DISTRICT OF COLUMBIA WATER AND SEWER AUTHORITY
Board of Directors

Meeting of the
Environmental Quality and Operations Committee

HQO-125 O Street SE, Washington DC 20003
Thursday, November 21, 2019
9:30 a.m.

	I.	**Call to Order**	Adam Ortiz Chair
9:30 a.m.	**II.**	**AWTP Status Update** **1.** BPAWTP Performance	Aklile Tesfaye
9:40 a.m.	**III.**	**Wet Weather Treatment Operating Parameters**	Aklile Tesfaye
10:00 a.m.	**IV.**	**FY'20 Capital Improvement Program**	Paul Guttridge
10:15 a.m.	**V.**	**Overview of FY2019 to FY2028 Proposed CIP Further Discussion**	Craig Fricke
10:30 a.m.	**VI.**	**Relocation Cost for Fleet Facilities and Sewer Service Facility from 125 O Street**	David Gadis/Len Benson
10:45 a.m.	**VII.**	**Action Items**	Joel Grosser/Len Benson

Joint Use

1. Contract No.: 18-PR-DWT-38 – Biosolids Management, Nutri-Blend
2. Contract No.: 18-PR-DFS-29 – Janitorial Cleaning Service, Clean Team Janitorial Service
3. Contract No.: 19-PR-DWS-29 – Utility Locating and Marking Services, Dynamic Concepts
4. Contract No.: 19-PR-DET-28 – Heavy Duty Fleet Vehicle Lifts, Alan Tye & Associates
5. Contract No.: 190070 – DC Water Fleet Maintenance Building, Hess Construction & Engineering Services, Inc.
6. Contract No.: 190080 - DC Water Sewer Service Building, Hess Construction & Engineering Services, Inc.
7. Contract No. 180070 – Floodwall Segment C Project, Corman Kokosing Construction
8. Contract No: DCFA 450 – Tunnel Dewatering Pump Station & Enhanced Clarification Facility, Arcadis District of Columbia, PC

Non-Joint Use

1. Contract No.: 160140 - Small Diameter Water Main Replacements 13B, Anchor Construction Corporation

10:50 a.m. **VIII.** **Other Business / Emerging Issues**

10:55 a.m. **IX.** **Executive Session***

11:00 a.m. **X.** **Adjournment** Adam Ortiz
Chair

* 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)(1); 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); 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.

Follow-up Items from Prior Meetings:

1. EVP, Ops & Engr, DC Water: Provide a briefing to the Committee regarding preventative and corrective maintenance programs on water, storm and sanitary sewer pump stations also including performance of DC Water's SCADA system. **[Target: December 2019]**
2. Vice President, Wastewater Operations, DC Water: Provide a presentation on the Advanced Wastewater Treatment Plant and Wet Weather Treatment Facility operating parameters and the flow split logic relative to the volume of CSO flow captured in the tunnels going through the AWWTP versus the WWTF. **[On Current Agenda]**
3. Manager, Green Infrastructure, DC Water: Conduct a robust discussion with the Committee regarding per/acre costs of developing, operating and maintaining grey vs. green infrastructure. **[The Committee requested DCCR to return in 6 months to address this item. Target: December 2019]**
4. Senior Director, Water Operations: Provide an update regarding the total number of Public Fire Hydrants in service. **[Target: December 2019]**
5. Manager, Program Controls: Conduct briefing on KPIs that have not met the 90-day threshold in FY2019. **[On Current Agenda]**
6. Senior Vice President & Chief Engineer: Provide an update regarding trends in sewer failures. **[On Current Agenda]**
7. Senior Vice President & Chief Engineer: Provide an update on the effects on risk of different water main and sewer replacement scenarios (i.e., if replacement percentages are <1%, equal to 1%, > 1%...etc.). **[On Current Agenda]**

