



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

Meeting of the
Environmental Quality and Operations Committee

**Thursday, February 15, 2024
9:30 a.m.**

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

Meeting ID: 294 613 320 197

Passcode: bnrsud

Or call in (audio only)

[+1 202-753-6714,,699206352#](#)

Phone Conference ID: 699 206 352#

9:30 a.m.	I	Call to Order	Sarah Motsch, Chair
	II	Roll Call	Michelle Rhodd, Board Secretary
9:35 a.m.	III	BPAWTP Performance Update	Nicholas Passarelli
9:40 a.m.	IV	Fire Hydrants Update	Sylvia Okogi
9:45 a.m.	V	Water Quality Monitoring	Maureen Schmelling
9:50 a.m.	VI	CIP Quarterly Update	David Parker and Paul Guttridge
10:10 a.m.	VII	Proposed FY2024 – FY2033 Capital Improvement Program	Matthew Brown
		1. Action Item (Joint Use): Recommendation for Approval FY 2023 – FY 2033 – Proposed Capital Improvement Program (10-Year Disbursement Plan and Lifetime Budget)	
10:30 a.m.	VIII	Action Items (Non-Joint Use)	
		1. Contract No. N/A - Metro Branch Trail from Piney Branch Road NW to Blair Rd NW – District of Department of Transportation	
		2. Contract No. 200030 – Small Diameter Water Main Replacement-16A – Capitol Paving of D.C., Inc	
10:50 a.m.	IX	Other Business/Emerging Issues	
10:55 a.m.	X	Executive Session*	
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.

Follow-up Items from Prior Meetings:

1. William Elledge (Director, Engineering and Technical Services): Provide a cost estimate for the new parallel Potomac Interceptor River Crossing pipe that has the added benefit of creating redundancy. The committee would like to be informed prior to the geotechnical equipment helicopter fly in. **Responses will be provided in February.**
2. David Parker (Vice President, Engineering): Provide a chart mid-year of analysis to explain why DCW projections are never quite right and where we see the risk of them not being quite right. The analysis should further explain what is causing the errors in projection and how we can get a better handle on where we think the projections can potentially go with a risk of them not being exact. Information that should be included is listed below:
 - a. Certainty and risks on each set of projections
 - b. Analysis of differences of the following and the certainty of each moving forward
 - i. What we thought FY25 was going to cost last year
 - ii. What we think FY25 is going to cost now
 - c. Analysis of what categories DCW is certain are vs. what categories DCW isn't certain of
 - d. Analysis of
 - i. Where DCW thought we'd be
 - ii. Where DCW is now
 - iii. A look at outyears to show which categories are affected by these potential risks
 1. Show how certain or uncertain
 - a. Include historical analysis of how certain DCW has been in the past

¹The 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
February 15, 2024

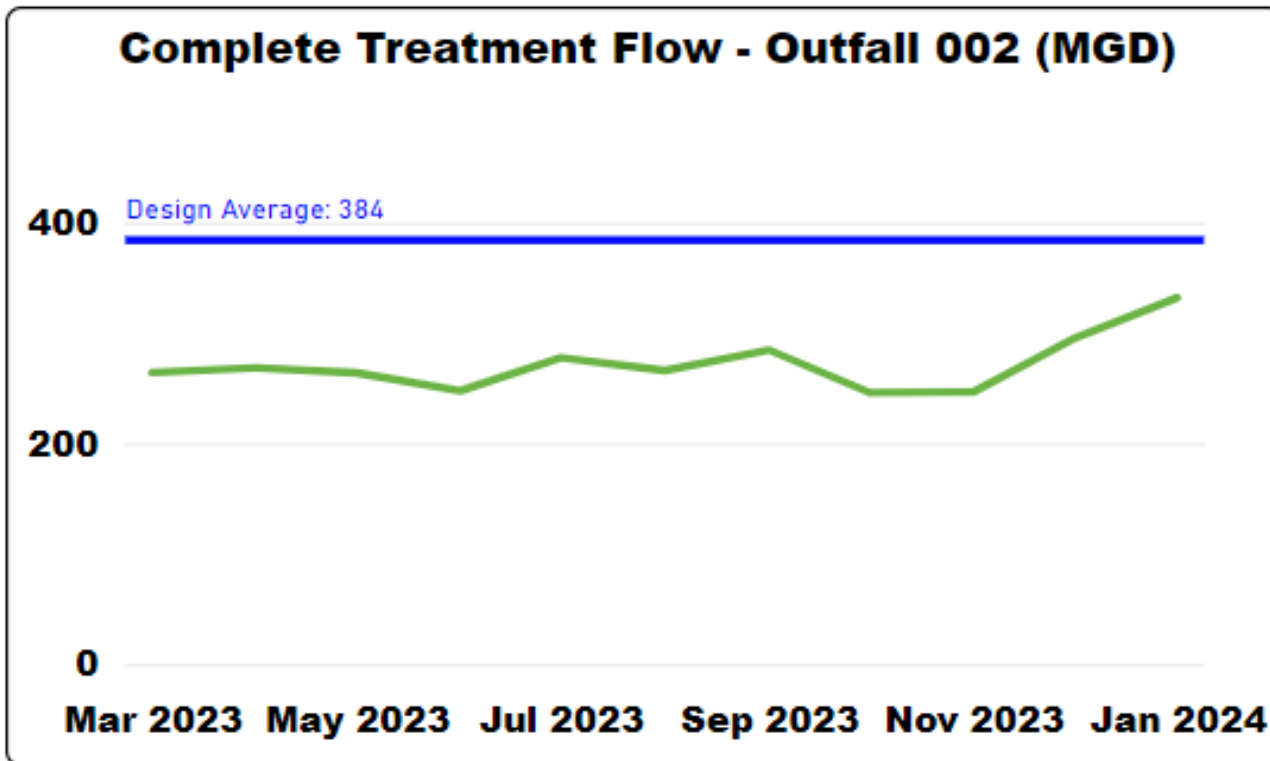


Nicholas Passarelli, Vice President , Wastewater Treatment Operations



Operational Performance Complete Treatment

Monthly Average Flow Trend to Complete Treatment (MGD)



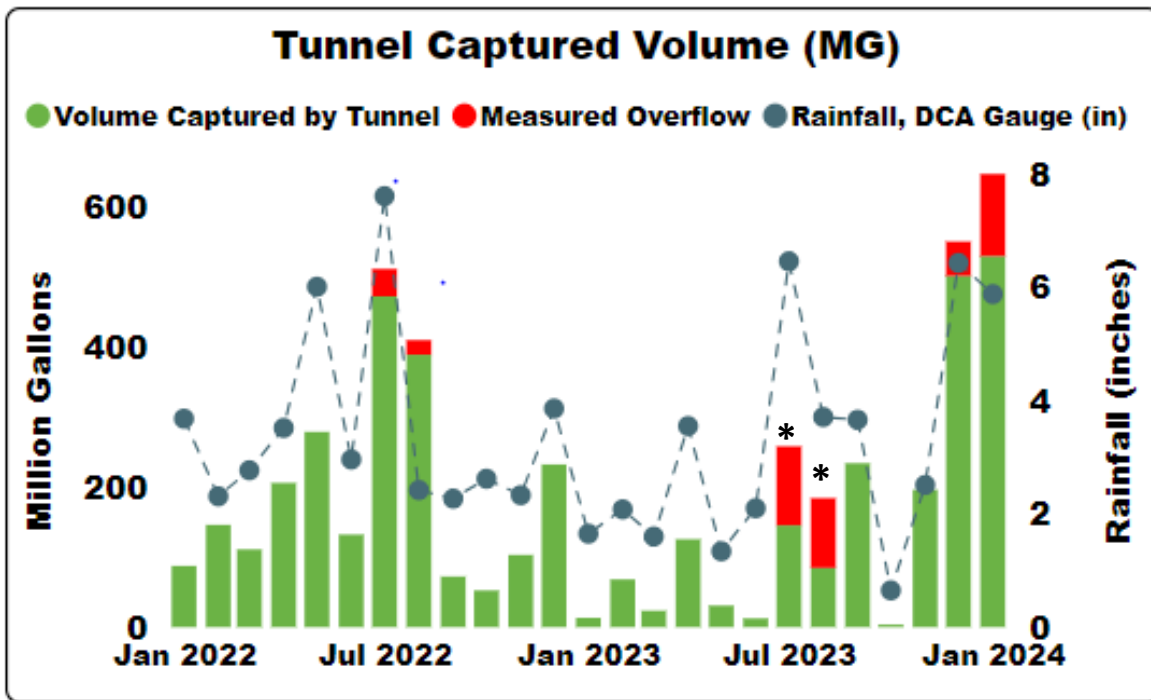
All weekly and monthly NPDES permit requirements were met

Average Outfall 002 flow for Jan: 332 MGD



Operational Performance Tunnel Systems and Wet Weather Treatment

Anacostia River Tunnel System Annual Performance 2022 – 2024 (Through Jan 2024)



Total System Performance from Start-Up (2018-2023)

	Anacostia River Tunnel System
Number of events	290
Volume Captured, MG	16,229
Volume to CSO, MG	1,538
Percent Captured, %	91.0

