



Baltimore City Department of Public Works

FY 2022 Capital Improvement Program Presentation, Bureau of Solid Waste

January 14, 2021



Department of Public Works

Mission

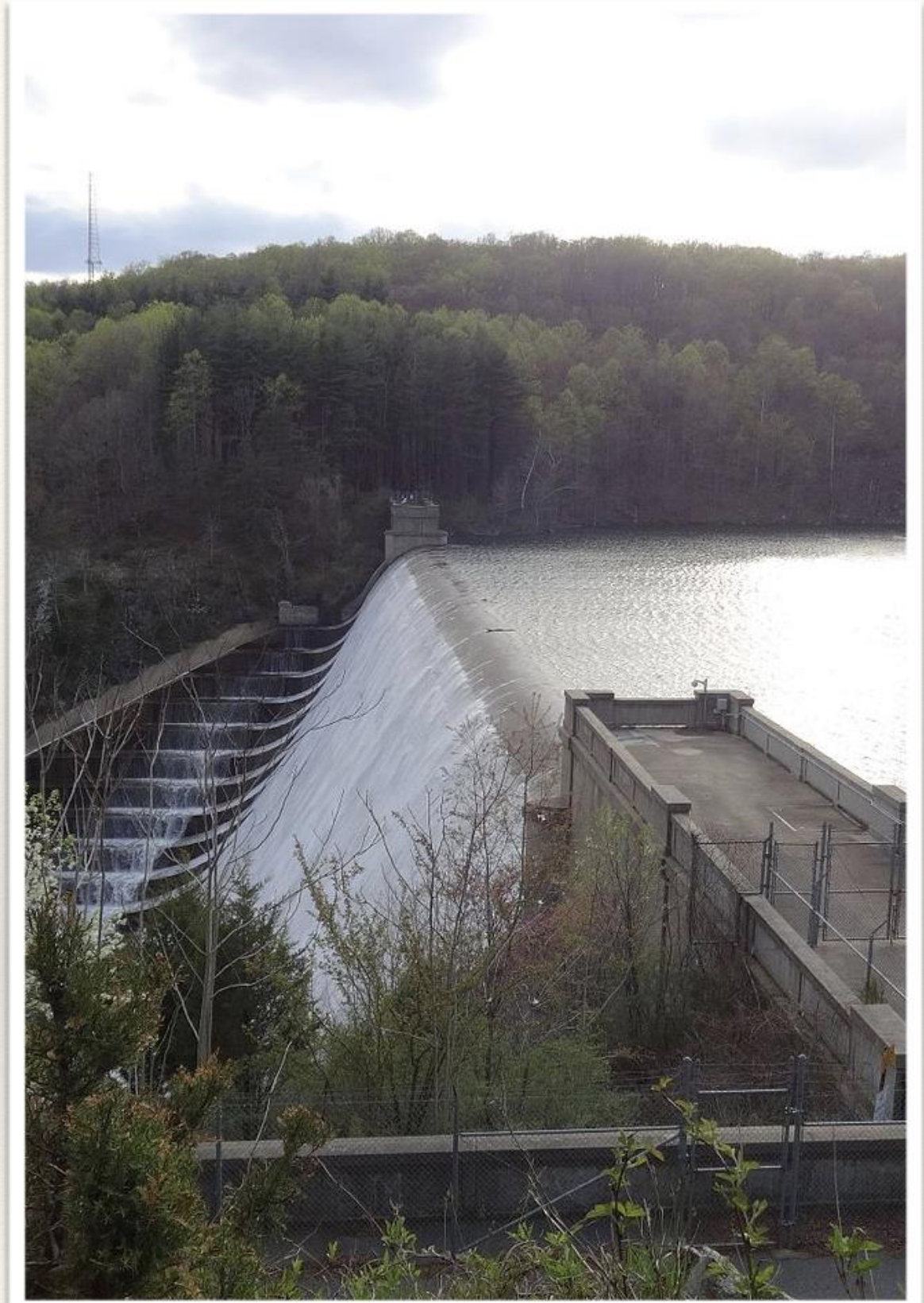
We support the health, environment, and economy of our City and the region by providing customers with safe drinking water and keeping neighborhoods and waterways clean.