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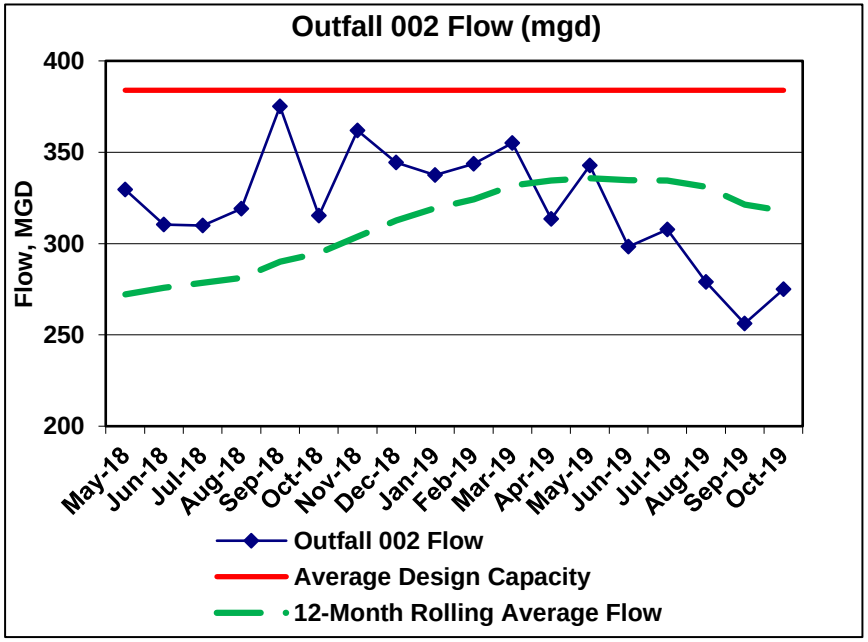
Blue Plains Advanced Wastewater Treatment Plant

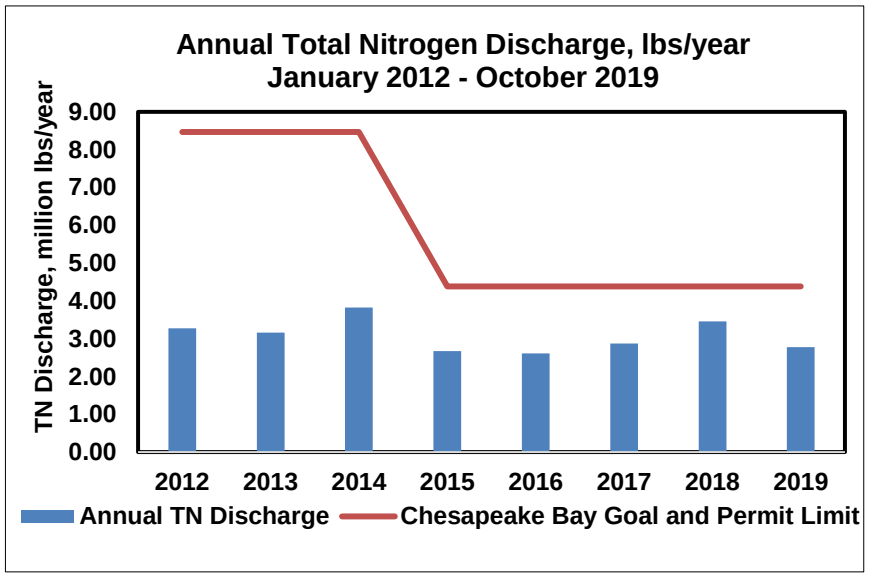
Performance Report

Environmental Quality and Operations Committee

November 21, 2019

Complete Treatment Performance





- Annual Average flow remained above 300 MGD since November 2018
- Plant performance was excellent with all effluent quality requirements well below or within the NPDES permit requirements
- The total pounds of nitrogen discharged in the complete treatment effluent - during the current calendar year is on track to remain below the NPDES permit discharge limit of 4,377,580 lbs. /year.

Wet Weather Treatment Facility Performance

	September 2019	October 2019
Total Precipitation, inches	**0.25**	**4.66**
Total Volume Captured and Treated, MG*	**19**	**349**
➢ **Directed to Complete Treatment, MG**	**19**	**296**
➢ **Discharged to Outfall 001, MG**	**0**	**53**
Measured Overflow, MG	**0**	**0**
➢ **Percent Captured, %**	**100**	**100**

***MG = Million Gallons**

Class A Biosolids Quality & Bloom Marketing

- All biosolids produced 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
- Bloom Marketing: ~2,900 tons marketed in October 2019
- Marketing goal during fiscal year 2020: 60,000 tons (~40% of production)

