



**DISTRICT OF COLUMBIA  
WATER AND SEWER AUTHORITY  
Board of Directors**

Meeting of the  
Environmental Quality and Operations Committee

**Thursday, November 16, 2023  
9:30 a.m.**

Microsoft Teams meeting  
**Join on your computer, mobile app**  
[Click here to join the meeting](#)

Meeting ID: 256 285 208 69

Passcode: 5pY3Tw

**Or call in (audio only)**

[+1 202-753-6714,,238278502#](#)

Phone Conference ID: 238 278 502#

|            |      |  |                                   |
|------------|------|--|-----------------------------------|
| 9:30 a.m.  | I    | <b>Call to Order</b>   | Sarah Motsch<br>Chair             |
|            | II   | <b>Roll Call</b>   | Michelle Rhodd<br>Board Secretary |
| 9:35 a.m.  | III  | <a href="#">BPAWTP Performance Update</a>  | Nicholas Passarelli               |
| 9:40 a.m.  | IV   | <a href="#">Fire Hydrants Update</a>   | Sylvia Okogi                      |
| 9:45 a.m.  | V    | <a href="#">Water Quality Monitoring</a>   | Maureen Schmelling                |
| 9:50 a.m.  | VI   | <a href="#">Potomac River Crossing Update</a>  | William Elledge                   |
| 10:10 a.m. | VII  | <a href="#">CIP Quarterly Report</a>   | David Parker<br>Paul Guttridge    |
| 10:30 a.m. | VIII | <b>Action Items</b>  | David Parker<br>Joel Grosser      |
|            |      | <b><u>Joint Use</u></b>  |                                   |
|            |      | 1. <a href="#">Contract No. 200020 – Emergency Sewer Main IR&amp;R Contract for FY21–FY23 CO8 – Spiniello Companies</a>  |                                   |
|            |      | 2. <a href="#">Contract No. 230060 – Sewer Life Restoration Program (SLRP) - 2 – Spiniello Companies</a>   |                                   |
|            |      | 3. <a href="#">Contract No. 10030 – Annual Maintenance, Repair and Calibration of Instrumentation Control and Equipment – C&amp;E Services, Inc. of Washington</a> |                                   |
|            |      | 4. <a href="#">Contract No. 19-PR-DWT-21B – Supply and Delivery of Methanol – Mitsubishi International Corporation</a>   |                                   |
| 10:50 a.m. | IX   | <b>Other Business/Emerging Issues</b>  |                                   |
| 10:55 a.m. | X    | <b>Executive Session*</b>  |                                   |

11:00 a.m. XI Adjournment

Sarah Motsch

*This meeting is governed by the Open Meetings Act. Please address any questions or complaints arising under this meeting to the Office of Open Government at [opengovoffice@dc.gov](mailto:opengovoffice@dc.gov).*

**Follow-up Items from Prior Meetings:**

1. Getachew Melsew (Sr. Manager, Planning, Engineering): To provide copy of white paper on the equity analysis benefits and either a presentation to the full Board or the opportunity for Board Members to observe a training session on the equity analysis tool and dashboard. **Due December 2023.**
2. Paul Guttridge (Director, CIP Infrastructure Management): Confirm total underspending amount at end of year meeting.

<sup>1</sup>The DC Water Board of Directors may go into executive session at this meeting pursuant to the District of Columbia Open Meetings Act of 2010, if such action is approved by a majority vote of the Board members who constitute a quorum to discuss certain matters, including but not limited to: matters prohibited from public disclosure pursuant to a court order or law under D.C. Official Code § 2-575(b)(1); terms for negotiating a contract, including an employment contract, under D.C. Official Code § 2-575(b)(2); obtain legal advice and preserve attorney-client privilege or settlement terms under D.C. Official Code § 2-575(b)(4)(A); collective bargaining negotiations under D.C. Official Code § 2-575(b)(5); facility security matters under D.C. Official Code § 2-575(b)(8); disciplinary matters under D.C. Official Code § 2-575(b)(9); personnel matters under D.C. Official Code § 2-575(b)(10); third-party proprietary matters under D.C. Official Code § 2-575(b)(11); train and develop Board members and staff under D.C. Official Codes § 2-575(b)(12); adjudication action under D.C. Official Code § 2-575(b)(13); civil or criminal matters or violations of laws or regulations where disclosure to the public may harm the investigation under D.C. Official Code § 2-575(b)(14); and other matters provided under the Act.



# ***BPAWTP UPDATE***



**Blue Plains Complete Treatment Performance**  
Environmental Quality & Operations Committee  
November 16, 2023

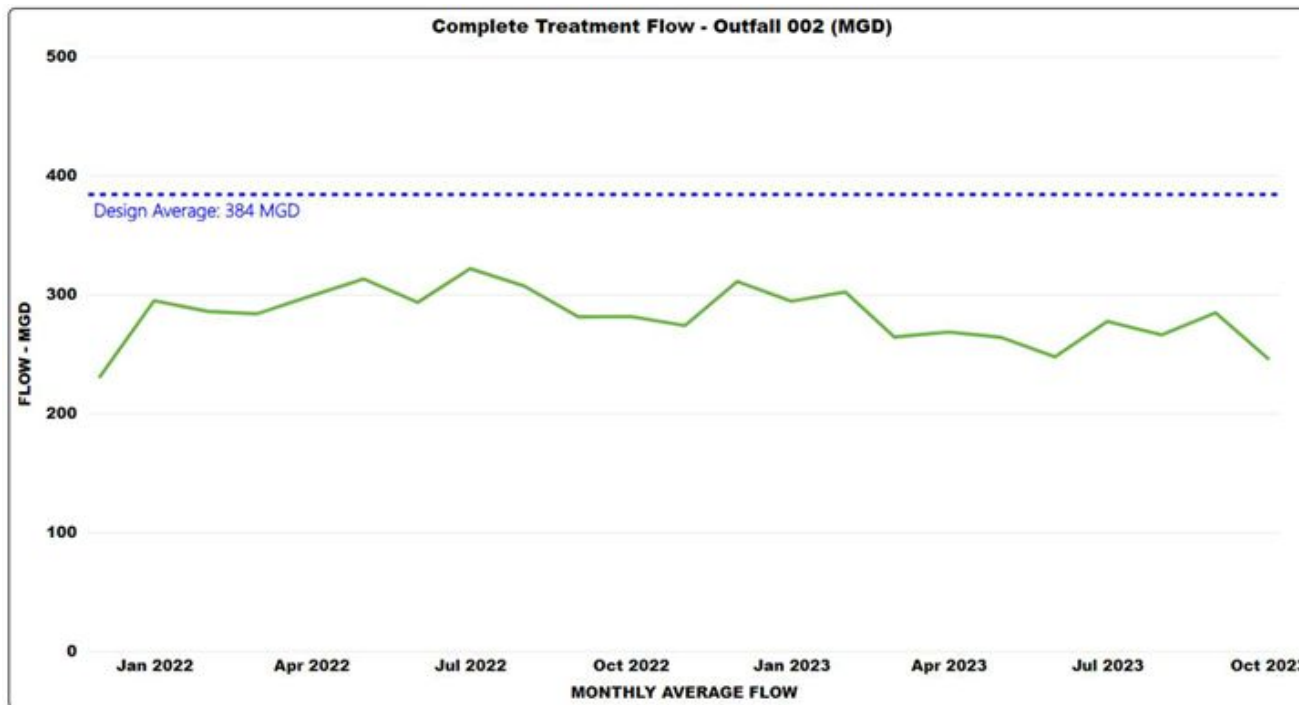


Nicholas Passarelli, Vice President, Wastewater Treatment Operations



# Operational Performance Complete Treatment

## Monthly Average Flow Trend to Complete Treatment (MGD)



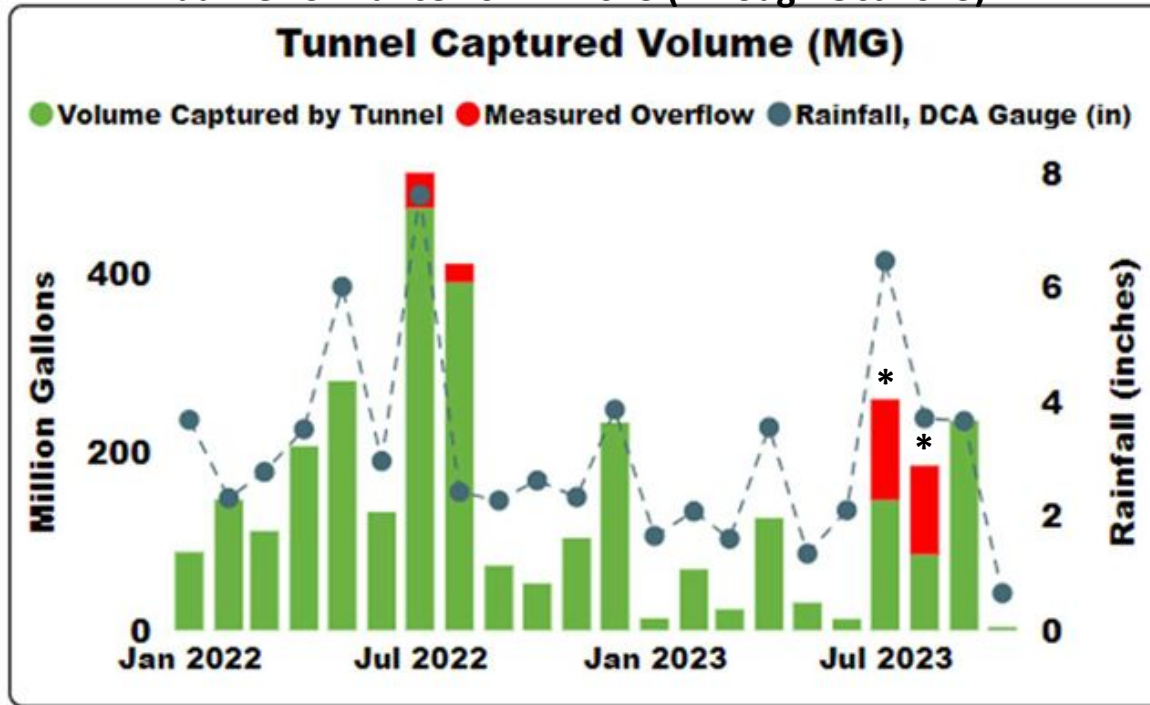
All weekly and monthly NPDES permit requirements were met

Average Outfall 002 flow for Sept: 246 MGD



# Operational Performance Tunnel Systems and Wet Weather Treatment

**Anacostia River Tunnel System  
Annual Performance 2022 – 2023 (Through Oct 2023)**



**Total System  
Annual Performance 2018-2022**

|                     | Anacostia River Tunnel System | Total System |
|---------------------|-------------------------------|--------------|
| Number of events    | 61                            | 398          |
| Volume Captured, MG | 14,786                        | 18,177       |
| Volume to CSO, MG   | 1,342                         | 6,943        |
| Percent Captured, % | 91.7                          | 72.4         |

Note: Total System includes Anacostia, Potomac, and Rock Creek  
MG ~ Million Gallons  
CSO~ Combined Sewer Overflow