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

1443 MG of volume captured by Anacostia River Tunnel System in Calendar Year 2023 through December, with 262 MG overflow

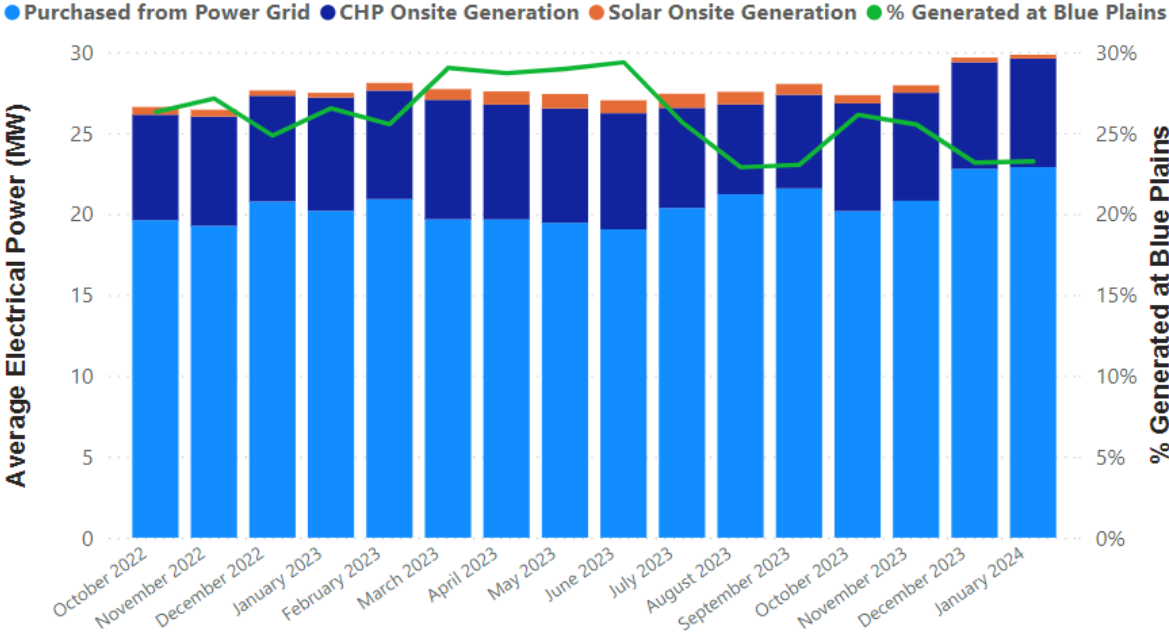
* - CSO 019 diversion to tunnel was out of service July 5 - Aug 29 for commissioning of Northeast Boundary Tunnel, causing temporary increase in overflows. Necessary for safety of workers in tunnel. EPA/DOEE advised in advance.



Operational Performance Electrical Energy Use and Generation

Blue Plains Electrical Energy Use and Generation

Blue Plains Electrical Report

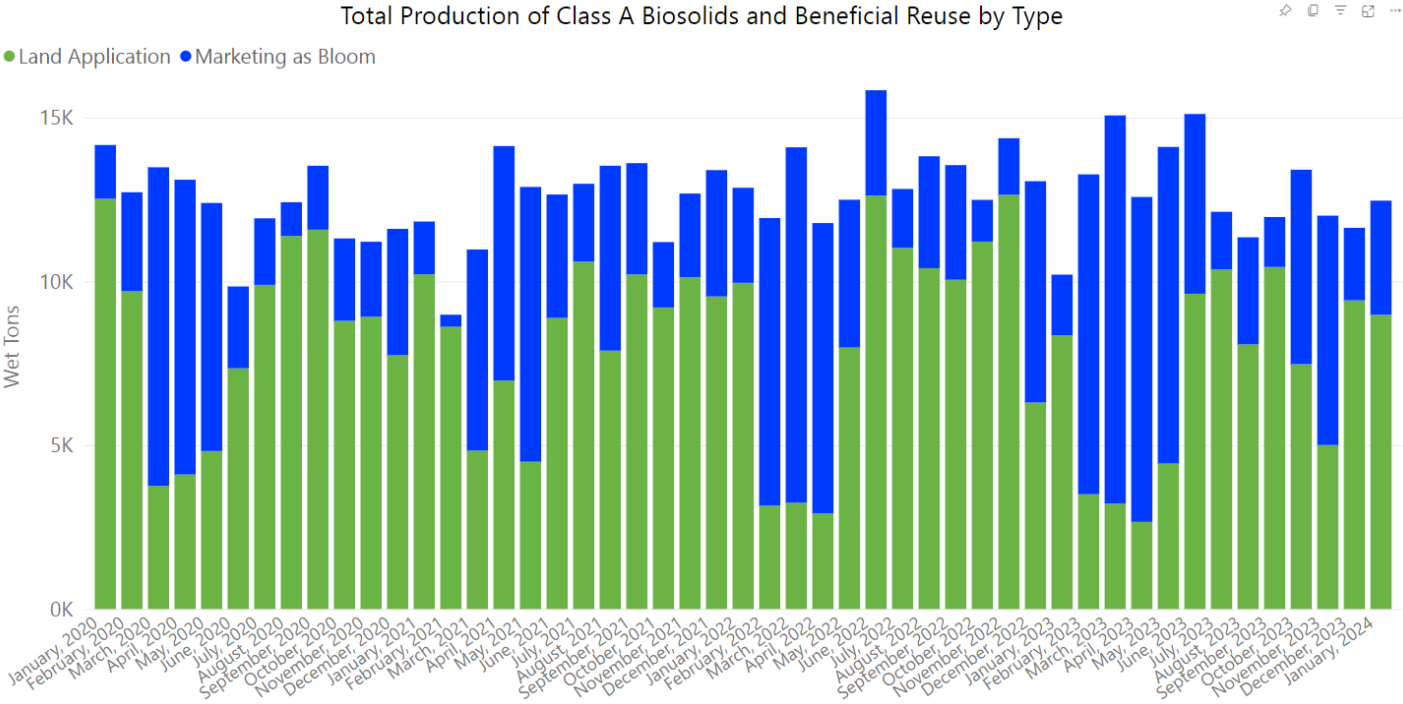


- 23% of electricity was generated onsite
- Combined Heat and Power (CHP) facility produced an average of 8.0 megawatts (MW), with 6.7 MW net to Blue Plains grid
- Solar System produced an additional 0.24 MW of power on average
- Total electricity consumption at Blue Plains averaged 29.8 MW
- DC Water purchased an average of 22.9 MW of electricity from PEPCO



Operational Performance Class A Biosolids Production

Total Production of Class A Biosolids and Beneficial Reuse by Type



In January, Blue Drop sold approximately 3,483 tons of Bloom; for a total of 18,630 tons towards the FY24 goal of 65,000 tons.

Blue Plains Produced 12,462 tons of biosolids for the month with the remaining 8,979 tons managed through land application contracts.



