dc

water is life

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

Meeting of the Environmental Quality and Operations Committee

*Thursday, October 15, 2020* 9:30 a.m.

#### Join Microsoft Teams Meeting +1 202-753-6714 Conference ID: 578 366 426#

9:30 a.m.	I.	Call to Order	Adam Ortiz Chair
	П.	Roll Call	Linda Manley Board Secretary
9:35 a.m.	III.	AWTP Status Update	Aklile Tesfaye
		1. BPAWTP Performance	
9:50 a.m.	IV.	DC Clean Rivers Update	Carlton Ray
10:10 a.m.	۷.	Action Items	Joel Grosser/Len Benson
		Joint Use	
		<ol> <li>Contract No.: 18-PR-DMS-49 – Annual M Electrical Power Distribution Equipment,</li> </ol>	
		Non-Joint Use	
		<ol> <li>Contract No.: 17-PR-DSS-49 – Sand, Gr Rodgers Brothers Custodial Services</li> <li>Contract No.: 170060 - Small Diameter V 14A, Capital Paving of DC Inc.</li> </ol>	
10:25 a.m.	VI.	Procurement Proposal and Contract Vetting	Dan Bae
10:35 a.m.	VII.	Other Business / Emerging Issues	Kisha Powell
		1. Briefing on September 10 <sup>th</sup> Final After-Ad	ction Report
10:50 a.m.	VIII.	Executive Session*	Adam Ortiz Chair
		1	

10:55 a.m. IX. Adjournment

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

- **1.** SVP, CIP Project Delivery: Include risks associated with a potential privatization of the Washington Aqueduct and its impact on rates as part of the Risks and Sensitivities analysis. **[TBD]**
- 2. VP, DC Clean Rivers: Schedule a tour of GI Sites [TBD]
- **3.** Vice President, Procurement and Compliance: Provide a briefing on the process staff uses to vet contracts and proposals prior to being presented to the Committee. **[On Current Agenda]**
- 4. Director, Procurement, Goods & Services edit fact sheet for Contract No: 16-PR-HCM-44AC and 44AD to clarify that DC Water will bill the relevant jurisdictions for temporary staffing only if the temporary staff were working on Multi-Jurisdictional Use Facility (MJUF) projects/programs. [The fact sheet has been edited and submitted to BOD Secretary]
- EVP, Chief Operating Officer Conduct further discussions on the effects of increased wet weather events in the District including the need to further evaluate current modeling assumptions used to predict the magnitude of such events. [Target: November 19<sup>th</sup> EQ&Ops Meeting]
- 6. Director, DC Clean Rivers Project provide postponed discussion on the status of the DCCR project. [On Current Agenda]
- 7. VP, Procurement & Compliance provide postponed discussion on Procurement Proposal and Contract Vetting process. [On Current Agenda]
- 8. Risk and Resilience Briefing [Target: November 19th EQ&Ops Meeting]

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: matters prohibited from public disclosure pursuant to a court order or law under D.C. Official Code § 2-575(b)(1); contract negotiations under D.C. Official Code § 2-575(b)(2); legal, confidential or privileged matters under D.C. Official Code § 2-575(b)(4), collective bargaining negotiations under D.C. Official Code § 2-575(b)(5); facility security 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); proprietary matters under D.C. Official Code § 2-575(b)(11); train and develop members of a public body and staff under D.C. Official Codes § 2-575(b)(12); decision in an adjudication action under D.C. Official Code § 2-575(b)(13); civil or criminal matters where disclosure to the public may harm the investigation under D.C. Official Code § 2-575(b)(14), and other matters provided in the Act.



### Wastewater Operations

#### Blue Plains Advanced Wastewater Treatment Plant – September 2020

Accomplishments & Priorities	Employee Health and Safety Adherence to social distancing and other DC Water guidelines is a key priority to maintain employee health and safety. Management continuous to proactively engage with staff to receive feedback, provide support and resources.
Operational Performance	Blue Plains Complete Treatment Performance: The plant performance for the month of September 2020 was excellent with all effluent parameters well below the seven-day and monthly NPDES permit requirements. The monthly average flow through complete treatment (Outfall 002) was 302 Million Gallons Per Day (MGD).

#### Operational Performance

**Wet Weather Treatment Facility (WWTF) Performance**: During the month a total of 267 million gallons (MG) of combined wet weather flows, captured in the tunnel system, were treated through the WWTF. The treated discharge of captured combined flows to the wet weather treatment outfall (Outfall 001) was 103 MG. The remaining 164 MG were directed to the complete treatment train.

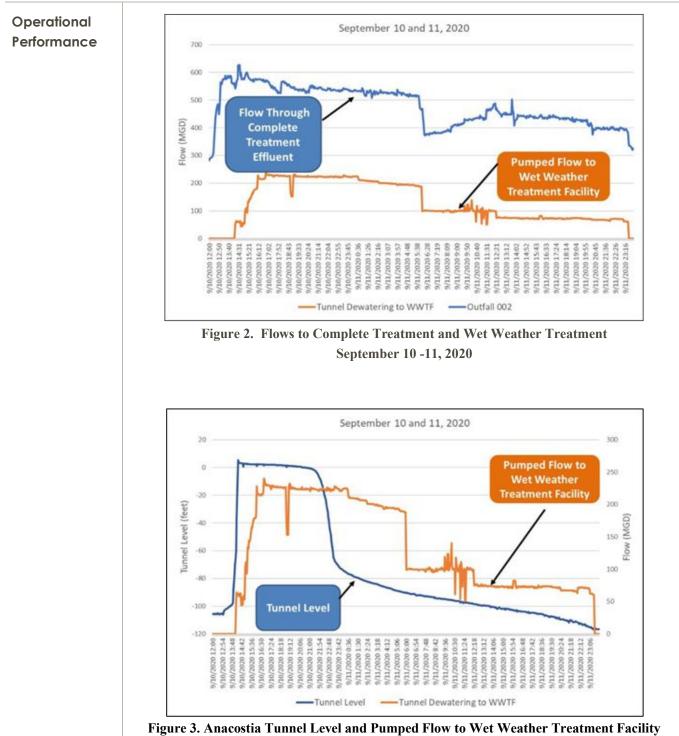
Table 1. wet weather	Treatment Facility	r er for mance
	September 2020 (Draft)	Calendar Year 2020 (Through September)
Total Precipitation, inches (DCA gauge)	4.24	40.09
Total Volume Captured in the Anacostia Tunnel, MG	267	2,037
Overflow, MG*	108	290
Percent Captured**	71%	88%

#### Table 1. Wet Weather Treatment Facility Performance

\*Overflows at tunnel structures

\*\*Expected Capture ~80%

**Performance During September 10, 2020 Storm Event:** On the afternoon of September 10, 2020, a severe rainfall event impacted the DC metro region, with rainfall amounts between 2 to 6 inches, depending on location. During the event, peak flow rate through complete treatment reached 628 MGD, exceeding the 555 MGD four- hour peak capacity (Figure 2). The storm resulted in intense diversions of captured combined flows and rapid rise of water level, to fill the tunnel system to capacity in about 35 minutes (Figure 3). The volume retained in the tunnel system was pumped and treated through Enhanced Clarification at the design and permitted capacity of 225 MGD, until the water level and the corresponding volume in the tunnel system subsided. The total volume captured by the tunnel during the storm was 195 MG. Approximately 108 MG of overflows were measured at tunnel overflow structures and additional amounts overflowed from the existing CSO outfalls, after the tunnel filled. Tunnel dewatering and wet weather treatment operations continued for over 33 hours and tunnel system was emptied at 11:30 pm on September 11, 2020, well within 59 hours of the last diversion, as stipulated by the NPDES permit All effluent quality and operating parameters were within the NPDES permit limits.

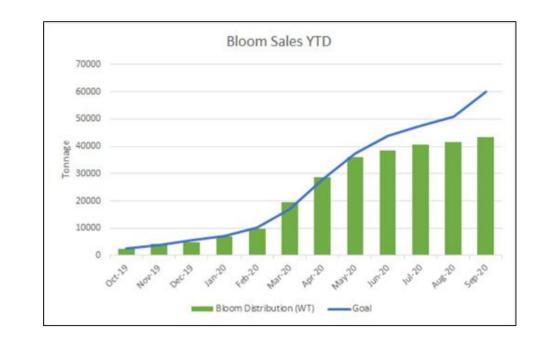


September 10 – 11, 2020

#### Operational Performance

**Class A Biosolids Quality**: In September, biosolids hauling averaged 440 wet tons per day (wtpd). All biosolids produced during the month met Class A Exceptional Quality (EQ) requirements required by EPA. Fecal Coliform values on daily process monitoring samples remained below the 1,000 MPN\*/gram required for Class A biosolids - consistent with the low levels measured historically. \*Most Probable Number (MPN) per gram measures statistical probability of number of organisms.