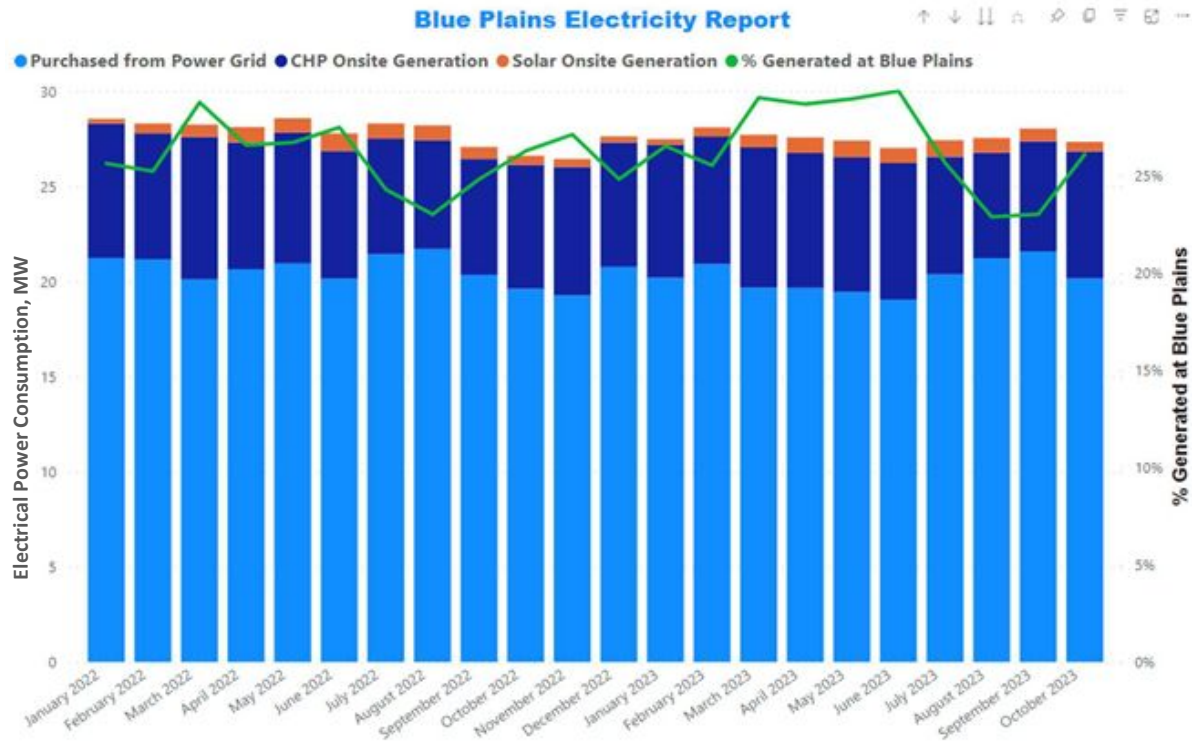
746 MG of volume captured by Anacostia Tunnel in Calendar Year 2023 through October, with 213 MG overflow, which took place in July and August due to outages required by NWBT commissioning

\* - CSO 019 diversion to tunnel was out of service July 5 - Aug 29 for commissioning of Northeast Boundary Tunnel, causing temporary increase in overflows. Necessary for safety of workers in tunnel. EPA/DOEE advised in advance.



# Operational Performance Electrical Energy Use and Generation

## Blue Plains Electrical Energy Use and Generation

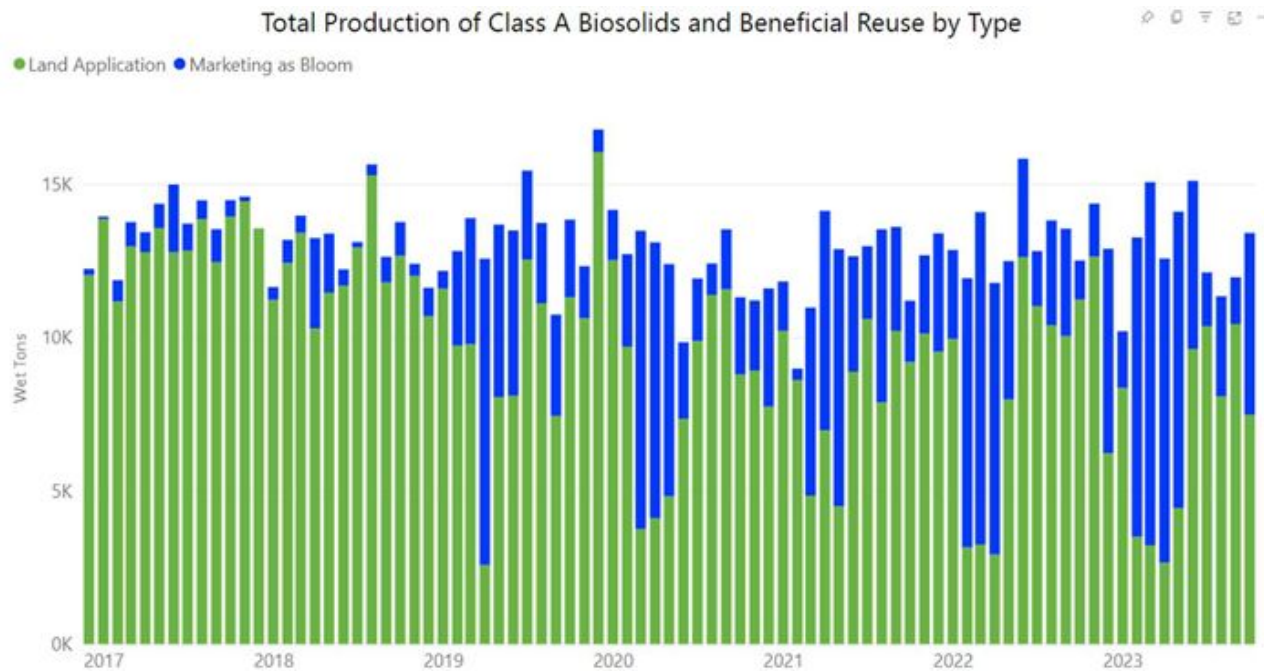


- 26% of electricity was generated onsite
- Combined Heat and Power (CHP) facility produced an average of 8.1 megawatts (MW), with 6.7 MW net to Blue Plains grid
- Solar System produced an additional 0.7 MW of power on average
- Total electricity consumption at Blue Plains averaged 27.5 MW
- DC Water purchased an average of 20.2 MW of electricity from PEPCO



# Operational Performance Class A Biosolids Production

## Total Production of Class A Biosolids and Beneficial Reuse by Type



In October, Blue Drop sold approximately 5,934 tons of Bloom, and the new goal for FY24 is 65,000 tons.

Blue Plains Produced 13,408 tons of biosolids for the month with the remaining 7,474 tons managed through land application contracts.

The FY23 goal of 55,000 tons was exceeded and a total of 64,818 tons was sold as Bloom for FY23

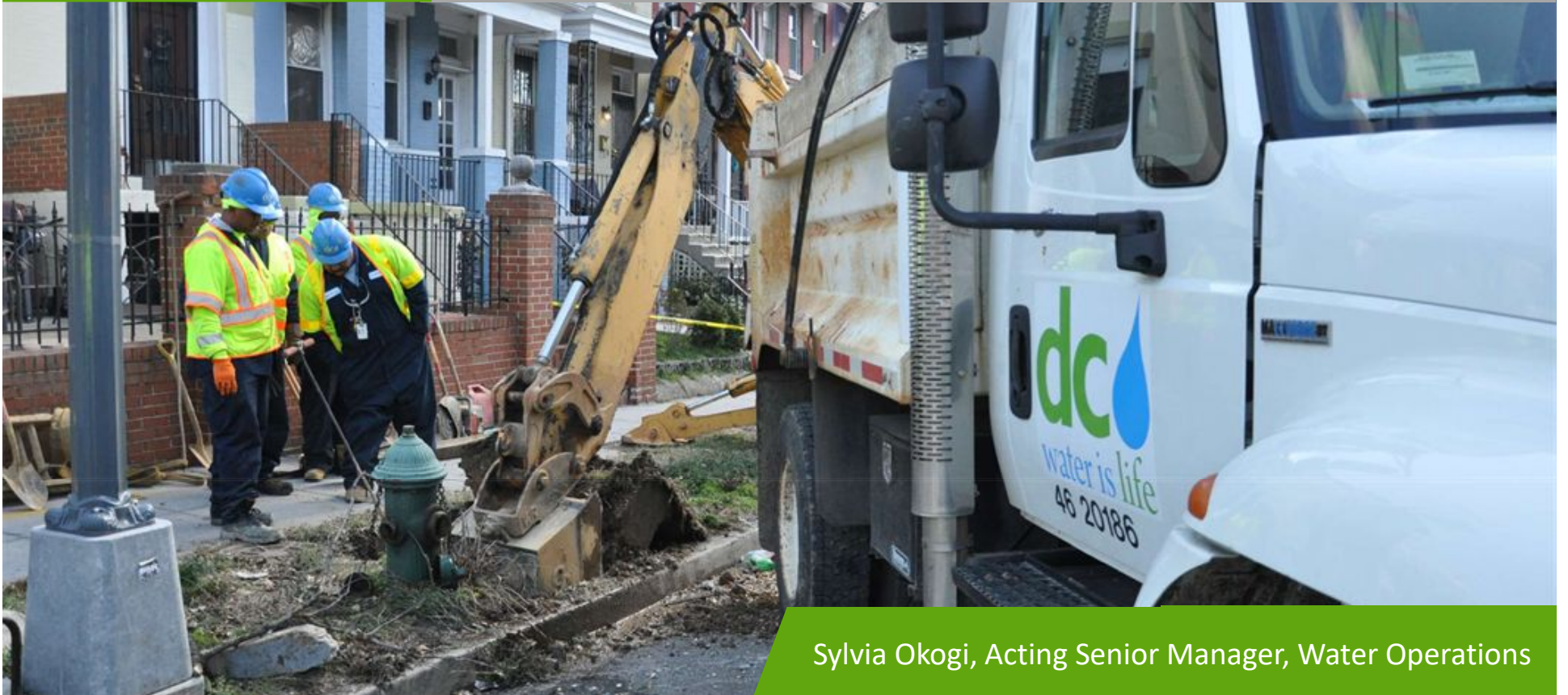




# *Fire Hydrant Update*



**Fire Hydrant Update**  
Environmental Quality & Operations Committee  
November 16, 2023



Sylvia Okogi, Acting Senior Manager, Water Operations

## Map of Public Out-of-Service Hydrants November 02, 2023



- OOS Hydrants  
LEGEND**
- DEFECTIVE
  - NEW CONSTRUCTION
  - OBSTRUCTED
  - TEMPORARY



Prepared By: Distribution Control Branch

Status Report of Public Fire Hydrants for DC Water Services Committee - November 2, 2023

|   | August<br>Cmte. Report<br>(August 7, 2023) | September<br>Cmte. Report<br>(September 1, 2023) | October<br>Cmte. Report<br>(October 2, 2023) | November<br>Cmte. Report<br>(November 2, 2023) |
|---|--|--|--|--|
| Public Fire Hydrants:   | 9,843                                      | 9,847  | 9,844  | 9,837  |
| In Service:   | 9,800                                      | 9,808  | 9,802  | 9,799  |
| Marked Out-of-Service (OOS)   | 43   | 39   | 42   | 38   |
| OOS - defective requiring<br>repair/replacement                               | 22   | 17   | 20   | 14   |
| % OOS requiring repair or<br>replacement (DC Water goal is<br>1% or less OOS) | 0.22%                                      | 0.17%  | 0.20%  | 0.14%  |
| OOS - due to inaccessibility or<br>temp construction work                     | 21   | 22   | 22   | 24   |

Note: The number of public hydrants in the DC Water system fluctuates; this number fluctuates as hydrants are added and removed during development or construction activities as well as at the request of the Fire Dept.