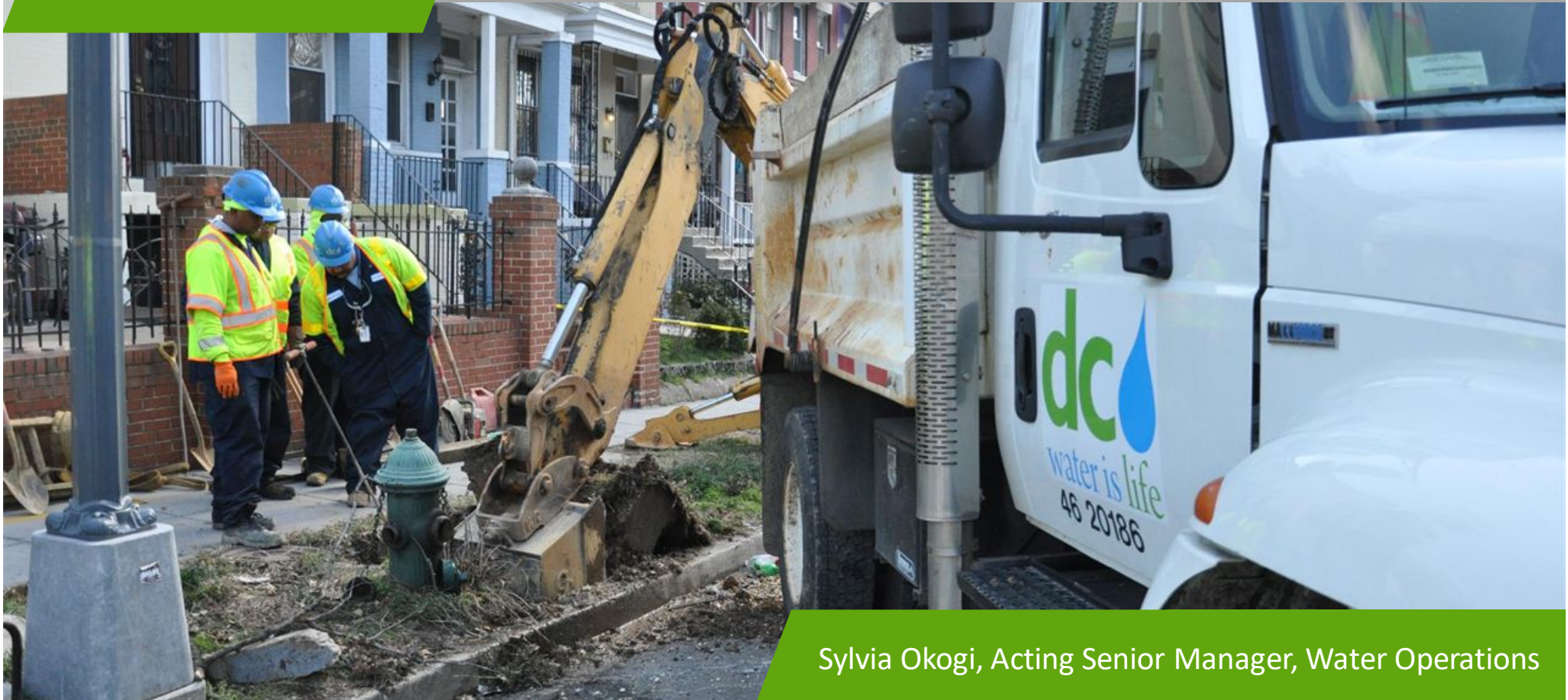
Fire Hydrant Update



Fire Hydrant Update

Environmental Quality & Operations Committee

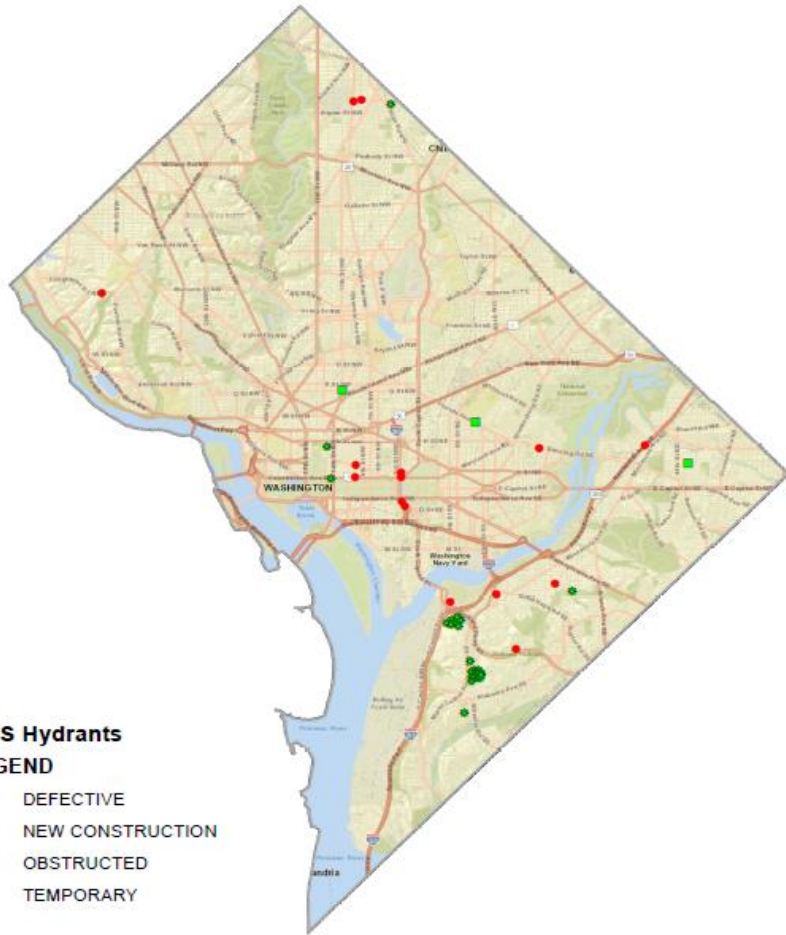
February 15, 2024



Sylvia Okogi, Acting Senior Manager, Water Operations

Map of Public Out-of-Service Hydrants

February 01, 2024



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



Prepared By: Distribution Control Branch

Status Report of Public Fire Hydrants for DC Water Services Committee - February 1, 2024

	November Cmte. Report (November 2, 2023)	December Cmte. Report (December 1, 2023)	January Cmte. Report (January 5, 2024)	February Cmte. Report (February 1, 2024)
Public Fire Hydrants:	9,837	9,839	9,840	9,840
In Service:	9,799	9,796	9,802	9,796
Marked Out-of-Service (OOS)	38	43	38	44
OOS - defective requiring repair/replacement	14	15	11	15
% OOS requiring repair or replacement (DC Water goal is 1% or less OOS)	0.14%	0.15%	0.11%	0.15%
OOS - due to inaccessibility or temp construction work	24	28	27	29

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 February 1, 2024

Breakdown of Defective	0-7 Days	8-14 Days	15-30 Days	31-60 Days	61-90 Days	91-120 Days	> 120 Days	Total
	Hydrant Needs Repair/Investigation	3	0	0	0	0	0	0
Needs Valve Investigation for Low Flow/Pressure or Shut Test for Replacement	0	0	0	0	0	0	0	0
Needs Replacement	1	0	0	**	1**	0	9**	12
Defective								15

Breakdown of Others	0-7 Days	8-14 Days	15-30 Days	31-60 Days	61-90 Days	91-120 Days	> 120 Days	Total
	Temporarily OOS as part of operations such as a main repair	1	1	0	0	1	0	0
Construction* - OOS	0	0	0	0	2	10	14	26
Obstructed Hydrant - OOS hydrant due to operation impeded by an obstruction.	0	0	0	0	0	0	0	0
Others								29

*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
February 15, 2024



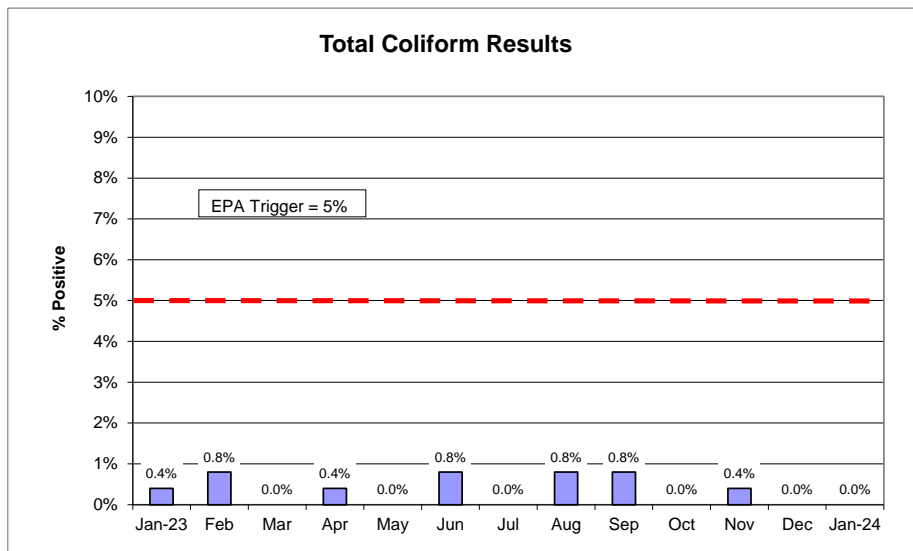
TAP WATER IS AFFORDABLE • SAFE • ECO-FRIENDLY

Maureen Schmelling, Director, 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

July-December 2023	1 st Draw	2 nd Draw
90 th Percentile, parts per billion (ppb)	2.0	4.7
Number of samples	107	106
Number of samples > 15 ppb	0	0

1st draw is a one-liter sample collected after minimum six hours of stagnation (no-water use period)

2nd draw is a one-liter sample collected after the 1st draw and filling and dumping three liters, resulting in between the 5th to 6th liter of water which is water that stagnated in the service line.

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



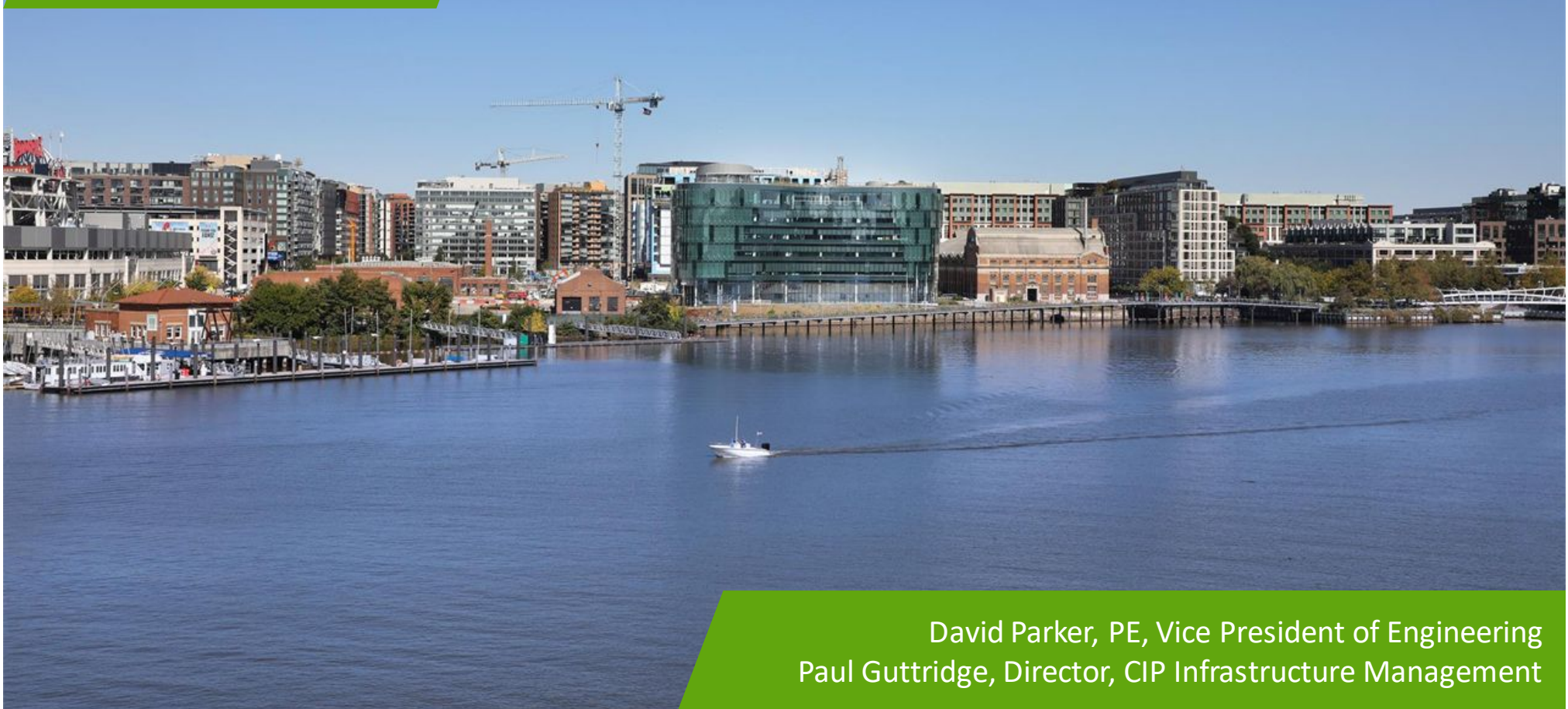
CIP Quarterly Update



CIP Quarterly Update

Environmental Quality & Operations Committee

February 15, 2024



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



Agenda

- FY24 CIP Quarter 1 Budget & KPI Update
- Report on FY24 Quarter 1 CIP Progress by Service Area
 - Non-Process
 - DC Clean Rivers (DCCR)
 - Blue Plains
 - Sewer
 - Water
 - Lead Free DC (LFDC)



