Department of Public Works

Bureau of Solid Waste Quarterly Oversight Hearing August 2022



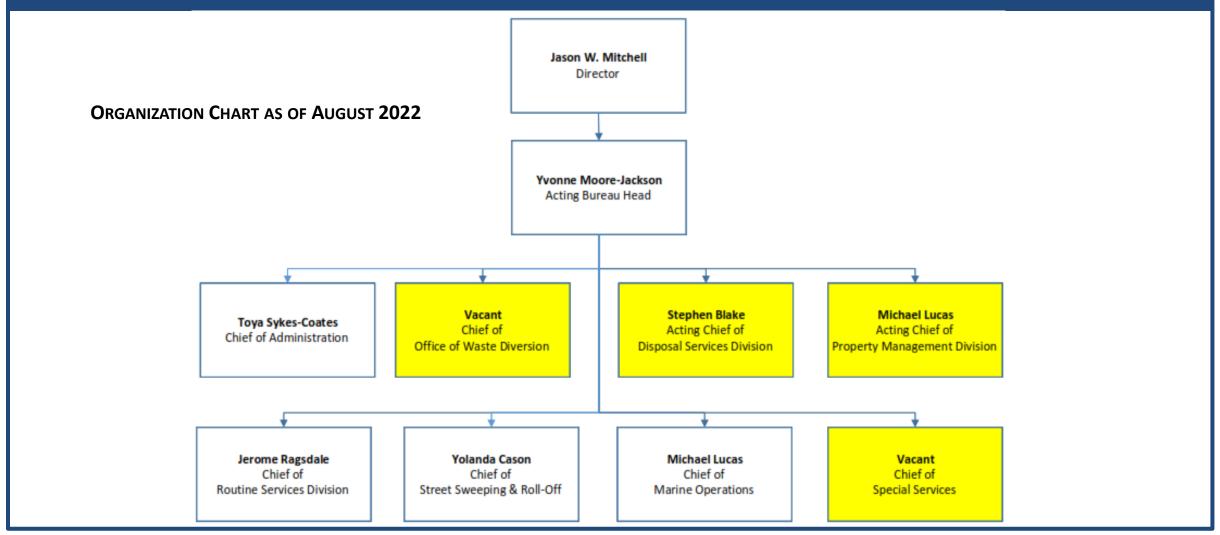
Presentation Outline

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 - a. Bureau Organization Chart
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 - c. Office of Waste Diversion
- 2. Capital Improvement Programs
- 3. Grants and Funding
- 4. Collaboration
- **5. Legislative Updates**
- 6. Community Engagement
- 7. Recycling Efforts
- 8. Recycling Collection



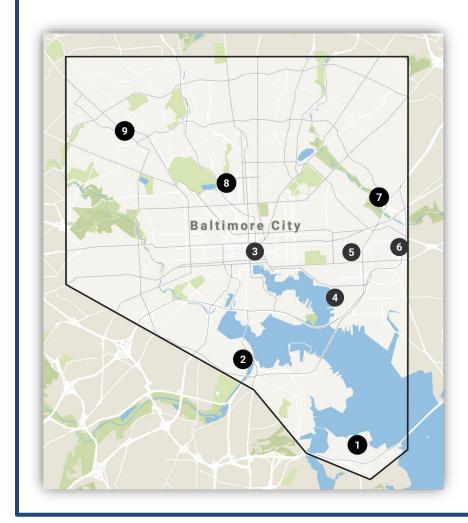


Bureau of Solid Waste





Bureau Overview



Bureau of Solid Waste Facilities and Offices

- 1. Quarantine Road Landfill 6100 Quarantine Road, Baltimore, MD (410) 396-3772
- 2. Western Sanitation Yard701 Reedbird Avenue, Baltimore, MD(410) 396-3367
- **3. Administration & Waste Diversion** 200 N. Holliday Street, Baltimore, MD Administration: (410) 396-5134 Waste Diversion: (410) 396-4511
- **4. Inner Harbor/Downtown Operations** 3311 Eastbourne Avenue, Baltimore, MD (410) 396-5671
- **5. Property Management Division** 111-231 Kresson Street, Baltimore, MD (410) 396-1023

- 6. Special Services/Mechanical Street Sweeping
- 111 Kane Street, Baltimore, MD (410) 396-1300
- **7. Eastern Sanitation Yard** 6101 Bowleys Lane, Baltimore, MD (410) 396-9950
- **8. Sisson Street Drop-Off Center** 2840 Sisson Street, Baltimore, MD (410) 396-7250
- 9. Northwest Transfer Station5030 Reisterstown Road, Baltimore, MD(410) 396-2706