Breakdown of Public Fire Hydrants Out-of-Service (OOS) as of November 2, 2023 38

| Breakdown of Defective   | 0-7<br>Days | 8-14<br>Days | 15-30<br>Days | 31-60<br>Days | 61-90<br>Days | 91-120<br>Days | > 120<br>Days | Total     |
|--|-------------|--------------|---------------|---------------|---------------|----------------|---------------|-----------|
| Hydrant Needs<br>Repair/Investigation  | 1           | 0            | 0             | 0             | 0             | 0              | 0             | 1         |
| Needs Valve Investigation for<br>Low Flow/Pressure or Shut Test<br>for Replacement | 0           | 0            | 0             | 0             | 0             | 0              | 0             | 0         |
| Needs Replacement  | 0           | 0            | 1             | 0             | 1             | 0              | 11            | 13        |
| <b>Defective</b>   |             |              |               |               |               |                |               | <b>14</b> |

| Breakdown of Others  | 0-7<br>Days | 8-14<br>Days | 15-30<br>Days | 31-60<br>Days | 61-90<br>Days | 91-120<br>Days | > 120<br>Days | Total     |
|--|-------------|--------------|---------------|---------------|---------------|----------------|---------------|-----------|
| Temporarily OOS as part of<br>operations such as a main repair                     | 0           | 0            | 0             | 0             | 0             | 0              | 0             | 0         |
| Construction* - OOS  | 10          | 0            | 0             | 1             | 0             | 1              | 11            | 23        |
| Obstructed Hydrant - OOS<br>hydrant due to operation<br>impeded by an obstruction. | 0           | 0            | 0             | 0             | 0             | 0              | 1             | 1         |
| <b>Others</b>  |             |              |               |               |               |                |               | <b>24</b> |

\*Fire hydrants not accessible due to construction activities. Also includes new hydrants which have not yet been commissioned or old hydrants which will be abandoned as part of ongoing construction projects.

\*\*Fire hydrants pending replacements are due to constraints outside of our control at this time. Constraints include construction, critical customer impact, large isolation, and critical infrastructure impact.



# *Water Quality Update*



**Water Quality Update**  
Environmental Quality & Operations Committee  
November 16, 2023



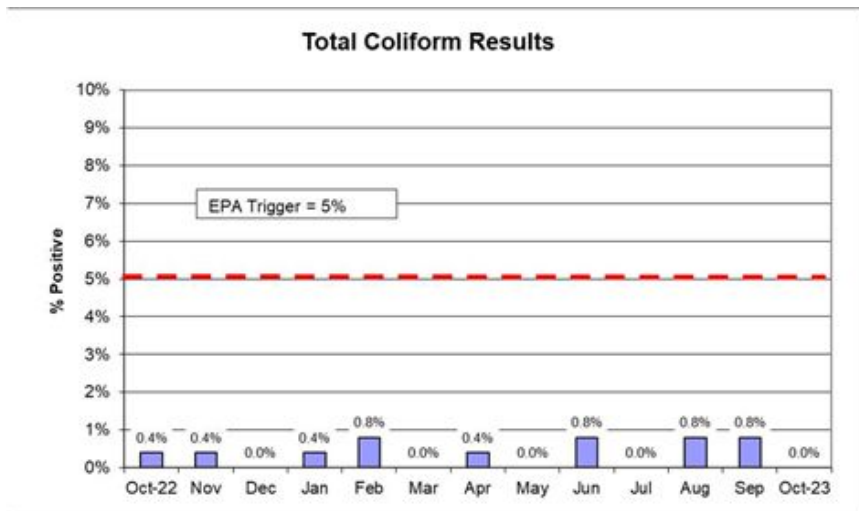
**TAP WATER IS AFFORDABLE • SAFE • ECO-FRIENDLY**

Anjuman Islam, Manager, Water Quality



# Drinking Water Quality Update

## Total Coliform Rule



- 240 minimum samples collected each month at over 50 government and commercial buildings

## Lead and Copper Rule

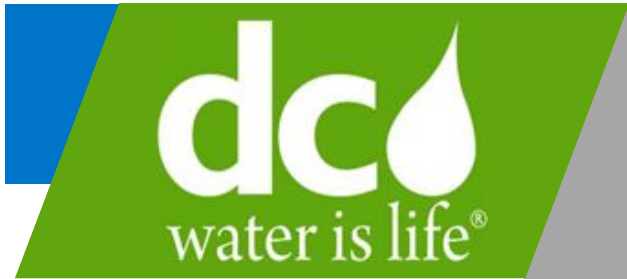
| Jan-June 2023  | 1 <sup>st</sup> Draw | 2 <sup>nd</sup> Draw |
|--|----------------------|----------------------|
| 90 <sup>th</sup> Percentile, parts per billion (ppb) | 2.2                  | 7.1                  |
| Number of samples                                    | 88                   | 88                   |
| Number of samples > 15 ppb                           | 0                    | 0                    |

**90<sup>th</sup> Percentile should be less than 15ppb (We are in compliance)**

- 1<sup>st</sup> draw is a one-liter sample collected after minimum six hours of stagnation (no-water use period)
- 2<sup>nd</sup> draw is a one-liter sample collected after the 1<sup>st</sup> draw and filling and dumping three liters, resulting in between the 5<sup>th</sup> to 6<sup>th</sup> liter of water which is water that stagnated in the service line.

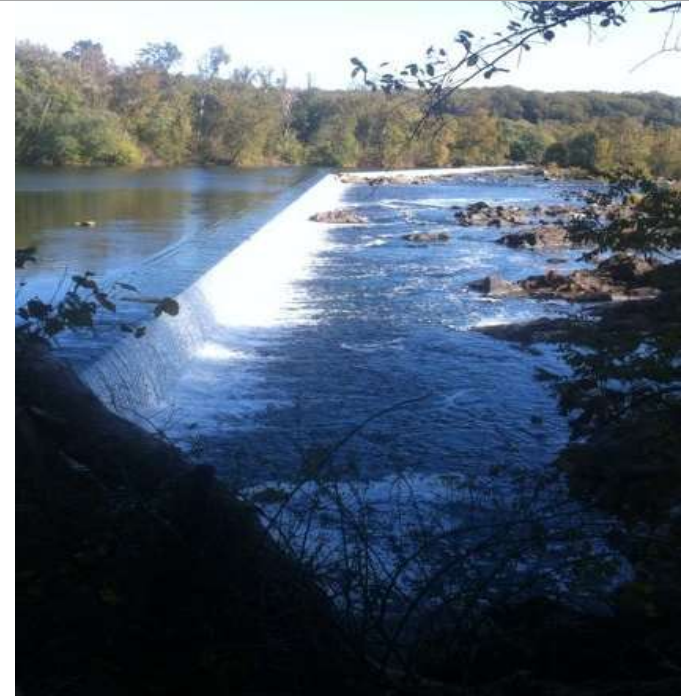
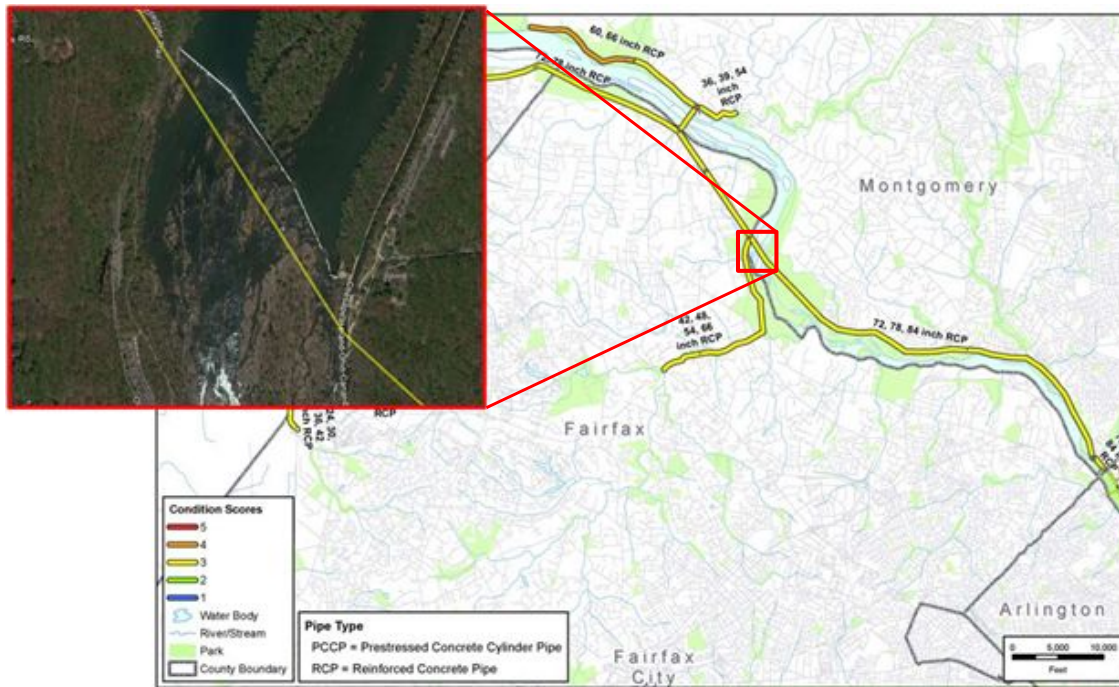


# *Potomac River Crossing*



# Potomac Interceptor River Crossing Geotechnical Investigations

Environmental Quality & Operations Committee  
November 16, 2023



William Elledge, Director, Department of Engineering & Technical Sciences

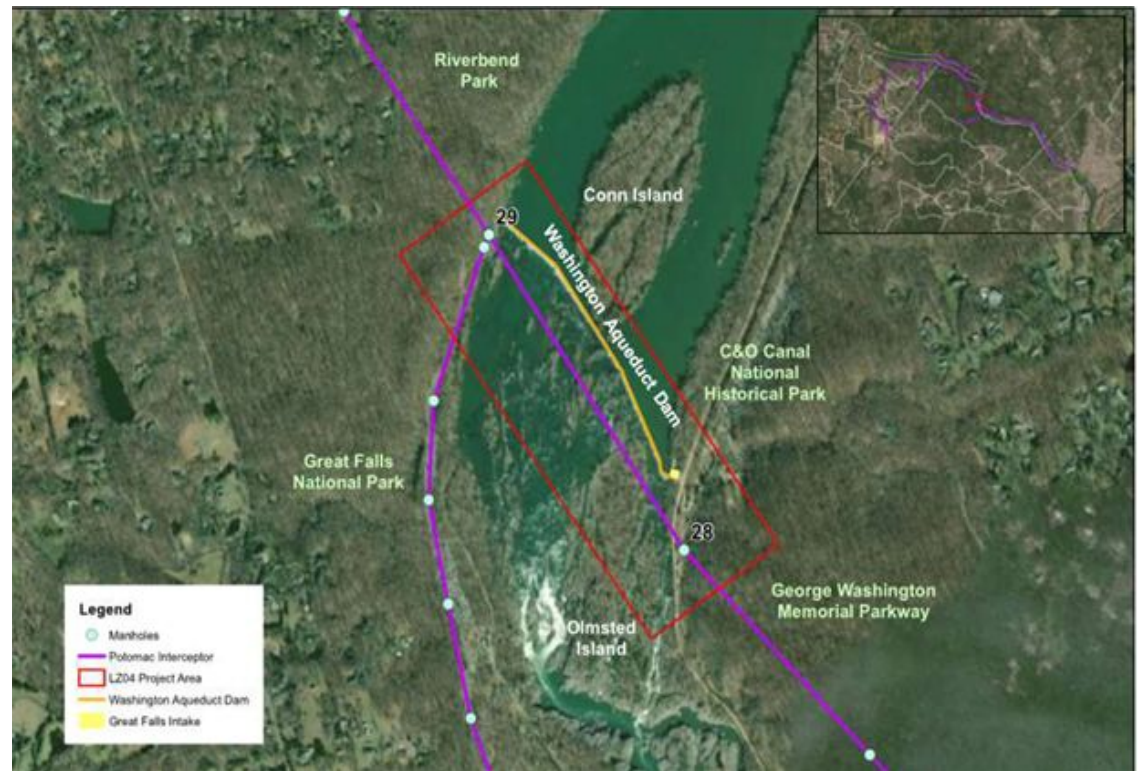




## Project Site and Background

The project is located on the Potomac Interceptor between MH 28 and MH 29 across the Potomac River

