

MINUTES OF THE MEETING ENVIRONMENTAL QUALITY AND OPERATIONS COMMITTEE JANUARY 16, 2025

(via Microsoft Teams)

COMMITTEE MEMBERS PRESENT

- 1. Sarah Motsch, Chairperson, Alternate, Fairfax County
- 2. Howard Gibbs, Vice-Chairperson, Principal, District of Columbia
- 3. Andrea Crooms, Alternate, Prince George's County
- 4. Christopher Herrington, Principal, Fairfax County
- 5. Richard Jackson, Principal, District of Columbia

DC WATER STAFF PRESENT

- 1. David L. Gadis, Chief Executive Officer and General Manager
- 2. Wayne Griffith, Chief Administration Officer and EVP
- Marc Battle, Chief Legal Officer and EVP, Government and Legal Affairs
- Michelle Rhodd, Secretary to the Board
- Matthew Brown, Chief Financial Officer and EVP, Finance, Procurement and Compliance
- 6. Jeffrey Thompson, Chief Operating Officer and EVP

The Environmental Quality and Operations Committee meeting was called to order by Sarah Motsch, Chairperson at 9:30 AM. The meeting was held via Microsoft Teams. Michelle Rhodd, Secretary to the Board called the roll.

I. BPAWTP PERFORMANCE UPDATE

Nicholas Passarelli, Vice President, Wastewater Operations, presented a summary of the performance of Blue Plains Advanced Wastewater Treatment Plant (BPAWTP) for December 2024. Specific details of the presentation can be found on pages 3 to 8 of the Environmental Quality and Operations Committee meeting package from 01.16.2025. The average flow through to complete treatment was 252 million gallons per day (MGD)

for the month, and the peak daily flow was 365 MGD, which occurred on December 11th, 2024. It was reported that all weekly and monthly NPDES permit requirements were met.

Mr. Passarelli discussed the performance of the Anacostia tunnel system and wet weather treatment at BPAWTP. It was noted that precipitation for the month was 2.9-inches and the combined wet weather flows captured by the tunnel system was 75 million gallons (100% rainwater capture). 1,546 MG of volume was captured by Anacostia River Tunnel System in calendar year 2024 through December, with 115 MG overflow. Since the system's inception in 2018, there have been 350 events with a total volume of 17,775 MG captured and 1,653 MG to CSO, resulting in a total capture rate of 91.5%.

Mr. Passarelli discussed electrical energy use and onsite generation at BPAWTP. Onsite energy generation from the Combined Heat and Power (CHP) facility and solar panels for the month was 22% of the average consumption at BPAWTP. The CHP Facility generated an average of 7.1 megawatts (MW), of which 6.0 MW was transferred to the Blue Plains grid. The solar system power generation was low at an average of 0.28 MW for the month due to winter conditions. The average electrical consumption for the month was 29.0 MW and the total purchased power from PEPCO averaged 22.7 MW. DC Water saved approximately \$5.2 million cumulatively in FY24 due to power generated onsite at BPAWTP (instead of purchasing from PEPCO).

Mr. Passarelli discussed biosolids production and Bloom marketing at BPAWTP. During December, over 12,000 wet tons of biosolids were produced; approximately 2,000 wet tons were sold as Bloom, and the remaining 10,000 wet tons were land applied through existing land application contracts. For FY25 to date, just under 9,000 tons have been sold as Bloom, compared to the goal of 70,000 tons for the year.

II. FACILITIES KPI SUCCESS

Brent Christ, Director, Facilities Management, presented on the successful implementation and outcomes of key performance indicators (KPIs) through enhanced collaboration between the facilities management team and the Enterprise Program Management Office (EPMO). Mr. Christ began by detailing the journey of improvement in service requests and preventive maintenance, where the targets were ambitiously set at 90% completion rate. Initially, the performance metrics were low, but with persistent efforts through 2021 to 2023, and a pivotal collaboration with the EPMO initiated in mid-2023, there was a significant upward trend in meeting and even surpassing these targets.