Bureau Overview

The Bureau of Solid Waste is responsible for vital services that contribute to the public health, safety, economic development and overall quality of life in Baltimore City

Bureau of Solid Waste divisions and services:

- Special Services, Marine Operations, Street Sweeping and Roll-off: Maintains the cleanliness of public rights-of-ways and clears debris away from storm drains to protect water quality. Activities include Street and Alley Operation, Mechanical Sweeping Operations, Cleaning Business Districts and Marine Operations
- **Property Management:** Provides cleaning, boarding, mowing and rat control services to vacant and unoccupied properties that are cited by the City's housing inspectors
- Routine Services: Provides residents with waste and recycling pickup from households and multi-family dwellings. This service also includes condominium and public housing refuse collection, recycling administration, and funding for household hazardous waste disposal services
- **Disposal Services:** Manages mixed refuse and recycling materials at the City's landfill and the Northwest Transfer Station, which is integral to the efficiency of the Bureau of Solid Waste by providing a centralized drop off facility for trucks to shorten trips and consolidate material prior to transfer to Baltimore Energy Systems Company (BRESCO) or to the recycling facilities
- Office of Waste Diversion: Manages initiatives related to waste reduction and diversion, collaborates with departments across the city, and acts as a resource for residents to find information about recycling, composting, and solid waste services
- Office of Administration: Administrative support to perform data compilation for reports and analyze operations to maximize efficiency



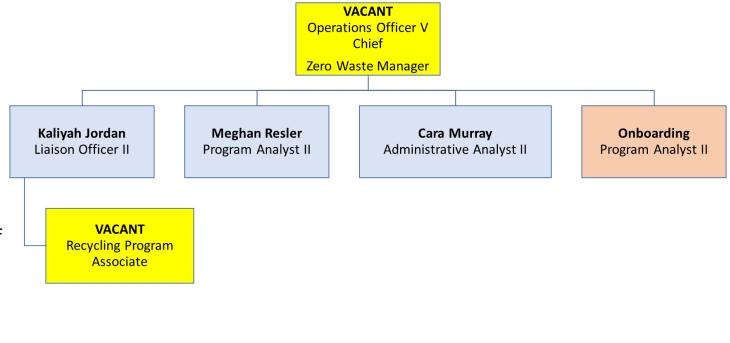
Office of Waste Diversion

Overview

The Office of Waste Diversion was created January 1, 2022 to align with the Mayor's zero waste goals. The office is still developing and looking for a chief and additional staff to oversee office functions. The office manages initiatives related to waste reduction and diversion, collaborates with other departments across the city, and acts as a resource for residents to find information about recycling, composting, and solid waste services.

Status Update

- Staffing:
 - Solid Waste recently onboarded the following staff in the Office of Waste Diversion:
 - Program Analyst II (2 positions)
 - Liaison Officer II (1 position)
 - Solid Waste is actively recruiting for the following positions in the Office of Waste Diversion:
 - Recycling Associate (1 position)
 - Chief of Waste Diversion, Zero Waste
 Manager- applications have been received





Waste Diversion Overview

Office Responsibilities

- Develop and oversee all waste diversion initiatives and programs in the Bureau of Solid Waste
- Oversee the food scrap drop off sites at 5 citizen's drop off centers and assist with the drop off sites at 2 farmer's markets
- Manage the annual, state-required reporting process for the Maryland Recycling Act, collecting waste and recycling tonnage reports from public and private entities within the City
- Provide written feedback on proposed legislation pertaining to solid waste, recycling, and other related topics
- Research and write grant applications and programs, such as Food Matters and the Anti-Contamination campaign
- Schedule and attend events that promote and actively divert material from the landfill, like Shred Events and backyard composting workshops