**Bloom Marketing**: During the month, a total of 1,800\* tons of bloom was marketed. The total tons marketed during the fiscal year (through the end of September 2020) is 43,681 wet tons or 73% of the 60,000 tons goal.



Bloom sales exceeded the FY2019 total (40,658 tons), despite sales totals for the month falling short of the projected goal. While we had set a goal of 60,000 tons of sales for this fiscal year, we fell short, with sales totaling 43,681\* tons. We believe the shortfall is due largely to the pandemic and unanticipated wet weather, with lower than expected sales to garden centers, nurseries, soil blenders, and farms. Our garden centers and landscapers have seen a drop in business. With a drop in construction activities we have seen fewer sales to soil blenders as well.

However, the costs for managing the program are lower than anticipated this year, due to lower unit price for hauling and land application of Class A Biosolids managed by Blue Drop.

\*estimated total due to scale outage issues. Updated numbers and graph forthcoming.

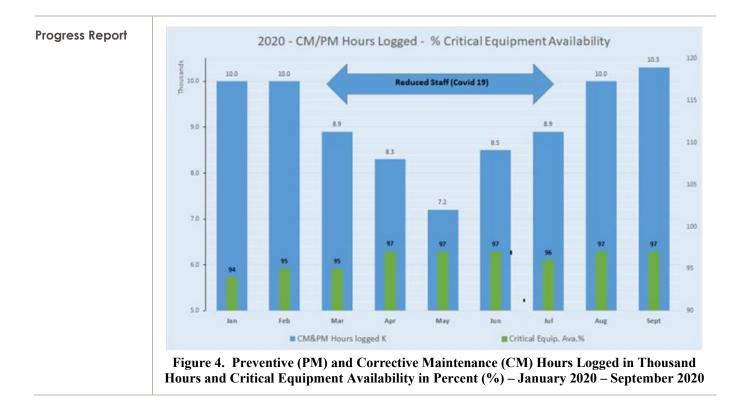
#### Progress Report

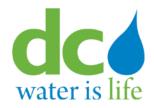
Water Quality & Pretreatment: As part of the Industrial Pretreatment Program, staff completed inspections of two Significant Industrial Users (SIU), including Naval Research Laboratory and Naval Support Facility-Carderock. Annual inspections of all SIUs will be completed before the end of the calendar year. In addition, staff conducted compliance monitoring at Amtrak's Ivy City Facility, issued two Waste Hauler permits and two Temporary Discharge Authorization permits.

**Research and Development**: Results from DC Water's research on more efficient nitrogen removal processes and high-rate secondary treatment were recently presented at the International Water Association Nutrient Removal and Recovery Conference. Originally scheduled to take place in Finland, this conference was successfully held in a virtual format in early September. Five research papers co-authored by **graduate students** working at Blue Plains, **Haydee De Clippeleir**, Program Manager Research and **Christine deBarbadillo**, Director Clean Water Quality and Technology were presented during the conference.

**COVID19 Pandemic O&M Recovery Plan – O&M Progress:** During the peak of the pandemic from March 2020 to the end of July 2020, the O&M strategy adapted a COVID19 staffing plan designed to effect social distancing and protect the health and safety of front-line staff. Staff focused on completing critical Preventive Maintenance (PM) and Corrective Maintenance (CM) required to sustain health and safety and regulatory compliance. The target Critical Equipment Availability of 95% or higher was maintained during the period. With the implementation of Phase II Recovery (beginning July 26, 2020) front line O&M staff at Blue Plains returned to pre-COVID19 schedule while following guidelines to maintain employee health and safety. The recovery plan increased available labor hours to resume implementation of all planned O&M inspections and preventive maintenance activities.

Figure 4 (below) shows hours logged in MAXIMO to complete PM and CM workorders during each month in the current calendar year along with the percentage of critical equipment availability. The total hours logged dropped from approximately 10,000 hours prior to COVID19 to 7,200 hours in May when implementation of the COVID19 staffing plan was in full effect. The logged hours increased gradually as more staff were brought back to complete PMs and CMs and reached pre-COVID19 levels in August. Implementation of all planned proactive maintenance activities, including preventive and predictive maintenance improve systems/equipment reliability and resilience.





District of Columbia Water and Sewer Authority David L. Gadis, CEO and General Manager

Briefing on:

### DC Clean Rivers Project Quarterly Update

Briefing for:

**Environmental Quality & Operations Committee Meeting** 

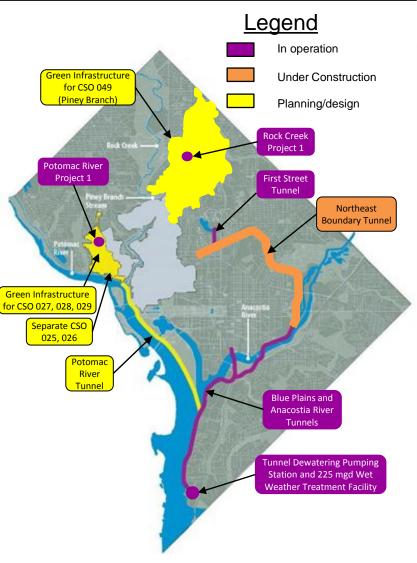


October 15, 2020



# **Project Status**

- First phase of the Anacostia River tunnel system commissioned on March 20, 2018.
  - Provides control for all CSOs along the Anacostia River
  - Provides about 100 million gallons of storage
- Northeast Boundary Tunnel, currently under construction, will increase CSO storage and flood risk mitigation.
  - Adds about 90 million gallons of storage
- Submitted practicability assessments for Rock Creek and Potomac River Green Infrastructure Projects to EPA.
- CSO 025/026 Sewer Separation Project currently in procurement.
- Potomac River Tunnel design underway.



# Anacostia Tunnel System Performance Since March 20, 2018

Month	Rainfall, DCA Gauge (in)	Volume Captured by Tunnel (MG)	Measured Overflow (MG)	% captured
March 20 -31, 2018	1.48	20	0	100%
April 2018	3.59	249	10	96.0%
May 2018	8.73	860	13	98.5%
June 2018	5.21	265	47	85.0%
July 2018	9.73	679	260	72.3%
August 2018	5.19	334	14	95.9%
September 2018	9.73	784	116	87.1%
October 2018	3.06	164	0	100%
November 2018	7.57	777	5	99.3%
December 2018	5.82	468	100	82.3%
January 2019	3.30	259	0	100%
February 2019	3.52	74	0	100%
March 2019	4.00	337	46	87.9%
April 2019	2.24	77	0.1	99.9%
May 2019	4.97	311	1	99.7%
June 2019	4.27	134	0.1	100%
July 2019	6.49	339	77	81.4%
August 2019	1.99	186	22	89.3%
September 2019	0.25	19	0	100%
October 2019	6.66	450	18	96.2%
November 2019	1.37	55	0	100%
December 2019	2.80	80	0	100%
January 2020	2.79	150	0	100%
February 2020	3.21	143	0.6	99.6%
March 2020	2.31	38	0	100.0%
April 2020	6.30	338	127	72.7%
May 2020	2.49	169	0	100.0%
June 2020	3.51	205	0	99.9%
July 2020	6.51	265	2	99.2%
August 2020	8.73	463	52	89.8%
September 2020 (DRAFT)	4.24	267	108	71.2%
Total	142.06	8956	1021	89.8%

- Nearly <u>9 billion</u> gallons captured to date
- Over 4,300 tons of trash, debris, and other solids captured
- Exceeding predicted capture rate (90%>80%)
- First year in operation was the wettest year on record for the District of Columbia



Trash, Debris and Solids Removal from Screening Shaft at Tunnel Dewatering Pumping Station

3

# Managing Program Through Covid

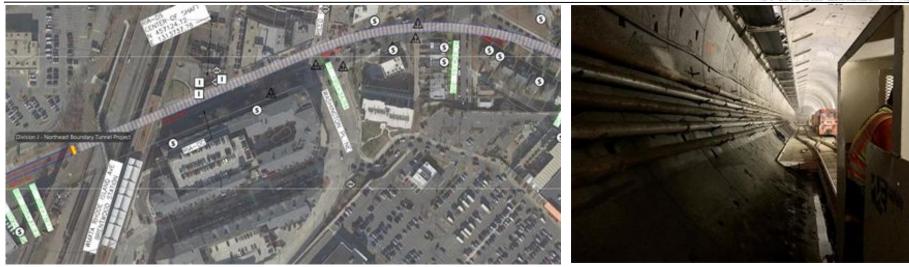
- Clean Rivers Office Staff
  - Initially: developed 14-day office rotation to minimize risk of spreading Covid
  - Subsequent actions: office staff are teleworking
- Clean Rivers Field Staff
  - Procedures in place for field staff monitoring construction sites to work out of specific offices and to not travel between multiple construction sites to minimize the risk of affecting other groups
- Construction Contractors
  - Working with our construction contractors to identifying and implement procedures to minimize contact and spreading of the virus while allowing work to continue
  - Daily temperature checks/assessment of work force performed
  - Personal protective equipment, social distancing and cleaning protocols observed
  - No visitors or tours of tunnel
  - Contact tracing and isolation for affected staff
  - Conditions for staff to return to work after illness
- Northeast Boundary Tunnel Contractor reserved its rights for impacts due to Covid
  - Confined environment in tunnel presents unique challenges
  - How pandemic plays out in the future will affect the rights reservation
  - Working with team to minimize impacts on construction