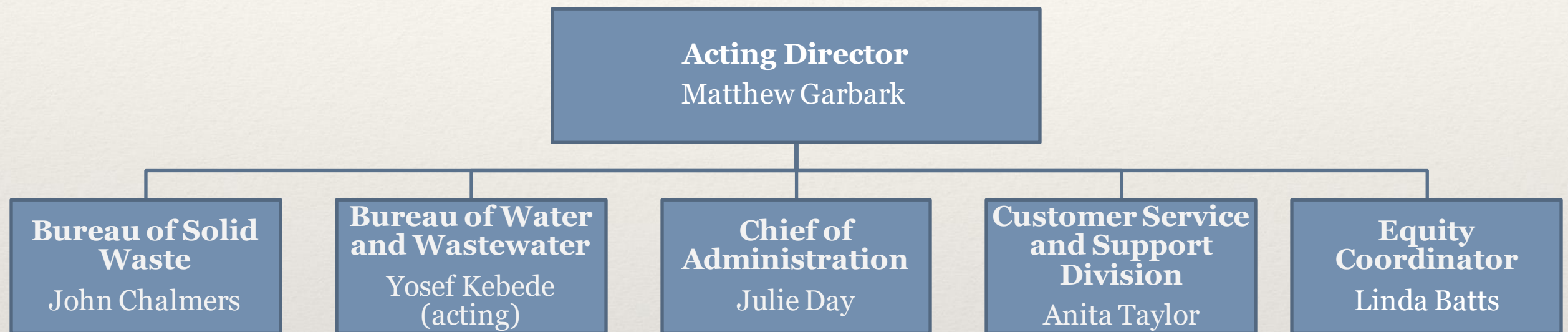
Department of Public Works

Vision

To be a strong proponent and protector of our environment and the health and vitality of our communities.



Office of the Director - Organizational Chart



Solid Waste Program 517

Actual Funding Needed

Project	Appropriation (Millions)
Rail Transfer Station	\$81.5
Quarantine Road Landfill Expansion	\$42.0
Eastern Transfer Station	\$23.1
Renovation of Solid Waste Facilities	\$21.2
Solar Can Installation Phase 2 and 3	\$16.7
Aerated Static Pile Compost Facility	\$1.5
Regulatory Compliance Services	\$0.98
Bowley's Lane Convenience Center Upgrades	\$0.44

Total Funding Requests = \$187.4 Million



Solid Waste Program 517

General Fund Priority Requests

CIP #	Program	(\$ in Millions)
517-500	Renovation of Solid Waste Facilities	\$1.0
517-012	Quarantine Road Landfill Expansion	\$3.0
517-028	Less Waste, Better Baltimore Implementation	\$3.5

FY 2022 = \$7.5 Million

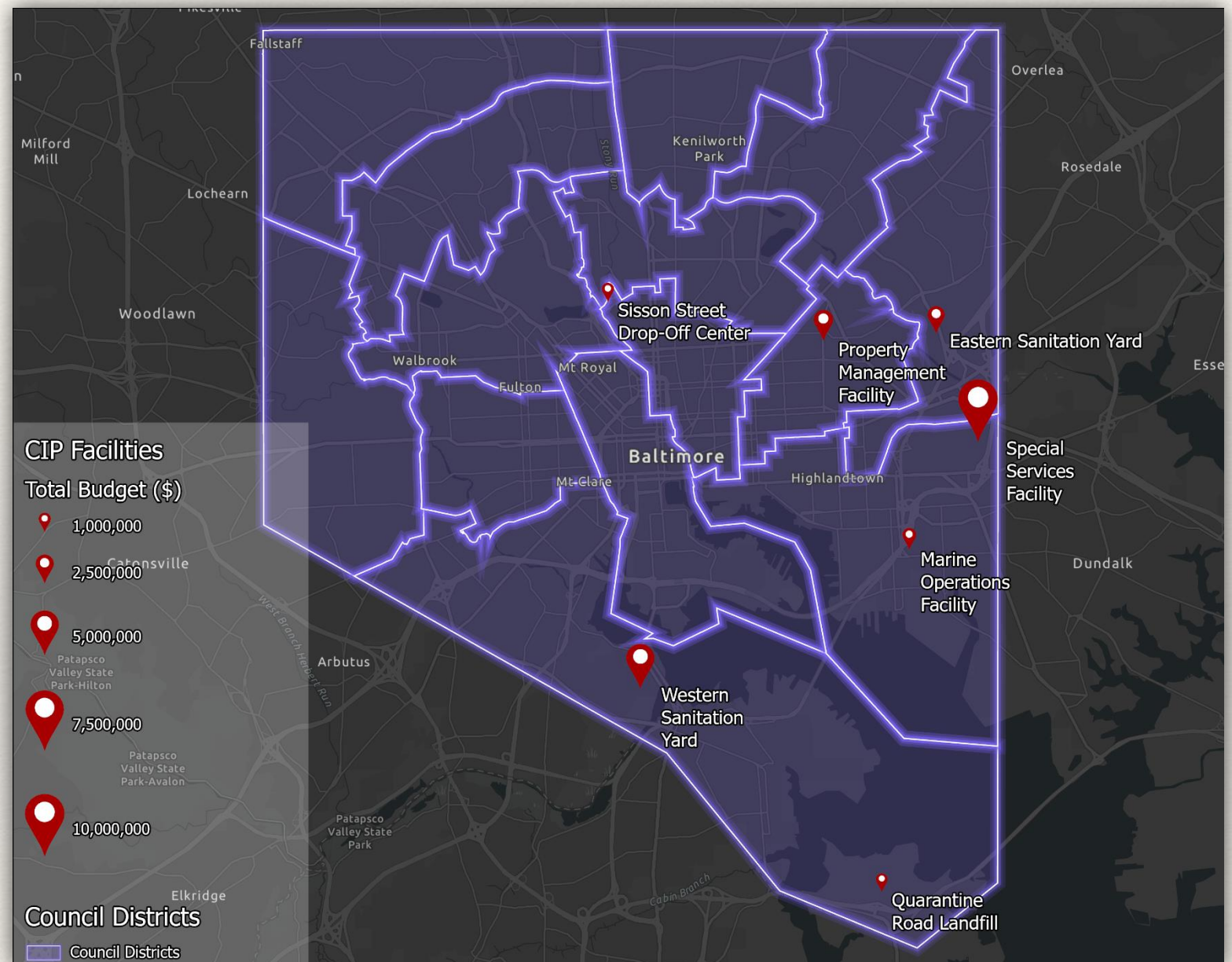
Planning's Target Funding = Up to \$7.5 Million / Fiscal Year