Mr. Christ emphasized the cultural shift required to achieve these results, shifting from a lack of accountability to a culture where every team member takes ownership of their

responsibilities. This cultural transformation was supported by strategic provision of the right tools and resources, enabling the staff to efficiently manage and close out work orders through the Maximo system. Regular training sessions were conducted, ensuring that foremen were well-equipped to handle their roles, which was crucial in fostering a sense of responsibility and ownership among the staff.

The presentation highlighted the impact of daily stand-up meetings, initiated to improve communication within teams, which helped in addressing immediate operational issues and planning for upcoming tasks. This practice not only improved team dynamics but also significantly boosted operational efficiency.

Furthermore, Mr. Christ discussed the structural improvements and strategic focus shifts in facilities management. The role previously held by a business operations manager was reevaluated, leading to a decision to incorporate business analysts who could better serve the evolving needs of the department. The focus was also redirected towards core functions, optimizing resource allocation, and shedding non-core activities to streamline operations.

A critical component of these enhancements was the robust support and strategic guidance from the EPMO. They provided a three-pronged approach focusing on people, processes, and technology which was instrumental in refining operations. The EPMO team spent three months embedded within the facilities department, which allowed them to thoroughly understand the processes and challenges, leading to targeted improvements in the Maximo system and overall workflow management.

The successful outcome of these initiatives was evident in the creation of a KPI dashboard using Power BI, which allowed for real-time monitoring of work orders and helped maintain high performance standards across the board. Mr. Christ's presentation not only highlighted the significant improvements made but also underscored the ongoing commitment to enhancing service delivery through strategic planning, staff empowerment, and leveraging technology in facilities management at DC Water.

III. 10-YEAR FY25 TO FY34 PROPOSED CIP BUDGET UPDATE

Matthew Brown, Chief Financial Officer and EVP, Finance, Compliance and Procurement began a discussion of the proposed Capital Improvement Plan (CIP) for fiscal years 2025 to 2034. Mr. Brown opened by mentioning the Board Workshop and emphasized the importance of the committee's deliberations and recommendations to the board. The Board will be asked to approve the budget in March.

Mr. Brown outlined the schedule for the budget review process, highlighting key dates including a Wholesale Customer briefing on January 22nd, a meeting with the Office of People's Counsel on January 24th, and a joint meeting between the Retail Rates Committee and the Finance and Budget Committee on January 28th.

Mr. Brown discussed the budget: the Operations & Maintenance (O&M) budget, the capital budget, and the Financial Plan. He noted there was a slight increase in the O&M budget by about 3%, while debt service costs are expected to rise by approximately 11% due to additional work for the capital program, resulting in an overall budget growth of about 7%.

Delving into the details of the capital budget, Mr. Brown described its three primary components: capital projects, capital equipment, and contributions to the Washington Aqueduct for DC Water's share of their capital program. He also mentioned the annual production of a 10-year Financial Plan, which estimates the rate increases needed to meet the operating budget requirements and supports the 10-year CIP.

Mr. Brown highlighted significant increases in funding across several service areas within the CIP. These included a \$429 million increase for wastewater treatment, \$863 million for sanitary sewer improvements largely associated with the Potomac Interceptor, and \$518 million for water projects including the Lead-Free DC program and necessary permits. He responded to previous board feedback by incorporating funding for projects anticipated beyond 2030, ensuring a more realistic projection of future spending and its impact on rates.

In conclusion, Mr. Brown discussed the financing of the CIP, noting that approximately 42% of the capital plan's funding would be sourced through new revenue bonds, while federal grants make up about 4.2% of the budget. He emphasized that the Clean Rivers Program would be complete by 2030, and the budget proposal includes increased investments in water and sewer infrastructure projects.

David Parker, Vice President, Engineering, provided further detail on the overall 10-year CIP, including new budget requests and specifics about the currently approved budget for projects that DC Water plans to execute within the timeframe. The 10-year \$9.62 billion CIP budget is broken into service areas, as detailed below.

- 1. Full funding of the Clean Rivers Program, including completion of the Potomac River Tunnel to meet the consent decree requirement by 2030.
- 2. Allocation of \$1.1 billion for the Lead-Free DC program.
- 3. Funding for more than 150 miles of small diameter water main replacement projects.

