



Department of Solid Waste Management Business Plan

Fiscal Years: 2023 and 2024*
(10/1/2022 through 9/30/2024)

Approved by:

A handwritten signature in blue ink, appearing to read "Mike Fernandez".

Michael J. Fernandez, Department Director

06/06/2023

Date

A handwritten signature in blue ink, appearing to read "Jimmy Morales".

Jimmy Morales, Chief Operations Officer

6/8/2023

Date

Plan Date: February 8, 2023



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Departmental Business Plan and Outlook

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DEPARTMENT OVERVIEW

The Department of Solid Waste Management (DSWM) has served the community for more than 60 years, beginning with its establishment as a collections entity in 1959 and ultimately merging with the disposal arm originally managed by the Public Works Department. Today, the DSWM is the largest government owned and operated waste collection and disposal system in the southeastern United States, serving a county population of approximately 2.8 million residents and a geographic area of over 300 square miles. The DSWM has significant responsibility for overseeing the management of waste and recyclables generated within County borders in an environmentally responsible manner. Over 1,100 employees, including drivers, collectors, engineers, code enforcement officers, environmental compliance staff and other professional and technical employees, work together to accomplish the Department's mission. In addition to the traditional tasks of waste collection and disposal, the Department oversees mosquito control countywide.

Department Mission

The mission of the Miami-Dade County Department of Solid Waste Management (DSWM) is to provide our customers with exceptional waste collection, recycling, disposal, and mosquito control services that protect, preserve, and improve our environment and the quality of life in our community.

Major Duties, Services and Programs:

The DSWM's major duties, services and programs currently provided are as follows:

County-wide Services

- **Transfer:** Operate three waste transfer facilities (the Northeast, West, and Central Transfer Stations) to minimize travel distance and transport time, reduce traffic congestion and better enable the County to meet its waste delivery obligations
- **Disposal:** Operate three waste disposal facilities located in the north, central and south regions of the county (North Dade Landfill, Resources Recovery Ashfill and South Dade Landfill)
- **Mosquito Control:** Provide integrated mosquito prevention, control, education, and outreach
- **Permits:** Issue permits to landscapers, tire generators, and waste haulers

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Neighborhood Services

- **Collection and Disposal:** Provide waste collection and disposal services to over 340,000 residential households in the Waste Collection Service Area (WCSA), which includes residents of the Unincorporated Municipal Service Area and nine municipalities
- **Recycling:** Provide single-stream residential curbside recycling service to nearly 350,000 households in the WCSA and nine municipalities serviced through interlocal agreements
- **Drop-Off Centers:** Manage and operate 13 Trash and Recycling Centers (TRCs) located throughout the WCSA
- **Enforcement:** Enforce Miami-Dade County Code regulations that promote clean, safe, and attractive neighborhoods and encourage recycling
- **Bulky:** Provide two bulky waste pick-ups each year scheduled at the customer's convenience
- **Debris:** Oversee debris removal within the WCSA following emergencies such as storms and hurricanes

Environmental Protection

- **Recycling:** Provide recycling to more than 360,000 residential customers, protecting natural resources, and diverting 60,000 tons from landfills.
- **Home Chemical:** Operate two household chemical and electronic waste collection centers that are designed to divert hazardous materials from the residential waste stream and prevent groundwater contamination
- **Litter:** Conduct litter clean-up, bus stop and hot spot programs targeting popular illegal dumping sites
- **Regulatory Compliance:** Maintain environmental compliance with federal, state, and local waste-related regulations, including post-closure care of county landfills
- **Landfill Remediation:** Protect groundwater by funding and overseeing remediation of inactive landfills
- **Landfill Gas:** Protect air quality by capturing and burning methane, a powerful Greenhouse gas that is converted to a less potent form through combustion.

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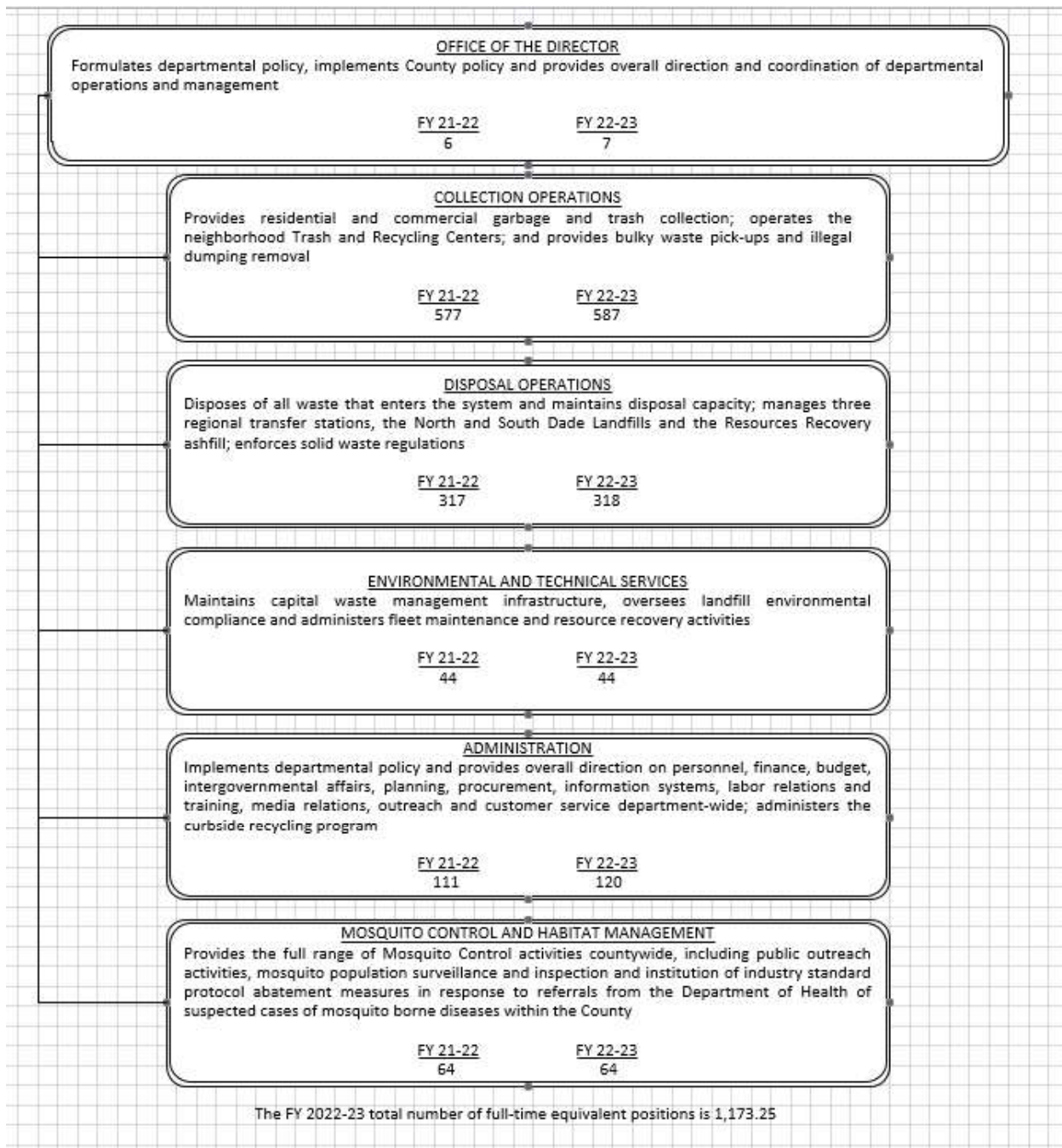
- **Education and Outreach:** Provide a robust education and outreach program to raise residents' awareness of residents' proper use of their waste services, litter and illegal dumping prevention efforts, proper home chemical management, and guidelines designed to avoid contamination of recyclables and increase recycling program participation. Participate in WE+LAB (Water and Energy Learning and Behavior) workshops that teach residents about water and energy conservation, recycling, and pollution prevention. Additionally, the department is responsible for comprehensive education and outreach for countywide mosquito control services, providing residents with information needed to prevent mosquito breeding and to protect themselves from mosquito bites and associated mosquito-borne viruses
- **Wetlands:** Create, restore, and maintain coastal and freshwater wetlands that provide habitat for native plants and a variety of wildlife at the Resources Recovery Facility, 58th Street, South Dade, and Old South Dade Landfills

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Our Customers

The Department's key customers and/or market segments are County and municipal residents within the WCSA, private solid waste haulers, municipal waste collection operations, commercial establishments, and other County departments. Our customers require and receive effective, efficient, courteous, and consistent service.