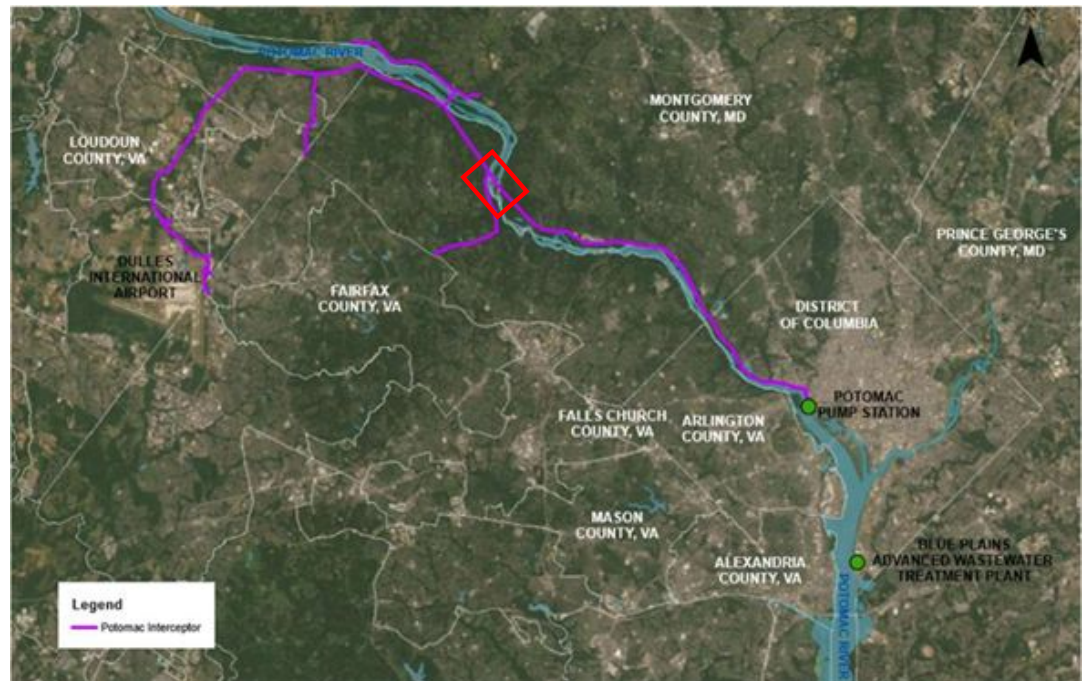
- ~3,100 linear feet of 78-inch RCP, then transitions to ~257 linear feet of 84-inch arch shaped tunnel near MH 28
- NPS Potomac Heritage Trail – VA
- NPS C&O Canal Park – Maryland
- Directly downstream of Washington Aqueduct Dam and Conn Island
- Directly upstream of Great Falls
- Project is subject to National Environmental Policy Act (NEPA) compliance.





## Project Purpose and Need

- The Potomac Interceptor (PI) is critical to DC Water's overall sewer system, and maintaining uninterrupted service requires periodic inspection, continual maintenance, and repair
- Data from periodic inspections of the PI is used to prioritize work. This segment was identified for rehabilitation because of:
  - Pipe deficiencies: concrete corrosion and exposed rebar
  - High risk/consequence of failure: environmental and public impacts





## Project Purpose and Need

- Address identified deficiencies with solutions that are:
  - Cost-effective
  - Structurally feasible
  - Meet safety and performance standards
- Project alternatives were screened based on:
  - Engineering complexities
  - Construction considerations
  - Environmental impacts
- Anticipated Schedule and Cost:
  - Geotechnical Investigations – Summer 2024
  - Design/Construction - 2025-2028
  - Construction Cost (Placeholder) – \$40 million\*

\*Cost is planning level. Selection of the preferred alternative, and geotechnical data are needed, to develop a more accurate estimate.





## Project Alternatives

- During the NEPA process a number alternatives were considered.
- The Alternatives included various combinations of:
  - Rehabilitate existing
  - Temporary bypass
  - Reverse flow
  - New siphon
  - New pump station
  - New parallel pipe
- Two potential alternatives are currently being evaluated.
- Both utilize a new parallel pipe for bypassing flow during rehab of the existing pipe and will provide redundancy for the segment in the future





## Purpose of Geotechnical Borings

- The alternatives differ via the method used to construct the parallel pipe, one utilizes open cut (cofferdams), and the other utilizing drilling/boring methods.
- The Borings will determine subsurface conditions along the proposed new parallel pipe and provide data for the alternative selection in the NEPA process.





## Key Safety issues for Geotechnical Work

- Sikorsky S-64E helicopter to transport and place drill rig and accessories at each location within the river.
- Scheduled for January/February.





# Proposed Boring Locations





## Risks and Mitigations

### Risks

- Emergency evacuation
  - Debris in the river
  - Drilling directly downstream of a dam and water intake
  - Drilling occurs upstream of Great Falls
  - Rising water levels
- Re-using and containerizing of drilling fluids
- Airlifting of the heavy drilling equipment and accessories to the river boring locations
- Mobilizing drilling rig to the land borings with minimum impact to the vegetation / habitat

### Mitigations

- Conduct Daily Safety Meeting Checklist prior to start of work
- Personal Protection Equipment (PPE)
- Conduct a thorough site assessment to identify potential hazards and implement appropriate safety measures
- Develop an Emergency and Medical response plan that includes evacuation procedures
- Site-Specific Training





# *Quarterly CIP Update*



# CIP Quarterly Update

## Environmental Quality & Operations Committee

November 16, 2023



David Parker, Vice President of Engineering  
Paul Guttridge, Director, CIP Infrastructure Management



## Agenda

- FY23 Quarter 4 CIP Progress by Service Area
  - Non-Process Facilities
  - DC Clean Rivers (DCCR)
  - Blue Plains
  - Water
  - Combined Sewer Overflow (CSO)/Storm/Sewer
  - Lead Free DC (LFDC)
- FY23 CIP Quarter 4 Budget Update
- Program Execution Changes



# Non-Process Facilities

## FY2023 Progress

### Planning

- a. Roofing & HVAC Assessments: Phase 1 & 2 roofing assessments are completed. Phase 3 is in progress
- b. Main & O Seawall: Change to Scope – Pursuing full seawall replacement due to high cost to certify existing seawall
- c. Concept Design Underway – Bryant St and Main PS Upgrades, COF Reno, Ft Reno Upgrades Spring 2023

### Procurement

- a. DCFA-535 Design BOA – BOD Approval November 2023
- b. Bryant Street Parking Design – DCFA-535 Design BOA
- c. Anacostia Pump Station Design – DCFA-535 Design BOA
- d. Fort Reno Watchman’s Lodge Design – RFP December 2023

### Design & Design-Build

- a. D-B: Sidewalk Installation at Main PS - \$260K
- b. Design: Blue Plains SB-1 Warehouse Reno – Permitting
- c. Design: North Canal Street Fence Design – Permitting

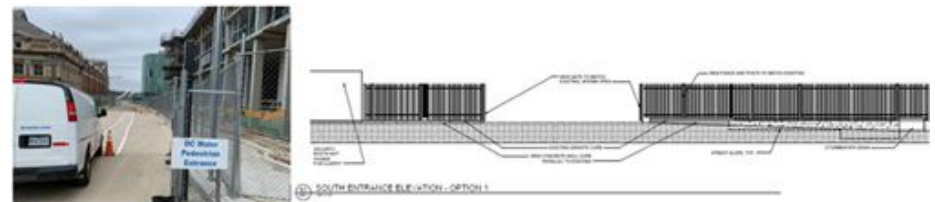
### Fort Reno Renovation



### Blue Plains SB-1 Warehouse Renovation



### North Canal Fence





# DC Clean Rivers

## Projects in Construction: (see next 2 slides)

Div. J, Northeast Boundary Tunnel (NEBT)

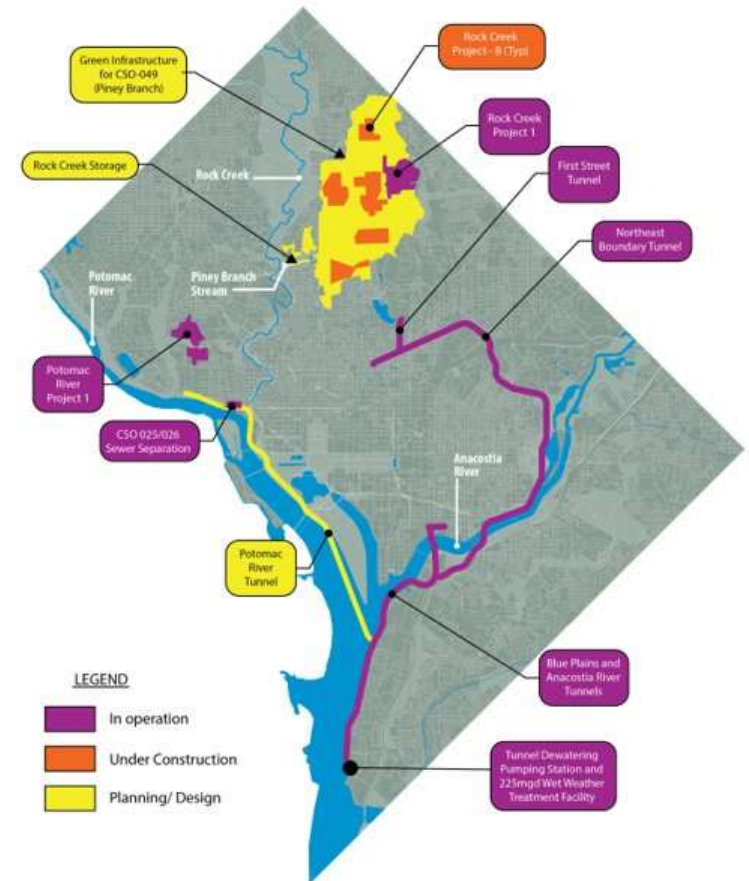
Div. PRT-A, Potomac Tunnel Advance Utility

Div. RC-B, Green Infrastructure Project B

## Upcoming Project:

Potomac River Tunnel:

- Board approved Contract: 10/5/2023
- Notice to Proceed (NTP): issued 11/9/2023
- Construction: 2024 – 2030





# Clean Rivers Construction Projects (1 of 2)

| Div J Northeast Boundary Tunnel |  |
|---------------------------------|--|
| Purpose                         | CSO control & flood mitigation at known chronic flooding areas in Northeast Boundary |
| Scope                           | 5.5 miles of 23' dia. tunnel, shafts and diversions                                  |
| Phase                           | Construction   |
| Contract Value                  | \$ 579,975,000   |
| % Complete                      | Approx. 99%  |
| Schedule                        | Tunnel commissioned 9/15/2023, ahead of 3/23/2025 Consent Decree deadline.           |
| Progress                        | Remaining work includes WS VCF and site restoration                                  |

| Div PRT-A, Pot Tunnel Advance Utility Construction |   |
|--|---|
| Purpose  | Bring power to future Potomac Tunnel work sites   |
| Scope  | Electrical duct banks, manholes and appurtenances   |
| Phase  | Construction  |
| Contract Value                                     | \$13,943,834  |
| % Complete   | 99%   |
| Schedule   | Project substantially completed on 5/26/2023  |
| Progress   | Remaining Work includes relocation of 4-way PEPCO duct (95% complete) conflicting with future Potomac Tunnel facilities at CSO 024. |



Florida Ave Restoration



Rhode island Ave Restoration



Duct Bank Work at CSO 024



Road Restoration at CSO 024

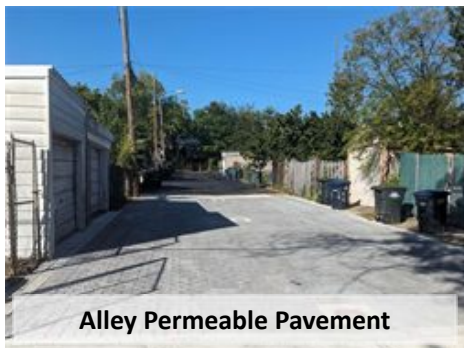


# Clean Rivers Construction Projects (2 of 2)

| Div RC-B, Rock Creek Green Infrastructure Project B |  |
|---|--|
| Purpose   | CSO control for Rock Creek   |
| Scope   | Alley permeable pavement and bioretention facilities   |
| Phase   | Construction   |
| Contract Value                                      | \$ 15,856,873  |
| % Complete  | 98%  |
| Schedule  | Consent Decree deadline 1/23/2024  |
| Progress  | All 37 alleys and 19 bioretention facilities completed. Substantial completion was achieved on 10/20/2023. |