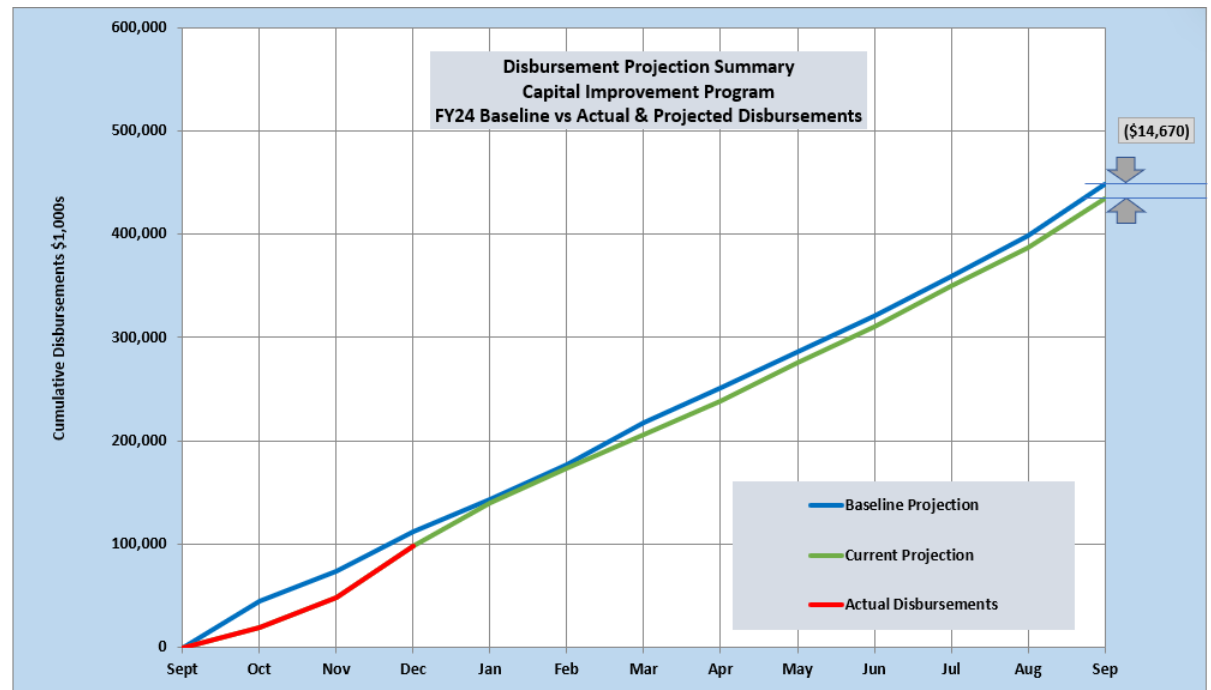
CIP Quarterly Update

FY24 CIP Disbursement Performance

- The Baseline projection for FY24 was developed to better align with the anticipated execution of the planned work. Total Baseline budget is **\$448.6M**
- The fiscal year 2024 thru Quarter 1 CIP disbursements were **\$98M** through the end of the first Quarter

Schedule Key Performance Indicators

	Performance
36	Total KPIs due this year
3	KPIs completed within threshold
3	KPIs forecast outside threshold (>90 days)





Non-Process Facilities

FY2024 Progress

Planning

- a. Roofing Assessments
- b. HVAC Assessments
- c. Bryant St and Main PS Upgrades, Ames PI Expansion, HQO Terrace Improvement
- d. Anacostia PS & Bryant St PS Parking Modification

Procurement

These projects are ready for procurement:

- a. Floatable Debris Dock Renovation
- b. Floatable Debris Office Building
- c. Fort Reno Watchman's Lodge & Abandoned Pump Station

Construction

These projects are under permit review:

- a. Blue Plains SB-1 Warehouse Reno
- b. North Canal Street Fence

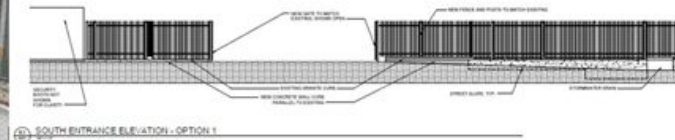
Fort Reno Renovation



Blue Plains SB-1 Warehouse Renovation



North Canal Fence





DC Clean Rivers

Projects in Planning:

RC-T - Piney Branch Tunnel

NEPA compliance underway – Construction Start May 2026

Projects in Design:

RC-C - Rock Creek Green Infrastructure Project C

25 acres – Construction start March 2025

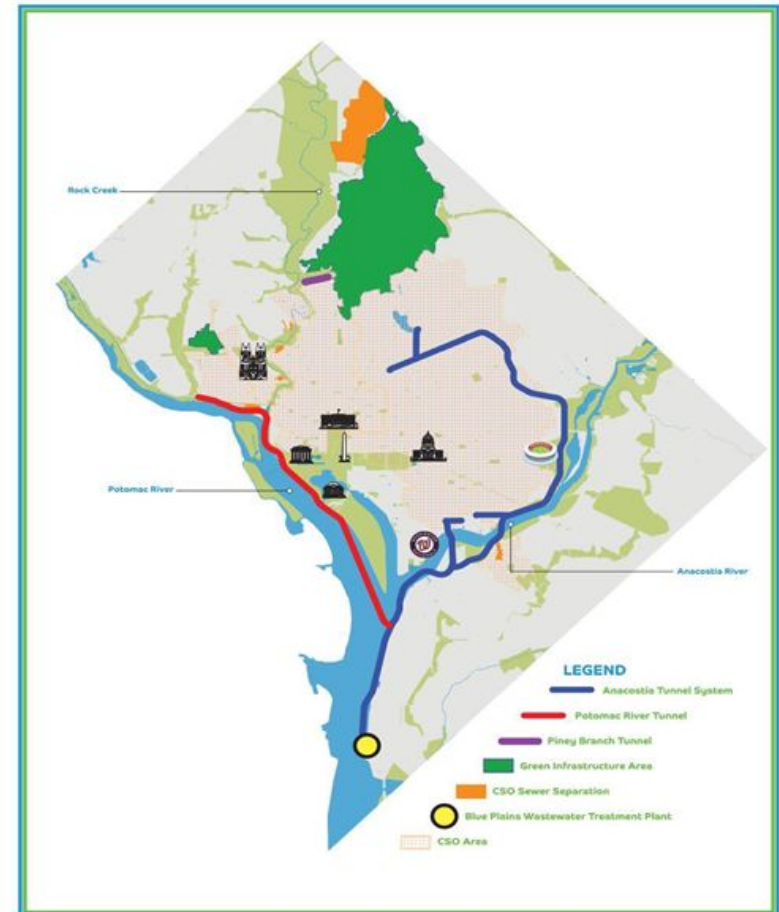
Projects in Construction:

J - Northeast Boundary Tunnel (\$580M 99% complete)

Placed in operation ahead of consent decree

PRT-B - Potomac River Tunnel (\$819M 3% complete)

Mobilization and Design underway





Blue Plains Advanced Wastewater Treatment Plant

FY2024 Progress

Planning

- Over **20** Tasks including planning studies at various stages of completion
- Flood Wall Sections A,B&D – On hold for FEMA Grant issuance
- Electrical Improvements and Microgrid Roadmap Study

Design

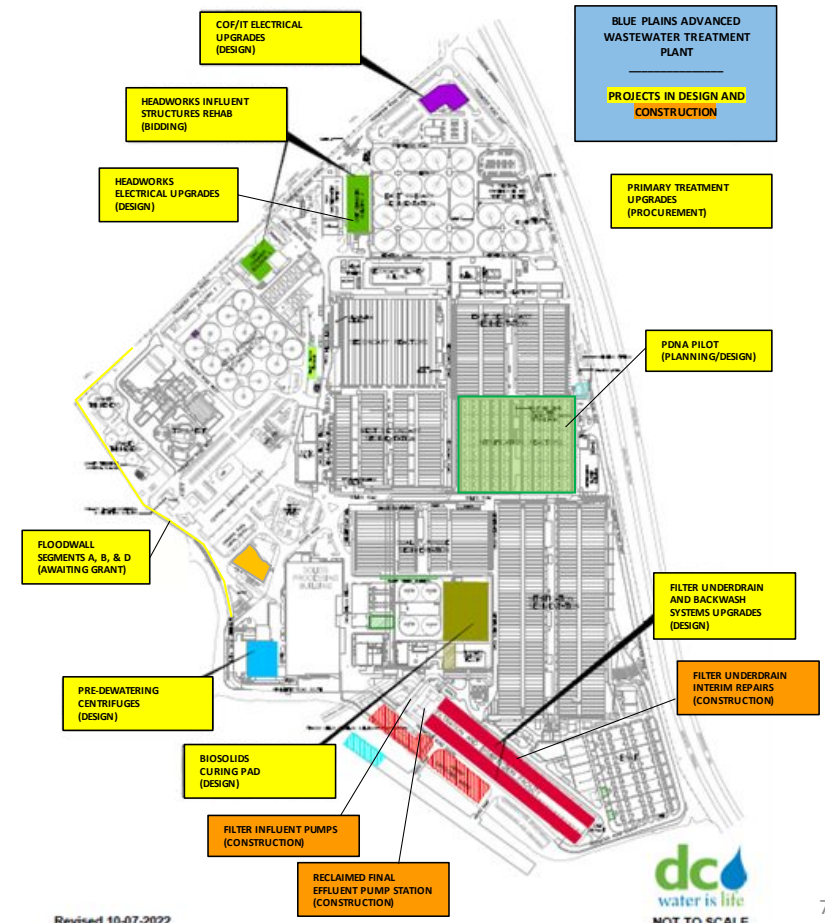
- **9 projects under design** with total construction value of \$160M
- PdNA Pilot design complete, preparing to bid construction task order
- Filter Underdrain and Backwash System Upgrades design underway
- Headworks Electrical Upgrades at Pre-final design