Construction has not been stopped and we continue to meet consent decree deadlines:

- Rock Creek & Potomac GI Practicability Assessments submitted on time
- CSO 025/026 design completed and procurement underway
- Northeast Boundary Tunnel construction continues
- Potomac River Tunnel design continues

### Division J – Northeast Boundary Tunnel Construction Progress - Tunnel

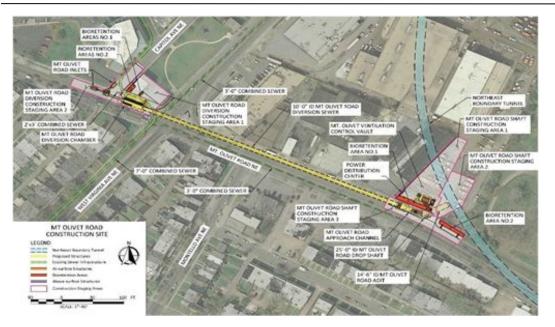




- Tunnel Boring Machine (TBM) excavated 19,294 LF (72.4%) and installed 3,212 rings.
- Successfully completed Home Depot Retaining Wall undercrossing.
- During TBM stop at Rhode Island Ave. safe haven, a complete cutterhead maintenance and tail shield brushes inspection and repair were carried out.
- WMATA undercrossing was successfully completed on October 3<sup>rd</sup>.
- Currently mining under Rhode Island Ave. NE in CSX Zone of Influence.



## **Division J – Northeast Boundary Tunnel Construction Progress – Mt. Olivet Road**



- Completed ground improvement for break-in • panel and installation of cement bentonite walls for Approach Channel support of excavation system.
- Started excavation of Ventilation Control Vault.
  - Continued mobilization and setup at the **Diversion Chamber site.**

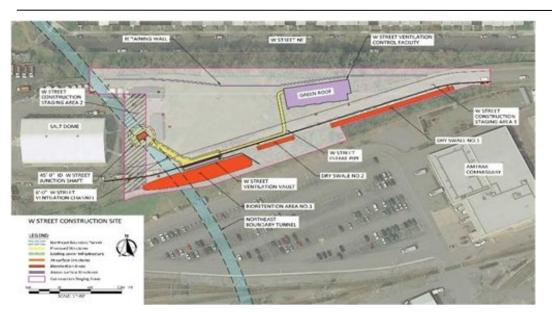




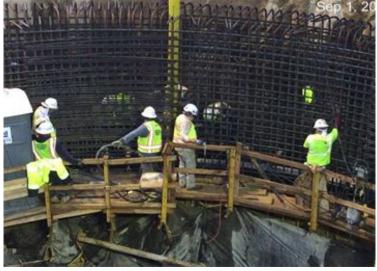


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## Division J – Northeast Boundary Tunnel Construction Progress – W Street



- Completed shaft concrete final liner lifts.
- Preparing for excavation of Ventilation Channel and Ventilation Vault.







# Division J – Northeast Boundary Tunnel Construction Progress – Rhode Island Ave







- Completed installation of secant pile support of excavation system for the Approach Channel and Ventilation Vault.
- Commenced secant pile installation at the Diversion Chamber

16

# Division J – Northeast Boundary Tunnel Construction Progress – 4<sup>th</sup> Street





- Completed excavation of the Adit.
- Completed excavation for the Diversion Chamber, placed the concrete base slab and commenced cast in place walls



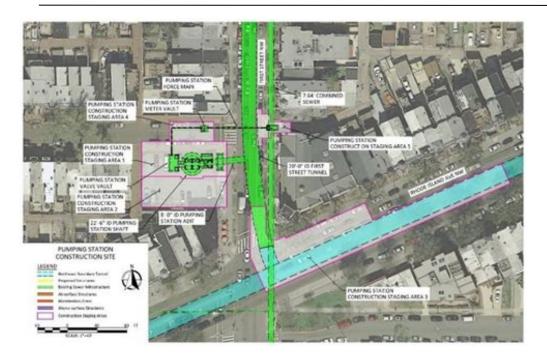




## Division J – Northeast Boundary Tunnel Construction Progress – Pumping Station



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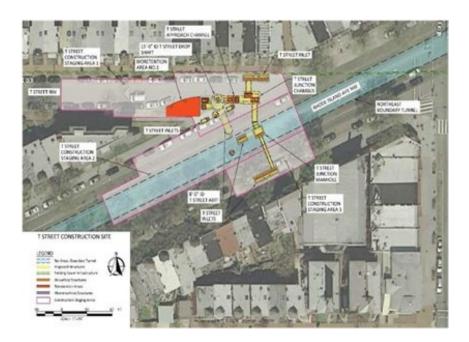
- Completed ground improvement in the Adit /Tunnel connection.
- Start QC core testing of ground improvement area.





# Division J – Northeast Boundary Tunnel Construction Progress – T Street







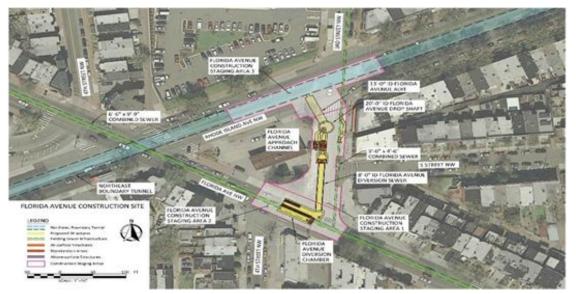
- Completed installation of the Inlet-1 secant pile support of excavation system.
- Completed demo of secant pile guide walls.
- Start setting up site for jet grouting operation.



Jet grouting to begin around October 13<sup>th</sup>.

# Division J – Northeast Boundary Tunnel Construction Progress – Florida Ave





- Completed first stage bracing for the Diversion Chamber and excavation down to the combined sewer spring-line.
- Completed soldier piles for the Ventilation Vault.
- Continued installing bypass piping in preparation for temporary flume installation in the Diversion Chamber.

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PROJECT

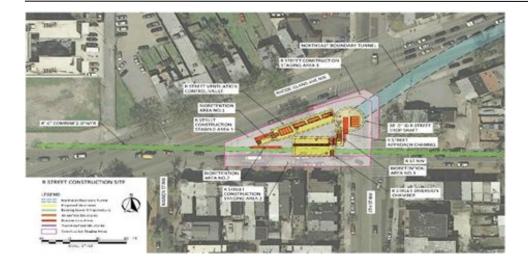
Performed potholing in Rhode Island Avenue (CSA3) for Adit jet grouting.





## Division J – Northeast Boundary Tunnel Construction Progress – R Street





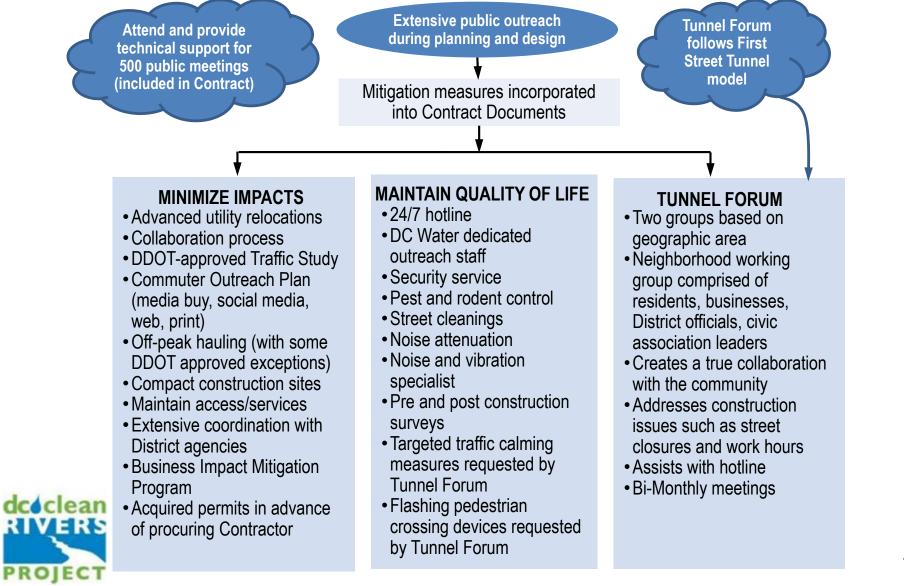
- Began shaft excavation. Reached ~53-ft depth out of 78 ft (68%).
- Additional soldier piles to be installed for the crane pad following shaft excavation.