Planter Bioretention



Alley Permeable Pavement



Planter Bioretention



# Blue Plains Advanced Wastewater Treatment Plant

## FY2023 Progress

### Planning

- Over **60** Tasks including planning studies at various stages of completion
- Blue Plains AWTP Facilities Plan update in progress
- PdNA Pilot project planning for implementation in one train

### Design

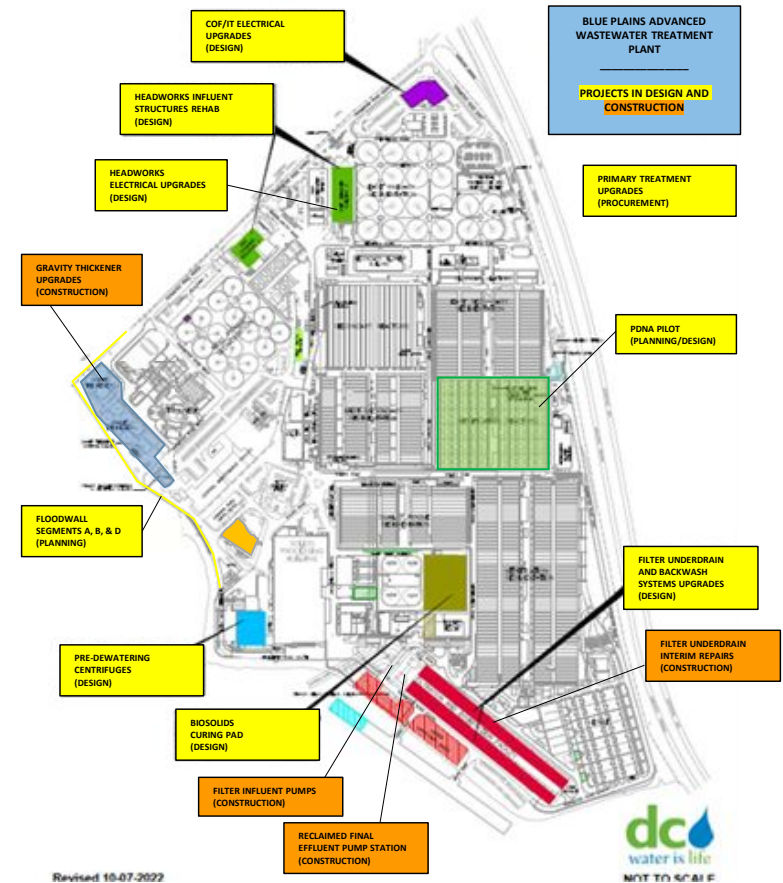
- 9 projects under design with total construction value of \$160M
- Filter Underdrains and Backwash Systems – CFR and VE Study underway

### Procurement

- Flood Wall Sections AB&D – Preparing solicitation documents
- Primary Treatment Upgrades - Design Consultant selected
- Solar Phase II - negotiations in progress
- Pre-Dewatering Centrifuges, Headworks Structural Improvements, and COF IT Electrical Upgrades - Construction RFPs pending

### Construction

- Gravity Thickener Upgrades Phase 2 - Substantially Complete
- Filter Influent Pumps (FIPS) - Commissioning and vibration analysis of all ten (10) FIPS continue
- Reclaimed Final Effluent Pump System - construction ongoing
- Interim Filter Underdrain Repairs – construction ongoing







# Blue Plains Ongoing Construction Projects

Gravity Thickener Upgrades  
GT-1 through GT-10



Filter Influent Pumps 1-10  
Replacement Project



Interim Filter Rebuild Project





# Blue Plains Ongoing Construction Projects

Primary Sludge/Scum Replacement



Reclaimed Final Effluent Pump Station Upgrades



Nitrification Sedimentation Expansion Joints Repair



Grit Chamber Baffle Wall Project



DSLFL Safety Repairs





## CSO and Sanitary Sewer Projects

### FY2023 Progress

#### Planning

- Conducting emergency design to repair defect found in East West Outfall Relief Sewers.
- This inspection and the ongoing repair prevented a major sinkhole.

#### Design

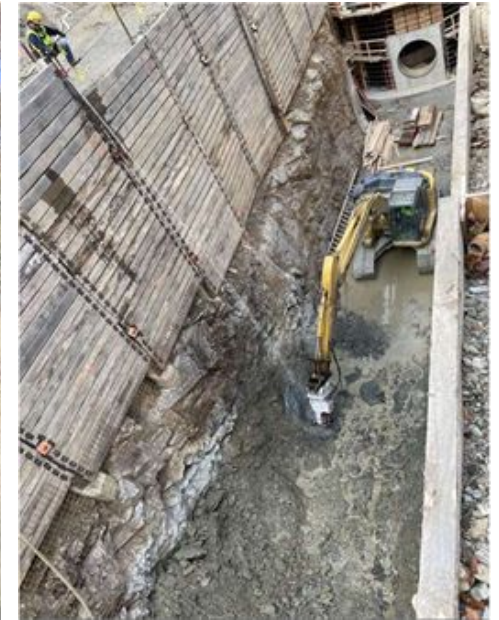
- Completed design for Northeast Boundary Trunk Sewer, initiated construction procurement

#### Construction

- Completed Oregon Ave Sewer Replacement
- Completed first pour of concrete at walls of "new" MH31
- Continued excavation of open pit and trenches for installation of new MH30.59 & MH 31 as well as new HOBAS pipe.



Potomac Interceptor New MH31



Open Trench Excavation between MH 31 and MH 30.59



# CSO and Stormwater PS Construction Projects

## FY2023 Progress

### Planning

- Updated Facility Plans being prepared
- Flooding/power/resiliency studies

### Design

- VFD Replacements at Sanitary PS's
- Ventilation upgrades
- Stormwater PS design for Scott Circle, 26<sup>th</sup> & K
- Inflatable Dam replacement project

### Construction

- Stormwater PS upgrades at Portland Street, 12<sup>th</sup> & Maine, Kenilworth PS's
- Inflatable Dam Mechanical Equipment and Controls
- O St PS Ventilation
- Main PS Low Area Pumps

Inflatable Dams Mechanical Equipment and Controls



Stormwater Pump Station Upgrades





# Water Linear

## FY2023 Progress

### Planning

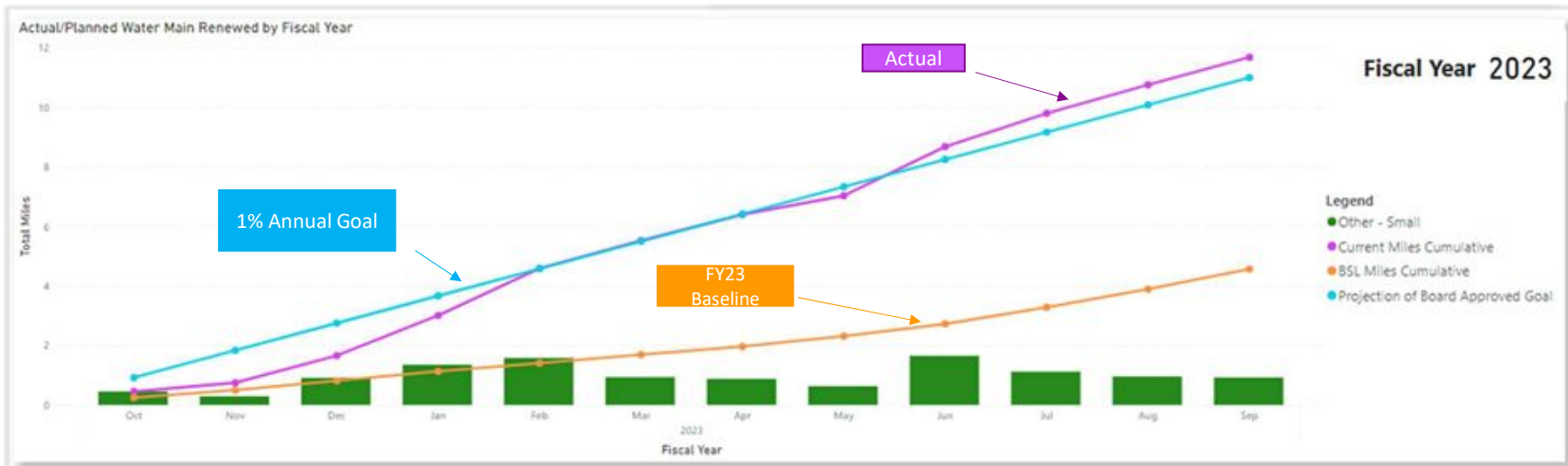
- Concept design of five projects are ongoing.
- Completed concept design on six projects; transitioned to design.

### Design

- Completed bid documents for another 4 miles of Small Diameter Water Mains under 16B

### Construction

- FY23 actual installation of 11.68 miles exceeds the board approved goal of 11 miles per year or 1% of total small diameter water main.
- Actual installation rate exceeded projected mileage due to collaboration between DC Water Construction Managers and contractors.





# Water Vertical

## FY2023 Progress

### Planning

- Updated Facility Plans being prepared
- Water Storage planning study

### Design

- WSSC Interconnection
- Large Valve Replacement
- Anacostia PS Improvements

### Construction

- Anacostia Tanks 1 and 2 rehab
- Fort Reno PS Booster Pumping
- Bryant Street Spill Header