The Department's waste collection and disposal services are designed to be accessible to all customers who are assessed the waste collection fee. Enhancements to waste services such as the new Bulky Appointment System are designed and implemented at the same time throughout the service area to ensure that all customers are able to access and utilize their services to maintain their properties and enhance neighborhood aesthetics. Through education and outreach programs such as Nothing Goes to Waste, Let's Clean Things Up, Detox Your Home and Recycle Right, the Department seeks to promote greater environmental stewardship and increased community engagement. The DSWM's education and outreach support Thrive305 Priority 2 Engaged and Empowered Residents, Action 2.1 Educate the public about County government and Action 2.2 Create easy pathways for civic engagement in County government as well as Priority 8 Resilient Communities Designed by and For Residents, Action 8.3 Launch a countywide initiative to educate and engage residents to protect and clean our environment.

Customers Served

External customers include:

- **County Residents:** All residents of Miami-Dade County, who benefit from mosquito prevention, control, education, and outreach services
- **Waste Collection Service Area:** Households within the Waste Collection Service Area, which includes the unincorporated area and the following ten municipalities: Aventura, Doral, Miami Gardens, Sunny Isles Beach, Cutler Bay, Miami Lakes, Opa-locka, Palmetto Bay, Pinecrest, and Sweetwater; commercial and multi-family account holders in the Solid Waste Collection Service Area
- **Cities:** The following nine municipalities with interlocal recycling agreements: El Portal, Florida City, Medley, Miami Beach, Miami Springs, North Bay Village, South Miami, Virginia Gardens, and West Miami
- **Permitted Businesses:** Businesses that are issued general, landscaping, or waste tire permits by the DSWM
- **Community Stakeholders:** Community stakeholders such as homeowner associations, civic groups, and schools.
- **Haulers:** Private solid waste haulers operating throughout the County that make deliveries to DSWM disposal facilities

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- **Peer Agencies:** Other city and county governments across the country that exchange comparative operational and financial data with the Department for research and analysis projects

Internal customers include County elected officials/policy makers and other County departments that receive DSWM service.

Customer Trends

The DSWM's authority to provide waste collection and recycling services is established in the Miami-Dade County Code. To provide these services, DSWM must construct or maintain an extensive infrastructure, which requires major capital investment and includes, associated debt service. Such debt service will be incurred regardless of tonnage intake. Therefore, conservation of the System customer base is crucial. There are indications of a consistent, gradual increase in customer demand for waste collection and disposal services.

Customer Feedback

In the DSWM, customer feedback is direct and immediate. Customer feedback is received in the form of phone calls, e-mails, customer surveys following completion of bulky waste and green waste cart service requests as well as online-service requests gathered through the County's 311 Contact Center, website, and telephone apps, as well as direct letters, e-mails, calls and requests. Garbage, bulky waste, and recycling collection service complaints are measured on the DSWM scorecard in the Strategic Management System (SMS). Direct and immediate feedback enables management to identify problems and act quickly to effectively address and improve performance while continuing to increase customer satisfaction.

Strategic Alignment, 4E, and Thrive305 Summary

The DSWM supports the following strategic goals and outcomes through the delivery of its integrated waste management collection, recycling, disposal programs and mosquito control. In addition, the DSWM supports other plan goals and objectives by utilizing technology, administering various programs, and adhering to established policies and procedures.

- **Safe, Healthy and Attractive Neighborhoods and Communities (NI1)**
 - Promote livable and beautiful neighborhoods **NI1-1**

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- Protect the community from public nuisances and incidents that threaten public health **NI1-4**
- **Continuity of Clean Water and Community Sanitation Services (NI2)**
 - Provide sustainable solid waste collection and disposal capacity **NI2-3**
- **Protected and Restored Environmental Resources (NI3)**
 - Maintain air quality **NI3-1**
 - Protect and maintain surface and drinking water sources **NI3-2**
 - Preserve and enhance natural areas and green spaces **NI3-4**
- **Effective Emergency and Disaster Management (PS3)**
 - Increase countywide preparedness and community awareness **PS3-1**
 - Ensure recovery after community and countywide disasters and other emergencies **PS3-2**
- **Accessible, Equitable, Transparent, and Responsible Government (GG1)**
 - Support a customer-focused organization by providing convenient access to information and services, and by ensuring processes are easy to navigate **GG1-1**
- **Excellent, Engaged and Resilient Workforce (GG2)**
 - Attract and hire new talent to support operations **GG2-1**
 - Promote employee development and leadership **GG2-2**
 - Ensure an inclusive and diverse workforce **GG2-3**
- **Effective Leadership and Management Practices (GG4)**
 - Effectively prioritize, allocate and use resources to meet the current and future operating and capital needs for all residents **GG4-2**
 - Reduce County government's greenhouse gas emissions and resource consumption **GG4-3**

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Alignment of Measures to 4Es and Thrive305 Priorities

Measure Name	4E (Environment, Equity, Economy, or Engagement)	Thrive 305 Priority or Action
Example: Number of activities implemented to decrease Countywide energy consumption	Environment	Action 9.1
Number of Litter Corridor Miles Completed	Environment	Action 8.3
Percentage of scheduled illegal dumping piles picked up	Environment	Action 8.3
Number of DSWM Media Relations Activities	Engagement	Action 2.1
Percentage of Automated and Manual Garbage Routes completed on time	Environment	Action 8.3
Percentage of response to Mosquito Nuisance Complaints within 48 hours	Environment	Action 8.3

KEY ISSUES

Departmental Issues

Financial Stability: The DSWM must maintain financial stability to both meet its service delivery obligations and assure a stable bond rating outlook for its credit profile. Negative bond rating pressure can be prevented by continuing to sustain adequate debt service coverage levels and strong liquidity. This will enable the department to maintain financial stability and ensure favorable rates when issuing future bonds.

Between 2006 and 2016, the residential solid waste collection fee remained constant, at \$439 per household. In September 2017, the Board of County Commissioners (BCC) approved a residential waste collection fee increase of \$25, from \$439 to \$464 per household, which included \$19 per household to cover the cost of basic services and an additional \$6 per household to combat illegal dumping. In September 2019, the BCC approved an additional \$20 increase, bringing the FY 2019-20 fee to \$484 per year, to absorb inflationary operating costs and the estimated costs of collective bargaining negotiations. Unfortunately, due to the impact of Hurricane Irma, which struck Miami-Dade County in September of 2017, the DSWM anticipates unreimbursed expenses of approximately \$10M between its two funds. To date, the DSWM has recovered roughly \$148.5 million from the Federal Emergency Management Agency (FEMA), through the Florida Division of Emergency Management (FDEM). DSWM staff continues working with both FEMA and FDEM on additional reimbursements, potentially totaling \$5 million. In addition, the COVID-19 pandemic has significantly impacted commercial and residential waste generation. In 2020, the Department saw an increase of over \$10M in disposal costs on its Collections operations. Staff believes this was due to a shift in tonnage from commercial accounts to residential accounts, likely sparked by the increase in work-from-home arrangements. Federal funding through the CARES act offset the 2020 disposal costs and additional funding helped with 2021 expenses. In addition, in 2021 the Board approved a \$25 fee increase, bringing the fee up to \$509.