Solid Waste Program 517

General Fund Priority Requests – Facility Improvements

Facility	Total
Special Services Facility (111 Kane St)	\$7,812,000
Western Sanitation Yard (701 Reedbird Ave)	\$5,012,000
Property Management Facility (1825 Edison Highway)	\$2,828,000
Sisson Street Drop-Off Center (2840 Sisson St)	\$1,005,200
Marine Operations (3311 Eastbourne Ave)	\$1,386,000
Quarantine Road Landfill (6100 Quarantine Rd)	\$896,000
Eastern Sanitation Yard (6101 Bowleys Ln)	\$2,268,000
Total	\$21,207,200



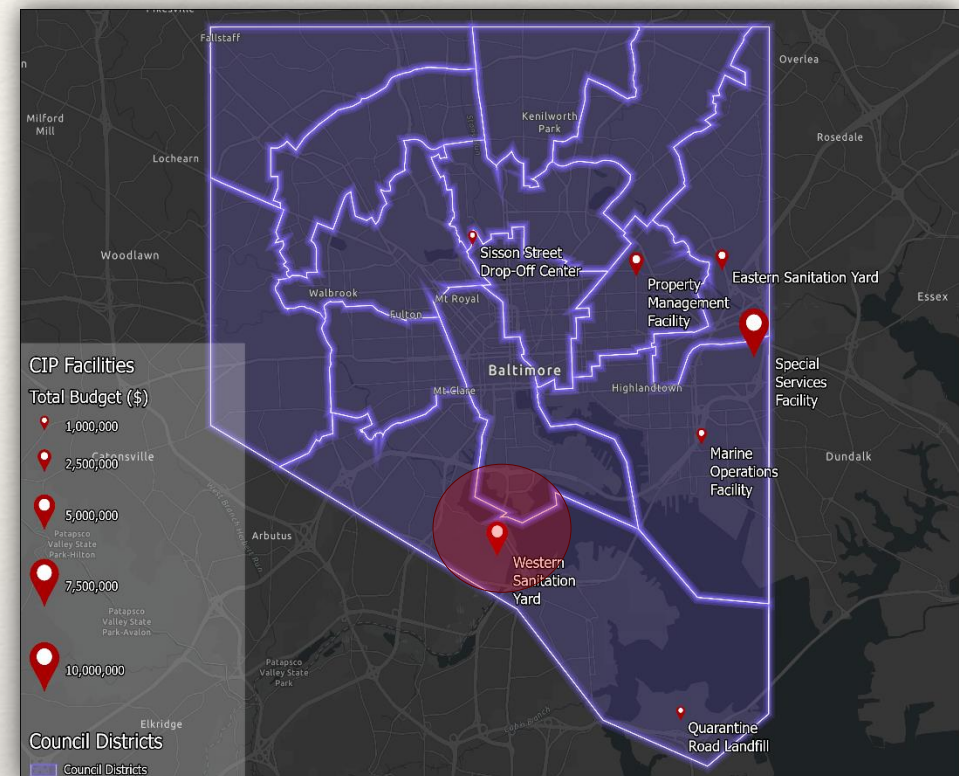
Solid Waste Program 517

General Fund Priority Requests – Facility Improvements

Western Sanitation Yard *701 Reedbird Avenue*



Unevenly graded parking lot results in icy road conditions



Parking lot has reached full capacity and there is limited room for equipment



Underground storage cover is damaged



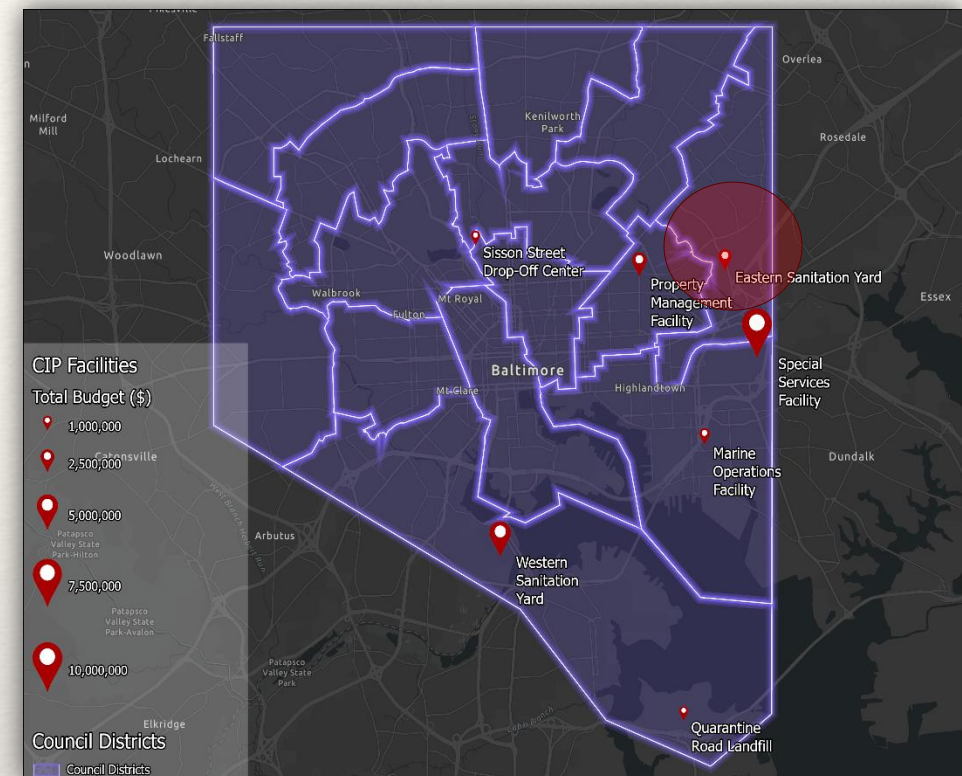
Solid Waste Program 517