Blue Plains Advanced Wastewater Treatment Plant

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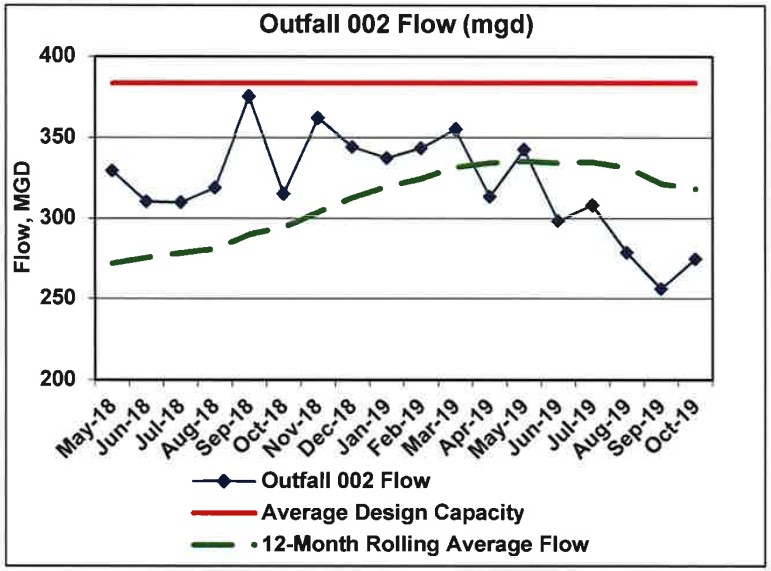
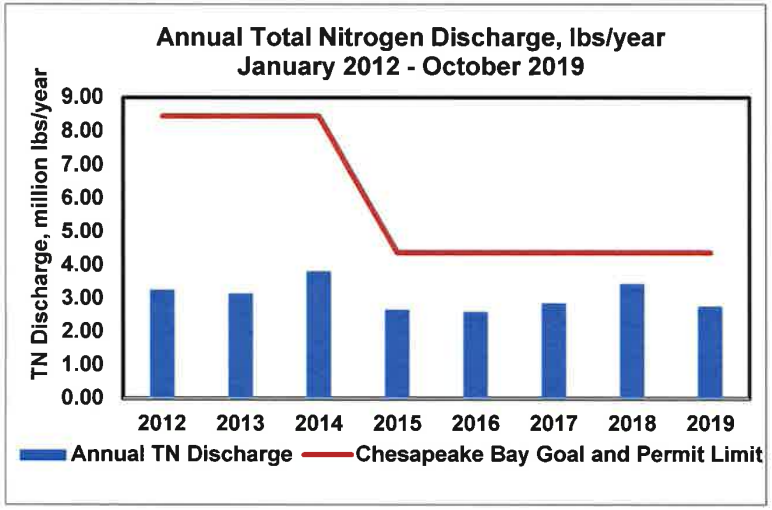
Complete Treatment Performance





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3

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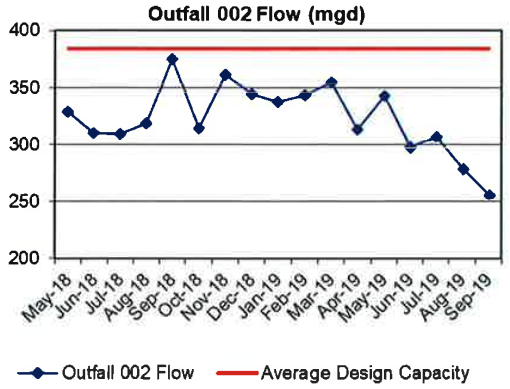
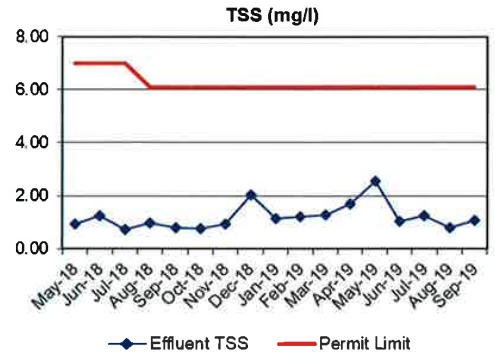
BLUE PLAINS ADVANCED WASTEWATER TREATMENT PLANT
PERFORMANCE REPORT – SEPTEMBER 2019

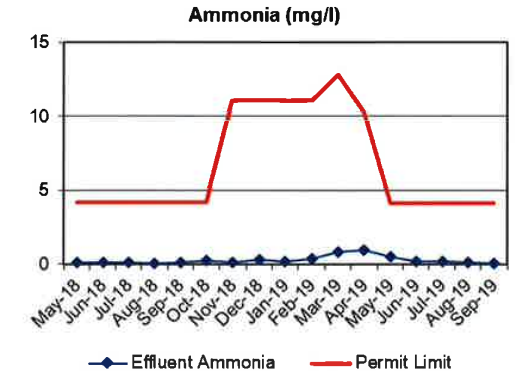
Average plant performance for the month of September 2019 was excellent with all effluent parameters well below the seven-day and monthly NPDES permit requirements. The monthly average flow through complete treatment and discharge to outfall 002, was 256 MGD. There was no treated captured combined flow directed to Outfall 001 during this period. The following figures compare the plant performance with the corresponding NPDES permit limits.