- 4. Investment of \$4.5 billion in aging water and sewer system infrastructure, including the rehabilitation of the Potomac Interceptor sewer system.
- 5. Allocation of \$1.8 billion for major rehabilitation and upgrades of Blue Plains Advanced Wastewater Treatment Plant (BPAWTP).
- 6. Allocation of \$500.8 million for DC Water's share of the Washington Aqueduct's Infrastructure Program.
- 7. Allocation of \$350.8 million for capital equipment such as purchase/replacement of vehicles, heavy-duty equipment, mechanical equipment, operation facilities, meters, office renovations and IT projects, etc.

The proposed changes to the 10-year CIP include an increase of \$15 million in the Non-Process Service Area, \$430 million in the Wastewater Service Area, \$870 million in the Sewer Service Area, \$152 million in the Water Service Area and \$367 million in Lead Free DC Service Area. It also includes a decrease of \$3 million in the Stormwater Service Area and \$98 million in the DC Clean Rivers Service Area due to completed work.

The Lead-Free DC program has an increase of \$220 million as brass service lines have also been included to be replaced as part of the program. Initially, the replacement of brass service lines wasn't planned as it is not considered a Lead contributor in drinking water, nor does the EPA recommend removal of brass piping. However, DC Law requires brass service lines removal as part of the Lead-Free DC program which resulted in the \$220 million increase. DC Water staff will be working with DC Council to propose legislation to remove the requirement to remove brass from DC Law, however until the legislation is changed, DC Water must plan for brass removal in its program. The Lead-Free DC program also has an increase of \$85 million to manage the District Department of Transportation (DDOT) permit fees. It is important to note that the program is scheduled to be completed by 2037, and the 10-Year CIP doesn't represent the full cost of the program.

The Wastewater area has an increase of \$429 million due to odor control requirements and the Second Source Initiative. The Second Source Initiative has studies and pilot work planned which will investigate how the treated effluent at the BPAWTP can be used as a resource and improve the reliability and resiliency of the system.

The Sewer & CSO area has an increase of \$441 million for full rehabilitation of the Potomac Interceptor, an increase of \$250 million for the Sewer Rehabilitation (Infrastructure Renewal and Replacement Contracts managed by the operations group) and an additional \$92 million for the small and local sewers rehabilitation.

The Water area includes an increase of \$61 million for Water Distribution, an increase of \$57 million for Water Storage needs, and an additional \$143 million for the Washington Aqueduct's Future Needs.

Service Area Details of Proposed CIP

1. Non-Process Facilities (\$213 Million)

Mr. Parker discussed the capital allocated to the Non-Process Facilities. The Main Pump Station Building Restoration has \$21.2 Million allocated to it. The pump station building is historical and was built in the early 1900s. Hence, it requires architectural and structural improvements. The Bryant Street Pump Station Upgrades has \$21.5 Million allocated for structural, roof and envelope upgrades. Blue Plains Enhancements have \$4.5 Million allocated to enhance employee and visitor experience and create space for additional treatment processing capacity.

2. Wastewater Treatment at Blue Plains (1.76 Billion)

Similarly, Mr. Parker discussed the capital allocated to the BPAWTP. \$1,050 Million is allocated to Liquid Processing, \$402 Million is allocated Plantwide, \$309 Million is allocated to Solids Processing and \$0.7 Million is allocated to Enhanced Nitrogen Removal Facilities at the BPAWTP.

Mr. Parker also discussed the major projects at Blue Plains. They are prioritized based on risk ranking and data driven decision making. There are 38 projects underway in this fiscal Year, 8 in the Planning Phase, 9 in the Design Phase and 21 in the Construction Phase. Innovative research to improve sustainability and resilience includes Process Intensification, the Flood wall Project and the Microgrid Study Project.

3. Combined Sewer System and Stormwater Pump Stations (\$105 Million)

Mr. Parker explained that \$60 million was allocated to the combined Sewer System that includes projects like inflatable dams and work on Main and O Pump Stations. There is \$45 Million allocated to the 16 Stormwater Pumping Facilities. Many of these stormwater pumping stations have not been rehabilitated in 60 years, so they require various upgrades. Four stations are partially funded by FEMA grants.