60,984 Pounds of
Organic Material Recycled to
date



Approx. 33,573 pounds paper shredded and recycled in FY22 at 5 shred events



22,159 Tons of Residential Recycling in FY22



5 out of 5
Maximum Source Reduction
Credit Received from MDE



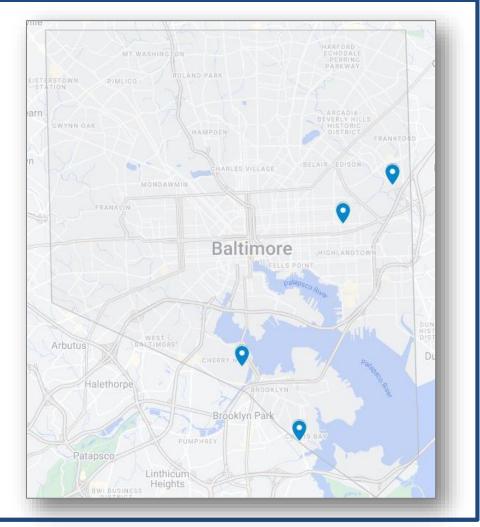


Capital Improvement Programs

Closed Landfill Assessment

Status Update: In Progress

- A feasibility study was initiated at 4 closed landfill sites to investigate possible upgrades to operations, including modernizing citizen convenience centers, and providing new compost infrastructure construction.
- Contractors surveyed 4 closed landfills:
 - Bowley's Lane
 - Reedbird Ave
 - Monument St
 - Pennington Ave
- Environmental hazard, soil, and geo-technical analyses are required to inform decisions about how each site could possibly be used. This will ensure compliance with EPA regulations.







Grants and Funding

Status Update

ARPA Funding Requests

• In Summer 2021, DPW submitted 17 ARPA proposals, totaling almost \$61M, for various solid waste projects. A complete list of these projects as well as the writeups themselves are available upon request

State Bond Funding

- DPW was recently awarded \$7,000,000 in grants from a Maryland Consolidated Capital Bond Loans to create an East Baltimore Transfer Station
- Funding will be used for the "acquisition, planning, design, construction, repair, renovation, reconstruction, site improvement, and capital equipping of a transfer station and small hauler site in East Baltimore at the Bowley's Lane Sanitation Yard in Baltimore City."

U.S. Conference of Mayors Award

• DPW is partnering with the Office of Sustainability and local urban farms on an \$15,000 award from the U.S. Conference of Mayors for food rescue workshops, composting and funding for school programs. The funds are planned for 3 Baltimore school and urban farm partnerships, and an educational summit at the end of the school year.





Grants and Funding

Opportunities

- Infrastructure Investment and Jobs Act/Bipartisan Infrastructure Law
 - The Grants & Partnerships Office will apply for the EPA's Solid Waste Infrastructure for Recycling Grant and Recycling Outreach and Education Programs; Notice of Funding Availability (NOFA) expected in the fall



- The Grants & Partnerships Office works closely with DPW staff and elsewhere in the City to secure resources for various DPW projects and programs
- DPW is working in conjunction with Sustainability and higher education institutions on a USDA grant for composting and food waste reduction, due September 1
 - The proposal will include funding for backyard composting workshops, expanded food scrap drop off locations, and sub-grants to food recovery organizations







Collaboration

Status Update

- Waste Working Group
 - This group meets monthly as a part of the Sustainability Subcabinet initiative
 - Recent discussion include:
 - Ways to improve awareness of waste management practices in city buildings,
 - Drafting green business guidelines
 - Learning about state implementation of HB 264 from MDE regulators

NRDC Food Matters

- DPW works with Sustainability to run the Baltimore Food Waste Reduction Working Group (BFWRWG), which includes higher education groups, community composting groups, and other organizations invested in reducing food waste in Baltimore
- Advocacy
 - DPW offices and Sustainability have been meeting regularly with Zero Waste advocates to discuss plans to make progress towards zero waste goals

Opportunities

- The Waste Working Group will continue to meet and report back to the Sustainability Subcabinet on progress of ongoing projects. The group has an opportunity to bring awareness to waste management practices within city government and to encourage participating agencies and offices to lead by example
- Expand the BFWRWG to include more community organizations and food recovery organizations to grow the network. The network can provide resources to organizations looking to comply with HB264 and increase food recovery and organic diversion





Legislative Updates

Status Update

- HB264 Organic Waste Diversion Law, January 1 2023
 - DPW submitted comments on MDE's proposed regulation for HB264 based on comments received during the Waste Working Group.
 - The group's input consisted of concerns over reporting compliance and the mechanism by which MDE plans to enforce compliance, whether through the state or municipalities.
 - The group stressed the lack of data available to the City from private entities, including their organic waste volume. This presents a challenge to knowing who should be complying with the law.
- EPA Request for Information
 - DPW submitted two letters to the Federal Register to respond to the EPA RFI for Solid Waste Management Infrastructure and Recycling and Outreach grant programs.
 - Letters were written through collaboration with the Office of Sustainability, DPW Grants Office, Waste Diversion, and Legislative Affairs
- 10-Year Solid Waste Management Plan update in 2023
 - A total revision of the Plan is due to MDE by the end of 2023
 - DPW is beginning the process of revision, and plans to include community input on the updates

Opportunities

• Extended Producer Responsibility (EPR) bills





Community Engagement

Trash Talk Tuesdays

- Topical videos on waste reduction released on Facebook Live
- Videos have been released monthly in 2022