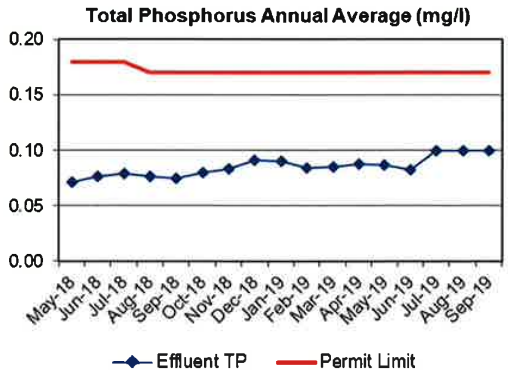
This graph illustrates the monthly average influent flow to the plant. The design average flow is 384 MGD. Blue Plains has a 4-hour peak flow capacity of 555 MGD through complete treatment. Once the plant is at capacity, up to 225 MGD of additional captured combined system flow from the tunnel can be treated through enhanced clarification, disinfection and dechlorination.



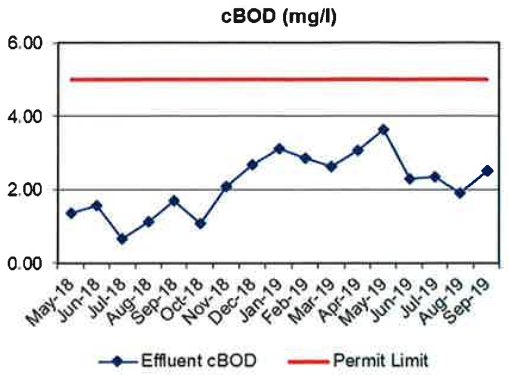
Effluent Total Suspended Solids (TSS) is a measurement of the amount of solid material that remains suspended after treatment. The effluent TSS concentration for the month averaged 1.09 mg/L, which is below the 6.1 mg/L permit limit.



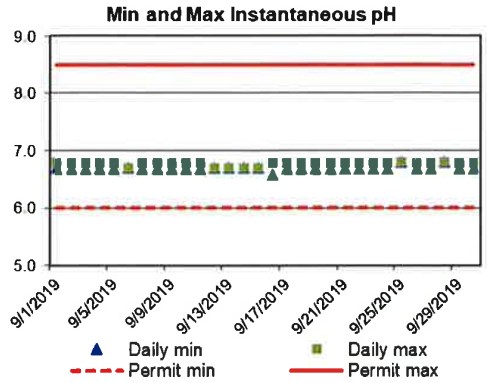
The Ammonia Nitrogen (NH3-N) is a measurement of the nitrogen found in ammonia. For the month, effluent NH3-N concentration averaged 0.03 mg/L and is below the 4.1 mg/L seasonal limit.



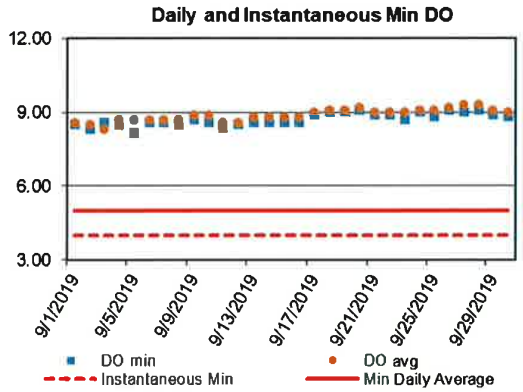
The Total Phosphorus (TP) is a measurement of the particulate and dissolved phosphorus in the effluent. The 12-month rolling average effluent TP concentration is 0.10 mg/L, which is below the 0.17 mg/L limit.



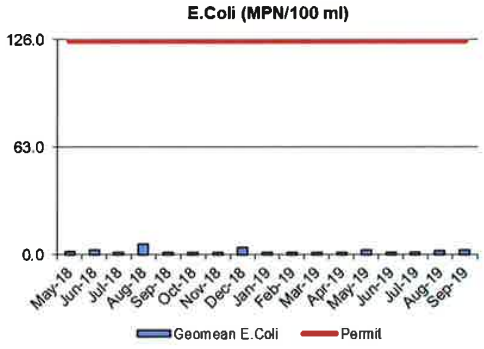
Carbonaceous Biochemical Oxygen Demand (CBOD) is a measurement of the amount of oxygen required for the decomposition of organic materials. The effluent CBOD concentration averaged 2.5 mg/L, which is below the 5.0 mg/L limit.



pH is a measurement of acidity of the effluent. The minimum and maximum pH observed were 6.6 and 6.8 standard units, respectively. The pH was within the permit limits of 6.0 and 8.5 for minimum and maximum respectively.