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However, the Department still anticipates proposing another household fee increase for FY 2023-24 to cover both the inflationary costs of personnel costs and the new level of disposal generated by residential accounts. *(Mayor's 4E: Economy – promote stronger and more sustainable economy)*

Purchase of Land: The DSWM purchased a 10-acre parcel of vacant land located immediately south of the Resources Recovery Facility (RRF) that provides a buffer zone, which will help to prevent residential development encroachment. The Department continues to assess the availability of property west of RRF, east of the North Dade Landfill and west of the South Dade Landfill.

Additional Waste Disposal Capacity: Increased waste generation and population growth will impact existing capacity. Cell 5 is the final cell that can receive waste and has a design capacity of 4,400,000 tons and is currently being used for waste disposal. The North Dade Landfill will reach capacity within the next 3 years without considering any tonnage from disaster debris. The procurement and award for the design and permitting of a vertical expansion is pending approval from the Mayor's Office. Once approved by the Mayor's Office, staff will initiate engineering evaluation of the vertical expansion at North Dade Landfill. For the DSWM's system to be self-reliant, there must be a pursuit of vertical landfill expansions and continuity of contracts with third party entities to secure additional disposal capacity. *(Mayor's 4E: Environment - provide greater stewardship of the environment)*

Energy-from-Waste: With the help of a consultant the Department finalized a Solid Waste Master Plan (SWMP) refresh in 2020. The SWMP provides multiple recommendations including the need for a replacement modern facility. The DSWM envisions a sustainable campus inclusive of an electric charging station for its fleet. On May 17, 2022, the BCC approved a resolution for the DSWM to develop and issue a solicitation for a consultant to prepare a design criteria package for a new waste to energy plant to replace the County's RRF on the same site or a similar site. Also, on July 19, 2022, the BCC approved the selection of the existing Resources Recovery Facility site for a new waste to energy facility. A Notice to Professional Consultants for a Design Criteria Professional and Owner's Representative Services for the New Waste to Energy Plant was issued on July 13, 2022. Three firms issued proposals that are currently being evaluated. However, this phase of the project is on hold based on Resolution R-728-22.

On October 18, 2022, the Board approved the Fifth Amended and Restated Operations & Management Agreement between the County and Covanta. This "bridge agreement" is for an initial five years, plus an additional five-year option to renew (OTR). The initial five years reflect the commitment to use best efforts to complete a replacement WtE but given the complexity of these projects and the regulatory hurdles, the OTR gives us extra time, if needed.

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On Sunday, February 12, 2023, at approximately 2:00pm, a notable fire broke out at the Resources Recovery Facility deeming it inoperable. There was significant damage to four buildings: 1) fuel storage 2) garbage processing, 3) garbage pit and 4) garbage receiving. As a result of the fire, the department had to amend its disposal operations by diverting waste that was going to the Resources Recovery Facility to other system facilities to ensure seamless service delivery to 350,000 plus customers and partner municipalities. Ongoing assessments and investigations continue. Damage assessment reports will assist the DSWM in evaluating and determining next steps. Prior to the fire, the DSWM was in the process of developing and implementing plans to design and build a new Energy-from-Waste/Resources Recovery Facility which plays a significant role in the development of the County's Zero Waste Strategic Plan.

At the March 7, 2023, Board of County Commissioners meeting, a motion was made and approved to: (i) rescind Resolution No. R-728-22; (ii) authorize the County Mayor or County Mayor's designee to analyze and recommend siting alternatives for a new WTE facility to replace the existing RRF; (iii) direct the County Mayor or County Mayor's designee to explore alternative technologies to a WTE facility; and (iv) direct the County Mayor or County Mayor's designee to prepare a report regarding said analysis and recommendations, including costs and potential funding sources, within 90 days and to place the completed report on an agenda of the full Board for discussion and approval. Department staff is currently working with a consultant to complete the tasks and provide recommendations with a final report. The completed report will be included on the June 2023 Board of County Commissioners agenda for approval. *(Mayor's 4E: Environment - provide greater stewardship of the environment)*

Solid Waste Disposal Concurrency

The DSWM determines compliance with the County's adopted level-of-service (LOS) standard which is a minimum of five years of solid waste disposal based on the ability of the County Solid Waste Management System to accommodate projected waste flows for concurrency. Only those System facilities that are constructed or subject to a binding executed contract for construction are included in the determination, in accordance with Chapter 33G of the Miami-Dade County Code, Service Concurrency Management Program. The DSWM currently meets the minimum LOS standard for solid waste disposal. However, the fire incident at the Resources Recovery Facility has impacted the DSWM's remaining years of disposal capacity. Insufficient disposal capacity could possibly limit development in Miami-Dade County. Ongoing assessments are occurring at the Resources Recovery Facility to determine next steps. Prior to the fire, the DSWM was in the process of developing plans to design and build a new Resources Recovery/Waste-to-Energy Facility. It is imperative that the DSWM continue this process. A replacement, modern Waste-to-Energy Facility is an essential part of the department's overall waste management operations. It will have a positive impact on the County's future development and solid waste disposal concurrency.

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Mosquito Control Funding: The 60-year-old Mosquito Control Building requires replacement to provide adequate workspace for staff and incorporate a testing laboratory and implement modern environmental controls. A new proposed facility would feature employee amenities including an emergency shower station, maintenance shop, lab, chemical and trap storage, and a battery charging station. Replacement of the Mosquito Control Facility will allow Miami-Dade County to more effectively control the mosquito populations and prevent the spread of diseases, including the Zika and Dengue viruses. This project will be funded through the Countywide Infrastructure Improvement Program (CIIP). Total project cost is \$7.57 million.

Mosquito-Borne Disease/Insecticide Resistance: The resurgence of mosquito-borne diseases is an issue, including a return of yellow fever, possible emergence of Mayaro virus, and the on-going circulation of Zika, dengue and chikungunya viruses in the region. There is an acknowledged lack of effective and successful methods against *Aedes aegypti*, the primary vector of these diseases, highlighting the need for innovative techniques and a reassessment of traditional control efforts. Biochemical resistance in *Aedes aegypti* to various insecticide classes is serious cause for concern, demonstrating the shortcomings of traditional methods and emphasizing the need for novel approaches. Considerable amount of field and laboratory work needs to be done to provide a more complete picture of insecticide resistance in Miami-Dade County. In addition, West Nile Virus has been detected in Miami-Dade County, including confirmed human incidence, which represents a separate and distinct health threat and will require careful monitoring.

Changes in Business Environment

Disposal Services: The Solid Waste Management System (System) operates within a competitive environment, in that private firms provide the same or similar services. To ensure that the System remains financially stable and the County's waste delivery obligations are met, the Department utilizes several means to control the flow of waste into the System. First, the Department collects waste directly from more than 340,000 households. Second, the Department enters into long-term waste disposal agreements with municipalities, private waste disposal companies and private waste haulers at predictable rates. Finally, the Department enforces Resource Recovery and Management Facility regulations that preserve the County's ability to meet financial obligations, as well as provisions in Solid Waste System Bond documents that authorize the County to disapprove the construction, acquisition or operation of private solid waste disposal facilities that may compete with the System or adversely affect operating revenues. (*Mayor's 4E: Economy – promote a stronger and more sustainable economy*)

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Privatization: As stated under Disposal Services above, private firms provide the same or similar waste collection and disposal services as the DSWM. One of the issues faced by the Department involves municipalities with County waste disposal agreements privatizing their waste collection services. Privatization can limit the Department's ability to monitor a Contract City's compliance with their waste delivery obligation to the County, because Contract City waste is commingled with waste from other entities serviced by the private hauler. To minimize any potential tonnage decreases resulting from such municipal collection privatizations, all prospective hauler agreements require contract city tons to be reported separately to ensure that Contract Cities are meeting the terms and conditions of their waste disposal interlocal agreements.