GROW Pop-Ups and Shred Events

- Multi-agency supported events for residents to get free trees, mulch and information on city programs, including waste reduction and recycling
- Residents bring material from home to be shredded and recycled at shred events; 3 held in 2022 to date
- 8 GROW centers held in 2022 across the city to date

ReNews Newsletter

- Monthly publication to subscribers
- Shares information on recycling topics and news from Solid Waste

Community Events

- DPW participated in the Sustainability Open House in June
- The Office of Waste Diversion attended DAM Jam on August 13





Recycling Efforts

School Recycling Collection

- DPW has re-started recycling collection at schools as an op-in program. The registration process is underway, and collection is anticipated to start the first week of September
 - Schools can sign up at any time, and can expect a 2-week turnaround between signing up and first pickup
 - DPW will collect from existing dumpsters or from any school supplied container

Recycling Drop Off Locations

- DPW continues to maintain drop-off locations for residential recycling at the citizen's convenience centers, as well as 8 additional sites:
 - Digital Harbor High School
 - Merganthaler High School
 - Reginald F Lewis High School
 - William S. Baer School

- MLK Elementary/Middle
- Westside Skill Center
- Marine Operations on Eastborne
- Property Management on Kresson St

BALTIMORE CITY DEPARTMENT OF PUBLIC WORKS

RESIDENTIAL DROP-OFF CENTERS

Residential drop-off centers are locations where City residents can dispose of items at no charge. Please consider donation of items before disposal.

Waste and Recycling Drop-Off Locations

1. Quarantine Road Landfill

6100 Quarantine Road (410) 396-3772 Haulers and Landfill Use:

Mon.- Sat. 8:00 a.m. to 4:00 p.m. Residential Drop-Off:

Mon.- Sat. 9:00 a.m. to 5:00 p.m.

2. Western Sanitation Yard 701 Reedbird Ave

701 Reedbird Ave (410) 396-3367

3. Eastern Sanitation Yard

6101 Bowley's Lane (410) 396-9950

4. Sisson Street Drop-Off Center

2840 Sisson Street (410) 396-7250

5. Northwest Transfer Station

5030 Reisterstown Road (410) 396-2706

Mon.- Sat. 7:00 a.m. to 5:00 p.m

Hours:

Drop off locations are open the following hours unless otherwise noted.
Labor Day to Memorial Day:
Monday to Saturday 9:00 a.m. to 5:00 p.m.
Memorial Day to Labor Day:
Monday to Saturday 9:00 a.m. to 7:00 p.m.

Accepted Materials:

- The following materials are accepted at all locations: household trash, single stream recycling, bulk items such as furniture and mattresses, electronics, white goods such as stoves and refrigerators, scrap metal, rigid plastic, and motor oil.
- Tires without rims are accepted at all locations except for the Sisson Street Drop-Off Center.
- Oyster shells are accepted at the Sisson Street Drop-Off Center.
- Household hazardous waste collections occur the first consecutive Friday and Saturday of the month, April through October at the Sisson Street Drop-Off Center only.
- Durable medical equipment is accepted for donation at the Quarantine Road Landfill and Northwest Transfer Station.





For more information on services available at dropoff centers, please contact the Office of Recycling at (410) 396-4511







Recycling Efforts

Know What to Throw Anti-Contamination Campaign

- The Recycling Partnership awarded DPW a \$250,000 grant to reduce contamination in single steam recycling
- Between March 8, 2022 and May 20, 2022, 3,327 'Oops' tags were distributed between 24 selected recycling routes. In the first 3 weeks of the campaign, an average of 551.67 tags were distributed per week
 - During the 11-week period, an average of 302 tags were distributed per week. There was a decrease in participating routes starting the first week of April
 - The 24 routes were chosen to represent both weeks in the bi-weekly recycling schedule, as well as the routes that were known to have issues with contamination
- The campaign also posted on social media, sent 189,000 postcards to residents, advertised on TV, advertised on public transportation, and hosted billboards in the City
- The contamination rate in November 2021 was 14.7% after a sort at WMRA, future sorts will take place where changes in contamination will be observed





Recycling Opportunities

Less Waste, Better Baltimore Plan Recommendations

Additional opportunities to reach the maximum diversion potential include:

- Expanding recycling to multifamily residences and commercial buildings through mobile collection and increased collection in public spaces
 - Expanding recycling would require legislative action, as well as enforcement and program management commitment from DPW.
 Additionally, any new programs would require financial resources to ensure there is sufficient labor and equipment to make the program sustainable
- State law requires owners of properties with 10 or more units and office buildings to provide recycling services, but relies on municipalities to enforce
 - There is an opportunity to develop and improve enforcement of this law within Baltimore City