Anacostia Elevated Storage Tank No. 2

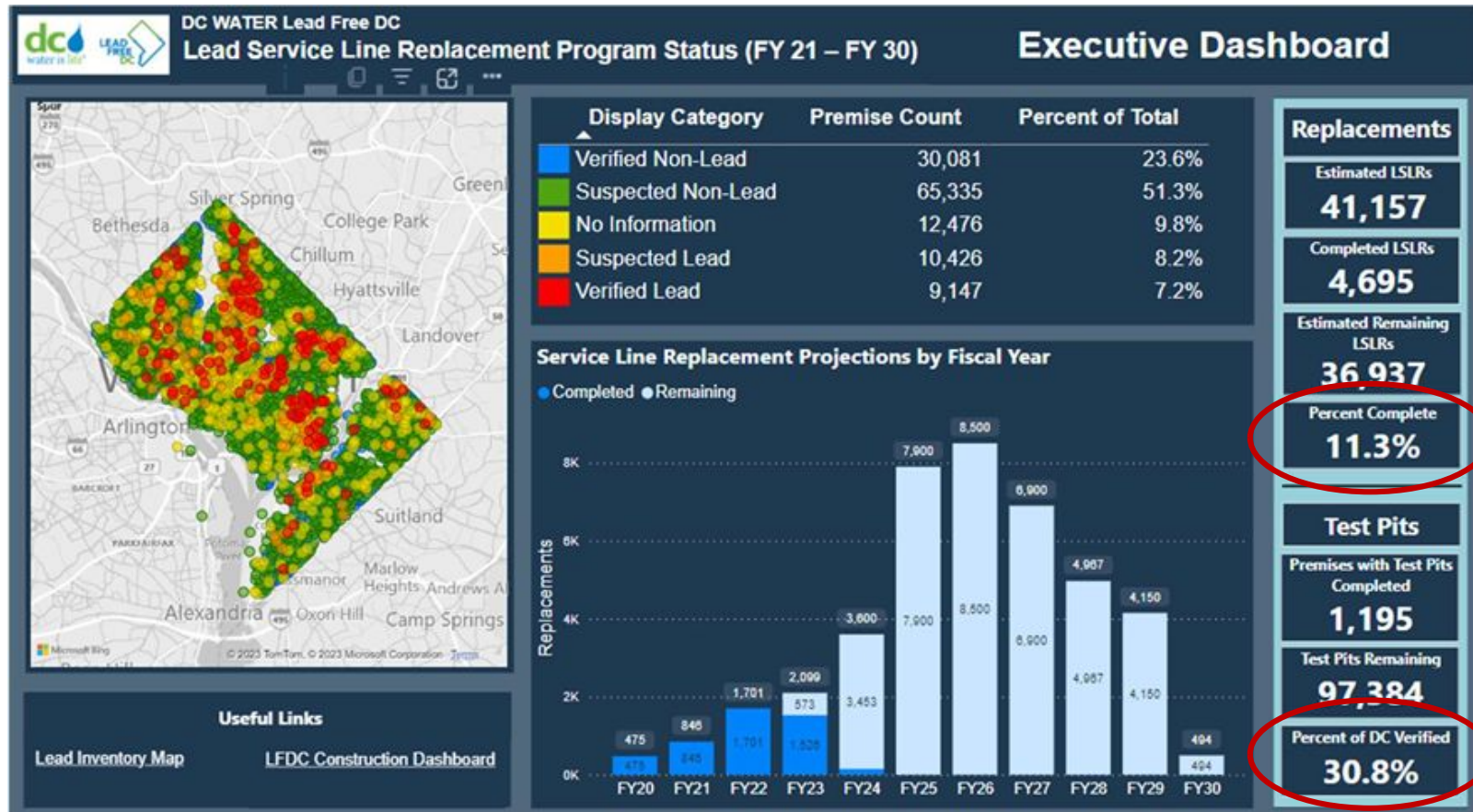


Emergency Booster Pumping – Ft. Reno PS





# Lead Free DC Program





## Key Activities Completed FY23 Q4

- **Received BIL Grants to Support the By-Block Program –Began receiving DDOT permits for FY23 replacement work**
- Replacements started on packages 5 and 6
- **Issued NTP for first LFDC specific construction task orders through MSA contracts for packages 7-10**
- **\$57.4M**
- Community Activators began cross training to support different workstreams across the LFDC communications program
- Held webinars to promote use of new Lead Map and Construction Dashboard
- Mailing to obtain agreements for construction slated for FY24 and FY25.
- Mailing to premises with records of historic copper and brass to provide POE documentation
- Began discussions with CBO's to collaborate on public events to promote participation in the program
- Provided responses to DC Council questions following hearing
- Participated in 2 ANC Mtgs
- Received 2279 Agreements in FY23.



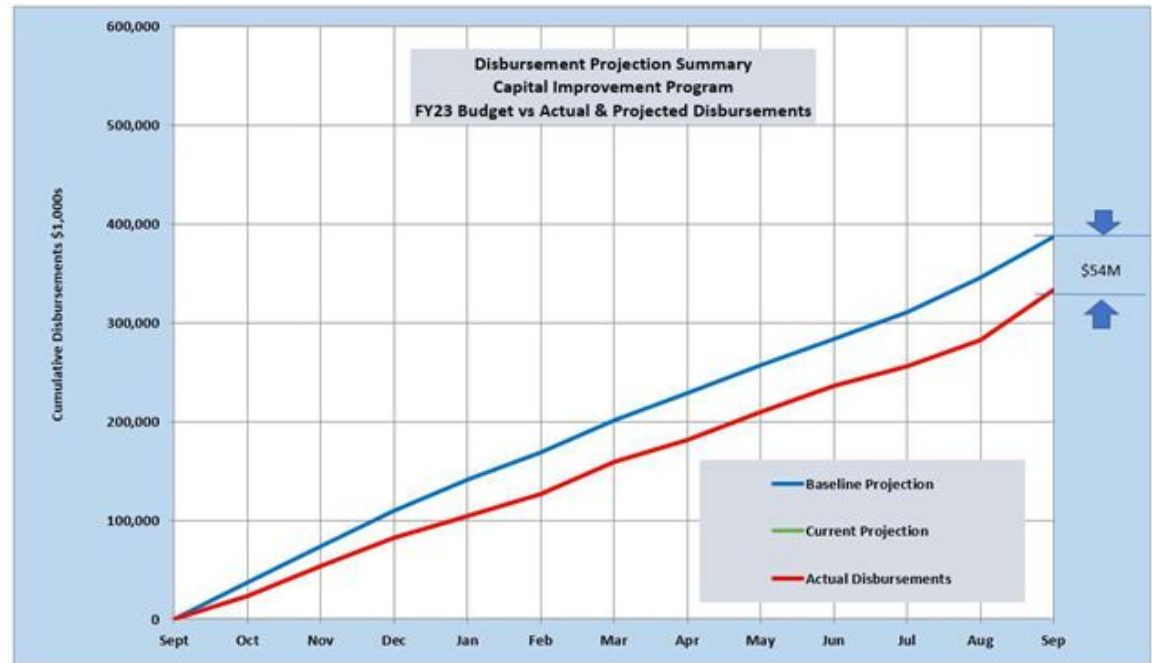




# CIP Quarterly Update

## FY23 CIP Disbursement Performance

- The Baseline projection for FY23 was developed to better align with the anticipated execution of the planned work. Total Baseline budget is \$386.5M
- The actual total program disbursements through the end of the fiscal year compared with the FY23 baseline budget are shown in the chart (right).
- The fiscal year 2023 thru Q4 CIP disbursements were **\$333M**. We achieved **86%** of the baseline plan for the year.





# Schedule - Key Performance Indicators

## Summary of FY23 Key Performance Indicators (KPIs):

|    | Performance                       |
|----|-----------------------------------|
| 35 | Total KPIs due this year          |
| 22 | KPIs completed within threshold   |
| 13 | KPIs outside threshold (>90 days) |

## Q4 KPIs achieved within the 90-day threshold:

| Job  | Job Name   | KPI type  | Due Date (Baseline) | Actual Completion Date |
|------|--|---|---------------------|------------------------|
| HW01 | Rehabilitation of Elevated Water Storage Tanks (Anacostia 1 & 2 Tanks) | Design Start Milestone                              | 29-Sep-23           | 6-Jul-23               |
| HX02 | SDWM Renewal 16B   | Construction Start Milestone                        | 20-May-23           | 10-Jul-23              |
| HE03 | 200 Bryant St. Building A & B Demo/Reno                                | Concept Design Start Milestone                      | 1-Apr-23            | 10-Jul-23              |
| KI01 | Small Diameter Water Main Rehabilitation 22                            | Design Start Milestone                              | 28-Feb-24           | 1-Aug-23               |
| U501 | WSSC Interconnections Project  | Design Start Milestone                              | 29-Sep-23           | 9-Aug-23               |
| CY14 | Div J - Northeast Boundary Tunnel                                      | Construction Substantial Completion Milestone (KPI) | 29-Sep-23           | 18-Nov-23 (Est)        |



## Schedule – KPIs continued

### Q4 KPIs not achieved within the 90-day threshold:

| Job (KPI Type)               | Job Name  | Delta | Comment  | Due Date (Baseline) | Est. Completion Date |
|------------------------------|---|-------|--|---------------------|----------------------|
| OB01<br>(Design Start)       | Inflatable Dams Replacement   | -150  | Design start milestone delayed by revisions to the CFR Maintaining operations and constructability considerations added. | 3-Jul-23            | 3-Nov-23             |
| HK02<br>(Construction Start) | CMF Cart Shop & Supply Bldg Renovations                                 | -503  | Design revision needed to meet Dept. of Buildings permit requirements. Procurement start pending permit approval.        | 1-Aug-23            | 16-Dec-24            |
| KH03<br>(Design Start)       | SDWM Renewal 21C  | -182  | Task Order Negotiations with consultant were extended.   | 1-Sep-23            | 1-Mar-24             |
| HX03<br>(Construction Start) | SDWM Renewal 16C  | -159  | Consultant's delivery of final design was delayed.   | 16-Sep-23           | 16-Dec-23            |
| OR01<br>(Design Start)       | Ft. Reno Pump Station Upgrades - Phase II - Pump and Motor Replacements | -154  | Design scope adjusted during negotiations - added voltage suppression system.  | 28-Sep-23           | 29-Feb-24            |



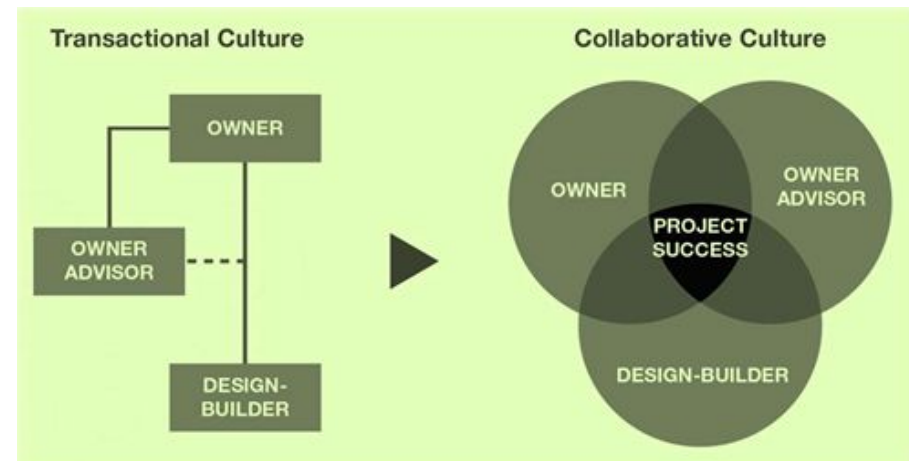
## 10-Year CIP Moving from DBB to PDB/CMAR

### Improvements to the CIP

- The Capital Improvement Program is shifting from the traditional Design-Bid-Build (DBB) approach to collaborative delivery
- Progressive Design-Build (PDB) and Construction Management At Risk (CMAR) are the new default delivery approaches
- Projects and correspondingly Contracts, are also to be consolidated into fewer, larger projects

### Potential Benefits Include:

- Improved collaboration with Contractors
- Faster delivery of Projects
- Reduced overall project durations
- Reduced risk for DC Water

