. The deficits total \$611,530.

**Table 2 - Optional Services Provided to BMSD and Municipalities\***

Optional Services for Fiscal year 2017	Field Inspection	Bulk- Waste/ Yard Waste	HHW/ Electronic Recovery	Keep Broward Beautiful
Revenues	\$45,365	\$189,098	\$773,775	\$43,296
Expenses	76,658	463,077	907,163	75,600
Share of Administrative Expense	<u>18,044</u>	-	<u>103,248</u>	<u>19,274</u>
<b>Deficit</b>	<b><u>(\$49,337)</u></b>	<b><u>(\$273,979)</u></b>	<b><u>(\$236,636)</u></b>	<b><u>(\$51,578)</u></b>
<b>Number of Participating Municipalities</b>	<b>4</b>	<b>7</b>	<b>11</b>	<b>6</b>

Source: Compiled by Office of County Auditor from data provided by Accounting Division

\* As shown in Table 2, we allocated administrative expenses from the SWRS administrative section to the optional services sections. The administrative expenses were allocated proportionally based on the amount of personnel expenses in the optional services sections as compared to the other sections within SWRS.

These resulting deficits shown in Table 2 are likely attributed to the reduced number of participating municipalities. After the dissolution of the Resource Recovery System, the County maintained these services, which continue to be available to the BMSD and municipalities through interlocal agreements. Fewer municipalities now participate in these services.

We also found that Disposal Contract Management (Centralized Billing) likely operates at a deficit. Revenue for Centralized Billing Services was \$7,314 for 2017 and \$7,059 for 2016; however, staffing costs to perform the service are part of administrative expenses and not separately tracked. Therefore, this service is not included in Table 2. The costs pertaining to this service likely exceed revenues resulting in this service generating an annual deficit.

- B. SWRS Governmental Facilities Recycling Services operated at a deficit of \$194,277 in fiscal year 2017. Under this program, SWRS receives revenue from County agencies for recycling activities conducted at government facilities. The deficit includes an allocation of \$34,391 in administrative expenses from the SWRS administrative section.

These deficits result from services provided to the BMSD, participating municipalities, and County agencies. The services provided are not self-sustaining.

**We recommend management:**

- A. Perform the following to address annual deficits in optional services:
  - i. Evaluate charges to the BMSD and participating municipalities, cost containment, and/or identified funding sources for future deficits.
  - ii. Evaluate the ongoing feasibility and appropriateness of continuing the services.
- B. Address annual deficits in Governmental Facilities Recycling Services through evaluation of charges to County agencies, cost containment, and/or identified funding sources for future deficits.

**Management response:**

- A. Agree. The optional service programs were continued following the dissolution of the Resource Recovery System in order to serve the best interest of the public as some municipalities were not able to provide such services at that time. It should be noted that a conscious management decision was strategically made to keep the programs available until the future direction of the Broward County's solid waste management system is determined.
- B. Partially Agree. Recycling revenues, consisting mostly of office paper, do not cover processing costs and associated support services. This is even more true in recent years, and nationwide, these programs are not profitable. Currently, the program is funded by County general and enterprise funds. Recent trends will likely result in increased program costs due to fluctuations in market conditions. That said, monitoring on an annual basis keeps the organization informed of market conditions.

## 2. The BMSD Fund Balance and Charges to Customers Should be Evaluated.

Residential customers in the BMSD pay an annual solid waste assessment fee for the collection and disposal of residential solid waste and recyclables. This method of charging an annual fee is consistent with other municipalities that provide these services. However, the amount of assessment fees charged results in excess revenues within the fund.

- A. As shown in Table 3, BMSD revenue exceeded expenses by \$462,626 and \$230,759 in fiscal years 2016 and 2017.

**Table 3 – BMSD Operations\***

BMSD	2016	2017
Revenues	\$1,452,591	\$1,448,296
Expenses	<u>1,204,661</u>	<u>1,349,895</u>
<b>Surplus - Before Adjustments</b>	<b>247,930</b>	<b>98,401</b>
Share of SWRS Administrative Section Expense	(21,484)	(120,262)
Reverse Transfer to SWRS Administrative Section	<u>236,180</u>	<u>252,620</u>
<b>Surplus - After Adjustments</b>	<b><u>\$462,626</u></b>	<b><u>\$230,759</u></b>

Source: Compiled by Office of County Auditor from data provided by Accounting Division

\* We allocated administrative expenses from the SWRS administrative section to the BMSD section. The administrative expenses were allocated proportionally based on the amount of personnel expenses in the BMSD section as compared to the other sections within SWRS. We also identified transfers of monies from the BMSD to the Administrative Section and allocated those monies back to the BMSD section. The resulting surpluses, after these adjustments, were \$462,626 in fiscal year 2016 and \$230,759 in fiscal year 2017.