Procurement

- 20 Yr Primary Upgrades – design/CMAR – May NTP
- Renewable Natural Gas – negotiating design and construction
- Headworks Structural Upgrades - Construction bid received
- Biosolids curing pad and Solar PV – construction procurement
- Solar Phase 2 in procurement

Construction

- Reclaimed Final Effluent Pump System ongoing
- Interim Filter Underdrain Repairs – 8 filter cells to be completed FY24
- MFU 8 tasks - Pump Station 10, DAF Skimmer Replacement, Digester Roof Liner Replacement





CSS, Sanitary, Stormwater Linear

FY2024 Progress

Planning

- Emergency design to repair defect found in East West Outfall Relief Sewers.
- Emergency cleaning and design of Anacostia Main Interceptor
- Facilities Plan Update for linear assets is near completion.
- Planning multiple projects along Potomac Interceptor

Design

- Procuring design firm for Glover Park Sewer collaborative delivery
- Designing 4 cured-in-place pipe (CIPP) projects throughout District
- Designing multiple projects along Potomac Interceptor

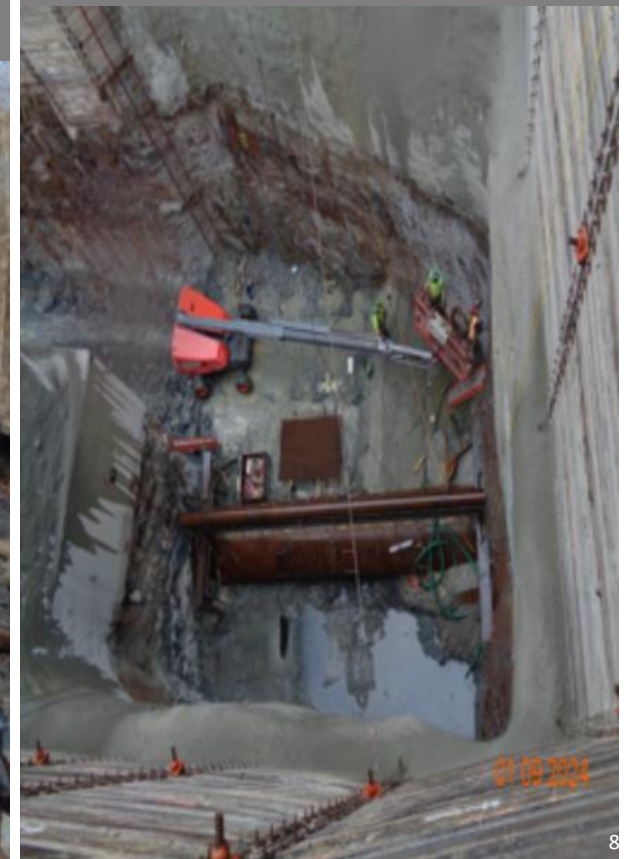
Construction

- MH31-30 Rehabilitation 60% complete
- Soapstone Valley Park Sewer Rehabilitation: 85% complete
- Started construction on Piney Branch Trunk Sewer Rehab and Northeast Boundary Trunk Sewer

New MH31 Energy Dissipator



MH31 Support of Excavation





CSS, Sanitary, Stormwater Linear

Anacostia Main Interceptor Emergency Repair

- Collapse week of December 18, 2023
- Last inspected between August 2022 and February 2023
- **Phase 1:**
 - Bypass pumping
 - Installation of trench box
 - Temporary repair of the collapsed pipe.
- **Phase 2:**
 - Cleaning contractor is mobilizing.
 - Lining of the pipe from MH 460 to MH-103 (~1,460 lf)





Water Linear

FY2024 Progress

Planning

- Concept Design of five projects
- Six projects transitioned to design.

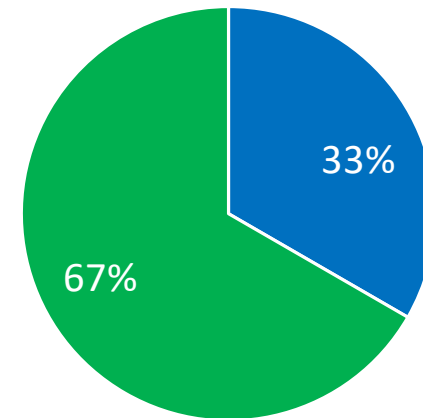
Design

- Completed bid documents for Small Diameter Water Main (16C)
- CFR/NEPA for 8 projects ongoing
- Six projects in design (pre-final)

Construction

- Completed approx. 3.5 miles of SDWM compared to current budget plan of 11 miles
- Six contracts in active construction

Small Diameter Watermain Replacement (miles) Annual Plan



■ % Achieved ■ % Remaining



Lead Free DC Program

FY2024 Progress

Completed 5,000th replacement (since Oct 1, 2019), with 492 replacements completed in FY24 Q1.

Construction Packages 15 & 16 were bid in Dec 2023 and awarded in Jan 2024

Co-Hosted 2 workshops: Ward 8 with Black Millennials for Flint (BM4F) and a local AWWA on Lead Removal and Procurement

Supported EPA event "Get the Lead Out - GLO" with homeowner testimonials on LFDC

Re-established District Funding (\$2.8M+) for the Lead Pipe Replacement Assistance Program (LPRAP) completed 110+ private side replacements.

Continued Canvassing Efforts for pkgs 5-16 and Presented at 6 ANC Meetings in Wards 3, 6, and 8.





Impacts of Lead Free DC on CIP

Lead & Copper Rule Improvements

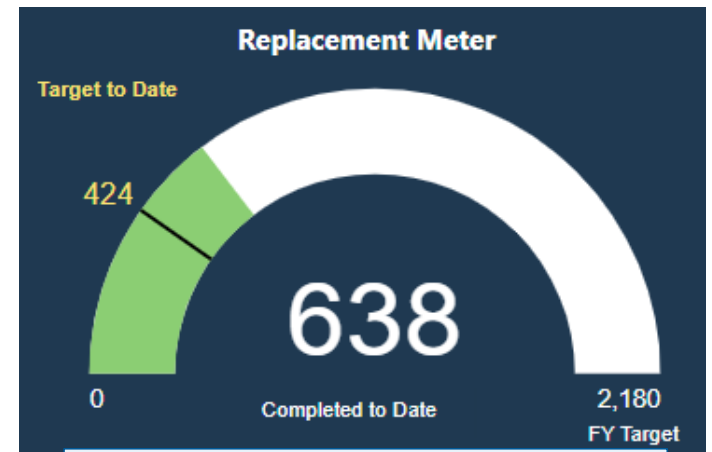
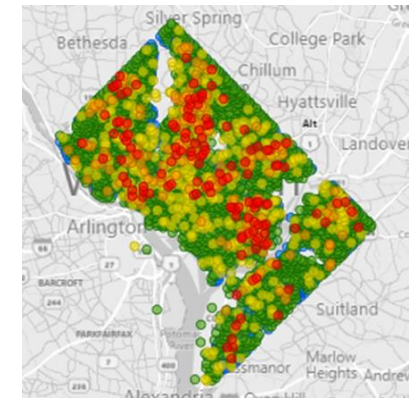
- DC Water is largely ahead of the curve on proposed requirements from EPA
 - Achieve 100% removal of pipe
 - Locate and identify legacy services
 - Improve tap sampling
 - Lower lead action level
 - Strengthen protections to reduce exposure
- DCW will accelerate identification on unknowns

Water Service Information

Premise Material Status

Display Category

- Verified Lead
- Suspected Lead
- No Information
- Suspected Non-Lead
- Verified Non-Lead



LSLR's Oct 1, 2023 thru Feb 7, 2024



Proposed FY2024 – FY2033 Capital Improvement Program



Proposed FY2024 – FY2033 Capital Improvement Program
Environmental Quality & Operations Committee
February 15, 2024



Matthew Brown, Chief Financial Officer and EVP Finance,
Procurement



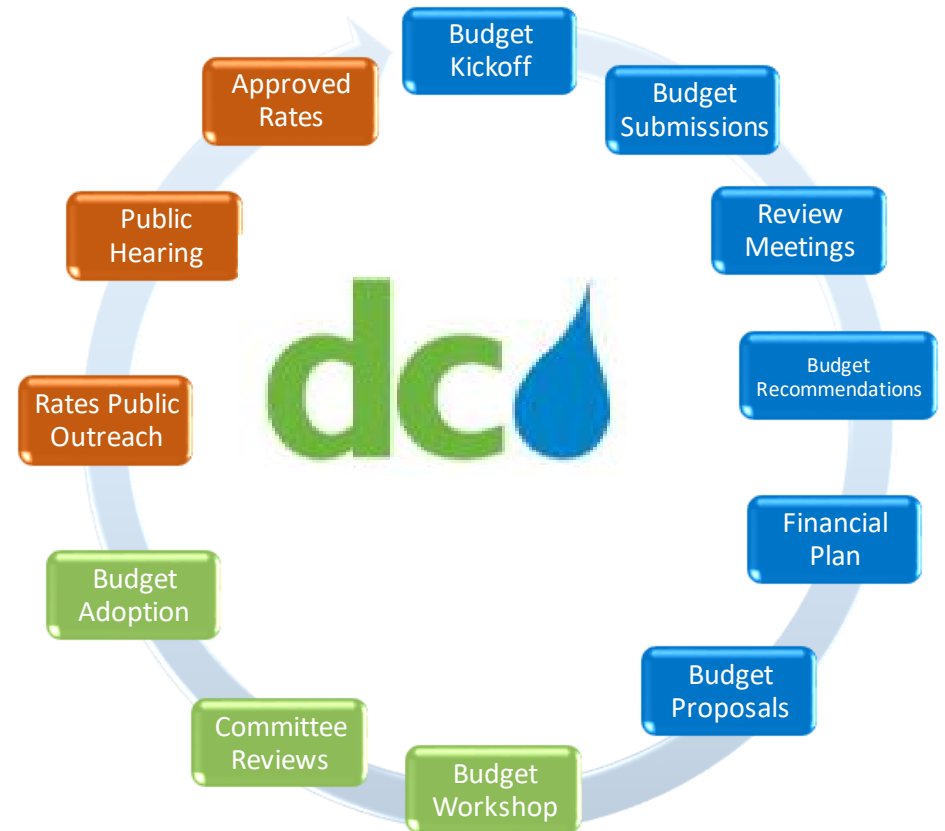
Purpose

- Review the management's budget proposal
- Obtain committee's recommendation to the Board on the following:
 - Proposed FY 2024 – FY 2033 Capital Improvement Program (disbursements and lifetime), including amendments to the FY 2024 Capital Disbursements budget