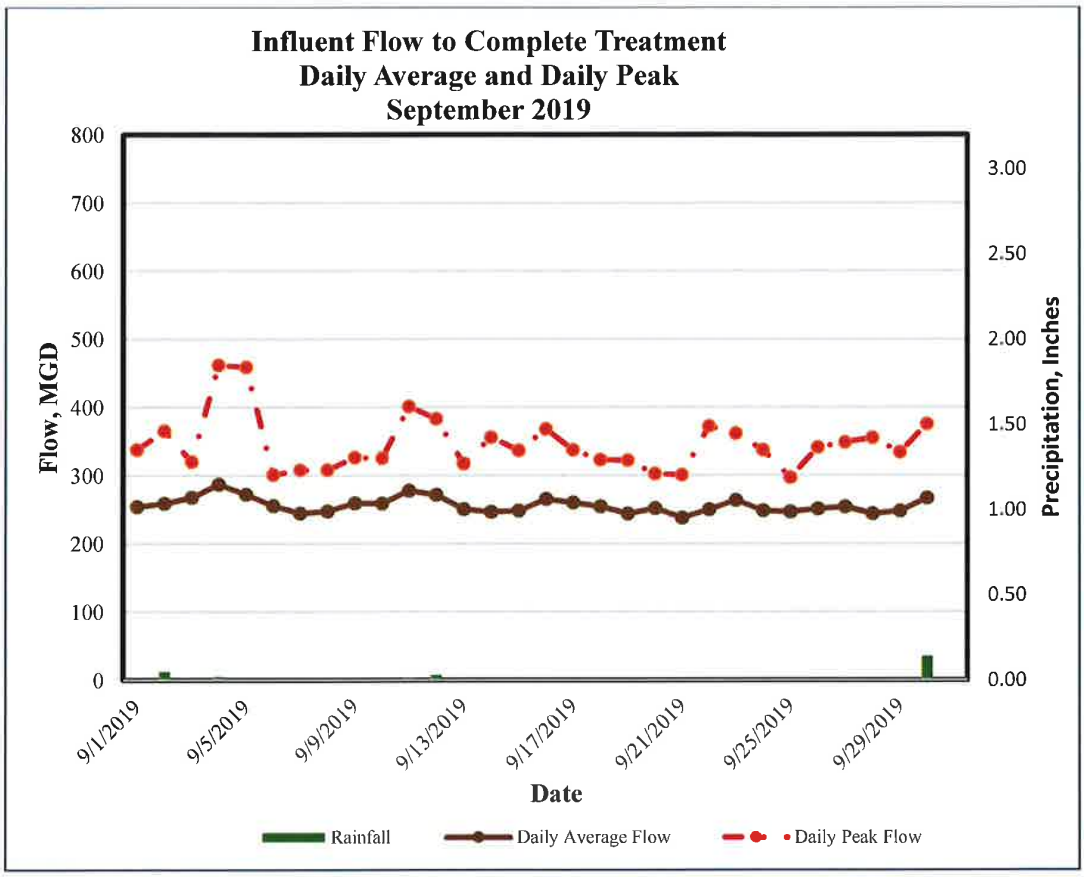
Dissolved Oxygen (DO) is a measure of the atmospheric oxygen dissolved in water. The DO readings for the month are within the permit limits. The minimum daily average is 8.3 mg/L. The minimum instantaneous DO reading is 8.2 mg/L. The minimum daily average and instantaneous permit limits are 5.0 mg/L and 4.0 mg/L, respectively.



E. coli is an indicator of disease causing organisms (pathogens). The E. coli permit limit is 126/100mL. The E coli geometric mean is 2.9 /100mL, and well below the permit limit.

Wet Weather Impact on Plant Performance

During the month of September 2019, the Washington Metropolitan Region received below average precipitation (0.25 inches vs normal of 3.72 inches) as measured at the National Airport. There was no treated captured combined flow directed to Outfall 001 during this period.



Wet Weather Treatment Facility (WWTF) at Blue Plains

Brief Description

The Wet Weather Treatment Facility at Blue Plains provides treatment for Combined Sewer Overflows (CSO) conveyed through the Long-Term Control Plan (LTCP) tunnel systems to Blue Plains. With a design capacity of 250 MGD, the facility consists of sub systems including- a flow surcharge wet well and coarse screens, upstream of five 3,000 Horse Power (HP) Tunnel Dewatering Pumps (TDPs). The TDPs lift the flow 156 ft to the above ground Enhanced Clarification Facility (ECF), which comprises of fine screening, grit removal, and high rate clarification (HRC). The effluent from HRC is disinfected and dechlorinated before it's discharged through Outfall 001. When flow rates to the main plant are below the permitted peak flow rates of 555 OR 511 MGD, the effluent from the HRC (or a portion of it) is directed to the main plant for complete treatment. On an average year, the facility is designed to receive approximately 2.6 billion gallons of CSOs and provide treatment with The WWTF, along with the first section of the Anacostia Tunnel System were placed in operation, three days in advance of the March 23rd Consent Decree date.