General Fund Priority Requests – Facility Improvements

Eastern Sanitation Yard *6101 Bowleys Lane*



Inactive fueling station and maintenance building



Deteriorating parking lot and road conditions



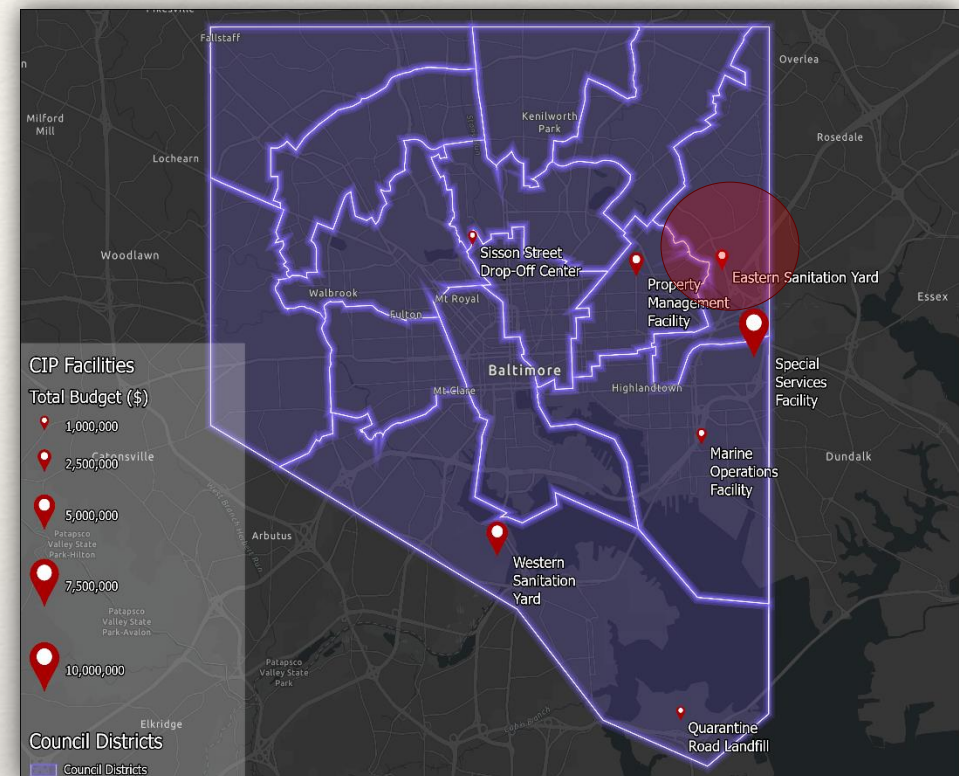
Convenience Center currently sits on more than half of the parking lot



Solid Waste Program 517

General Fund Priority Requests – Facility Improvements

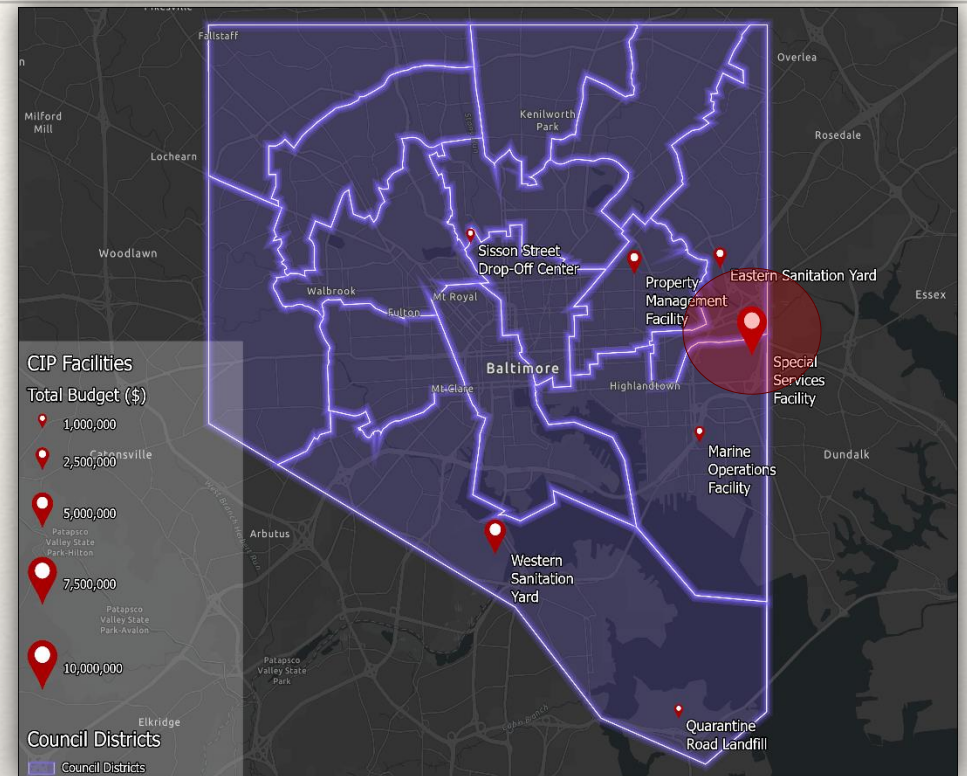
Eastern Sanitation Yard *6101 Bowleys Lane*