The Budget Process

- **Preparation** of Proposed Budget ✓
- Board review of proposals
 - Two months of detailed review by Finance and Budget, Environmental Quality and Operations, and Retail Rates Committees
- Customer **Briefings** and **Feedback**
 - Wholesale Customer Briefing ✓
 - Office of People’s Counsel Budget Briefing ✓
 - Town Halls
- Board **Budget Adoption** on March 7, 2024
- **Public Hearing** on May 9, 2024
- **Board adoption** of rates on July 3, 2024
- Fiscal year begins on October 1, 2024





Budget & Rates Adoption Calendar

Timeline	Activity	Status
January 4	Budget Workshop with Board of Directors	✓
January 12	Wholesale Customer Briefing	✓
January 19	Office of People’s Counsel Briefing	✓
Committee Discussions & Reviews		
January 18	Environmental Quality & Operations	✓
January 23	Joint DC Retail Water & Sewer Rates and Finance & Budget Committee	✓
February 1	Board Meeting (No Board Action Required)	
Committee Reviews, Recommendations & Actions		
February 15	Environmental Quality & Operations	
February 22	Finance & Budget	
February 27	DC Retail Water & Sewer Rates	
March 7	Board Adoption of Budgets	
April	Submit Budget via the District to U.S. Congress	
April – June	Rates Public Outreach & Town Halls & Public Hearing on May 9	
July 3	Board Adoption of Rates	
October 1	Fiscal Year 2025 Begins	



DC Water's Budget

- The Board of Directors has the sole authority to adopt DC Water's budget
- When DC Council established DC Water, they emphasized the importance of need for independent financial control in DC Code § 34–2201.01:
 - **(3)** The **financing requirements** for water distribution and sewage collection, treatment, and disposal systems, including the ability to fund capital programs without undue reliance on the general obligation credit of the District, are substantial and **require financial resources independent of other District funds**
 - **(4)** Creation of an **independent authority** with secure funding **separated** from the District's General Fund to oversee water and sewer operations for the District and surrounding jurisdictions will **enhance the financial viability of water distribution and sewage collection, treatment, and disposal systems in the District and enhance the District's ability to meet its statutory obligation to provide sanitary sewer services to the surrounding jurisdictions**
 - **(7)** It is in the **best interest** of the District, its citizens, and the surrounding jurisdictions that the Council establish an **independent water and sewer authority** to achieve the following goals and objectives
 - **(B)** To expedite the repair, replacement, rehabilitation, modernization, and extension of existing water distribution and sewage collection, treatment, and disposal systems **including the financing, on a self-sustaining basis, of capital and operating expenses** relating thereto



DC Water's Budget

- DC Council and the U.S. Congress enacted legal requirements for DC Water's budget:
 - **7 affirmative [Board member] votes shall be required for approval of the Authority's budget.** See D.C. Law11-111; D.C. Code § 34–2202.04(b)(4)(j)
 - The District of Columbia Water and Sewer Authority established pursuant to Chapter 22 of Title 34 shall prepare and annually submit to the Mayor, for inclusion in the annual budget, annual estimates of the expenditures and appropriations necessary for the operation of the Authority for the year. All such estimates shall be forwarded by the Mayor to the Council for its action pursuant to §§ 1-204.46 and 1-206.03(c), **without revision but subject to his recommendations.** Notwithstanding any other provision of this chapter, the **Council may comment or make recommendations** concerning such annual estimates but **shall have no authority under this chapter to revise such estimates.** See Pub. L. 104-184, § 4(a); D.C. Code § 1-204.45a(a)



Management's Recommendation: Ten-Year CIP

- The **proposed ten-year CIP budget of \$7.74B** includes annual spending estimates for capital construction, capital equipment and DC Water's share of the Aqueduct's capital projects
 - This is a \$792M increase over the Board-approved CIP for the ten-year period
- The **proposed lifetime budget is \$16.1B** and covers total commitments, including labor, for active projects prior to, during, and beyond the ten-year window

Cash Disbursements (\$ in thousands)	FY 2024 - FY 2033 Disbursement Plan											Last Years 10-yr	(Increase)/ Decrease	Lifetime Budget
	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031	FY 2032	FY 2033	10-yr Total			
NON PROCESS FACILITIES	\$ 13,074	\$ 19,900	\$ 25,190	\$ 27,461	\$ 17,775	\$ 35,413	\$ 23,100	\$ 13,283	\$ 14,977	\$ 7,345	\$ 197,518	\$ 141,246	\$ (56,272)	\$ 362,044
WASTEWATER TREATMENT	65,150	103,291	133,487	146,143	164,601	194,637	185,233	174,807	91,587	74,666	1,333,603	1,180,881	(152,722)	3,348,779
COMBINED SEWER OVERFLOW	123,793	213,408	231,323	216,615	193,750	154,800	92,363	4,041	-	-	1,230,093	1,062,875	(167,218)	3,430,748
STORMWATER	7,293	13,565	7,958	3,804	4,532	3,268	6,697	9,432	6,772	5,231	68,551	72,241	3,690	157,075
SANITARY SEWER	80,599	92,235	123,854	118,639	169,037	287,816	249,471	227,771	269,312	236,846	1,855,580	1,796,116	(59,464)	2,897,505
WATER	158,736	222,494	252,395	250,278	266,256	268,591	279,184	207,235	219,880	227,979	2,353,028	2,011,801	(341,227)	4,738,104
CAPITAL PROJECTS	\$ 448,646	\$ 664,893	\$ 774,206	\$ 762,940	\$ 815,951	\$ 944,526	\$ 836,048	\$ 636,568	\$ 602,528	\$ 552,067	\$ 7,038,373	\$ 6,265,159	\$ (773,214)	\$ 14,934,255
CAPITAL EQUIPMENT	30,535	31,477	31,839	30,523	37,169	37,169	37,169	37,169	37,169	37,169	347,390	347,390	-	347,390
WASHINGTON AQUEDUCT	35,546	35,770	35,770	35,770	35,770	35,770	35,770	35,770	35,770	35,770	357,472	338,518	(18,954)	357,472
ADDITIONAL CAPITAL PROJECTS	\$ 66,081	\$ 67,246	\$ 67,609	\$ 66,293	\$ 72,939	\$ 72,939	\$ 72,939	\$ 72,939	\$ 72,939	\$ 72,939	\$ 704,863	\$ 685,908	\$ (18,954)	\$ 704,863
LABOR														\$443,166
TOTAL CAPITAL BUDGETS	\$ 514,727	\$ 732,139	\$ 841,815	\$ 829,232	\$ 888,890	\$ 1,017,465	\$ 908,987	\$ 709,507	\$ 675,467	\$ 625,006	\$ 7,743,235	\$ 6,951,067	\$ (792,168)	\$ 16,082,284
Prior Year Board Approved CIP	\$ 604,671	\$ 784,064	\$ 838,249	\$ 859,188	\$ 892,646	\$ 841,454	\$ 677,036	\$ 507,647	\$ 444,676	\$ -	\$ 6,951,067			
Delta (inc)/dec	\$89,944	\$51,925	(\$3,566)	\$29,955	\$3,756	(\$176,011)	(\$231,951)	(\$201,860)	(\$230,791)	(\$625,006)	(\$792,168)			

DC Water Budget Overview FY2024-2033 Proposed Capital Investments of \$7.7 billion



\$1.17 billion
Fully Funds DC Clean Rivers projects to meet Consent Decree requirements



\$347 million
Invests in process equipment, specialized vehicles, and information technology infrastructure

Invests in the Aqueduct's capital infrastructure



\$357 million



\$732M
To continue lead service line replacements

Continues investment in Water & Sewer infrastructure



\$1.62 billion
Ramps up to 1.5% replacement for small diameter water mains per year



\$1.92 billion
Ramps up to 1% rehabilitation for small/local sewer lines per year



\$197 million
Renovates Non-Process Facilities including the Historic Main Pump Station, Bryant Street Pump Station, non-process buildings at Blue Plains, laboratory upgrades, and solar installations



\$68 million
Improves stormwater pump stations to relieve local flooding



\$1.33 billion
Funds rehabilitation and upgrades at Blue Plains



Action Item: Proposed CIP Budget

ACTION ITEM: FY 2024 – FY 2033 Proposed Capital Improvement Program (Ten-Year Disbursement Plan and Lifetime Budget)

DC Water presents its capital improvement program on two different bases:

- a. **Ten-Year Disbursement Plan** – The cash disbursement-based capital plan is utilized to forecast the timing and amount of capital financing, which is the primary basis for projected retail rate increases.
- b. **Lifetime Budget** – The project lifetime budget reflects the total costs of each project active during the ten-year planning period. These costs include historical and projected spending, project contingencies, and labor (listed as a separate line item).