Collections Operation: The Department continues to evaluate bulky waste pick-ups, Trash and Recycling Centers and other collection service models to address community demands and better align Departmental operations with industry standards. In early 2018, the DSWM increased the amount of construction and demolition (C&D) debris accepted at TRCs from one cubic yard to three cubic yards. Impacts of the increased uptake of C&D is being monitored to better gauge a potential increase in service demands and the need for additional capacity to accept larger quantities of C&D at many of the smaller facilities.

While the Department's satisfaction rating for customer service remains high and the complaint rate continues to remain low, feedback has been received from various stakeholders requesting more user- friendly services. The Department is exploring several collection system improvements that may require code changes and educational campaigns prior to implementation. These include:

- Expansion of the residential used oil collection program to provide convenient drop-off locations for customers to bring their used motor oil for recycling, from the current eight (8) locations that includes two (2) Home Chemical Collection Centers and six (6) Trash and Recycling Centers to eleven (11) locations and expect to have the infrastructure in place by December 2023. (*Mayor's 4Es: Equity - foster greater equity in provision of services; Environment – provide greater stewardship of the environment*)
- The creation of a non-service area resident (especially multi-family dwellings and/or commercial) fee for those wanting to use the TRCs to discard trash debris, but currently prohibited by Chapter 15 Code.
- Development of partnerships with non-profit organizations that are interested in picking up used appliances and electronics from TRCs (*Mayor's 4E: Environment - provide greater stewardship of the environment; Thrive305 Priority 9, Deepen*

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Partnership with Business and Major Civic Institutions; Action 9.1 Promote corporate social responsibility practices that bolster our local workforce)

On January 4, 2022, the Department implemented the Bulky Appointment System. This system allows requests to be routed and picked up on a date that the customer selects, for a faster response time while minimizing the length of time trash is set out at the curbside. The Bulky Appointment System is a service enhancement that will result in quicker service, neater curbsides and gives residents more control over when your pile is collected. *(Mayor's 4Es: Equity - foster greater equity in provision of services; Environment – provide greater stewardship of the environment)*

Illegal Dumping: Illegal Dumping and general littering is a countywide problem. As a result of the household waste fee increase approved by the BCC in September 2017, the Department implemented an initiative. Four new bulky crews were established and assigned to pro-actively remove illegal dumping from identified hot spots within the WCSA. The Enforcement Division updates the hot spot list as needed and submits new locations to the Trash Division for regular removal of illegally dumped debris from these sites. Information received from regular zone patrols and surveillance efforts help determine the best resource to suppress illegal dumping activity. The use of game cameras and wireless cameras have been added to live feed cameras to increase coverage in remote areas and have become an effective tool in the fight against illegal dumping. The Board of County Commissioners have implemented recommendations made by the Illegal Dumping Task Force, including the creation of the Miami-Dade Police Department's, Illegal Dumping Unit (a part of the Agricultural Section). Since the implementation of the Illegal Dumping Unit in January 2020, the increased collaboration with the DSWM's Special Investigation Unit has led to better communication, combined use of resources, and working cases jointly. As a result of these efforts, the Department has recorded 19 felony arrest cases since January 2020 to now. *(Mayor's 4Es: Environment – provide greater stewardship of the environment; Engagement – ensure increased engagement among members of the community)*

A "Dirty Crimes Carry Fines" education and outreach campaign, instituted by the DSMW, is advertised throughout the community via billboards, newspaper, bus, online, social media and radio advertising. The campaign promotes and encourages residents of the County to report illegal dumping by calling 311 or using the 311Direct or DSWM apps, which are mobile telephone applications that enable users or residents and visitors of Miami-Dade County to report neighborhood problems and code violations to the 311 Contact Center. The DSWM will also continue to promote the department supported "Let's Clean Things Up" community pride program that incorporates messages that promote litter and illegal dumping prevention and proper use of available waste services. Illegal dumping will remain a high priority for the DSWM. Aggressive

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public awareness and outreach activities will continue in support of illegal dumping prevention, and the work of the DSWM illegal dumping crews will help contribute to improved aesthetics in Miami-Dade County. *(Mayor's 4Es: Environment – provide greater stewardship of the environment; Engagement – ensure increased engagement among members of the community; Thrive305 Priority 2 Engaged and Empowered Residents, Actions 2.1 Educate the public about County government; Action 2.2 Create easy pathways for civic engagement in County government; Priority 8 Resilient Communities Designed By and For Residents, Action 8.3 Launch a countywide initiative to educate and engage residents to protect and clean our environment; Priority 12 Government that Cares and Responds, Action 12.1 Improve communication with the public through messengers and messages that meet people where they are)*

Energy Sales Revenues: Energy sales that come from the Department's Energy-from-Waste (EfW) facility have steadily declined since 2013 as a result of the expiration of the Power Purchase Agreement (PPA) with Progressive Energy Florida, now Duke Energy. The County has not been able to secure another single large-scale PPA, but up to 40 MW are marketed by an energy broker. The Department entered into a 12-year power purchase agreement with Homestead Energy Services (HES) for 15 megawatts (about 30% of the excess power) in 2017. In 2022, DSWM amended their agreement with HES for the purchase of an additional 10 megawatts. The Department continues to provide power to the City by wheeling it from another utility, despite the inoperability of the RRF. *(Mayor's 4Es: Economy – promote a stronger and more sustainable economy; Environment – provide greater stewardship of the environment)*

Achievement of Milestones

- The Department of Solid Waste Management inducted into the U.S. Department of Labor's Hall of Honor as Essential Workers of the Coronavirus Pandemic.
- The department's first-ever electric powered waste collection vehicle unveiled and placed into service.
- Implemented the bulky waste appointment system, reducing the amount of time bulky waste piles linger on public rights-of-way.
- The DSWM has received \$148.5 million to date in FEMA reimbursements for debris cleanup and repairs associated with Hurricane Irma (September 2017) which represents 92.5% of the total cost of \$160.6 million.
- The Department will receive twenty-nine (29) new automated, clean diesel, side-loading garbage trucks in FY2023-24 to replace vehicles that had reached the end of their useful service life. This automated fleet replacement program provides

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waste truck drivers with the latest equipment and customers with more efficient service. In addition to the twenty-nine (29) automated side loaders, the DSWM will have another busy year as we have over one hundred (100) new pieces arriving in the current FY. The equipment and vehicles currently on order are the following: twenty (20) truck tractors, eight (8) cranes, eight (8) trash trucks, six (6) roll-offs, two (2) bull dozers, two (2) front end loaders, twenty-four (24) aluminum trailers, seven (7) rear loading garbage trucks, seven (7) heavy pieces of equipment and twenty (7) light vehicles to include one (1) electric Mach E.

- Won 2022 NACo Achievement Award for the "Learn with DSWM" webinar series.
- Introduced a new larvicide to reduce mosquito resistance to pesticides.
- Code Enforcement issued 165 citations for illegal dumping, resulting in 12 arrests.