4. Clean Rivers Project and Potomac Interceptor (\$1.1 Billion)

The Long-Term Control Plan (LTCP) 10-year CIP has decreased by \$98 Million. Mr. Parker detailed the remaining budgets in the Anacostia LTCP, Potomac LTCP and the Rock Creek LTCP Projects. The 10-Year CIP for

the Potomac Interceptor project is \$667 Million, which is a \$435 Million increase compared to the approved budget. The Potomac interceptor carries wastewater to the BPAWTP and is collecting wastewater from Fairfax, Loudoun and Montgomery Counties. Committee member Howard Gibbs enquired about the funding responsibility for the additional \$435 million related to the Potomac interceptor project. Mr. Parker clarified that the jurisdictions, including Fairfax County, Loudon County, and Montgomery County, are responsible for funding this additional amount.

5. Sanitary Sewer (\$1.86 Billion)

Mr. Parker discussed the capital allocated to Sanitary Sewer area, which is \$1.86 billion, and the overall CIP increase amounts to \$863 million. The Sewer Collection System has \$685 million allocated to it. The Interceptor and Trunk Force Sewers has \$1.34 billion allocated to it. It is important to note that this amount includes the Potomac Interceptor as well. The Ongoing Sewer work has \$457 million allocated to it and it includes emergency response to address sewer failures. Sewer Pumping has \$190 Million allocated to it to ensure reliable service.

Mr. Parker discussed the importance of investing in the sanitary sewer system for improved reliability. A risk-based approach is used to prioritize sewer system needs, which is heavily influenced condition assessments performed. Significant progress has been made in inspecting the system, but more inspections are needed, especially for large trunk sewers, where failures have severe consequences.

Additionally, Mr. Parker discussed that there are 38 miles of major sewer rehabilitation projects planned, including work on main interceptors, trunk sewers, and relief sewers. The budget includes \$45 million for emergency response and repairs, with recent work on critical sewers such as the East-West Outfall relief sewers and Anacostia Main Interceptor. This funding is projected for one year of emergency response but further increases in funding are anticipated for next year's budget. An additional \$229 million is allocated for ongoing emergency responses from FY2030 onwards.

Mr. Gibbs inquired about Upper Potomac Interceptor Relief Sewer (UPIRS). This question was posed during a discussion where Mr. Parker was explaining the various components involved in managing and rehabilitating

the infrastructure related to the Potomac interceptor. Mr. Parker provided context on the UPIRS, clarifying its function as a parallel sewer to the Potomac interceptor, which conveys flow within the district along the Potomac River, near the Maryland boundary.

6. Water (\$2.87 billion)

Mr. Parker discussed the capital allocated to Water which is \$2.87 billion, and the overall CIP increase amounts to \$519 million. The Water Distribution System has \$1.21 billion allocated to it. The Lead-Free DC Program has \$1.1 billion allocated to it. The Water Pumping Facilities has \$43 million allocated to it. The Water Storage Facilities has \$251 Million allocated to it to ensure system resilience.

The Water Distribution system program area includes various efforts such as ramping up Small Diameter Water Mains replacement to 1.5%, Anacostia 3rd High Pressure Zone Improvements and Critical Valve Replacement.

The Water Storage Facilities have \$251 Million allocated to it. Mr. Parker explained that there are key efforts being undertaken to improve water storage for the District, focusing on resiliency and sustainability, as the Potomac River is the single source of water supply for the District. Fort Stanton Reservoir #2 in the Anacostia area will be replaced. The existing reservoir has been decommissioned due to defects, and the project aims to add 10 million gallons of storage, providing an additional day of water storage for the area. After replacing Fort Stanton Reservoir #2, work will begin on rehabilitation of Fort Stanton Reservoir #1 to ensure reliable water storage for the area.