# Division J – Northeast Boundary Tunnel Community Impact Mitigation



### Our Three Main Street Organization Partners Augment Local Businesses during Construction



### **Main Street Organizations**

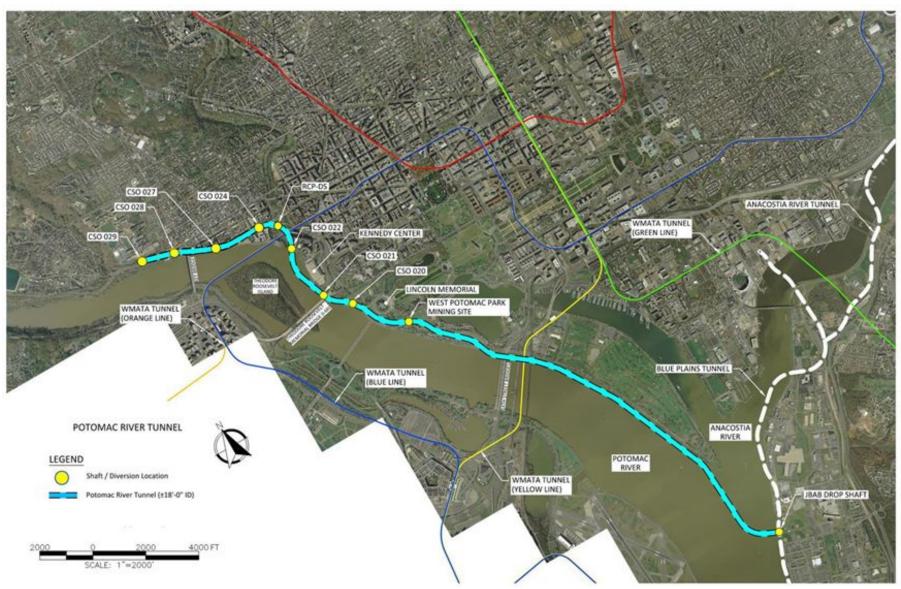
- Planned funding for Main Streets in 2019 & 2020 is \$900,000
- Memoranda of Agreement (MOAs) amended to allow direct assistance/grants to NEBT-impacted businesses along Rhode Island Ave.
- North Capitol Main Street: 19 small businesses received a total of \$150,000 in direct assistance.
- Rhode Island Ave. Main Street NE: 17 small businesses received a total of \$120,000 in direct assistance, and over \$60,000 in traditional Main Street assistance.
- Shaw Main Street: \$44,900 direct assistance to be provided to local businesses. Total plan funding is \$50,000 for 2020.
- Public feedback on construction
  - Traffic concerns have not been a major issue, likely due to Covid.
  - Noise, housekeeping and changes in work phases predominate concerns.

### **Commuter Outreach Program**

- **Traffic Advisories and Newsletters**: Distributed to media, residents, and businesses with updates of construction site activity impacts such as lane and street closures, parking restrictions, pedestrian and bicycle detours, and work schedules and durations.
- Media Buy: Spending for 2019 Campaign total \$250,000 to date on on-air project messages on WTOP and WHUR radio stations, reaching over 1.5 million listeners in 6 months. No further funds have been expended for 2020 due to District pandemic restrictions on businesses, which drastically reduced traffic. Preparing for another media buy as businesses begin to open and resulting commuting increases.
- 24/7 Hotline: Callers to the hotline are able to access information without leaving a message. Messages from callers are responded to directly, usually within 24 hours of call. A log of all calls, their status and resolution are submitted weekly

# **Potomac River Tunnel**





# **Potomac River Tunnel**



- Design Update
  - Developing 60% contract documents
  - Archeological and utility investigations at planned surface construction sites almost complete
  - Drilling geotechnical borings along the tunnel alignment
  - Coordinating with various external stakeholders, including NPS, DDOT, WMATA, Georgetown University, and community groups
  - Identifying and preparing designs for utility relocations to be completed ahead of tunnel contract
- Schedule
  - Tunnel Contract (Best Value Design-Build):
    - 60% RFP: January 2021
    - 90% RFP: December 2021
    - 100% RFP: June 2022
    - Award, Begin Construction: Summer 2023
    - Place in Operation: March 23, 2030





### CSO 028 Site Renderings

# **CSO 025/026 Sewer Separation Project**



- Procurement underway. Technical and Price Proposals received on September 16, 2020.
- Evaluation phase of proposals is underway.
- Contract Execution/NTP scheduled for January 2021.
- Utility investigation trench work with DC Water MFU contractor was completed.
- Ongoing coordination with District and utility agencies for approvals prior to contract award.
- Ongoing coordination with Advisory Neighborhood Commission, Georgetown Business Improvement District, and community on project status.





# **Results of Practicability** (DC Water Met Consent Decree Deadlines)

### Rock Creek

- Submitted to EPA June 12, 2020
- EPA has 180 days to approve
- DC Water recommended <u>hybrid</u>
   <u>approach</u>
- Construct mix of gray and green recommended to optimize benefits
  - 4.2 mg gray storage
  - 3.0 mg of DC Water GI
  - 2.3 mg credit GI constructed per DC Stormwater Regulations





### Potomac River

- Submitted to EPA August 13, 2020
- EPA has 180 days to approve
- DC Water recommended that
   <u>GI is impracticable</u> on the
   Potomac due to historic
   District
- Recommend extending
   Potomac Tunnel to CSO 029

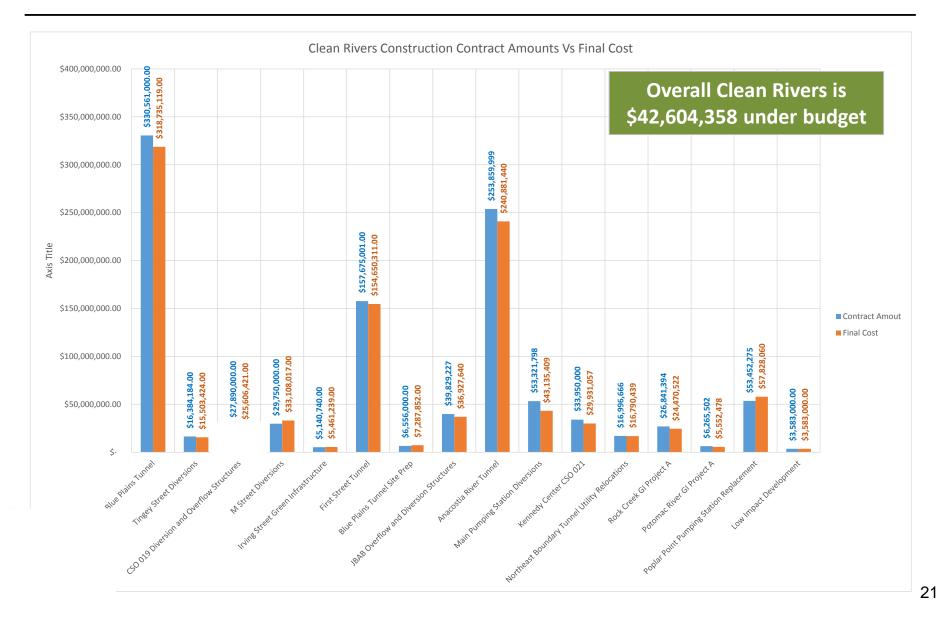
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# **DC Clean Rivers Schedule**