As shown in Attachment A-1, the Board of Directors will be asked to approve the following:

1. **FY 2024 – FY 2033 Disbursement Plan** – \$7.74 billion, including the Proposed Revised FY 2024 budget of \$514.7 million
2. **Lifetime Budget** – \$16.08 billion

Environmental Quality and Operations Committee - VII. Proposed FY2024 - FY2033 Capital Improvement Program (Matthew Brown)

	FY 2024 - FY 2033 Disbursement Plan											Last Years 10-yr	(Increase)/ Decrease	Lifetime Budget
	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031	FY 2032	FY 2033	10-yr Total			
Facility Land Use	\$13,074,148	\$19,899,722	\$25,189,941	\$27,460,830	\$17,774,560	\$35,413,360	\$23,100,090	\$13,282,590	\$14,977,360	\$7,345,430	\$197,518,032	\$141,245,733	(\$56,272,299)	\$362,044,066
NON PROCESS FACILITIES	\$13,074,148	\$19,899,722	\$25,189,941	\$27,460,830	\$17,774,560	\$35,413,360	\$23,100,090	\$13,282,590	\$14,977,360	\$7,345,430	\$197,518,032	\$141,245,733	(\$56,272,299)	\$362,044,066
Liquid Processing	\$31,048,728	\$37,484,373	\$62,214,984	\$82,863,496	\$90,298,000	\$109,684,150	\$99,566,930	\$106,730,770	\$64,331,770	\$59,904,400	\$744,127,601	\$625,265,688	(\$118,861,913)	\$1,383,302,353
Plantwide	\$21,440,084	\$35,956,649	\$43,146,688	\$49,890,832	\$43,836,600	\$45,110,650	\$27,192,330	\$18,601,890	\$3,488,790	\$3,152,650	\$291,817,163	\$301,808,762	\$9,991,599	\$542,511,511
Solids Processing	\$11,166,208	\$28,652,274	\$27,041,176	\$10,790,136	\$29,141,904	\$31,597,830	\$34,274,930	\$38,154,176	\$23,316,940	\$11,608,670	\$245,744,238	\$203,857,210	(\$41,887,028)	\$985,127,586
Enhanced Nitrogen Removal Facilities	\$1,495,382	\$1,198,170	\$1,084,272	\$2,598,760	\$1,324,256	\$8,244,470	\$24,198,440	\$11,320,200	\$449,580	\$0	\$51,913,531	\$49,948,854	(\$1,964,676)	\$437,837,932
WASTEWATER TREATMENT	\$65,150,402	\$103,291,467	\$133,487,120	\$146,143,224	\$164,600,760	\$194,637,100	\$185,232,630	\$174,807,030	\$91,587,080	\$74,665,720	\$1,333,602,533	\$1,180,880,515	(\$152,722,018)	\$3,348,779,382
DC Clean Rivers Program	\$118,913,096	\$204,033,452	\$220,390,158	\$212,583,113	\$189,056,663	\$147,147,462	\$77,719,333	\$0	\$0	\$0	\$1,169,843,276	\$962,607,417	(\$207,235,859)	\$3,266,221,697
Combined Sewer Overflow Program	\$4,879,708	\$9,374,524	\$10,932,822	\$4,031,919	\$4,693,032	\$7,652,799	\$14,643,837	\$4,040,802	\$0	\$0	\$60,249,443	\$100,267,378	\$40,017,935	\$164,526,690
COMBINED SEWER OVERFLOW	\$123,792,803	\$213,407,976	\$231,322,980	\$216,615,032	\$193,749,695	\$154,800,261	\$92,363,170	\$4,040,802	\$0	\$0	\$1,230,092,719	\$1,062,874,795	(\$167,217,924)	\$3,430,748,387
Storm Local Drainage Program	\$491,379	\$3,461,292	\$2,886,366	\$430,646	\$424,035	\$226,443	\$264,562	\$302,681	\$324,394	\$302,681	\$9,114,479	\$10,920,503	\$1,806,024	\$38,639,859
Storm On-Going Program	\$224,568	\$574,996	\$642,534	\$846,220	\$1,083,740	\$1,287,260	\$935,100	\$500,000	\$500,000	\$500,000	\$7,094,418	\$7,566,163	\$471,745	\$11,553,151
Storm Pumping Facilities	\$4,847,323	\$8,068,698	\$2,692,739	\$1,050,183	\$3,024,225	\$1,754,650	\$5,497,260	\$8,490,700	\$5,507,390	\$3,747,260	\$44,680,428	\$46,083,172	\$1,402,744	\$64,226,628
Stormwater Program Management	\$1,287,865	\$851,352	\$337,770	\$0	\$0	\$0	\$0	\$138,240	\$439,760	\$680,880	\$3,735,867	\$3,242,574	(\$493,293)	\$13,678,204
Stormwater Trunk/Force Sewers	\$441,724	\$608,525	\$1,398,672	\$1,477,017	\$0	\$0	\$0	\$0	\$0	\$0	\$3,925,938	\$4,428,226	\$502,288	\$28,976,732
STORMWATER	\$7,292,860	\$13,564,862	\$7,958,081	\$3,804,066	\$4,532,000	\$3,268,353	\$6,696,922	\$9,431,621	\$6,771,544	\$5,230,821	\$68,551,129	\$72,240,638	\$3,689,509	\$157,074,574
Sanitary Collection System	\$6,087,171	\$26,323,390	\$36,509,534	\$26,783,380	\$35,728,446	\$108,246,910	\$82,941,630	\$61,528,530	\$113,098,870	\$95,611,860	\$592,859,721	\$491,829,019	(\$101,030,702)	\$774,096,236
Sanitary On-Going Projects	\$13,397,969	\$14,489,438	\$13,643,343	\$13,383,880	\$16,037,200	\$29,818,230	\$26,474,270	\$26,465,890	\$26,963,810	\$26,176,970	\$206,851,000	\$155,609,676	(\$51,241,324)	\$292,096,297
Sanitary Pumping Facilities	\$3,639,346	\$7,259,350	\$9,040,344	\$5,374,521	\$9,016,038	\$18,035,170	\$20,116,590	\$20,951,460	\$32,230,670	\$27,351,080	\$153,014,569	\$201,000,160	\$47,985,591	\$236,064,444
Sanitary Program Management	\$7,495,225	\$3,382,364	\$5,193,600	\$7,889,814	\$10,130,481	\$9,192,210	\$6,269,290	\$748,620	\$0	\$0	\$50,301,604	\$77,312,817	\$27,011,213	\$171,900,257
Interceptor/Trunk Force Sewers	\$49,979,621	\$40,780,436	\$59,467,004	\$65,207,396	\$98,125,320	\$122,523,184	\$113,669,300	\$118,076,130	\$97,018,750	\$87,705,880	\$852,553,020	\$870,364,234	\$17,811,215	\$1,423,347,320
SANITARY SEWER	\$80,599,332	\$92,234,977	\$123,853,825	\$118,638,991	\$169,037,485	\$287,815,704	\$249,471,080	\$227,770,630	\$269,312,100	\$236,845,790	\$1,855,579,913	\$1,796,115,906	(\$59,464,007)	\$2,897,504,554
Water Distribution Systems	\$59,596,455	\$99,259,710	\$117,420,426	\$96,830,370	\$106,484,688	\$113,946,380	\$130,215,120	\$133,780,750	\$141,443,600	\$152,827,460	\$1,151,804,959	\$1,033,288,738	(\$118,516,220)	2,152,848,712
Lead Free DC Program	\$62,338,564	\$83,332,632	\$93,925,392	\$98,920,812	\$99,443,200	\$101,674,367	\$104,866,870	\$42,753,261	\$22,166,058	\$22,166,058	\$731,587,214	\$611,671,598	(\$119,915,616)	\$1,827,131,910
Water On-Going Projects	\$14,106,682	\$15,339,404	\$15,041,104	\$16,157,640	\$15,132,392	\$20,691,000	\$21,601,000	\$20,878,810	\$22,622,770	\$20,403,590	\$181,974,392	\$194,234,952	\$12,260,560	\$280,813,438
Water Pumping Facilities	\$6,276,940	\$8,130,624	\$8,562,160	\$6,142,860	\$7,451,730	\$5,688,940	\$3,625,010	\$1,785,530	\$0	\$0	\$47,663,793	\$57,295,042	\$9,631,249	\$84,432,273
Water Storage Facilities	\$7,461,655	\$5,812,826	\$7,836,632	\$21,093,345	\$31,911,237	\$26,562,030	\$18,875,870	\$8,037,130	\$33,647,710	\$32,582,080	\$193,820,515	\$59,898,591	(\$133,921,925)	\$306,733,553
Water Service Program Management	\$8,955,788	\$10,618,571	\$9,608,800	\$11,132,559	\$5,833,053	\$28,750	\$0	\$0	\$0	\$0	\$46,177,521	\$55,412,240	\$9,234,719	\$86,144,167
WATER	\$158,736,084	\$222,493,766	\$252,394,514	\$250,277,586	\$266,256,300	\$268,591,467	\$279,183,870	\$207,235,481	\$219,880,138	\$227,979,188	\$2,353,028,393	\$2,011,801,161	(\$341,227,232)	\$4,738,104,052
CAPITAL PROJECTS	\$448,645,630	\$664,892,769	\$774,206,461	\$762,939,728	\$815,950,800	\$944,526,245	\$836,047,763	\$636,568,154	\$602,528,222	\$552,066,949	\$7,038,372,719	\$6,265,158,749	(\$773,213,970)	\$14,934,255,015
METER REPLACEMENT	\$3,598,042	\$6,944,106	\$6,829,280	\$5,233,416	\$4,067,184	\$4,067,184	\$4,067,184	\$4,067,184	\$4,067,184	\$4,067,184	\$47,007,950	\$37,831,067	(\$9,176,883)	\$47,007,950
ERP System (Project Zeus)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$350,000	\$350,000	\$0
CAPITAL EQUIPMENT	\$26,937,000	\$24,532,395	\$25,009,725	\$25,289,725	\$33,102,229	\$33,102,229	\$33,102,229	\$33,102,229	\$33,102,229	\$33,102,229	\$300,382,217	\$309,209,100	\$8,826,883	\$300,382,217
WASHINGTON AQUEDUCT	\$35,546,040	\$35,769,600	\$35,769,600	\$35,769,600	\$35,769,600	\$35,769,600	\$35,769,600	\$35,769,600	\$35,769,600	\$35,769,600	\$357,472,440	\$338,518,000	(\$18,954,440)	\$357,472,440
ADDITIONAL CAPITAL PROJECTS	\$66,081,082	\$67,246,101	\$67,608,605	\$66,292,741	\$72,939,013	\$72,939,013	\$72,939,013	\$72,939,013	\$72,939,013	\$72,939,013	\$704,862,607	\$685,908,167	(\$18,954,440)	\$704,862,607
LABOR														\$443,166,477
TOTAL CAPITAL BUDGETS	\$514,726,712	\$732,138,870	\$841,815,066	\$829,232,469	\$888,889,813	\$1,017,465,258	\$908,986,776	\$709,507,167	\$675,467,235	\$625,005,962	\$7,743,235,326	\$6,951,066,916	(\$792,168,410)	16,082,284,099
Prior Year Board Approved CIP	\$604,670,700	\$784,063,681	\$838,249,154	\$859,187,756	\$892,646,051	\$841,454,213	\$677,036,073	\$507,646,685	\$444,676,243	\$0	\$6,951,067,266			
Delta (inc)/dec	\$89,943,988	\$51,924,811	(\$3,565,912)	\$29,955,287	\$3,756,238	(\$176,011,045)	(\$231,950,703)	(\$201,860,482)	(\$230,790,992)	(\$625,005,962)				