Solid Waste Program 517

General Fund Priority Requests – Facility Improvements

Special Services Facility *111 Kane Street*

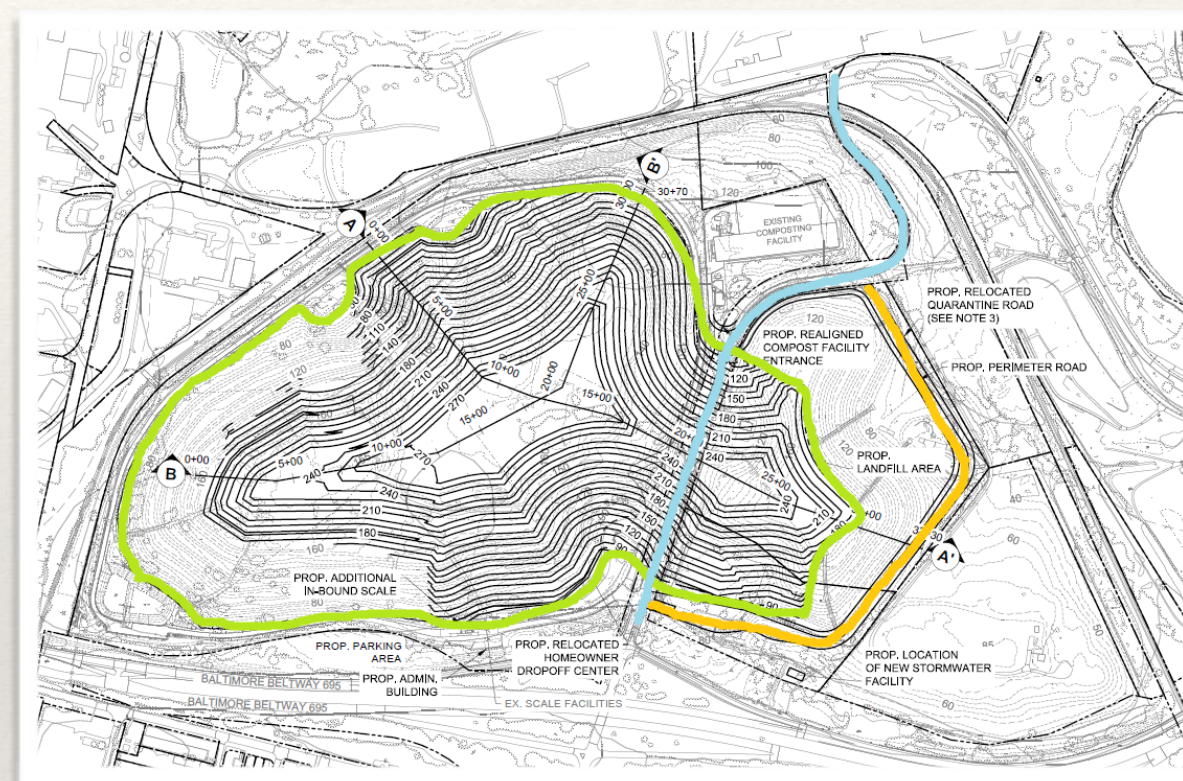


Solid Waste Program 517

General Fund Priority Requests – Quarantine Road Landfill Expansion

- Quarantine Road Landfill will reach **full capacity** by **CY 2027** based upon current waste generation conditions
- Expansion will combine Quarantine Road Landfill and Millennium Landfill to provide capacity until early 2036
- Part of the expansion will include the relocation of the Quarantine Road to wrap around both Quarantine Road Landfill and Millennium Landfill
- Phase 2 Hydrogeological Report of the permit application process was submitted to the Maryland Department of Environment (MDE) in June 2020

Next steps: Conduct additional geotechnical investigations, install additional groundwater monitoring wells, and additional monitoring analyses to address MDE's comments on the Phase 2 Report.