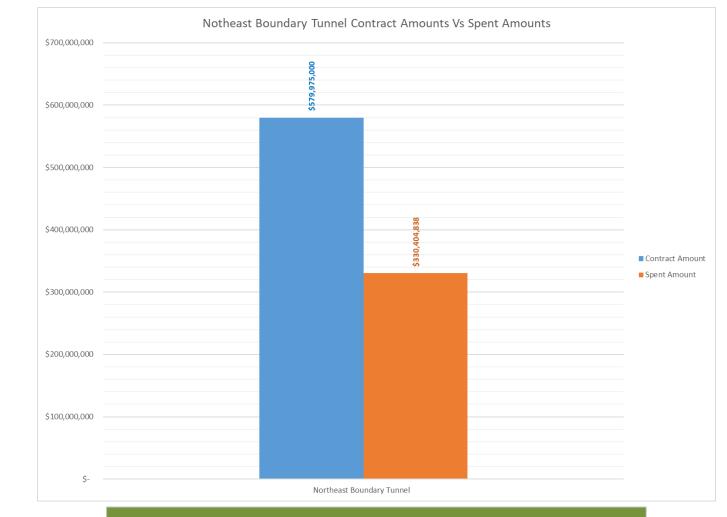
Div	Description	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
	Anacostia			CD De	adline 3/23	/2018											
W	Blue Plains Site Prep	Complete									Legend						
Α	Blue Plains Tunnel	Complete									CD Dea	dlines	Plann	ning/Design		Procuremen	nt
С	CSO 019 OF & Diversion	Complete									1 in the second s		D-B/0	Construction	1	Monitoring	
В	Tingey St Diversions	Complete															
D	JBAB OF & Diversions	Complete															
Е	M St Diversion Sewer	Complete															
G	CSO 007	Complete															
н	Anacostia River Tunnel	Complete															
N	LID @ DCW Facilities	Complete															
Р	First St Tunnel	Complete															
I	Main PS Diversions	Complete															
S	Irving St GI	Complete															
Y	TDPS and ECF	Complete															
Z	Poplar Point PS	Complete															
U	NEBT Utility Reloc	Complete									CD De	adline 3/23	/2025				
J	Northeast Boundary Tun.																
	I										T			F		1	
	Potomac																
PR-B	CSO 021	Complete															
PR-A	Potomac GI Project 1																
TBD	Potomac GI Project 2																
TBD	Potomac GI Project 3																
	· · · · ·																
PR-C	CSO 025/026 Separation																
TBD	Potomac Tunnel	EA	Fac Plan	(24)													
	1	<b>T</b> 7												F		1	
	Rock Creek																
TBD	Piney Banch Div. Str. Imp.																
RC-A	Rock Creek GI Project 1																
TBD	Rock Creek GI Project 2															******	
TBD	Rock Creek GI Project 3												_				
TBD	Rock Creek GI Project 4																
TBD	Rock Creek GI Project 5																
17 181	CARDINAL CONTRACTOR																



# **Clean Rivers Budget for Completed Contracts**



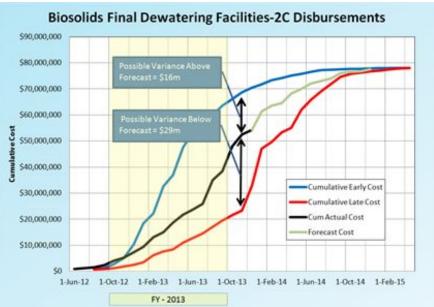
# **Clean Rivers Budget for Northeast Boundary Tunnel**



Clean Rivers expenditures to date on the Northeast Boundary Tunnel are not expected to exceed the budget

# **Clean Rivers Disbursements**

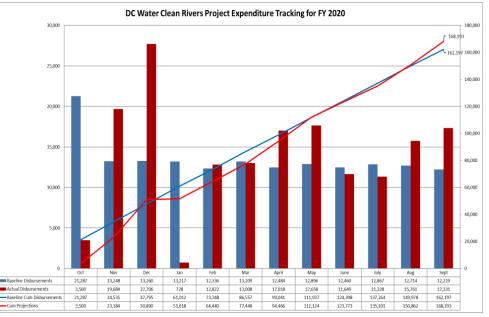
Contractor can complete noncritical work early or late and still be on time; two different curves.



"A comparison of actual disbursements with projected disbursements is not an accurate indicator of project, program, service area or CIP health!"

Source: Dave McLaughlin, March 2014 presentation • to EQ&SS and Finance & Budget Committees

# Clean Rivers slightly exceeded its planned disbursements for fiscal year 2020



- During January, no significant payments were posted to the system due to delayed submittal of invoices by the Northeast Boundary Tunnel Design Builder.
- DCCR slightly exceeded its spending goal for FY20 to accommodate a request from budget and finance to expedite a payment to Northeast Boundary Tunnel Design Builder that was originally planned to be reimbursed in October 2020 . 23

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

#### ACTION REQUESTED

#### GOODS AND SERVICES CONTRACT OPTION YEAR

#### ANNUAL MAINTENANCE AND REPAIR OF ELECTRICAL POWER DISTRIBUTION EQUIPMENT

#### (Joint Use)

Approval to exercise Option Year 2 in the amount of \$1,600,000.00.

#### CONTRACTOR/SUB/VENDOR INFORMATION

<b>PRIME:</b> M.C. Dean Inc. 1765 Greensboro Station Place Tysons, VA 22102	SUBS: N/A	<b>PARTICIPATION:</b> N/A	
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#### DESCRIPTION AND PURPOSE

Original Contract Value:	\$2,117,000.00
Original Contract Dates:	11-10-2018 — 11-09-2019
No. of Option Years in Contract:	2
Option Year 1 Value:	\$0.00
Option Year 1 Dates:	11-10-2019 — 11-09-2020
Option Year 1 Additional Funding Value:	\$1,120,000.00
Option Year 1 Additional Funding Dates:	03-15-2020 - 11-09-2020
Option Year 2 Value:	\$1,600,000.00
Option Year 2 Dates:	11-10-2020 - 11-09-2021

#### Purpose of the Contract:

DC Water's Department of Maintenance Services (DMS) and Department of Pumping and Sewer Operations has a continuing need for annual maintenance of high voltage switchgear (power distribution) equipment throughout DC Water facilities. Switchgear is the combination of electrical disconnect switches, fuses or circuit breakers used to control, protect and isolate electrical equipment.

#### Contract Scope:

DMS and Department of Pumping and Sewer Operations require a qualified contractor to provide up to 11 experienced power distribution test technicians and one supervisor, along with replacement parts for repair, calibration and annual maintenance of high voltage switchgear equipment and other associated devices at various DC Water facilities under the direction of DC Water's Contracting Officer's Technical Representative (COTR).

Interruption of high-voltage maintenance can result in catastrophic failures and an inability to continue DC Water's critical operations. High-voltage power distribution maintenance is outsourced due to the extensive experience and technical expertise required, limited local resources and high costs for these specialized personnel.

DMS and Department of Pumping and Sewer Operations are requesting an amount of \$1,600,000 to fully fund the contract for services through end of Option Year 2. Funding is needed as the maintenance cycle for FY21 includes the preventive maintenance of several unit and area substations that are performed on a biennial basis, including maintenance for the new Wet Weather Treatment facility at Blue Plains. The amount of \$1,600,000 is included in the approved FY21 budgets for both DMS and DPO. DC Water bills the relevant jurisdictions for this work only if it is performed on Multi-Jurisdictional Use Facilities.

#### **Spending Previous Year:**

Cumulative Contract Value:	11-10-2018 to 11-09-2020: \$3,237,000.00
Cumulative Contract Spending:	11-10-2018 to 9-30-2020: \$2,453,595.04

#### Contractor's Past Performance:

According to the COTR's, the Contractor's performance and quality of work all meet DC Water's requirements.

#### **PROCUREMENT INFORMATION**

Contract Type:	Fixed Price	Award Based On:	Best Value				
Commodity:	Maintenance Services	Contract Number:	18-PR-DMS-49				
Contractor Market:	Market: Open Market with Preference Points						

BODGET INFORMATION						
Funding:	Operating	Department:	DMS			
Project Area:	Blue Plains	Department Head:	Elkin Hernandez			

#### ESTIMATED USER SHARE INFORMATION

User	Share %	Dollar Amount
District of Columbia	43.44%	\$390,960.00
Washington Suburban Sanitary Commission	41.95%	\$377,550.00
Fairfax County	9.79%	\$88,110.00
Loudoun Water	4.23%	\$38,070.00
Other (PI)	0.59%	\$5,310.00
TOTAL ESTIMATED DOLLAR AMOUNT	100.00%	\$900,000.00

		BUDGET INFORMATION	
Funding:	Operating	Department:	Department of Pumping and Sewer Operations
Project Area:	Other	Department Head:	Kenrick StLouis

#### ESTIMATED USER SHARE INFORMATION

User	Share %	Dollar Amount
District of Columbia	100.00%	\$700,000.00
Washington Suburban Sanitary Commission	0.00%	\$0.00
Fairfax County	0.00%	\$0.00
Loudoun Water	0.00%	\$0.00
Other (PI)	0.00%	\$0.00
TOTAL ESTIMATED DOLLAR AMOUNT	100.00%	\$700,000.00

9/30/2020 Date

Aklile Tesfaye VP, Wastewater Operations

Dan Bae Da VP, Procurement and Compliance Date

David L. Gadis CEO and General Manager Date

kenrick st. louis 10/01/2020 Date

Kenrick StLouis VP, Pumping and Sewer Operations

Digitally signed by Matthew T. Matthew T. Brown Date: 2020.10.02 15:17:22 -04'00'

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

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

#### ACTION REQUESTED

#### GOODS AND SERVICES CONTRACT OPTION YEAR

Sand, Gravel and Topsoil

(Non-Joint Use)

This contract action is to exercise option year 3 in the amount of \$250,000.00.