Opportunities

To increase efficiency and maintain levels of service, the DSWM will continue to evaluate all possible opportunities that provide a net benefit to its operations, including the use of private contractors. Some potential opportunities currently in process and/or under consideration are as follows:

Garbage Collection and Disposal Services (County Departments): The Department is recommending the County extend the current contract which expires on November 2022, for an additional three years with two, one-year option-to-renew (OTR) terms. This will allow DSWM to transition County departments to DSWM service upon expiration of the requested extension. Due to recent supply chain issues and difficulties recruiting personnel, the DSWM requests a three-year extension with two, one-year option to renew periods to procure trucks, dumpsters, establish positions, recruitment, and training. *(Mayor's 4E: Environment – Provide greater stewardship of the environment).*

Trash Roll-Off/Dumpster Service: The DSWM is working on implementing a new revenue stream option, trash roll-off/dumpster service. This type of service will entail the Department dropping off a dumpster/roll-off container that our customer can use at his or her leisure for small renovation projects, spring cleaning, etc. Once filled the customer would contact the Department for removal and disposal. In addition to the roll-off/dumpster service being a viable revenue source, this service would allow the DSWM to properly dispose of the waste and minimize potential littering and/or illegal dumping. *(Mayor's 4E: Environment – Provide greater stewardship of the environment).*

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Electric Garbage Truck: The Department currently has a heavy fleet of garbage vehicles that utilize diesel fuel. Staff has been researching and learning more about the evolving technology in the refuse industry. There have been discussions with various companies (i.e., Lion Electric, Mack, Boivin Bodes, Build Your Dream, Peterbilt and Freightliner) who are involved with this new technology. Electric vehicles are now being introduced and will eventually be phased into heavy fleet. The DSWM has an interest in the electric garbage truck and has taken delivery of a fully electric automated side loader. It is currently being parked overnight at the Resources Recovery Facility. A charging station was built by an electrical contractor that is powered by the waste it collects. Staff have begun to test its capabilities and will closely monitor the driving distances, tonnages, and electrical consumption to verify the breakeven point for this unit. DSWM staff will familiarize themselves with the overall performance, durability, maintenance requirements, and infrastructure demands since there are over 200 automated side loader trucks that could all one day be replaced by an electric vehicle.

As technology continues to evolve, the Department would like to test its capabilities and seek Local, State and Federal funding opportunities to support this effort. This rapidly improving technology will generate zero emissions, reduce operating noise, eliminate fuel leaks during transport, and provide residents with a far more environmentally friendly truck. In addition, since the DSWM produces electricity at its Resources Recovery Facility, an Energy-from-Waste (EfW) plant, the electric garbage vehicles could ultimately be fueled by the very garbage it collects. The electric charging stations could be placed at this facility allowing DSWM to charge its own vehicles, and as the technology improves, the DSWM could transition the fleet in phases, towards a zero emission and environmentally friendly fleet of automated side loading garbage trucks. *(Mayor's 4E: Environment – Provide greater stewardship of the environment).*

Infrastructure Assessment: Conducting a comprehensive survey of Departmental infrastructure needs will determine future requirements for transfer stations, landfills, and supporting facilities. Anticipated future requirements will be based on tonnage projections, geographic area for more efficient routing and electric charging infrastructure.

Fleet Telematics/Driver Safety: The DSWM is seeking a Fleet Telematics Driver Safety Solution that will include all hardware, software licenses, equipment, materials, labor, installation labor, planning, design, configuration, interfaces development, testing, training, documentation, implementation, supervision, project management and all other items necessary to install an integrated turnkey Solution for the County, as well as subsequent software and hardware maintenance, escrow, and technical support services throughout the term of the resultant contract.

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The project will be composed of cameras (exterior and interior-facing), a GPS, and sensors that interface with the onboard engine control unit of vehicles to provide insight on the operations of DSWM vehicles on County roadways. There will be options to add more cameras in different locations on the vehicles (e.g., side, rear, hopper, etc.) for an additional fee. The solution provides for a proactive approach to driver safety, where the data combined from video, the vehicle engine control module, sensors, and GPS identify and analyze poor driving habits for correction before an accident occurs. The system provides valuable insights and evidence when an accident does occur. The solution will enable the County to take a more proactive stance on safety, where they will be able to leverage available system data to design training programs and intervention strategies to reduce risk and help drivers be safer on County roadways each day.

Safety Measures: Municipal solid waste workers have a risk of occupational injuries that is much higher than that for the general workforce. The Department strives to minimize accidents and will continue implementation and/or initiate implementation of the following Safety initiatives:

- In-house National Safety Council 4-hour Defensive Driving Training Course for Professional Truck Drivers with Commercial Driver's Licenses (CDL) who have had preventable collisions; Training goal: minimum of nine (9) training sessions per year based on a minimum of 8/maximum of 15 employees per session; Ongoing FY 22-23 and FY 23-24.
- Department of Transportation (DOT) Drug and Alcohol Training for CDL Holders (ongoing) and Supervisors (projected start date: FY 23-24).
- Investigation and Reporting Skills for Safety Incidents (virtual/in-person training; 4 hours): Target audience: supervisors and managers; Training goal: minimum of two (2) training sessions per year; Projected start date: FY 22-23 and ongoing FY 23-24.
- Continued implementation of the DSWM "Get Home Safe" Safety Campaign (Safety Spotlight Digital Newsletter, Safety Banners at operational facilities, Department Director's Safety Video, Safety Dan, and Safety Pledge); Ongoing FY 22-23 and FY 23-24 (*Thrive305 Priority 12 Government that Cares and Responds, 12.1 Improve communication with the public through messengers and messages that meet people where they are*)

Obstacles

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The DSWM continues to overcome some operational and capital challenges to continue to deliver quality levels of services efficiently and effectively. Some of them include:

- **Staffing:** The DSWM continues to evaluate staffing needs and realign resources to best address needs and reduce staffing shortfalls within operations. The Great resignation of 2021 and the pandemic have impacted the department and our recruitment and retention activity in driver/operator classifications. In addition, departure of senior staff in key areas of operations and administration, and the associated loss of institutional knowledge, continue to impact continuity of operations. Department activities have been significantly affected by position eliminations or retirements, which have led to an immediate knowledge deficit in key areas. The DSWM tracks pending retirements of critical positions to project and plan for the replacement of employees through recruitment planning. However, when timely replacements are not available due to a lack of qualified and trained employees suitable for promotion, the Department incurs overtime costs. The Department continues to evaluate means to retain its workforce and prepare for retirements by developing innovative programs and automating HR Systems to track, monitor and analyze employee data. Other departmental efforts include training, participating in career fairs, partnering with community organizations and monitoring the workforce to ensure that the skill sets necessary for the continuity of operations are maintained.

Recyclable Materials Markets: The County's recycling program is dependent on healthy markets for the collected recyclable materials. Robust markets create demand for recyclable materials and economic growth through high paying jobs. These markets are commodity driven and subject to the ebb and flow of market demands. Over the past few years, this demand has been negatively impacted by increased supply, and a decrease in end markets for collected materials. Most notably, the export market for recyclables has slowed substantially as China has virtually closed off many of its previously vibrant markets, in large part due to contamination of recyclables shipped from overseas sources. The Department has instituted recycling enforcement sweeps and an educational campaign to reduce contamination of recyclables.

Aging Facilities: The DSWM needs to ensure future viability of aging infrastructure, including equipment and facilities. Most of the Department's facilities are over 40 years old and therefore require upgrades and/or modifications to improve operations and extend their useful life. Of particular concern is the Mosquito Control facility, which requires replacement to accommodate a major reorganization and expansion of the division. A new facility will include modern laboratories, a safe and clean (hands-free) chemical mixing and loading plant, a separate pesticide storage building and insect rearing capability, as well showers/locker rooms to help mosquito control staff minimize

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the possibility of insecticide contamination by quickly cleaning and removing the chemical substance from the body.

Aging Equipment: The Department has Multi-Year Fleet and Capital Plans in place to address the aging fleet issues. The Department needs modernization/replacement of heavy fleet in the Collections and Disposal Operations. Vehicle purchases are in accordance with the Department's 10-Year Fleet Replacement Plan and is being funded through lease financing.