Legend

**Expansion
Area**

**Original
Road**

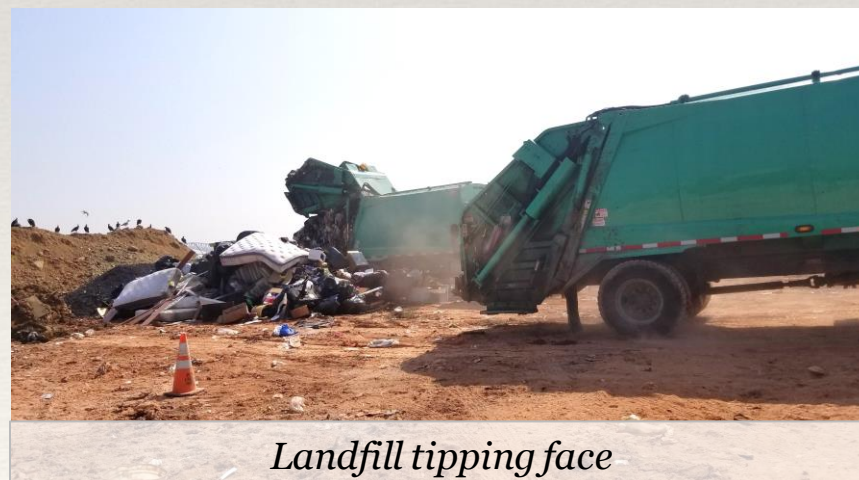
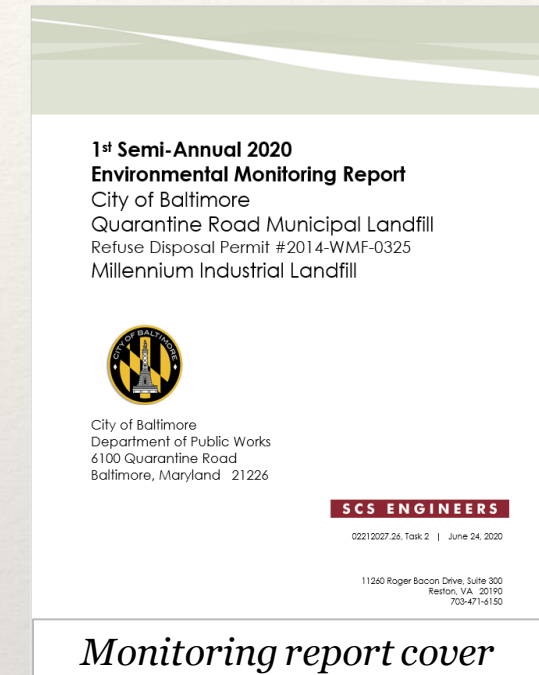
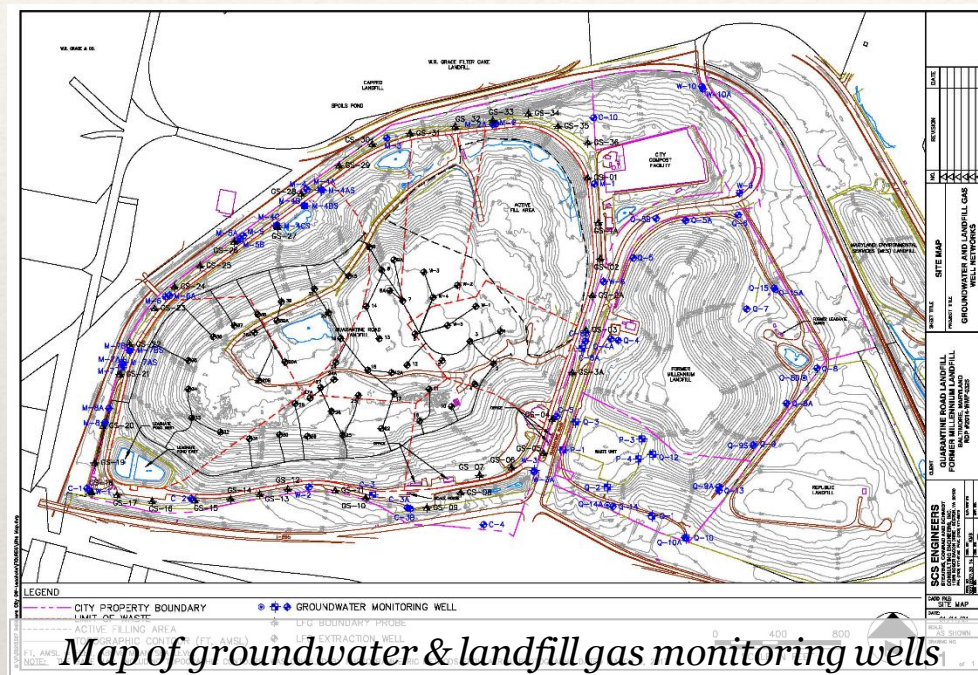
**Realigned
Road**



Solid Waste Program 517

Long Term Capital Needs – Regulatory Compliance Needs

Quarantine Road Landfill - Refuse Disposal Permit



Solid Waste Program 517

Long Term Capital Needs – Regulatory Compliance Needs

Quarantine Road Landfill – Refuse Disposal Permit Leachate Issues



Black leachate seeping from the landfill



Uncovering a leachate seep for remediation

Source: Photograph from November 2020 Maryland Department of Environment's site inspection