#### CONTRACTOR/SUB/VENDOR INFORMATION

PRIME:	SUBS:	PARTICIPATION:
Rodgers Brothers Custodial Services, Inc.	N/A	100%
2230 Lawrence Ave., NE		
Washington, DC 20018		
LSBE		

#### DESCRIPTION AND PURPOSE

Original Contract Value:	\$750,000.00
Original Contract Dates:	12-01-2017 - 11-30-2018
No. of Option Years in Contract:	3
Option Year 1 Value:	\$110,000.00
Option Year 1 Dates:	12-01-2018 - 11-30-2019
Option Year 2 Value:	\$0.00
Option Year 2 Dates:	12-01-2019 - 11-30-2020
Option Year 3 Value:	\$250,000.00
Option Year 3 Dates:	12-01-2020 - 11-30-2021

#### Purpose of the Contract:

This contract provides the delivery of Sand, Gravel, Stone, Topsoil and Cold Mix to DC Water locations in Washington, DC.

#### **Contract Scope:**

The Department of Pumping and Sewer Operations and the Department of Water Services have an ongoing need for a qualified contractor to provide the delivery of Sand, Gravel, Stone, Topsoil, and Cold Mix to DC Water locations in Washington, DC. These materials are used to fill holes created by excavation work required to repair water and sewer lines.

#### **Spending Previous Year:**

Cumulative Contract Value: Cumulative Contract Spending: 12-01-2017 to 11-30-2020: \$860,000.00 12-01-2017 to 09-30-2020: \$689,067.14

#### **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.

#### PROCUREMENT INFORMATION

Contract Type:	Fixed Price	Award Based On:	Best Value
Commodity:	Goods and Services	Contract Number:	17-PR-DSS-49
Contractor Market:	Open Market with Prefere	nce Points for LBE and LSBE Par	

#### BUDGET INFORMATION

Funding:	Operating	Department:	Pumping and Sewer Operations
Service Area: Various Sites	Department Head:	Kenrick St. Louis	

#### ESTIMATED USER SHARE INFORMATION

User	Share %	Dollar Amount
District of Columbia	100%	\$250,000.00
Washington Suburban Sanitary Commission	0.0%	\$0.00
Fairfax County	0.0%	\$0.00
Loudoun Water	0.0%	\$0.00
Other (PI)	0.0%	\$0.00
TOTAL ESTIMATED DOLLAR AMOUNT	100.00	\$250,000.00

2020 Date

Kenrick St. Louis Dat VP of Pumping and Sewer Operations

Digitally signed by Dan Bae DN: C=US, E=dan.bae@dcwater.com, Q=District of Columbia Water and Sever Authority, OU=VP of Procurement & Compliance, CN=Dan Bae Date: 202.09/.30 12:01:33-04'00'

Dan Bae Date VP of Procurement and Compliance

Digitally signed by Matthew T. Matthew T. Brown Date: 2020.09.30 16:23:09 Brown -04'00'

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

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:**

#### Small Diameter Water Main Replacement 14A (Non-Joint Use)

Approval to execute a construction contract for \$9,571,607.00

#### CONTRACTOR/SUB/VENDOR INFORMATION

PRIME:	SUBS:		PARTICIPATION:
Capitol Paving of D.C., Inc.	Omni Excavator Inc.		
2211 Channing Street, N.E.	Washington, DC	MBE	32%
P.O. Box 41248			
Washington, D.C. 20018	Acorn Supply & Distributing, Inc.		
-	White Marsh, MD	WBE	6%

#### DESCRIPTION AND PURPOSE

Contract Value, Not-To-Exceed:	\$9,571,607.00
Contract Time:	429 Days (14 Months)
Anticipated Contract Start Date (NTP):	01/03/2021
Anticipated Contract Completion Date:	03/08/2022
Bid Opening Date:	06/03/2020
Bids Received:	8
Other Bids Received:	
J. Fletcher Creamer & Sons	\$10,220,481.00
Garney Company Inc	\$10,453,520.00
Metro Paving Corporation	\$10,497,342.00
Sagres Construction Corp	\$10,971,656.00
Anchor Construction Corp	\$11,926,270.00
Civil Construction LLC	\$12,276,110.00
Fort Myer Construction	\$12,774,802.00

#### 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.

#### **Contract Scope:**

- Replace 3.19 miles of water mains ranging from four inch to twelve inches and associated valves and appurtenances.
- Replace copper water services 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.

#### **Federal Grant Status:**

• Construction contract is anticipated to be funded in part from a Water Infrastructure and Financing Act loan, pending finalization of project list and loan closing.

PROCUREMENT INFORMATION							
Contract Type:	Unit Price	Award Based On:	Lowest responsive, responsible bidder				
Commodity:	Construction	Contract Number:	170060				
Contractor Market:	Open Market						

#### **BUDGET INFORMATION**

Funding:	Capital	Department:	Engineering and Technical Services
Service Area:	Water	Department Head:	Craig Fricke
Project:	F2		

#### ESTIMATED USER SHARE INFORMATION

User	Share %	Dollar Amount
District of Columbia	100.00%	\$9,571,607.00
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%	\$9,571,607.00



/	
Dan Bae	Date
VP of Procurement and Compliance	

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

David L. Gadis CEO and General Manager

Date

1

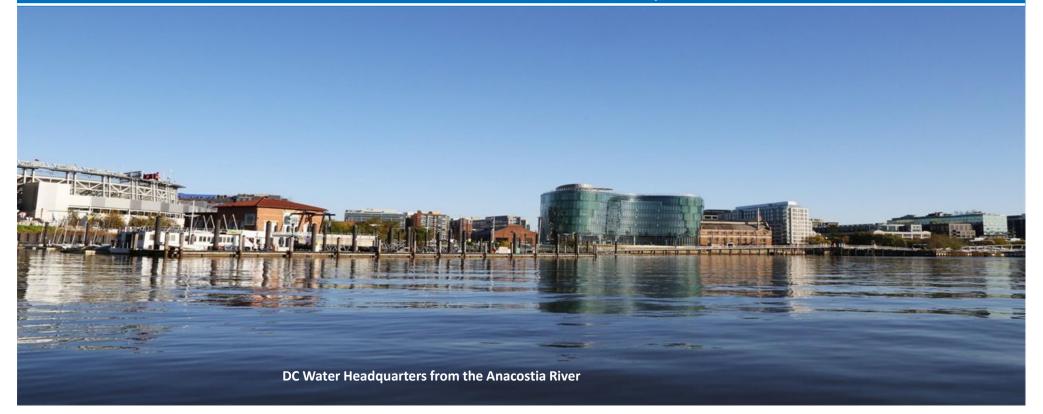
170060 Small Diameter Water Main Replacement 14A Fact Sheet

Prepared: September 22, 2020



### **Environmental Quality and Operations Committee** Proposal and Contract Review Process

October 15, 2020 District of Columbia Water and Sewer Authority Dan Bae, Vice President of Procurement and Compliance





### **Question from Committee**

 Process to verify contracts and proposals prior to being presented to the Committee



#### The process to get to a contract action is well-defined, with many checks and approvals along the way

- All proposals are reviewed by the evaluation committee made of subject matter experts from cross departments including engineering, procurement, legal, compliance, and safety.
- Prior to the award, Procurement and Compliance performs 27 checks (next slide)