Electric Power Purchase Agreement (PPA): The PPA with Progress Energy Florida (PEF), now Duke, expired November 30, 2013 and the DSWM and the Resources Recovery Facility (RRF) Operator were unable to secure a replacement. Therefore, the Department began selling power to Florida Power Light and Duke on an "As-Available" basis starting December 1, 2013. The As-Available rate is the lowest rate, which is anticipated to be approximately \$23 per megawatt hour, about 70% less than the prior \$85 per megawatt hour PPA rate with PEF. The County was awarded a 12-year power purchase agreement with Homestead Energy Services for 15 megawatts, beginning in the summer of 2017. In 2022, the DSWM amended their agreement with HES for an additional 10 megawatts.

Legislative Changes/Mandates

Legislative changes that can potentially affect the operations of the Department include:

Recycling Goal: The DSWM opposes any efforts to revise existing Florida statutes or adopt new legislation that diminishes the ability of Florida counties to count the production of renewable energy toward achievement of the long-term recycling goal of 75% by 2020. Under existing Florida Statutes, the DSWM can count Energy-from-Waste production, Landfill Gas Utilization (methane gas converted to energy), materials collected in its single stream recycling programs, as well as other recycling programs, toward the long-term recycling goal. Any changes to the Florida Statutes that disallow inclusion of renewable energy towards achievement of the goal will have an adverse impact on the DSWM and the County meeting the recycling goal. By the year 2020, the long-term goal for recycling efforts of state and local governmental entities, private companies and organizations, and the general public is to recycle at least 75% of municipal solid waste by 2020. The Florida Department of Environmental Protection's (FDEP) Solid Waste Annual Report reflects that the overall State recycling rate for 2021 was 49%. Miami-Dade County achieved a recycling rate of 30%. In FY2020-21, DSWM staff participated in a work group along with other Florida County representatives to develop the "**County-coordinated Guidance on a New State Diversion Goal and Benchmarks**" and is in support of the proposed 5-part recommended approach to a new state recycling goal (work group facilitated by Willie Puz, Director of Public Affairs & Recycling, Solid Waste Authority of Palm Beach County). The DSWM will continue to

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monitor legislation that impacts Florida's recycling goals. *(Mayor's 4E: Environment – provide greater stewardship of the environment)*

Recycling Contamination: The DSWM supports actions to repeal House Bill 73 passed in the 2020 Legislative Session that amends Florida Statue 403.706 specifying requirements in contracts between residential recycling collectors or recovered materials processing facilities and counties or municipalities for the collection or processing of residential recycling material providing that a residential recycling collector or recovered materials processing facility is not required to collect, transport, or process contaminated recyclable material except pursuant to specified contractual requirements after a contract is executed. This type of legislation places restrictions on the Department's ability to establish acceptable levels of recyclable materials contamination in the County's curbside recycling program. Repealing and opposing legislative changes that would be detrimental to the sustainability of the County's solid waste management and recycling programs will prevent additional costs that may result in fee hikes and/or prevent the Department from meeting state-mandated recycling goals. *(Mayor's 4E: Environment – provide greater stewardship of the environment)*

EfW-Generated Electricity: Miami-Dade County's long term PPA expired in November 2013, at which point the EfW plant annual electrical revenues (shared with the EfW plant operator) were reduced from \$30 million to approximately \$8.5 million currently. To counteract this sharp reduction in revenues and as a public policy to reduce the state's fossil fuel consumption, the DSWM strongly supports efforts to encourage EfW-Generated Electricity. The DSWM recommends that EfW-generated electricity be encouraged by amending the definition of "Customer-owned renewable generation" codified in F.S. 366.91 to include government owned EfW facilities utilizing municipal solid waste as fuel. Another alternative to addressing this problem includes requiring investor-owned utilities to purchase a minimum amount of WTE-generated electricity and/or allowing net metering or self-service wheeling of power from government owned WTE facilities over privately owned and operated utility transmission lines. *(Mayor's 4E: Environment – provide greater stewardship of the environment)*

PRIORITY INITIATIVES

The most important initiatives for the DSWM that are planned or ongoing for the upcoming fiscal year include:

58th Street Campus Design: The DSWM has begun the process to develop an overall conceptual plan and associated list of requirements for an entirely re-designed DSWM Campus meant to accommodate all administrative functions and support services in a single, well-laid out and attractive design that optimizes DSWM operations. As a part of this design, the DSWM will identify opportunities to share space and partner with other County Departments (such as the Internal Services Department, Fleet Division and Transportation and Public Works, Road and Bridge).

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Mosquito Control: Staff will place an emphasis on switching control treatments from ‘adulticiding’ (spraying of conventional insecticides) to ‘larviciding’ (application of bio-rational products) to *prevent* emergence of mosquitoes.

- Such methodologies are preferable in that strategies are *proactive* rather than *reactive* and are preemptive in preventing biting mosquitoes from emerging.
- Environmentally responsible; products do not harm humans, pets, plants or wildlife.
- Products are target specific, consequently do not harm beneficial insects.
- Emphasis on larviciding reduces the pressure to induce insecticide resistance in mosquito populations, a key issue in mosquito control.

The challenge in promoting this commendable switch in strategy is to manage the operational parameters during difficult fiscal restraints, while still maintaining desired levels of mosquito control.

Waste Oil Recycling Program: The Department will implement the waste oil recycling to residential customers at eight Trash & Recycling Centers. This initiative will provide increased convenience to DSWM customers and help promote the County’s mission of protecting our drinking water supply. (*Mayor’s 4Es: Environment – provide greater stewardship of the environment; Equity – foster greater equity in the provision of services*)

Recyclables Contamination: A Recyclables Contamination Abatement Program has been implemented to address the problem of items such as plastic bags, hangers, hoses, etc. being incorrectly placed in recycling containers. Contamination of the recyclable waste stream is a national problem with serious negative economic and environmental effects. The Department is addressing this problem on the front end, with an outreach program to educate customers, and on the back end with stepped up enforcement. (*Mayor’s 4E: Environment – provide greater stewardship of the environment*)

Code Revision: Chapter 15 of the Code of Miami-Dade County will be revised to reflect current policies and best practices, as well as to incorporate updated definitions and requirements pertaining to solid waste management, including recycling, enforcement, permitting, and illegal dumping.

Comprehensive Landfill Closure Plan: A resolution approving County and municipal landfill closure projects eligible for funding through the Comprehensive Landfill Closure Plan (CLCP) was approved by the Board of County Commissioners in October 2015. The CLCP includes County and municipal landfill sites that are eligible for remediation and closure funding from the Utility Service Fee (USF) and sets out the criteria, terms,

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and timing of this funding. The Department is currently funding the following municipal landfill closure grant projects: Munisport, Virginia Key, Taylor Park, and a County-owned site in the City of Miami Gardens. (*Mayor's 4E: Environment – provide greater stewardship of the environment*)

Landfill Expansion: The DSWM plans to expand the North Dade Landfill (NDL) by increasing the elevation of both the East and West Cells. This expansion maximizes the long-term capacity of the NDL. The scope of work involves hiring a consultant to provide an engineering design for the permitting of this vertical expansion.

Technology Initiatives

In addition to program-based initiatives, the DSWM has a number of technology initiatives that are in place or will be implemented in the near term to help support and improve operations. They are as follows:

Waste Collection Software Replacement (SWABS Deployment): The DSWM is nearing completion an effort to replace the outdated Mainframe Waste Collection System (WCS), a basic customer accounts and relationship management system. The new WCS (renamed SWABS) consists of several DSWM Operations and Administrative modules (Accounts Management/Invoicing and Billing, Customer Care, Payment Processing Lien and Legal). The phased implementation will wrap up by mid-FY22-23. The new system provides the public with access to the following functions: report/file a complaint, make online payments (bills, services, fines), verify availability of a bulky waste pick up, request bulky waste service, check status of a bulky waste order, request an inspection, complete a permit renewal application and check the status of an enforcement action.

