

## The Department of Public Works

The Department of Public Works' (DPW) mission is to 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. DPW's vision is to be a strong proponent and protector of our environment and the health and vitality of our communities.

### Agency Overview

DPW's key responsibilities are outlined below:

**1. The Bureau of Solid Waste:** The Bureau of Solid Waste is responsible for maintaining the City's cleanliness by providing waste collection services and waste reduction opportunities. The Bureau collects and disposes residential trash and recycling from single-family houses, small businesses, some condominiums, and City schools; manages a City-wide mechanical street sweeping program; cleans, mows, and boards vacant properties; operates a Rat Rubout Program; and provides waterway cleaning for the Inner Harbor. In addition to these services, the Bureau also manages the Quarantine Road Landfill, Northwest Transfer Station, and five Citizen Convenience Drop-Off Centers. These Citizen Drop-Off Centers allow residents to recycle special materials other than curbside recyclables, like scrap metal, scrap tires, electronics, waste oil, and household hazardous waste.

**2. The Bureau of Water and Wastewater:** The Bureau of Water and Wastewater is responsible for the sourcing, treatment, and purification of clean drinking water as well as the collection, transmission, and treatment of wastewater for rate payers throughout Baltimore City and Baltimore, Anne Arundel, Howard, Carroll, and Harford Counties. The Bureau oversees the metering and billing of water services for 412,000 retail accounts in Baltimore City and County in addition to wholesale accounts in Anne Arundel, Howard, Carroll, and Harford Counties. The assets owned, operated, and maintained by the Bureau include three raw water reservoirs, three water filtration facilities, two wastewater treatment facilities, over 30 pumping stations, six utility maintenance yards, one meter shop, and an extensive fleet of vehicles, trucks, and construction equipment. Altogether, the Bureau serves close to 2 million residents in the Baltimore metropolitan region. The Bureau is comprised of approximately 1,400 employees across four separate divisions: Utility Maintenance Division, Environmental Services Division, Wastewater Facilities Division, and Customer Support and Services Division.

**3. The Office of Asset Management:** The Office of Asset Management (OAM) is responsible for optimizing the service life of sewer and water linear infrastructure through the development and implementation of proactive inspection and preventative maintenance programs. The Office implements a strategic approach to managing these assets at a sustainable cost and an acceptable level of risk. OAM aims to transition DPW from a reactive mode of asset maintenance to a proactive mode, utilizing risk-based planning and other asset management principles to make sound decisions on managing its assets. Capital projects include main inspections, renewal using point/spot repairs, and valve and hydrant assessments. Capital projects are managed by the project managers and engineers under the OAM office.

**4. The Office of Compliance and Laboratories:** The Office of Compliance and Laboratories (OCAL) is committed to enhancing environmental regulatory compliance for DPW through collaboration, management program improvements, and regulatory enforcement. Many of the functions of this office had

previously existed within DPW, but were consolidated into a separate office in 2014 to emphasize accountability. The 100-position staff of OCAL primarily consists of engineers and scientists. The Office includes four laboratories located at each of the water and wastewater treatment facilities, in addition to a Watershed Planning and Partnerships Section, a Research and Innovation Section, a Water Quality Monitoring and Investigation Section, and a Plans Review and Inspection Section. The Plans Review and Inspection Section is responsible for all DPW review of both public and private construction projects as a part of the permitting process.

**5. Office of Engineering and Construction:** The Office of Engineering and Construction (OEC) is responsible for planning and directing the design, construction, contract administration, and inspection of utility infrastructure, dams, bridges, and water and wastewater treatment facilities. The OEC also reviews and inspects construction to assure adherence to codes, costs, progress and quality as programmed in the DPW capital improvement plan. OEC is responsible for engineering design for contracts to construct and maintain water and wastewater treatment plants, pumping stations, the collection and conveyance system, and provides a wide array of on call construction services that serve the urgent needs of the DPW Bureau of Water and Wastewater Utility Maintenance Division. Capital project types include both utilities and facilities for the Water and Wastewater programs as well as stream restoration, soil erosion and sediment control for the Stormwater program. Capital projects are managed by the project managers and engineers under the OEC office.



*SC-918H Backriver WWTP Headworks, 62% Complete*

*WC-1204 Druid Lake Finished Water Tanks, 66% Complete*

## Capital Program

DPW's Capital Program abides by the following regulatory guidelines:

- 2016 Modified Consent Decree (Wastewater)
- MS4 Permits
- EPA/MDE: Clean Water Act, Safe Drinking Water Act, & Surface Water Treatment Rules
- MD State Legislation to Cap Landfills

DPW's capital projects are categorized into four different classifications:

1. *Utilities* – Underground pipes that distribute water, wastewater, and stormwater through the system
2. *Facilities* – Above ground structures that treat or pump water, wastewater, and stormwater through the system
3. *Environmental* – Stream restoration projects or projects that mitigate/correct soil erosion and control sediment
4. *Solid Waste* – Solid waste management projects that prevent waste, leachate, and air pollution from degrading the surrounding environment.

Projects are prioritized using an Integrated Planning Framework (IPF). IPF uses a quadruple bottom line approach using Environmental, Social, Economic, and Project Implementation factors to rank all Water, Wastewater and Stormwater projects. The four areas have 16 different criteria that take into consideration multiple key performance indicators and priorities e.g., Equity, Regulatory Compliance, Funding Source, System Performance and Customer Satisfaction, to name a few. Each project is ranked and optimized using objective measures determined by the IPF criteria. The outcome is a prioritized and thoughtful list of projects.

DPW's capital projects have multiple funding sources. Because DPW has an enterprise fund via Water and Wastewater, the revenues generated go back into supporting the utility. Additionally, DPW uses debt to finance capital projects, in the form of revenue bonds (sold in municipal bond markets) and low interest loans from the state and federal governments.

The City's current landfill, Quarantine Road Landfill, is nearing full capacity and planning efforts to expand the landfill by 20 years is already underway. This project will cost approximately \$111 million. Unfortunately, Solid Waste is not a revenue generating fund where it can support the cost of such a construction project and must rely on the City to provide general fund dollars to support the project.