Process Step	Identify Need	Solicitation	Negotiations	Award Recommendation and Approvals	Board Action (If Required)
Process Overview	Identify Need Communications with end-users End-user writes SOW Check budget availability Technical Evaluation Team assigned	<ul> <li>Solicitation</li> <li>Done for new generally high-value requirements</li> <li>Compliance Team does LSBE/DBE outreach</li> <li>Procurement writes/issues RFx</li> <li>OCI disclosure, other forms</li> <li>Tech Eval Team scores proposals; Procurement evaluates pricing</li> </ul>	<ul> <li>Negotiations</li> <li>Engage Legal when either party offers terms that differ from DC Water's standard legal terms.</li> <li>Compliance Team assigns preference points</li> <li>Negotiate price/value improvement</li> <li>Proc documents award recommendation</li> </ul>	Award & Approvals <ul> <li>Perform 27 checks</li> <li>Confirm budget</li> <li>Documentation may include: D&amp;F Contract Modification Sheet; Fact Sheet</li> <li>Circulate for signatures</li> </ul>	Execution  Draft Fact Sheet Finance confirms budget availability Circulate for signatures Seek Committee recommendation for Board approval Board approval
Approvals Required	<ul> <li>End-user and Proc review and approve SOW</li> <li>Compliance Team determines applicable Business Development program and participation goals</li> <li>Safety, ROCIP, and Legal Affairs review and approve relevant requirements</li> </ul>	<ul> <li>RFx documents require End-User Department and Proc Manager or Director approval before issuing</li> </ul>	<ul> <li>Compliance confirms "Good Faith Efforts" to use LSBE/DBE subs when applicable</li> <li>Safety approves relevant proposal language</li> <li>Legal approves modified or new legal terms.</li> <li>Procurement Manager, Director (and for very high-value awards) VP approve award recommendation</li> </ul>	<ul> <li>E-mail from Budget Analyst, or approved req confirming budget</li> <li>Legal Sufficiency Memo if required</li> <li>Contract action approved per Delegation of Authority</li> </ul>	<ul> <li>Fact Sheet reviews by Finance and Procurement leadership</li> <li>Fact Sheet signatures by End-user, Procurement &amp; Finance leadership</li> <li>Committee recommendation</li> <li>CEO signs Fact Sheet</li> <li>Board approval</li> <li>CEO executes contract</li> </ul>



### **Pre-Award Vendor Selection Compliance Checks**

Compliance Checks per	formed prior to award
Disadvantaged Business Certification (Local certified, MBE, WBE, DBE)	Corporate Registration
Walsh-Healey Act Compliance	Class A Business License
Davis-Bacon Act Compliance	Tax Registration Certification Affidavit
"Officers Not to Benefit" Certification	Department of Employment Services Certificate
Pricing Derived Independently (No Collusion)	DC Courts Debarment Check & Certification
Drug-Free Workplace	National Labor Review Board Findings
Tax Filing Status	Office of Federal Contract Compliance Program
W-9	Good Faith Efforts Compliance
EEO Compliance Statement	Bond
Subcontracting Plans	Disclosure of Lobbying Activities
Subcontractor Approval Request	DC Water Works Program Disclosure Statement
Safety Information and Safety Plans	Certification Regarding Lobbying
References	Conflict of Interest Disclosure
Vendor Financial Viability	



### **Future Process in Consideration**

- Increase the use of quality based selection process vs. lowest price:
  - When possible, use more Request for Proposal (RFP) process instead of Invitation for Bid (IFB) process
  - > Allows to review price, scope, and requirements before award
    - In the IFB process, these are reviewed after the award
- Increase compliance monitoring to all subcontractors
  - Provide a training on Davis-Bacon act (and other requirements) to subcontractors to increase compliance
  - > Increase checks on others areas such as conflict of interest, collusion, etc.
- Automate the use vendor performance scorecard in the selection process
  - > Currently a manual process but automate it using Oracle
  - Measure and record performance of work as well as compliance to the regulatory and safety requirements in Oracle
  - > Automatic hold on poor performing vendors in Oracle system

# September 10 Flash Flood

#### EQ & OPS Committee Presentation

October 15, 2020

### September 10 Flash Flood

Scope	For 70 minutes on September 10, 2020, the National Capital Region experienced an extreme weather event/flash flood, resulting in surface flooding and basement backups primarily in the combined sewer area and the separate sewer area in Northeast DC (Nicholson Street). This After-Action Report documents activities of DC Water relating to the operations and performance of the stormwater, sewer collection and treatment system during the event, an analysis of core capabilities and areas of improvement based on lessons learned from this event.
Mission Area(s)	Response and Recovery
Core Capabilities	Environmental Response/Health and Safety Situational Assessment Infrastructure Systems
Objectives	<ol> <li>Respond to escalated number of flooding and basement back up calls</li> <li>Maintain operation of critical infrastructure including stormwater and combined sewage pump stations.</li> <li>Contain open construction sites.</li> <li>Accommodate high peak flows to Blue Plains Advanced Wastewater Treatment Plant.</li> </ol>
Threat or Hazard	Extreme Weather/Flash Flood Event
Lead Agency	DC Water – Operations and Engineering
Participating Departments	Department of Sewer and Pumping Operations, Wastewater Treatment, Engineering, DC Clean Rivers, Legal and Government Affairs, Marketing and Communications, Finance and Budget, Procurement, Customer Care, Information Technology

### Core Capabilities

Objective	Core Capability	Performed without Challenges (P)	Performed with Some Challenges (S)	Performed with Major Challenges (M)	Unable to be Performed (U)
Respond to escalated number of flooding and basement back up calls	Environmental Response/Health and Safety			Х	
Maintain operation of critical infrastructure including stormwater and combined sewage pump stations.	Infrastructure Systems		x		
Secure active DC Water construction sites, including Clean Rivers projects.	Situational Assessment and Infrastructure Systems			Х	
Accommodate high peak flows to Blue Plains Advanced Wastewater Treatment Plant.	Infrastructure Systems	х			

## Core Capabilities

- Performed without Challenges (P)
  - Potomac and Anacostia River Tunnels
  - Tunnel Dewatering Pump Station and Enhanced Clarification at Blue Plains
- Performed with Some Challenges (S)
  - Maintaining operation of critical infrastructure including stormwater and combined sewage pump stations
    - Storm Water PS Earl Street PS serving the underpass lost power
    - Rate of storm inflow to O Street faster than the storm pumps could be activated
- Performed with Major Challenges (M)
  - Number and rate of calls overwhelmed Customer Service resulting in long wait times and delayed response

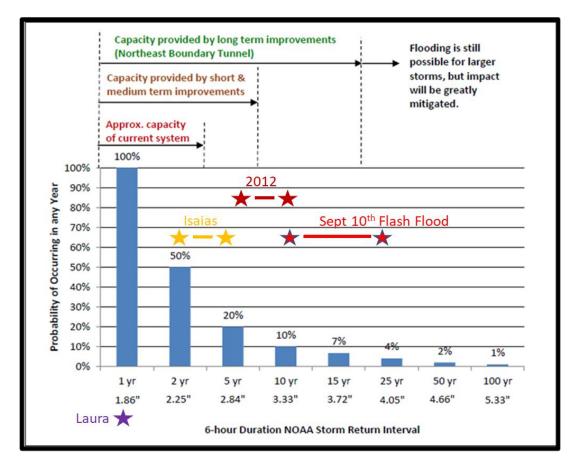
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 Secured Construction Sites for North East Boundary Tunnel, however 1<sup>st</sup> Street tunnel filled and overflowed during storm

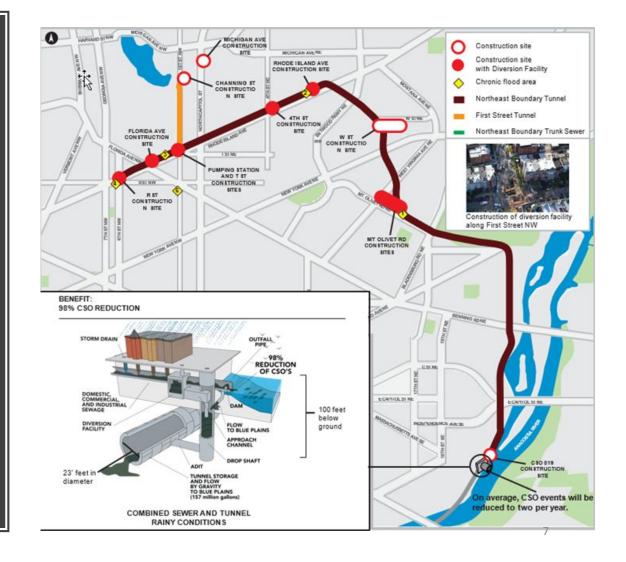
# September 10<sup>th</sup>, 2020 Flash Flood