Waste Disposal Scale House Weighing & Billing system: By the middle of FY 2022-23, the Department expects to complete an ongoing replacement of its weighing and billing system for its scale houses, implementing a software upgrade that provides for improved functionalities and efficiencies in addition to full (PCI) compliance. This effort will include replacement of the unmanned scale infrastructure.

Online/Mobile Device Applications: The DSWM has largely deployed a series of online and mobile applications that will facilitate service delivery to customers. These include a series of news/events/contacts/ listings, a collection service schedule, an online payments function, a hauler/landscaper registration process, a facility locator, a complaints/illegal dumping reporting app, a service request app, a route tracker, a mobile payments function, a Bulky Trash Appointment Application and a Recycling Information Application

Driver Safety/Fleet Telematics: The DSWM working jointly with ITD and DTPW, has prepared a draft RFP related to a proposed onboard Driver Safety/Fleet Telematics system with a planned FY22-23 procurement and an FY 23-24 implementation. This system will upload a video recording of "triggered" incidents or events to a cloud-based

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solution for data analysis and reporting via a full-service website. The reports, data and video accessed via the website would then form the basis for a targeted driver training/coaching program. Similar programs have improved safety performance and generated savings from fewer accidents, driver exonerations, improved fuel economy and reduced maintenance and repairs.

Electronic Data Management System (EDMS): The DSWM recently implemented a document storage solution for the Enforcement Division. This program provides enforcement account case histories and enables the enforcement officers to have a centralized storage and review repository for their photos, letters, and other related enforcement items. This application has the capability of interfacing with related applications for additional efficiencies. The DSWM expects to roll out this storage solution for the Technical Services section of the Department in FY23-24. In this way, important records concerning waste facilities and operations can be better preserved to meet state requirements.

South Dade Landfill Home Chemical Self-Service Kiosk units: The project to deploy kiosks that will enable a self-service processing option at this Home Chemical Collection Center is in the planning and procurement phase with deployment expected to be completed in FY23-24.

Microsoft PowerBI Dashboards/Reports: The DSWM is working with ITD in order to develop dashboards and reports for Waste Collections, Waste Disposal, Fleet Management, HR and Accounting,

Truck Wash Visit Tracking Application: The DSWM will be deploying a new application developed to track use of the Department's truck wash facilities in early calendar 2023.

Enforcement/e-Ticketing Application: As of mid FY 2022-23, the DSWM is in the investigation phase of determining the best path forward for the development and implementation of an e-Ticketing for its Enforcement Division.

Digital Signage: The DSWM is currently working on a project to deploy large screen monitors in the common rooms, break rooms and/or lobbies at various field facilities that will work with a software to display a customized package of HR related information, such as job advertisements, open enrollment deadlines, Department news and events and similar information on a rotating basis.

FUTURE OUTLOOK

There are various factors that have the potential to significantly impact Departmental operations within the upcoming years. A few of these are as follows:

Resources Recovery Facility (RRF)/Energy-from-Waste: The RRF is currently inoperable due to the fire that occurred on February 12, 2023. Ongoing assessments

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and investigations continue. Damage assessment reports will assist the DSWM in evaluating and determining next steps. Prior to the fire, the DSWM was in the process of developing and implementing plans to design and build a new Energy-from-Waste/Resources Recovery Facility which plays a significant role in the development of the County's Zero Waste Strategic Plan. DSWM staff will continue to work along with the Regulatory and Economic Resources Department, Office of Resilience, and other county staff to develop and support plans, initiatives and programs that further the County's efforts in becoming a Zero Waste Community.

At the March 7, 2023, Board of County Commissioners meeting, a motion was made and approved to: (i) rescind Resolution No. R-728-22; (ii) authorize the County Mayor or County Mayor's designee to analyze and recommend siting alternatives for a new WTE facility to replace the existing RRF; (iii) direct the County Mayor or County Mayor's designee to explore alternative technologies to a WTE facility; and (iv) direct the County Mayor or County Mayor's designee to prepare a report regarding said analysis and recommendations, including costs and potential funding sources, within 90 days and to place the completed report on an agenda of the full Board for discussion and approval. Department staff is currently working with a consultant to complete the tasks and provide recommendations with a final report. The Board's approval of the report allows the DSWM to continue its efforts in developing a new Waste-to-Energy Facility. *(Mayor's 4E: Environment – provide greater stewardship of the environment)*

Curbside Recycling Program: The 2008 legacy recycling collection and processing contracts were going to expire on March 31, 2023. However, on March 7, 2023, the Board approved a two-year extension ("bridge") to ensure the continuity of critical waste management services for the residents of Miami-Dade County while the replacement solicitations are evaluated, negotiated, awarded, and transitioned, which is anticipated to go beyond the current contracts' expiration date of March 31, 2023.

Mosquito Control Collaborations/Scientific Investigations: The DSWM plans to expand on various scientific collaborations already undertaken with research institutions, to further scientific knowledge and understanding of mosquito biology and behavior, to enhance the professional profile of the DSWM through peer-reviewed publications, and to establish valuable links with academic institutions, local and international. Such collaborative investigations have the potential to improve control methods in ways not anticipated, to identify new avenues for future research, and serve to boost staff morale and promote self-motivation within the organization.

Encroachment of Residential Development: Construction of residential communities in the area surrounding the Resources Recovery Facility (RRF) has resulted in complaints relating to odor. In response, the DSWM established an odor monitoring program and tasked Covanta with hiring an engineering firm to evaluate the existing odor control system and made upgrades to the existing odor control system. Additionally, the Department will be reviewing alternatives to develop buffers around the RRF as well as the North Dade and South Dade landfills.

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Financial Stability: The DSWM has experienced revenue shortfalls in the past few years and continues to monitor and reduce expenditures while attaining operational efficiencies that help minimize costs. Although the BCC approved a residential waste collection fee increase in September 2019, and a \$25 fee increase in FY 22-23, the Department continues to evaluate its fees and will recommend adjustments as needed. Commercial waste collection rates and services, for example, continue to be restructured to better cover costs and provide improved customer service. These actions will require Board approval of an updated Implementing Order 4-68 (Schedule of All Service Levels and Fees for Miami-Dade County Solid Waste Services). *(Mayor's 4E: Economy – promote a stronger and more sustainable economy)*

Technology: The DSWM is committing to improving operational efficiency through investment in technology. In FY 2018-19, the Department completed two pilots of a Driver Safety system using vehicle telematics and video cameras to improve driver performance through coaching. After a formal procurement process in FY 2021-22, DSWM anticipates implementation in FY 2022-23. This system will then evolve into a unified driver interface, using a mounted tablet providing turn-by-turn routing, work order processing, audio communication, sign-in and sign-out, pre-trip inspection, and post-trip inspection. Similarly, the Department will continue to expand its use of handheld and mobile devices, combined with GIS applications, and work order systems to speed routing and service order completion, improve reporting, and increase employee productivity in other divisions, such as Home Chemical Collection and the Truck Wash.

Annexations and Incorporations: Potential annexation and incorporation policies can impact the DSWM. Ordinance 96-30 was enacted to protect DSWM's system and financial integrity from Incorporations and Annexations. Annexations have the potential to reduce the Waste Collection Service Area and associated revenues. A smaller Waste Collection Service Area could have a profound impact on revenues, debt service coverage and ultimately fees charged to the remaining collection customers. The cumulative impact of annexations that have taken place since 1996, and that are anticipated to occur in the future, will spread additional debt service over a smaller revenue pool, resulting in increased fees to remaining customers. *(Mayor's 4E: Economy – promote stronger and more sustainable economy)*

Legislation

EfW-Generated Electricity: Miami-Dade County's long term PPA expired in November, 2013, at which point EfW plant annual electrical revenues (shared with the EfW plant operator) were reduced from \$30.0 million to approximately \$8.5 million

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currently. To counteract this sharp reduction in revenues and as a public policy to reduce the state's fossil fuel consumption, the DSWM strongly backs efforts to encourage EfW-generated electricity and has included an item in its legislative package to supports actions such as including EfW micro-grids where government owned facilities will be able to provide power to other local government infrastructure (i.e. airports, wastewater treatment plants, etc.) as an offset to electric energy provided by the electric utility during an applicable billing period and removing regulatory and market barriers preventing local governments from providing self-generated electricity, either directly or via net metering, to other non-contiguous government owned facilities.