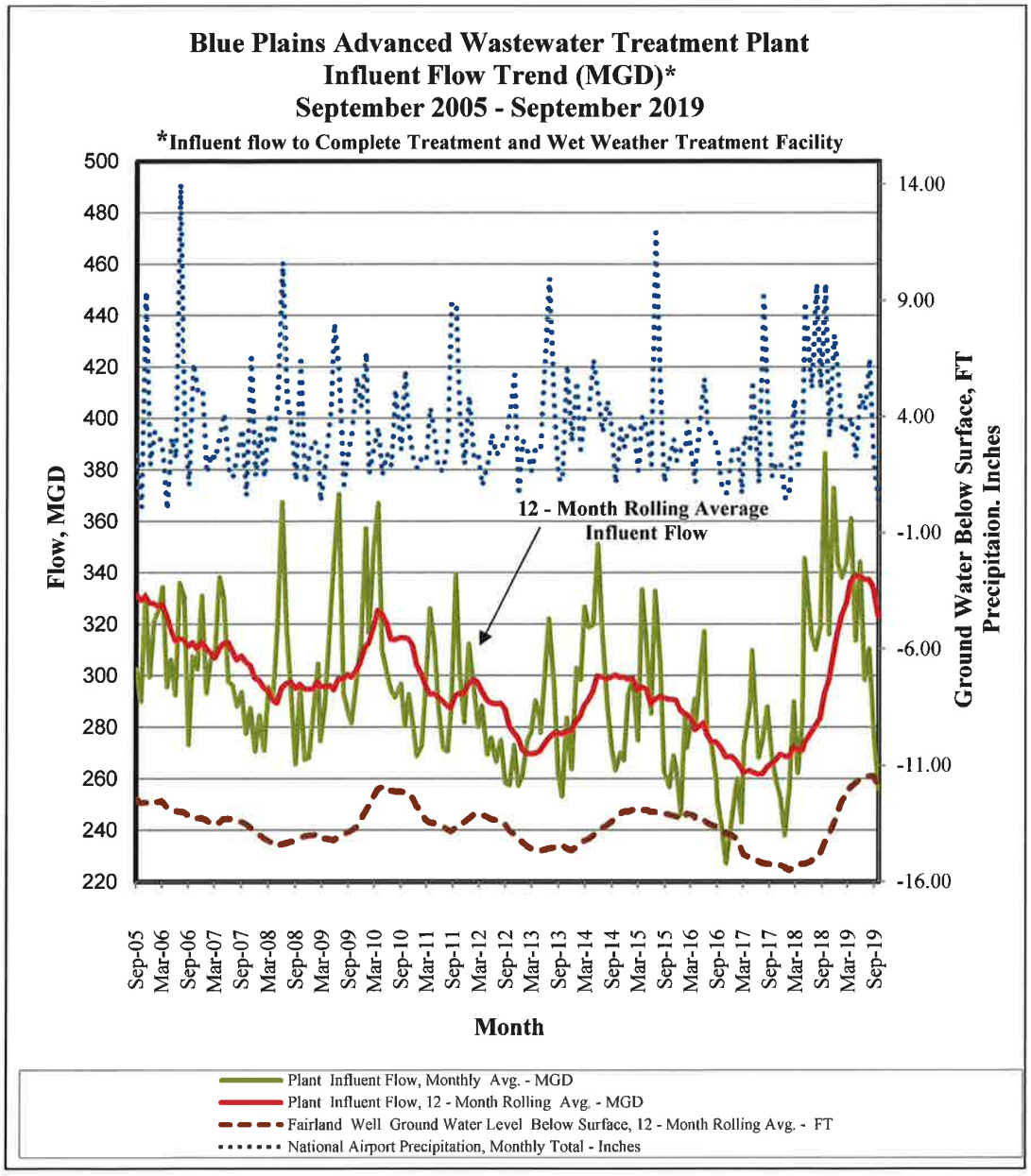
Aerial rendering of the Wet Weather Treatment Facility

Performance

During the month of September, a total of 19 million gallons (MG) of wet weather flow captured in the tunnel system, was pumped, directly to the Complet Treatment Plant. There was no discharge of treated captured combined flow to Outfall 001. The treated flow was directed to the main plant to maximize complete treatment. Since the commissioning of the first section of the Anacostia River Tunnel Systems and the WWTF on March 20, 2018 and including the wet weather events that occurred in September 2019, the total volume pumped and treated through the WWTF is 6,334 MG. During the same period, 2,768 wet tons of screenings and grit (trash, debris, sediment) were removed, that would otherwise have been discharged into the Anacostia River.