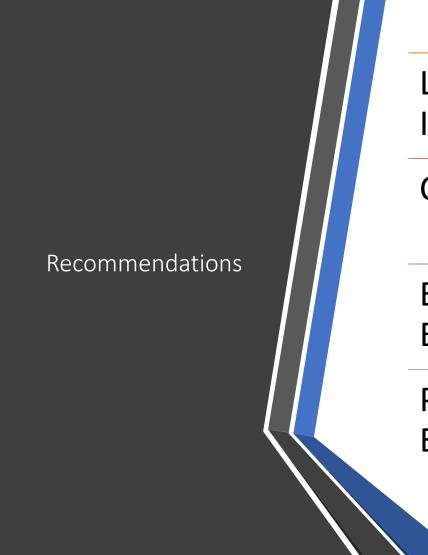


# Event Specifics & Comparison to other Storms



## North East Boundary Tunnel (NEBT) 2023





Leverage Existing Programs and Infrastructure Solutions

**Climate Adaptations** 

Enhanced Customer Service and Experience

Proactive and Timely Leadership Engagement

#	Improvement Action Needed	Reason for Action	Responsible Department	Involved Departments/ Agencies	FEMA Core Mission	FEMA Core Capability	DCW Core Element Identified (POETE)	Priority Level	Short, intermediate, long term
Lev	erage existing	g Programs and Ir	nfrastructu	re Solutions					
1	Implementation of Backwater Valve Program	Relief in advance of the next event	OMAC	Engineering Legal Finance Procurement Risk Management	Mitigation	Long-Term Vulnerability Reduction	Equipment/ Organization	High	Short Term
2	Limited sewer system evaluation in Nicholson St. to assess repeated backups	Nicholson Street is a separate sewer area. Need to understand reason for backups	Engineering	Operations Finance OMAC Risk Management	Mitigation	Long-Term Vulnerability Reduction	Equipment/ Organization	High	Intermediate
3	Develop a platform to view SCADA, DCCR, and PCS (plant data) as an integrated system	Have real time visibility for command and response into the entire system from street flooding to pumping to conveyance to treatment and discharge/overflows to river	Engineering	Blue Plains DCCR Pumping Finance Procurement OMAC	Preparedness	Situational Assessment/ Operational Communications	Equipment	Medium	Long Term





#	Improvement Action Needed	Reason for Action	Responsible Department	Involved Departments/ Agencies	FEMA Core Mission	FEMA Core Capability	DCW Core Element Identified (POETE)	Priority Level	Short, intermediate, long term
Clir	nate Adaptati	ion							
4	Implementation of Early Weather Warning System	Equipment check, catchbasin response crew prep	Engineering	Operations, Procurement, Finance, OMAC	Preparedness	Public Information and Warning	Planning	High	Short
5	Establish a dedicated IMT for extreme weather	Minimize time from Incident to Response	OEM	Operations Engineering Customer Service OMAC	Response/ Recovery	Operational Coordination	Organization	Medium	Intermediate
6	Requirement for Post-Event Granular Rainfall Record	Correlating storm intensity to event; modeling input	Engineering	Operations, Procurement, Finance, OMAC	Response/ Recovery	Infrastructure Systems/ Threats and Hazard Identification	Planning	High	Short
7	Work with DOEE staff to Develop/Access stormwater model for the City	Need to understand inundation after each event to improve DCW response and review changes to surface run off reaching existing storm pump stations operation by DCW to confirm capacity	Engineering	DOEE DDOT	Mitigation	Operational Coordination	Planning	Medium	Long Term

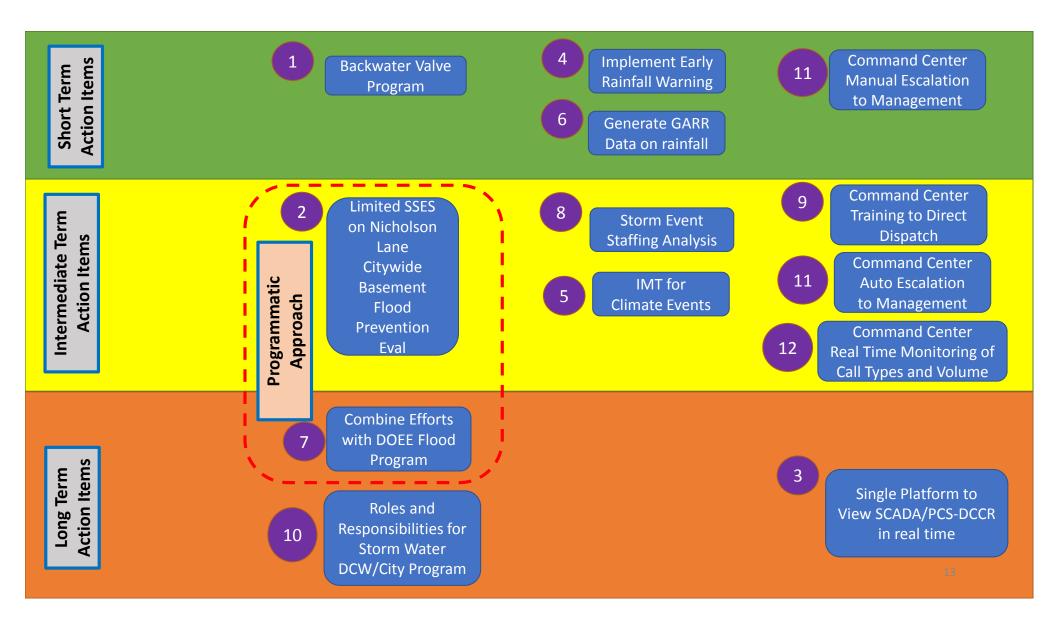




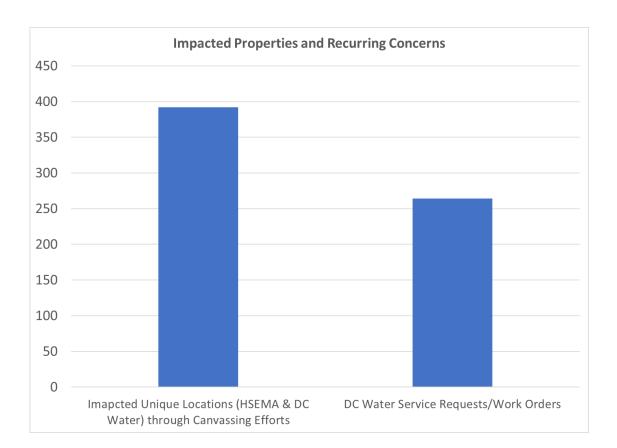
#	Improvement Action Needed	Reason for Action	Responsible Department	Involved Departments/ Agencies	FEMA Core Mission	FEMA Core Capability	DCW Core Element Identified (POETE)	Priority Level	Short, intermediate, long term
<b>Enł</b> 8	Conduct storm event staffing analysis	ner Service and E Provide analysis in field operations, and provide additional staffing resources where indicated to properly support operations	Sewer Operations	Finance P&T	Preparedness	Operational Coordination	Planning	High	Intermediate
9	Enhancement of command center staffing including training and skills to manage flood events and dispatching crews and services	Minimize interval between customer complaint and dispatch	Customer Service	Operations Engineering IT Procurement Finance OMAC	Response	Operational Communications	Training	Medium	Intermediate
10	Review roles/ responsibilities for stormwater flooding within the District and develop coordinated services for better customer experience	Need for clarification for the scope of responsibilities of each dept. within the District related to stormwater to improve efficiency and expediency of customer service	Govt Relations	Legal Engineering	Preparedness	Operational Coordination	Training/ Exercise	High	Intermediate



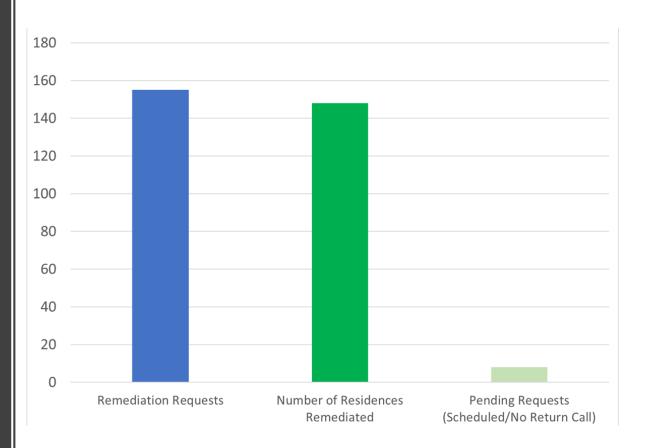
#	Improvement Action Needed	Reason for Action	Responsible Department	Involved Departments/ Agencies	FEMA Core Mission	FEMA Core Capability	DCW Core Element Identified (POETE)	Priority Level	Short, intermediate, long term
Pro	active and Ti	mely Londership I	Engagemen	t					
11	Develop notification procedure for Command center and Leadership	Need to keep leadership team informed on escalated call activity - Manual call to leadership as an interim step -Automated call out to leadership as target action	іт	Finance Engineering Operations Customer Service	Response	Situational Assessment/ Operational Communications	Planning	High	Short Term for Manual Call Intermediate for automated call
12	Establish real- time monitoring access for executive management	Need for dashboard for executive management monitoring and situational awareness	п	Finance Engineering Operations Customer Service	Response	Situational Assessment/ Operational Communications	Equipment	High	Intermediate



Impacted Properties HSEMA & DC Water Canvassing Efforts – Oct 13, 2020



# Remediation Request Status – Oct 13, 2020



Status of Backwater Valve Requests – Oct 13, 2020