Attachment 1

Business Plan Report

As Of <= 01/13/2023

Business Plan Report
Solid Waste Management

Perspective Name	Objective Name	Grand Parent Objective Name	Parent Objective Name	Measure Name	Details	As of	VR Flag		Actual	Target	FY2022-23 Annualized Target	FY2023-24 Annualized Target
Customer	Provide Quality Residential Garbage, Trash and Recycling Collection Services	NI2: Continuity of clean water and community sanitation services	NI2-3: Provide sustainable solid waste collection and disposal capacity	Number of curbside recycling complaints per 10,000 participating households (D)	📉	Nov '22		📉	10.6	7.4	6.7	n/a
				Number of Garbage Complaints Received per 10,000 households (D)	📉	Oct '22		📈	3	4	48	8
				Number of Missed Garbage Complaints Received Per 10,000 Households (D)	📉	Oct '22		📈	2	4	48	8
				Percentage of Automated and Manual Garbage Routes completed on time (D)	📉	Nov '22		📉	92.4%	98.0%	98.0%	n/a
				New Household Accounts added to Solid Waste Collections (D) (Monthly)	📉	Sep '22			131	n/a	n/a	n/a
				Number of Bulky Waste complaints per 1000 Regular Bulky Waste orders created (D) (New)	📉	Oct '22		📉	70.1	28.0	18.0	16.0
	Improve Programs that Promote Neighborhood & Rights-of-Way Aesthetics, & Environmental Conditions	NI1: Safe, healthy and attractive neighborhoods and communities	NI1-1: Promote livable and beautiful neighborhoods	Percentage of scheduled illegal dumping piles picked up (D)	➡️	Nov '22		📈	98.7%	95.0%	95.0%	95.0%
				Investigate Illegal Dumping Complaints received via 311 within one week of Receipt	📉	Dec '22		📈	100%	95%	95%	95%
	Provide Safe, Attractive and Structurally Sound ROWs and Infrastructure for Both General and Special Populations	TM3: Well-maintained, modern transportation infrastructure and assets	TM3-1: Harden and maintain roadway infrastructure	Total Residential Enforcement Actions (D)	📉	Nov '22		📈	3,298	2,915	34,980	7,800
				Litter Tons (D)	➡️	Nov '22			20	n/a	0	n/a
				Single Stream Recycling Program Tons (D)	➡️	Aug '22		🟡	4,898	5,000	n/a	n/a
	Provide Timely and Satisfactory Resolution to Customer Needs, Requests & Inquiries	GG1: Accessible, equitable, transparent, and responsible government	GG1-2: Facilitate community outreach and engagement to promote better decision-making in County government	Percentage of response to Mosquito Nuisance Complaints within 48 hours (D)	📉	Oct '22		📈	100.0%	100.0%	100.0%	100.0%
				Average Illegal Dumping Pick-up Response Time (D)	➡️	Nov '22		📈	2	4	4	4
				Average Bulky Waste Response Time in Calendar Days (D)	➡️	Nov '22		📉	12.0	7.0	7.0	7.0
Financial	Meet Budget Targets Quarterly			Disposal Revenue Tons - Garbage (D)	➡️	Nov '22		📈	112,396	108,689	1,304,268	n/a
				Disposal Revenue Tons - Trash (D)	➡️	Nov '22		🟡	53,140	54,154	649,848	n/a
				Disposal Full Fee Revenue Tons (D)	📉	Aug '22		📈	169,084	132,708	n/a	n/a
	Monitor Overtime and Temporary Expenditures	GG4: Effective leadership, and management practices	GG4-2: Effectively prioritize, allocate and use resources to meet the current and future operating and capital needs for all our residents	Temporary Expenditure (Administration) (D)	📉	Feb '22		📈	\$0	\$4,283	\$51,400	\$0
				Overtime Expenditure (WM Operations) (D)	📉	Mar '22		📉	\$713,481	\$278,560	\$3,381,048	\$1,009,063
				Temporary Expenditure (WM Operations) (D)	📉	Mar '22		📈	\$0	\$5,392	\$64,704	\$64,704
				Overtime expenditure (Administration) (D) (New)	📉	Apr '22		📈	0	891	10,692	9,900
	To Reduce Disposal Accounts receivable delinquencies	GG4: Effective leadership and management practices	GG4-1: Provide sound financial and risk management	Total Accounts Receivable (D)	📉	'23 FQ1		📈	\$7,174.0K	\$8,500.0K	\$8,500.0K	\$8,500.0K
	Meet Budget Targets (Solid Waste)			Revenue: Total (Solid Waste)	📉	'22 FQ3		📉	\$65,524K	\$152,120K	608480	n/a
				Expen: Total (Solid Waste)	📉	'22 FQ3		📈	\$84,738K	\$152,119K	608479	n/a
				Positions: Full-time Filled (D) (Solid Waste)	➡️	'22 FQ3		📉	989	1,119	1119	n/a
Internal	Ensure Ongoing Compliance with local, state, and Federal Regulations	GG4: Effective leadership and management practices	GG4-1: Provide sound financial and risk management	Disposal System Level of Service (D) (In Years)	➡️	2022 FY		📈	10	6	5	5
	Improve Service Request Responsiveness			Percentage of Purchases Processed as Change Orders (D)	➡️	Mar '22		📈	15%	25%	25%	25%
				Percentage of Purchases Processed as 'Confirmation Purchases' (D)	➡️	Apr '22		📈	0%	2%	2%	2%
				Average Number of Days from Request to Completion (D)	➡️	Oct '22		📈	15	15	8	5
				Bid Reviews Completed (D)	➡️	Apr '22			4	n/a	n/a	n/a
				Payment Requests Processed (D)	➡️	Mar '22			3	n/a	n/a	n/a
				Work Orders Processed (D)	➡️	Dec '22			3	n/a	n/a	n/a
Learning and Growth	Provide Training and Employee Development Opportunities			Total No. of Training Sessions (D)	📉	Nov '22		📉	7	8	96	n/a
	Ensure a Safe Working Environment for Employees	GG2: Excellent, engaged and resilient workforce	GG2-2: Promote employee development and leadership	No. of safety inspections conducted (D)	📉	May '22		📈	18	18	216	216

Key: 📌 - Initiative 🌟 - Featured Objective

Initiatives											
Objective Name	Initiative	As Of	Status	Budget	Timing	Quality	Risk	Scope	Owners		
Ensure Ongoing Compliance with local, state, and Federal Regulations	Munisport Landfill Grant	12/24/2019	In Progress						Kelapanda, Achaya (DSWM)		
	Virginia Key Landfill Grant	8/23/2019	In Progress						Kelapanda, Achaya (DSWM)		
Provide Quality Residential Garbage, Trash and Recycling Collection Services	Replace Waste Collection System (WCS)	2/10/2020	In Progress						Silver, Deborah F. (DSWM)		
Provide Quality Administrative and Operational Support that Drives Effectiveness and Efficiency in Service Delivery	Biometric Time Clocks Project Deployment	2/10/2020	On Hold						Silver, Deborah F. (DSWM)		

Name contains any Solid Waste Management