Solid Waste Program 517

Long Term Capital Needs – Regulatory Compliance Needs

Quarantine Road Landfill – NPDES 12-SW Permit Stormwater Management & Erosion and Sediment Control



Source: Photographs from November 2020 Maryland Department of Environment's site inspection



Solid Waste Program 517

Long Term Capital Needs – Regulatory Compliance Needs

Quarantine Road Landfill – NDPES 12-SW Permit Stormwater Management & Erosion and Sediment Control



Solid Waste Program 517

General Fund Priority Requests – Less Waste, Better Baltimore

- Planning process completed in 2020 to help the City improve efficiencies and increase the capacity of the Bureau's future operations, both short and long-term.
- Recommendations for the final "Less Waste, Better Baltimore" plan were based upon technical plans, stakeholder input, and research conducted during the planning process.
- These projects will have annual disposal savings relative to disposal at QRL.



Solid Waste Program 517

Long Term Capital Needs - Less Waste, Better Baltimore

‘Less Waste, Better Baltimore’ Continued Implementation

Project*	Estimated Capital Cost* (\$ in Millions)	Estimated Operating Cost (\$ in Millions)	Estimated Annual Revenue (\$ in Millions)
Food Waste Reduction & Recovery Programs	\$50.0	\$67.7	-
Residential Organics Diversion	\$30.8	\$17.5	\$2.0
Mini Municipal Recycling Facilities (MRFs)	\$17.6	\$10.4	\$3.8
Upgrading Citizen Drop-Off Centers	\$0.3	\$0.4	-
Eastside Transfer Station	\$23.1	\$12.4	TBD
Rail Transfer Station	\$61.0	\$26.5	\$14.8
Total	\$182.8	\$134.9	\$20.6

**Projects established in phases, so capital costs can be spread over time*



Solid Waste Program 517

Recent CIP Accomplishments

Engineering Reports and Plans

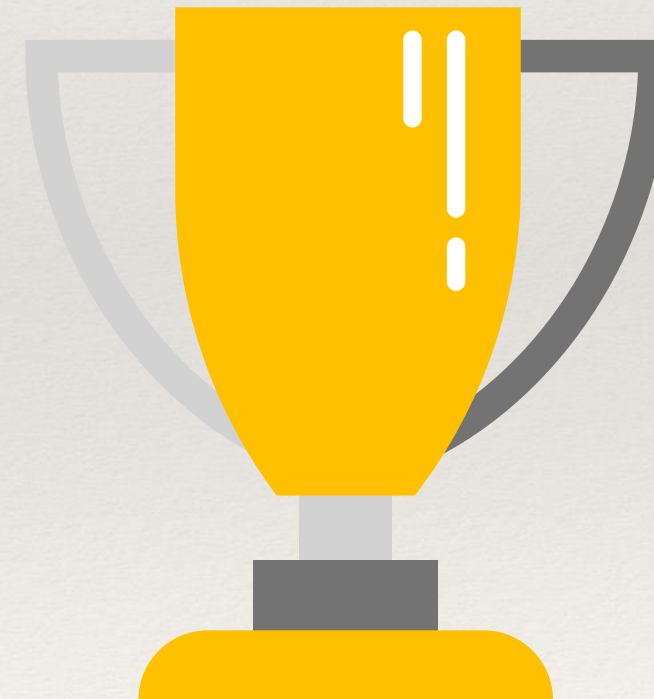
- Title V Landfill Gas Permit
 - ✓ Quarterly Surface Emissions Monitoring Landfill Gas
 - ✓ Quarterly Landfill Gas Perimeter Monitoring
 - ✓ Greenhouse Gas reporting
 - ✓ Title V Compliance Reports
 - ✓ Landfill Gas Annual Emissions Report
- Refuse Disposal Permit
 - ✓ Semi-Annual Environmental Monitoring Report
 - ✓ 2019 QRL Volume Report
 - ✓ 2020 QRL Volume Report
- NPDES 12-SW Industrial Stormwater Permit
 - ✓ Stormwater Pollution Prevention Plans

Construction Projects

- ✓ NWTS Renovations (95% complete)

Environmental Investigations

- ✓ Groundwater Alternative Source Demonstration at Quarantine Road Landfill
- ✓ Groundwater Nature and Extent Investigation at Millennium Landfill
- ✓ Alternative Design Analysis Report
- ✓ Alternative Road Design Analysis Report
- ✓ Phase 2 Hydrogeological Report for QRL Expansion





FY 2022 Capital Improvement Program Presentation



Questions?