Table 3 shows the annual surpluses resulting from BMSD operations. The revenues shown in Table 3 are primarily generated by the solid waste collection fee charged to BMSD residential customers. The current solid waste assessment for each residential property could have been reduced by \$53, from \$270 to \$217, while being revenue neutral (i.e. breakeven) and within ranges charged by other municipalities. Alternatively, the resulting surplus could be applied towards a specified reserve purpose such as a rate stabilization. As shown in Table 4, we surveyed 30 of the 31 Broward County municipalities and found solid waste annual fees to range from \$183 to \$400 per year. The average fee is \$272 per year and the median fee is \$253 per year. Nineteen of the municipalities have a lower fee than the BMSD solid waste assessment of \$270 per year. In comparing the solid waste assessments, it should be noted that assessments are impacted by varying accounting methodologies (such as cost allocations and asset capitalization) and budgetary policies. Therefore, assessment fees do not solely reflect the results of operations but remain useful for general benchmarking.

**Table 4 – Survey of Municipalities’ Residential Solid Waste Fee**

<b>Municipality</b>	<b>Annual Cost</b>
West Park	\$399.73
Lighthouse Point	\$394.80
Hollywood	\$372.00
Parkland	\$370.92
Fort Lauderdale	\$368.28
Dania Beach	\$348.48
Cooper City	\$334.56
Wilton Manors	\$300.36
Plantation*	PAYT or \$320.64 or \$468.48
Tamarac	\$273.75
<b>BMSD</b>	<b>\$270.00</b>
Deerfield Beach	\$268.00
Lauderdale Lakes	\$260.00
Sea Ranch Lakes	\$259.20
Margate	\$255.00
Southwest Ranches	\$250.10
Coral Springs	\$248.00
Sunrise	\$245.64
Lauderhill	\$245.30
Pompano Beach	\$243.36
Pembroke Pines	\$239.88
Pembroke Park	\$238.44
Hallandale Beach	\$226.44
Miramar	\$225.00
Oakland Park	\$217.00
North Lauderdale	\$216.02
Davie	\$207.54
Coconut Creek	\$198.36
Lauderdale by the Sea	\$188.28
Weston	\$183.48

Source: Compiled by Office of County Auditor from data obtained from a Survey

\*For the City of Plantation, PAYT stands for Pay As You Throw as a system that does not have a flat fee but instead where the customer purchases blue bags at retail stores which are used for waste disposal. The other two rates are for areas of Plantation that opted for the cart system which have fees of \$320.64 and \$468.48. We used \$320.64 for the analysis. Hillsboro Beach is not separately billed and, therefore, not included in the analysis.

- B. The BMSD reserve is \$7,395,409 as of September 30, 2017 which is enough to cover over five years of expenditures. SWRS provided documentation to support \$2,987,377 received from the Resource Recovery System as distributions to the municipalities. The balance of \$4.4 million may be derived, in part, from the residents of the unincorporated area paying higher solid waste assessments than were required to cover the cost of collecting the solid waste.

The Government Finance Officers Association (GFOA) best practice recommends working capital (reserves) to be no less than forty-five (45) days' worth of annual operating expenses and other working capital needs of an enterprise fund. Forty-five days' worth of BMSD fiscal year 2017 operating expenses was \$166,425. However, it is recognized that various factors should be considered in establishing appropriate reserves. These factors may include emergency debris cleanup, unforeseen market changes, and rate stabilizations.

**We recommend** management:

- A. Evaluate BMSD surpluses with consideration for:
- i. adjustments to annual assessments in order to operate on a revenue neutral basis and, if applicable, reduce reserves over time to appropriate levels, or
  - ii. applying surpluses to a specified reserve purpose such as a rate stabilization
- B. Establish a policy establishing a targeted reserve amount.

**Management response:**

Partially Agree. As is true for all enterprise funds, reserve balances are needed to account for unforeseen circumstances such as disaster debris cleanup, market fluctuations, inflation, future solid waste infrastructure costs, and residential/commercial occupancy fluctuations. Recent examples include recovery costs associated with Hurricane Irma and drastic increases to recycling collection contract costs.

### **3. The Broward Landfill Operations Manual and Cash Handling Procedures Manual Are in Draft Format.**

County agencies should have policies and procedures manuals that describe the critical daily tasks that must be accomplished for the agency to operate effectively and efficiently. The Broward Landfill Operations Manual and Cash Handling Procedures Manual are in a draft format and have not been finalized.

**We recommend** that the Broward Landfill Operations Manual and Cash Handling Procedures Manual be finalized.

**Management response:**

Agree. Solid Waste and Recycling Services has removed the word "draft" from our current written Broward County Landfill Scale House Cash Handling Procedures. The Broward County Landfill Scale House Operations Manual (Standard Operating Procedures) has also been finalized.