Organic Recycling

Status Update

- DPW supports 5 food scrap drop off locations at citizen's convenience centers and
 2 drop off locations at farmer's markets
 - To date, the citizen's convenience centers have diverted over 60,000 pounds of food scraps from the landfill
- The pilot program started as part of the NRDC-funded grant program, Food Matters. After a year, DPW is taking steps to make the program permanent
- The Food Matters program also includes backyard composting workshops hosted at community gardens across the city. Workshops are free to registrants and include a free compost bin after the event. There have been 6 composting workshops in 2022 and more are scheduled for Fall 2022

Less Waste, Better Baltimore Recommendations

- ✓ Encourage backyard and community composting
- ✓ Education and outreach about composting and food scrap recycling
- Separate curbside collection for organic material
- Increase in composting capacity





Recycling Opportunities

Less Waste, Better Baltimore

- ✓ DPW has achieved some of the recommendations in the Less Waste, Better Baltimore Plan- providing free recycling bins and providing significant education and outreach to reduce contamination
- DPW still has opportunities to reach the maximum diversion potential of recycling collection through improving and expanding recycling

Improved Recycling Collection

- Immediate Action- Work through the procurement process to purchase vehicles to enhance service delivery and fleet availability.
- Near Future
 - July 2022 December 2022: perform route optimization and analyze results
 - July 2022 July 2023: Study employee compensation
- Ongoing- Negotiation with contractors to augment current staff level to satisfy immediate service needs; Expedite vehicle repair





Overview

• DPW currently provides bi-weekly recycling to residents of single-family homes in Baltimore. The service is provided by the Routine Services division, and carts are managed by Marine Operations division.

Challenges

- DPW struggled with challenges presented by the COVID-19 pandemic, including a shift in material volume from office buildings to residences, labor shortages, and staff illness
- DPW still struggles with CDL driver shortages amid competition with higherpaying private sector positions. Contractors are not able to cover all labor needs
- Supply of vehicles to replace our aging fleet is limited; DPW is relying on maintenance which takes equipment out of service for long periods

Status Update

 Director Mitchell released a memo on July 20 to City Council, describing actions DPW is taking to overcome challenges with recycling collection





Before Carts





1 route= 10 hours

Prior to cart distribution, recycling containers were opt-in, so there were fewer stops. The bins were smaller, contained less volume, and were easier to scan for contamination

After Carts

1 route= 15 hours

Now that every single-family home has a recycling cart, there are 170,000 cans to be checked for recycling and contamination. They are harder to unload and take longer to check than the bins, which significantly increases time to complete 1 route. There are 80 routes in the city



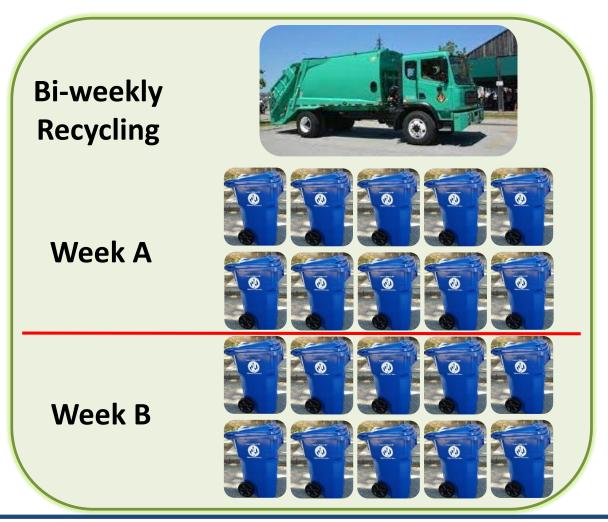




Bi-weekly recycling divides the total pickups in half. One half serviced one week, the second on the second week. The routes are manageable and can be completed consistently and reliably until the following issues are addressed:

- CDL Driver and staff shortage
- Equipment procurement and maintenance
- Route optimization

Route optimization will increase efficiencies and modernize recycling routes.







Collection Changes

- DPW has condensed routes due to the pandemic, and is using route optimization software to streamline recycling collection along those routes and reduce the time it takes to complete each route. Routes are taking 3-6 hours longer to complete than before recycling cart distribution.
- There are more bins to inspect and collect per route, as well as an increase in the weight of material collected.
 There has been an overall increase of 5.27 tons per route since recycling carts were distributed.

RECYCLING

ROUTE OPTIMIZATION

JUNE 2019

320

routes a month

1595

tons of recycling collected

4.98

average tons per route **JUNE 2022**

160

routes a month

2159

tons of recycling collected

13.49

average tons per route





Thank You