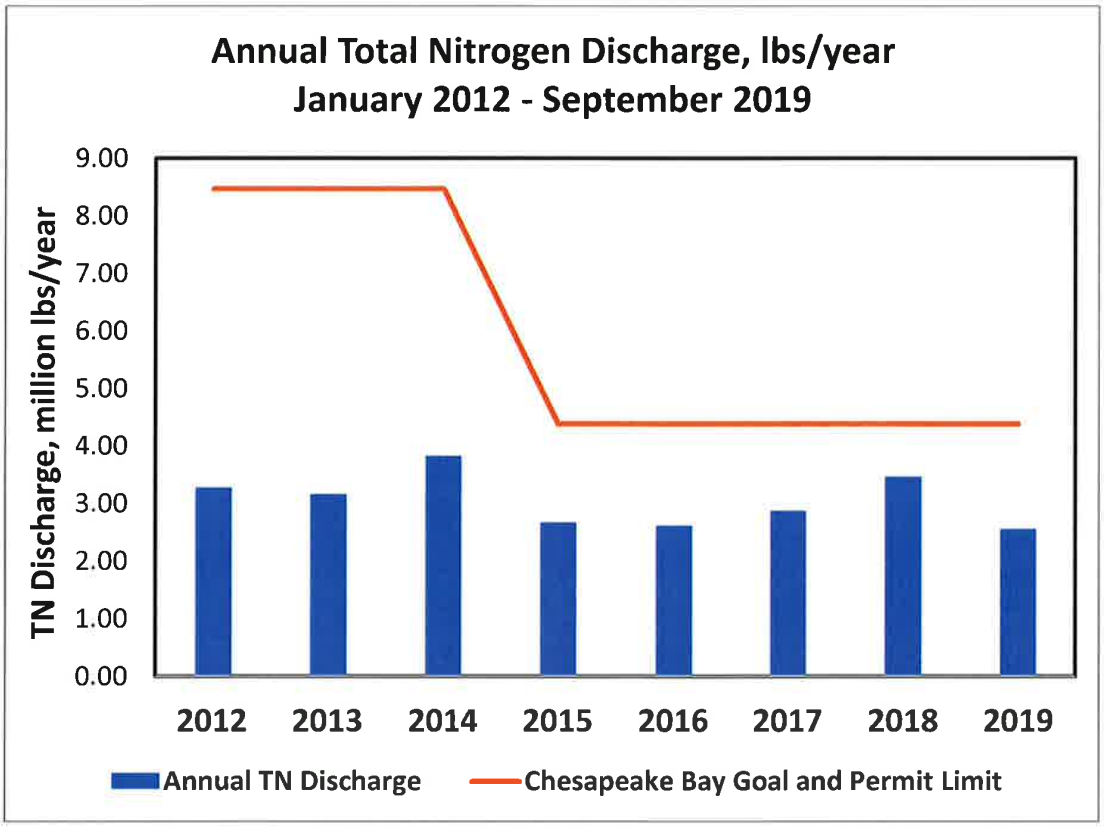
Plant Influent Flow Trend

The graph below shows a long-term influent flow trend to the plant ending September 2019. While for any given month the flow is weather dependent, the 12-month rolling average influent flow exceeded 300 MGD since November 2018.



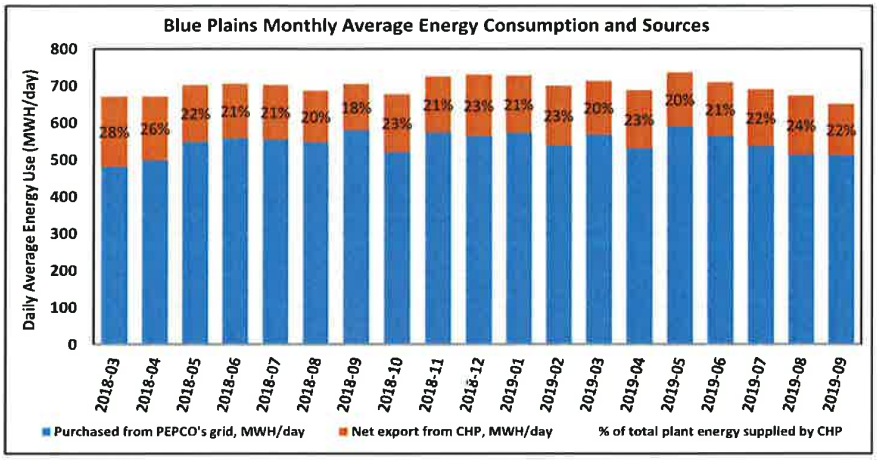
Blue Plains Total Nitrogen (TN) Removal – Performance