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

ACTION REQUESTED

PARTICIPATION IN DDOT PROJECT:

**DDOT – Metro Branch Trail from Piney Branch Road NW to Blair Rd NW
(Non-Joint Use)**

Approval to participate in DDOT’s Metro Branch Trail project under the terms of the 2002 Memorandum of Understanding (MOU) between District of Columbia Department of Transportation (DDOT) and DC Water for an amount up to \$2,151,500.00. This amount exceeds the General Manager’s approval authority.

PARTY INFORMATION

PARTY:	SUBS:	PARTICIPATION:
District Department of Transportation 55 M Street, SE, Suite 400, Washington, DC 20003	DBE and WBE fair share objectives will follow DDOT goals.	

DESCRIPTION AND PURPOSE

MOU Value, Not-To-Exceed:	\$2,151,500.00
MOU Time:	730 Days (2 Years)
Anticipated MOU Start Date:	July 15, 2025
Anticipated MOU Completion Date:	July 15, 2027

Purpose of DC Water’s Participation:

Replacement of small diameter water mains that have experienced failures, or have a history of low water pressure, or water quality issues within the District of Columbia.

Scope of DC Water’s Participation:

- Replace 0.40 miles of water mains ranging from six (6) inches to twelve (12) inches and associated valves and appurtenances.
- Replace copper water services two (2) inch and smaller in public and private space.
- Replace curb stop/curb stop box, meter box and penetration through building wall and connection to first fitting inside the building including installation of a shut-off valve and pressure reducing valve.
- Provide permanent pavement and surface restoration for 0.31 miles of the 0.40 miles within the project scope.

Federal Grant Status:

- Although the work scope is generally eligible for grant funding, grant funding was not applied to the project because it was procured through DDOT.

AGREEMENT INFORMATION

Contract Type:	MOU	Award Based On:	N/A
Commodity:	Design and Construction	Contract Number:	N/A

BUDGET INFORMATION


Funding:	Capital	Department:	Engineering and Technical Services
Service Area:	Water	Department Head:	William Elledge
Project:	KI		

ESTIMATED USER SHARE INFORMATION

User	Share %	Dollar Amount
District of Columbia	100.00%	\$ 2,151,500.00
Federal Funds	0.00%	\$
Washington Suburban Sanitary Commission	0.00%	\$
Fairfax County	0.00%	\$
Loudoun County & Potomac Interceptor	0.00%	\$
Total Estimated Dollar Amount	100.00%	\$ 2,151,500.00

Jeffrey F. Thompson
 Digitally signed by Jeffrey F. Thompson
 Date: 2024.02.05 15:04:43 -05'00'
 _____ /
 Jeffrey F. Thompson Date
 Chief Operating Officer and EVP

_____ /
 Matthew T. Brown Date
 Chief Financial Officer and EVP
 Finance, Procurement and Compliance


 Digitally signed by Dan Bae
 DN: C=US, E=dan.bae@dcwater.com, O=District of Columbia Water and Sewer Authority, OU=VP of Procurement & Compliance, CN=Dan Bae
 Date: 2024.02.06 09:13:41 -05'00'
 _____ /
 Dan Bae Date
 VP of Procurement

_____ /
 David L. Gadis Date
 Chief Executive Officer and General Manager

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

ACTION REQUESTED

CONSTRUCTION CONTRACT CHANGE ORDER:

**Small Diameter Water Main Replacement-16A
(Non-Joint Use)**

Approval to execute a Change Order No. 003 for \$2,042,049.00. The modification exceeds the Chief Executive Officer and General Manager's approval authority.

CONTRACTOR/SUB/VENDOR INFORMATION

PRIME: Capitol Paving of D.C., Inc. 2211 Channing St NE Washington, DC 20018	*SUBS: E&R Minority Supplier LLC Sterling, VA DBE	PARTICIPATION: 2.0%
--	---	-----------------------------------

*The project is still on pace to meet the overall utilization goals of 31.8% DBE and 6% WBE.

DESCRIPTION AND PURPOSE

Original Contract Value:	\$14,157,282.00
Total of Previous Change Orders:	\$ 94,594.16
Current Contract Value:	\$14,251,876.16
Value of this Change Order:	\$ 2,042,049.00
Current Contract Value, including this CO:	\$16,293,925.16
Original Contract Time:	565 Days (1 Years, 6 Months)
Time extension, this CO:	0 Days
Total CO contract time extension:	0 Days
Contract Start Date (NTP):	03-29-2023
Anticipated Contract Completion Date:	02-26-2026
Cumulative CO % of Original Contract:	14%
Contract completion %:	23%

Purpose of the Contract:

Replacement of small diameter water mains that have experienced failures, or have a history of low water pressure, or water quality issues across various locations within the District of Columbia.

Original Contract Scope:

- Replace 3.82 miles of small diameter water mains associated valves and appurtenances.
- Replace copper water services two (2) inches in diameter and smaller in public and private space as needed.
- Replacement curb stop / curb stop box, meter box and penetration through building wall and connection to first fitting inside the building including installation of a shut-off valve and pressure reducing valve.
- Provide permanent pavement and surface restoration.

Previous Change Order Scope:

- Connected the existing 3-inch water services to the proposed water main at 3956 and 3917 Pennsylvania Avenue SE.
- Excavated and removed the installed watermain, appurtenances and fittings, and backfill.

Current Change Order Scope:

- Due to reported water quality and contaminated soil issues that are deemed critical, lining of the existing water main on Quebec St NW between Fordham Rd NW to University Avenue NW is required.

- Clean and line utilizing the cured in-place pipe (CIPP) method at each intersection on Quebec St NW, covering approximately 2200 linear feet.
- Clean and line approximately 2200 linear feet of ductile iron water main using six access pits.
- Full replacement of valves and fire hydrants.
- A temporary bypass system will be set up so that customers will continue to have water service during construction.
- Due to two water main breaks in the past two years and the significant risk of another break in the I-395 Air Rights Tunnel which resulted in a sink hole, water outages, and severe DDOT travel conflicts, it is deemed essential to line the existing 1200 linear feet water main in the I-395 Air Rights Tunnel.
 - Clean and line utilizing the cured in-place pipe (CIPP) method lining approximately 1200 linear feet of existing 8" water main in the I-395 Air Rights Tunnel by 3rd St between K St NW and H St NW.
 - Clean and line approximately 1200 linear feet of 8" water main using three access pits.
 - Full replacement of valves and fire hydrants.

Federal Grant Status:

- Although this construction contract is funded in part by a Federal Grant, the change order is not eligible for grant funding.

PROCUREMENT INFORMATION

Contract Type:	Unit Price	Award Based On:	Lowest responsive, responsible bidder
Commodity:	Construction	Contract Number:	200030
Contractor Market:	Open Market		

BUDGET INFORMATION

Funding:	Capital	Department:	Engineering and Technical Services
Service Area:	Water	Department Head:	William Elledge
Project:	HX, F1		

ESTIMATED USER SHARE INFORMATION

User	Share %	Dollar Amount
District of Columbia	100.00%	\$ 2,042,049.00
Federal Funds	0.00%	\$ 0.00
Washington Suburban Sanitary Commission	0.00%	\$ 0.00
Fairfax County	0.00%	\$ 0.00
Loudoun County & Potomac Interceptor	0.00%	\$ 0.00
Total Estimated Dollar Amount	100.00%	\$ 2,042,049.00

Jeffrey F. Thompson

Digitally signed by Jeffrey F. Thompson
Date: 2024.02.05 15:04:14 -05'00'

Jeffrey F. Thompson / Date
Chief Operating Officer and EVP

Matthew T. Brown / Date
Chief Financial Officer and EVP
Finance, Procurement and Compliance



Digitally signed by Dan Bae
DN: C=US, E=dan.bae@dcwater.com,
O=District of Columbia Water and Sewer
Authority, OU=VP of Procurement &
Compliance, CN=Dan Bae
Date: 2024.02.06 09:12:41 -05'00'

Dan Bae / Date
VP of Procurement

David L. Gadis / Date
Chief Executive Officer and General Manager