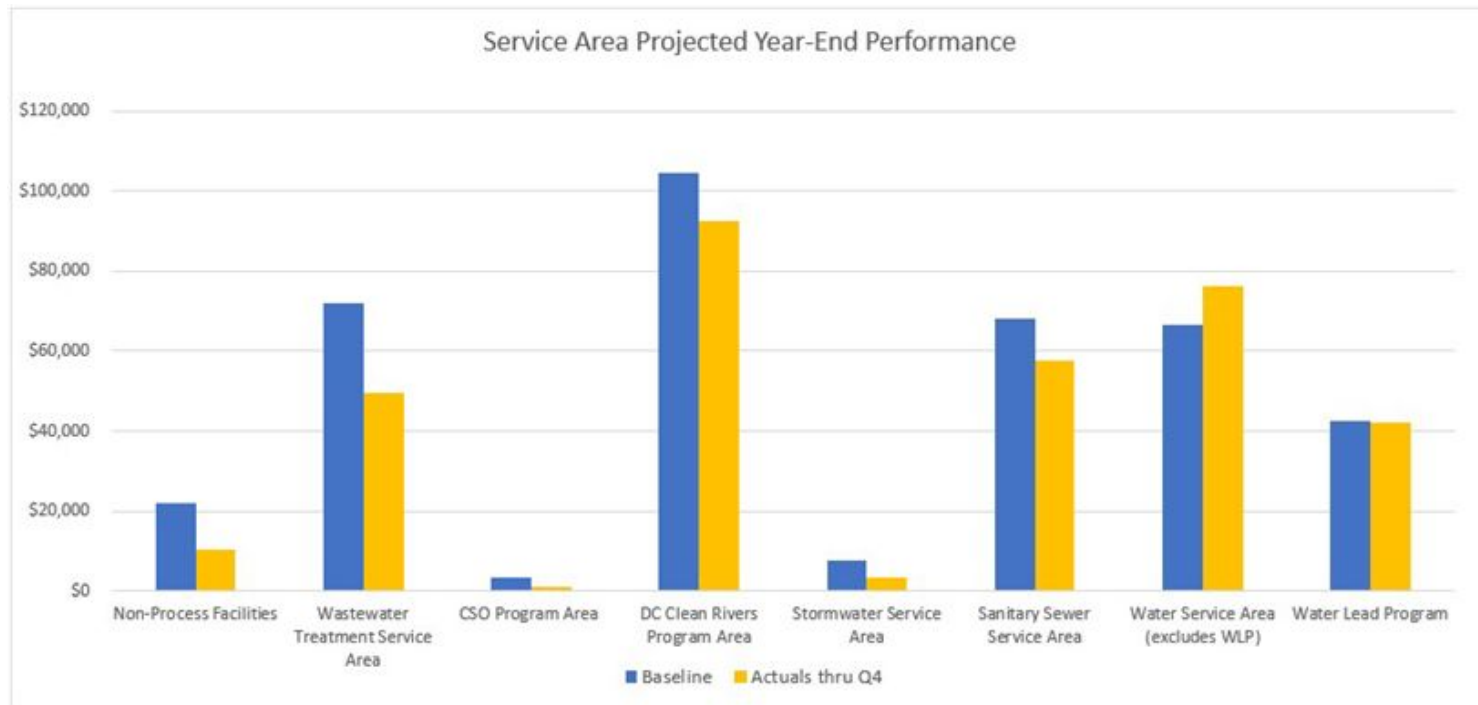




# *CIP Quarterly Report - Appendix*



# FY23 Performance by Service Area





## FY23 CIP Q4 Performance by Service Area

- **Non-Process Facilities – Year end underspending of \$11.8M (baseline \$22.1M, actual \$10.3M):**
  - Project HH - Main and O Relocation – Temporary occupancy permit took longer than expected but has been achieved for Fleet Management Facility, resulting in underspending of \$2.2M. Final contract closeout is ongoing.
  - Project SF - Solar Projects - The Fort Stanton solar project was scheduled to begin in FY23 and has been postponed while a project for upgrades to the Fort Stanton reservoirs is established and planned, resulting in underspending of \$2.1M
- **Wastewater Treatment Service Area – Year end underspending of \$22.5M (baseline \$71.9M, actual \$49.4M):**
  - Material and equipment lead times continue to adversely affected project progress and spending.
  - Primary Treatment Sludge Piping (Project J2) - Ductile iron piping lead time got as high as 1.5 years. Material deliveries have now been received, and the lead time is starting to decrease.
  - Effluent Filter Upgrades (Project IY) - Based on contractor’s field investigation in the filter cells, the design engineer identified a cost-effective solution that would result in a more robust product. DWT and DWE agreed that this scope change is warranted despite the resulting schedule delay. Despite the \$8.5M variance for FY23, the spending projection is expected to get back on schedule in FY24.
- **CSO Program Area – Year end underspending of \$2.3M (baseline \$3.5M, actual \$1.2M):**
  - Main & O St. PS (Project FQ) – Design change, requiring change order & 6-month extension, for O St. Ventilation work (MFU 6) resulted in underspending of \$1.7M.



## FY23 CIP Q4 Performance by Service Area (continued)

- **DC Clean Rivers Program Area – Year end underspending of \$12.3M (baseline \$104.6M, actual \$92.3M):**
  - Lower spending on project contingency allowances for risks that have not materialized during construction, lower retention release to protect DC Water’s interest in completing final project restoration and lower than planned (more efficient) spending on professional services.
- **Stormwater Service Area – Year end underspending of \$4.0M (baseline \$7.5M, actual \$3.5M):**
  - Project NG - Stormwater Pump Stations Rehabilitation project underspent by \$2.5M, mostly due to extended lead times for material and equipment (supply chain).
- **Sanitary Sewer Service Area – Year end underspending of \$10.5M (baseline \$68.0M, actual \$57.5M):**
  - The Soapstone project had permit delays and issues to productivity due to technical issues, accounting for \$2M of underspending.
  - There are multiple projects with insignificant variances that make up the remaining delta.
- **Water Service Area –Year end overspending of \$9.4M (baseline \$108.9M, actual \$118.3M):**
  - The Water Distribution program area proceeded ahead of schedule, with anticipated supply chain issues having less impact than predicted, improved performance resulted in overspending by \$21.9M.
  - Water On-Going Projects program area underspent by \$7.1M; the nature of the emergency rehabilitation is work is typically difficult to forecast.



**DISTRICT OF COLUMBIA WATER AND SEWER AUTHORITY  
BOARD OF DIRECTORS CONTRACTOR FACT SHEET**

**ACTION REQUESTED**

**CONSTRUCTION CONTRACT CHANGE ORDER:**

**Emergency Sewer Main Infrastructure Repair & Replacement Contract for FY21–FY23  
(Joint Use)**

Approval to execute Change Order No. 08 for \$20,000,000. The modification exceeds the Chief Executive Officer’s approval authority.

**CONTRACTOR/SUB/VENDOR INFORMATION**

| <b>PRIME:</b>   | <b>SUBS:</b>   | <b>PARTICIPATION:</b> |
|---|--|-----------------------|
| Spiniello Companies<br>3500 East Biddle Street<br>Baltimore, MD 21213 | Bulldog Distribution Trucking, LLC<br>Beltsville, MD DBE | 12.5%                 |
|   | Arthur Engineering Services, LLC<br>Laurel, MD DBE       | 6.4%                  |
|   | Empire Landscape, LLC<br>Silver Spring, MD DBE           | 6.2%                  |
| <u>Headquarters</u><br>Livingston, NJ 07039                           | RAM<br>Olney, MD WBE                                     | 6.0%                  |

DBE Participation = 25.1% WBE Participation = 6%

**DESCRIPTION AND PURPOSE**

|  |                               |
|--|-------------------------------|
| Original Contract Value:                   | \$16,011,710                  |
| Value of this Change Order:                | \$20,000,000                  |
| Cumulative CO Value, including this CO:    | \$45,450,000                  |
| Current Contract Value, including this CO: | \$61,461,710                  |
| Original Contract Time:                    | 1096 Days (3 Years, 0 Months) |
| Time extension, this CO:                   | 0 Days                        |
| Total CO contract time extension:          | 0 Days (0 Years, 0 Months)    |
| Contract Start Date (NTP):                 | 11-12-2020                    |
| Anticipated Contract Completion Date:      | 07-31-2024                    |
| Cumulative CO % of Original Contract:      | 284%                          |
| Contract Completion %:                     | 77%                           |

**Purpose of the Contract:**

This contract provides emergency and urgent sewer infrastructure rehab and replacement services at various public space locations in Washington, DC.

**Original Contract Scope:**

DC Water awarded an Indefinite Delivery and Indefinite Quantity (IDIQ) contract to the selected contractor. As emergency or urgent work was identified, DC Water Sewer Operations developed scopes of work, negotiated costs using pre-established pricing, and issued task orders to the contractor. Joint-use cost share amounts were determined, communicated, and billed per existing joint-use procedures. Typical task order scopes include:

- Emergency or Scheduled Rehab and Replacement of Sewer & Infrastructure
- Cleaning & CCTV inspection of sanitary sewer mains
- Sanitary sewer bypass pumping

**Previous Change Order Scopes:**

- To provide construction resources for FY22 block-by-block lead service line replacement projects through the LFDC Capital Improvement Project and Emergency Repair Replacement (CIPERR) program for both the private and public side. Other administrative changes were made to adjust the quantity on the schedule of prices only and had a zero-dollar impact on the contract amount.

- During a routine manhole inspection at Structure 2A on Monday 5/1/23, it was observed that the pipe wall between the East Outfall Relief Sewer and the West Outfall Relief Sewer downstream of Structure 2A was severely compromised. The full inspection later showed that the pipe had lost 75 LF of the central pipe wall immediately downstream of Structure 2A. Additionally, the crown of both pipes showed signs of severe corrosion, exposed rebar, and missing rebar from Structure 2A to Structure 105, approximately 467 LF. Structure 2A and Structure 105 are both located at Geisboro Park on Joint Base Anacostia-Bolling.

The emergency rehabilitation work was split into two phases. Phase 1 is stabilization of the structure and constructing a gravity diversion structure. Phase 2 which will be done under a separate change order will be to rehabilitate the two relief sewers using reinforced geopolymer application.

**Current Change Order Scope:**

Phase 2 response to East Outfall Relief Sewer and the West Outfall Relief Sewer will rehabilitate both relief sewers and Structure 2A; which includes:

- Design and rebuild the middle wall separating the East and West Outfall Relief Sewers.
- Design and rehabilitation of the East and West Outfall Relief Sewers and Structure 2A using PALTEM (Pipeline Automatic Lining SysTEM) Flow-Ring System.
- Heavy cleaning of relief sewers to create favorable environment for asset rehabilitation.
- Backfilling of the gravity bypass channel along with reestablishing sewer flow in the newly rehabilitated East-West Outfall Relief Sewers.
- Site restoration after the work is completed.

**Federal Grant Status:**

- This Construction Contract is not eligible for Federal grant funding assistance.

**PROCUREMENT INFORMATION**

|                           |              |                         |            |
|---------------------------|--------------|-------------------------|------------|
| <b>Contract Type:</b>     | Unit Price   | <b>Award Based On:</b>  | Best Value |
| <b>Commodity:</b>         | Construction | <b>Contract Number:</b> | 200020     |
| <b>Contractor Market:</b> | Open Market  |                         |            |

**BUDGET INFORMATION**

|                      |         |                         |                   |
|----------------------|---------|-------------------------|-------------------|
| <b>Funding:</b>      | Capital | <b>Department:</b>      | Sewer Services    |
| <b>Service Area:</b> | Sewer   | <b>Department Head:</b> | Kenrick St. Louis |
| <b>Project:</b>      | RE      |                         |                   |

**ESTIMATED USER SHARE INFORMATION**

| User                                    | Share %        | Dollar Amount           |
|---|----------------|-------------------------|
| District of Columbia                    | 39.37%         | \$ 7,874,000.00         |
| Washington Suburban Sanitary Commission | 44.78%         | \$ 8,956,000.00         |
| Fairfax County                          | 11.95%         | \$ 2,390,000.00         |
| Loudoun County & Potomac Interceptor    | 3.90%          | \$ 780,000.00           |
| <b>Total Estimated Dollar Amount</b>    | <b>100.00%</b> | <b>\$ 20,000,000.00</b> |

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 Jeffrey F. Thompson Date  
 Chief Operating Officer, EVP

\_\_\_\_\_/\_\_\_\_\_  
 Matthew T. Brown Date  
 CFO and EVP  
 Finance, Procurement and Compliance Cluster

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 Dan Bae Date  
 VP of Procurement

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 David L. Gadis Date  
 CEO and General Manager

**DISTRICT OF COLUMBIA WATER AND SEWER AUTHORITY  
BOARD OF DIRECTORS CONTRACTOR FACT SHEET**

**ACTION REQUESTED**

**CONSTRUCTION CONTRACT:**

**Sewer Life Restoration Program (SLRP) - 2  
Non-Joint Use**

Approval to execute a construction contract for \$19,517,704.25.