The Water Pumping Facilities is a \$43 Million project that includes the Bryant St. Pump Station spill header project, which will improve flow control from high to low-pressure zones during pressure issues or line breaks. Additionally, there are planned improvements for the 4th High Reno Booster pump station and upgrades to electrical, mechanical, and instrumentation systems at Anacostia and Ft. Reno pump stations.

Water Ongoing Program has \$183 Million allocated to it and includes fire hydrant replacements, valve replacements and, repairing pipe breaks. The

Water Program Engineering Support is critical in supporting the operations groups and the development of CIP projects. \$84 million is allocated to this section.

Collaborative Project Delivery

Mr. Parker also outlined the new project delivery approach being adopted. The focus is on improving project delivery through collaborative methods like Progressive Design-Build and Construction Management at Risk, moving away from traditional design-bid-build. The district has trained 47 staff members, with 20 certified by the Design Build Institute of America (DBIA). Additionally, smaller individual projects are being consolidated into larger contracts for greater efficiency, fewer procurement actions, and more effective management.

Needs beyond the Proposed CIP

The current CIP request is \$9.6 billion for the next 10 years, down from an initial \$12 billion assessment. The focus this year is to refine project priorities, costs, schedules, and needs. The aim of the Leadership team is to ensure the right projects are identified, and a significant increase in the CIP request is expected next year. Regular presentations will be made to keep the Committee informed on progress and findings throughout the year.

The CIP risks that are being monitored include Regulatory, Climate Change, Washington Aqueduct Capital Program Uncertainties and Anacostia River Sediment Contamination (PCBs). The risks that are being mitigated are Water Supply and the new Lead and Copper rule Improvements. Some CIP opportunities include capturing other Federal and Industrial funding opportunities, Blue Plains Process Research and Development and implementation of Resource Recovery Options.

IV. ACTION ITEMS

Non-Joint Use

1. Construction Manager at Risk (CMAR) - Division RC - C - Rock Creek Project C (GI)

Seth Charde, Senior Manager, Green Infrastructure presented the project overview slides for the Rock Creek Project C and Kevin Bellamy, Acting Director of Procurement, Capital Programs presented the procurement approach and award recommendation slides.

The Rock Creek Project C is the next phase of DC Water's green infrastructure initiative to manage stormwater in the Piney Branch sewer shed, meeting a consent decree requirement to manage 92 impervious acres. Following Projects A (20 acres) and B (22)

acres), Project C will manage 25 acres through 68 permeable alleys across 8 subproject areas. Construction must be awarded by March 23, 2025, and operations begin by December 31, 2027. Using a collaborative CMAR delivery method, the project focuses on design improvements, risk reduction, and compliance with environmental and stormwater standards, ensuring a successful outcome.

Mr. Bellamy outlined the procurement process for Rock Creek Project C. The process began with industry outreach in early 2024, followed by the issuance of a request for qualifications and proposals (RFQ/RFP). Two submittals were received, evaluated, and clarified, leading to the selection of Fort Myer Construction for pre-construction services.

The pre-construction contract, awarded in September 2024 for \$160,000, focused on design optimization, constructability, and site selection. Fort Myer also developed a Guaranteed Maximum Price (GMP) proposal, which underwent negotiations, resulting in a \$2.1 million reduction from the initial proposal without altering the project scope. The final GMP of \$23,280,000 was determined to be within acceptable limits.

Mr. Bellamy recommended approval of Amendment #1 to finalize the construction services contract with Fort Myer Construction, bringing the total contract value to \$23.4 million.

V. OTHER BUSINESS/EMERGING ISSUES

Committee Member Andrea Crooms discussed a proposed PFAS bill in Maryland, introduced by Senator Love, focusing on land-applied biosolids. The bill includes two key requirements: testing and setting effluent limits for PFAS (per- and polyfluoroalkyl substances) and PFOS (perfluorooctane sulfonic acid). Ms. Crooms emphasized the importance of monitoring the bill's progress, particularly given the significant use and sale of biosolids for land application in Maryland.

Mr. Marc Battle, Chief Legal Officer, confirmed that his team is working on finding the answer and will let the committee know in the next meeting whether it is an issue or not.

VI. ADJOURNMENT

The meeting was adjourned at 10:46am.