**CONTRACTOR/SUB/VENDOR INFORMATION**

| <b>PRIME:</b>   | <b>SUBS:</b>   | <b>PARTICIPATION:</b> |
|---|--|-----------------------|
| Spiniello Companies<br>3500 East Biddle Street<br>Baltimore, MD 21213 | Shekinah Group, LLC<br>New Brunswick, NJ DBE               | 33.0%                 |
| <u>Headquarters</u><br>Livingston, NJ 07039                           | RAM Construction, Inc.<br>Olney, MD WBE                    | 4.5%                  |
|   | Manuel Luis Construction Co., Inc<br>Silver Spring, MD WBE | 2.5%                  |

**DESCRIPTION AND PURPOSE**

Contract Value, Not-To-Exceed: \$19,517,704.25  
 Contract Time: 730 Days (2 Years, 0 Months)  
 Anticipated Contract Start Date (NTP): 01-31-2024  
 Anticipated Contract Completion Date: 01-30-2026  
 Bid Opening Date: 06-06-2023  
 Bids Received: 1  
 Evaluated Bid Amount: \$19,517,704.25

**Purpose of the Contract:**

The rehabilitation of aging sanitary and combined sewers in Atlas District, Bloomingdale, Columbia Heights, and Manor Park in this project will help prolong the life of the sewer/structures. The work involved in this project will largely be executed by using both open excavation and trenchless methods.

**Contract Scope:**

- Structural rehabilitation of approximately 68,690 linear feet of sewer pipes ranging from 8-inch through 40-inch in diameter using Cured-in-Place Pipe (CIPP) lining.
- Rehabilitate Eight (8) Open Cut Sewer Points of 10-inch through 24-inch in diameter and eighteen (18) Lateral Connection Points.
- Reinstatement of an estimated 3,421 laterals.
- Reconstruction of an estimated 392 structural lateral connections by lining and resin injection.
- Installation of Six (6) new sewer manholes.
- Associated paving, sidewalk, and curb restoration, undercut trench excavation, and borrow trench fill.

**Federal Grant Status:**

- This Construction Contract is not eligible for Federal grant funding assistance.

**PROCUREMENT INFORMATION**

|                           |              |                         |                    |
|---------------------------|--------------|-------------------------|--------------------|
| <b>Contract Type:</b>     | Fixed Price  | <b>Award Based On:</b>  | responsible bidder |
| <b>Commodity:</b>         | Construction | <b>Contract Number:</b> | 230060             |
| <b>Contractor Market:</b> | Open Market  |                         |                    |

**BUDGET INFORMATION**

|                      |         |                         |                                    |
|----------------------|---------|-------------------------|------------------------------------|
| <b>Funding:</b>      | Capital | <b>Department:</b>      | Engineering and Technical Services |
| <b>Service Area:</b> | Sewer   | <b>Department Head:</b> | William Elledge                    |
| <b>Project:</b>      | GH      |                         |                                    |

**\*ESTIMATED USER SHARE INFORMATION**

| User                                    | Share %        | Dollar Amount           |
|---|----------------|-------------------------|
| District of Columbia                    | 100.00%        | \$ 19,517,704.25        |
| Federal Funds                           | 0.00%          | \$                      |
| Washington Suburban Sanitary Commission | 0.00%          | \$                      |
| Fairfax County                          | 0.00%          | \$                      |
| Loudoun County & Potomac Interceptor    | 0.00%          | \$                      |
| <b>Total Estimated Dollar Amount</b>    | <b>100.00%</b> | <b>\$ 19,517,704.25</b> |

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 Jeffrey F. Thompson / Date  
 Chief Operating Officer, EVP

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 Dan Bae / Date  
 VP of Procurement

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 Matthew T. Brown / Date  
 CFO and EVP  
 Finance, Procurement and Compliance Cluster

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 David L. Gadis / Date  
 CEO and General Manager

**DISTRICT OF COLUMBIA WATER AND SEWER AUTHORITY  
BOARD OF DIRECTORS CONTRACTOR FACT SHEET**

**ACTION REQUESTED**

**GOODS AND SERVICES CONTRACT OPTION YEAR  
Annual Maintenance, Repair, and Calibration of  
Instrumentation Control and Electrical Equipment  
(Joint-Use Direct)**

This contract action is to exercise Option Year 3 and add funding in the amount of \$350,000.00.

**CONTRACTOR/SUB/VENDOR INFORMATION**

|   |                     |                               |
|---|---------------------|-------------------------------|
| <b>PRIME:</b><br>C&E Services, Inc. of Washington<br>1224 W. Street, SE<br>Washington, DC 20020<br>(LSBE) | <b>SUBS:</b><br>N/A | <b>PARTICIPATION:</b><br>100% |
|---|---------------------|-------------------------------|

**DESCRIPTION AND PURPOSE**

|   |                                |
|---|--------------------------------|
| <b>Base Award Contract Value:</b>       | \$276,000.00                   |
| <b>Base Award Contract Dates:</b>       | 02-01-2021 – 01-31-2022        |
| <b>No. of Option Years in Contract:</b> | 3                              |
| <b>Option Years 1 – 2 Values:</b>       | \$721,000.00                   |
| <b>Option Years 1 – 2 Dates:</b>        | 02-01-2022 – 01-31-2024        |
| <b>Option Year 3 Value:</b>             | <b>\$350,000.00</b>            |
| <b>Option Year 3 Dates:</b>             | <b>02-01-2024 – 01-31-2025</b> |

**Purpose of the Contract:**

The contract provides annual maintenance, repair, and calibration of instrumentation, control devices, and valve actuators to monitor and control equipment and processes, ensuring efficient and reliable operations. Instrumentation and control equipment are critical to running efficient utility operations. The Department of Pumping & Sewer Operations manages the contract.

**Contract Scope:**

The scope of the contract includes providing supervision, labor, transportation, replacement parts, modification, calibration, programming installation, and maintenance of instrumentation, valve actuators, Programmable Logic Controllers (PLC), Human Machine Interfaces (HMI), and other related equipment at various DC Water facilities.

**Spend Previous Year:**

|                               |                                   |
|-------------------------------|-----------------------------------|
| Cumulative Contract Value:    | 02/01/21 – 01/31/24: \$997,000.00 |
| Cumulative Contract Spending: | 02/01/21 – 09/30/23: \$962,463.00 |

**Contractor Past Performance:**

According to the COTR, the contractor’s quality of products and services, timeliness of deliverables, conformance to DC Water’s policies and contract terms and invoicing met requirements.

**PROCUREMENT INFORMATION**

|                           |   |                         |            |
|---------------------------|---|-------------------------|------------|
| <b>Contract Type:</b>     | Goods and Services  | <b>Award Based On:</b>  | Best Value |
| <b>Commodity:</b>         | Calibration of Instrumentation Control and Electrical Equipment | <b>Contract Number:</b> | 10030      |
| <b>Contractor Market:</b> | Open Market LSBE Participation                                  |                         |            |

**BUDGET INFORMATION**

|                      |                            |                         |                            |
|----------------------|----------------------------|-------------------------|----------------------------|
| <b>Funding:</b>      | Joint-Use Direct Costs     | <b>Department:</b>      | Pumping & Sewer Operations |
| <b>Project Area:</b> | Pumping & Sewer Operations | <b>Department Head:</b> | Kenrick St Louis           |

**ESTIMATED USER SHARE INFORMATION**

| User – MJUF Operating                   | Share %     | Dollar Amount       |
|---|-------------|---------------------|
| District of Columbia                    | 65.93%      | \$230,755.00        |
| Washington Suburban Sanitary Commission | 16.22%      | \$56,770.00         |
| Fairfax County                          | 10.14%      | \$35,490.00         |
| Loudoun Water                           | 6.66%       | \$23,310.00         |
| Potomac Interceptor                     | 1.05%       | \$3,675.00          |
| <b>Total Estimated Dollar Amount</b>    | <b>100%</b> | <b>\$350,000.00</b> |

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 Jeffrey F. Thompson      Date  
 Chief Operating Officer, EVP

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 Dan Bae      Date  
 VP, Procurement

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 Matthew T. Brown      Date  
 CFO and EVP, Finance, Procurement and Compliance

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 David L. Gadis      Date  
 CEO and General Manager

**DISTRICT OF COLUMBIA WATER AND SEWER AUTHORITY  
BOARD OF DIRECTORS CONTRACTOR FACT SHEET**

**ACTION REQUESTED**

**GOODS AND SERVICES CONTRACT OPTION YEAR  
Supply and Delivery of Methanol  
(Joint Use - Direct)**

This contract action is to execute option year 4 in the amount of \$1,800,000.00.

**CONTRACTOR/SUB/VENDOR INFORMATION**

|   |                     |                              |
|---|---------------------|------------------------------|
| <b>PRIME:</b><br>Mitsubishi International Corp.<br>655 Third Avenue<br>New York, NY 10017 | <b>SUBS:</b><br>N/A | <b>PARTICIPATION:</b><br>N/A |
|---|---------------------|------------------------------|

**DESCRIPTION AND PURPOSE**

|                             |                                |
|-----------------------------|--------------------------------|
| Base Period Contract Value: | \$700,000.00                   |
| Base Contract Period:       | 01-13-2020 – 01-12-2021        |
| Option year 1-3 Value       | \$3,810,000.00                 |
| Option Year 1-3 Date        | 01-13-2021 – 01-12-2024        |
| <b>Option Year 4 Value:</b> | <b>\$1,800,000.00</b>          |
| <b>Option Year 4 Dates</b>  | <b>01-13-2024 – 12-31-2024</b> |

**Purpose of the Contract:**

To secure the consistent supply and delivery of methanol to the Blue Plains Advanced Wastewater Treatment Plant. The methanol is used as the nutrient for bacteria in the Nitrification section of Blue Plains, where nitrogen is removed to comply with DC Water’s environmental permits as required by the EPA.

DC Water dual-sources methanol to assure continuity of supply. Colonial Chemical was awarded 90% of our volume requirements, and Mitsubishi was awarded 10%.

**Contract Scope:**

Under the contract, suppliers will deliver and provide all necessary equipment required to offload methanol into the designated storage tanks at the Blue Plains Wastewater Treatment.

The global methanol price increased by 70% in OY1 and OY2, this had direct impact on higher annual spending.

**Spending Previous Year:**

|                               |  |
|-------------------------------|--|
| Cumulative Contract Value:    | 01-13-2020 to 01-12-2024: \$4,510,000.00 |
| Cumulative Contract Spending: | 01-13-2020 to 10-31-2023: \$4,312,577.00 |

**Contractor’s Past Performance:**

According to the COTR: the Contractor’s quality of products and services; timeliness of deliverables; conformance to DC Water’s policies, procedures and contract terms; and invoicing all meet expectations and requirements.

No LBE/LSBE participation.

**PROCUREMENT INFORMATION**

|                           |                   |                         |               |
|---------------------------|-------------------|-------------------------|---------------|
| <b>Contract Type:</b>     | Good and Services | <b>Award Based On:</b>  | Best Value    |
| <b>Commodity:</b>         | Methanol          | <b>Contract Number:</b> | 19-PR-DWT-21B |
| <b>Contractor Market:</b> | Open Market       |                         |               |

**BUDGET INFORMATION**

|                      |             |                         |                      |
|----------------------|-------------|-------------------------|----------------------|
| <b>Funding:</b>      | Operating   | <b>Department:</b>      | Wastewater Treatment |
| <b>Service Area:</b> | Blue Plains | <b>Department Head:</b> | Nicholas Passarelli  |

**ESTIMATED USER SHARE INFORMATION**

| User                                    | Share %        | Dollar Amount         |
|---|----------------|-----------------------|
| District of Columbia                    | 43.08%         | \$775,440.00          |
| Washington Suburban Sanitary Commission | 41.90%         | \$754,200.00          |
| Fairfax County                          | 9.60%          | \$172,800.00          |
| Loudoun Water                           | 4.71%          | \$84,780.00           |
| Other (PI)                              | 0.71%          | \$12,780.00           |
| <b>TOTAL ESTIMATED DOLLAR AMOUNT</b>    | <b>100.00%</b> | <b>\$1,800,000.00</b> |

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 Jeffrey F. Thompson                      Date  
 Chief Operating Officer, EVP

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 Dan Bae                                      Date  
 VP of Procurement

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 Matthew T. Brown                      Date  
 CFO and EVP of Finance, Procurement and Compliance

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 David L. Gadis                              Date  
 CEO and General Manager