The graph below shows total annual nitrogen discharge, in million pounds per year, over an eight-year period ending September 2019. In September 2019, the monthly average TN concentration and total load in the complete treatment effluent were 2.07 mg/L and 132,879 lbs., respectively. The total pounds of nitrogen discharged in the complete treatment effluent during the current calendar year (through September 2019) is 2,550,808 lbs. and on track to remain below the NPDES permit discharge limit of 4,377,580 lbs. /year. The performance corresponds to average flow of 315 MGD, maximum month flow of 355 MGD, and average wastewater temperature above 16°C observed during the period. The Blue Plains Enhanced Nitrogen Removal Facility (ENRF) is designed to meet the TN discharge limits at influent loads corresponding to annual average flows of 370 MGD, maximum month flows of 485 MGD, and operating wastewater temperatures below 12°C.



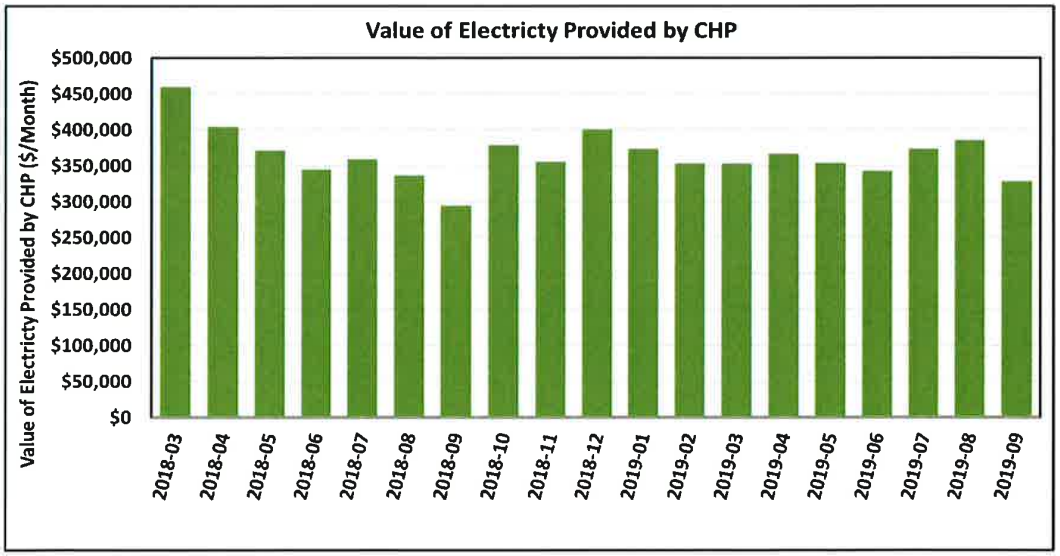
Blue Plains Electricity Generation and Usage

In September 2019, the average energy consumed at Blue Plains was 651 megawatt hours per day (MWH/day) or 2.54 MWH of electricity per million gallons of wastewater processed through complete treatment. The Combined Heat and Power (CHP) facility generated an average of 140 MWH/day, making up for 22% of total energy consumed at Blue Plains. The remaining 514 MWH/day was purchased from PEPCO.



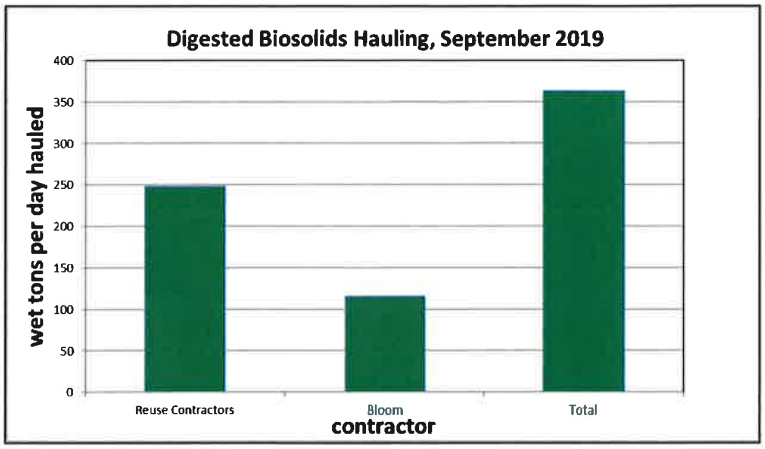
The graph above is based on power monitors installed at the Main Substation and CHP, and reflects average energy consumed at Blue Plains in MWH/day. Of the total use, the energy purchased from PEPCO and net energy supplied by CHP are indicated by the blue and orange highlights, respectively.

The graph below shows the monthly value of the net electricity generated by CHP by assuming unit price of $78/MWH of electricity.

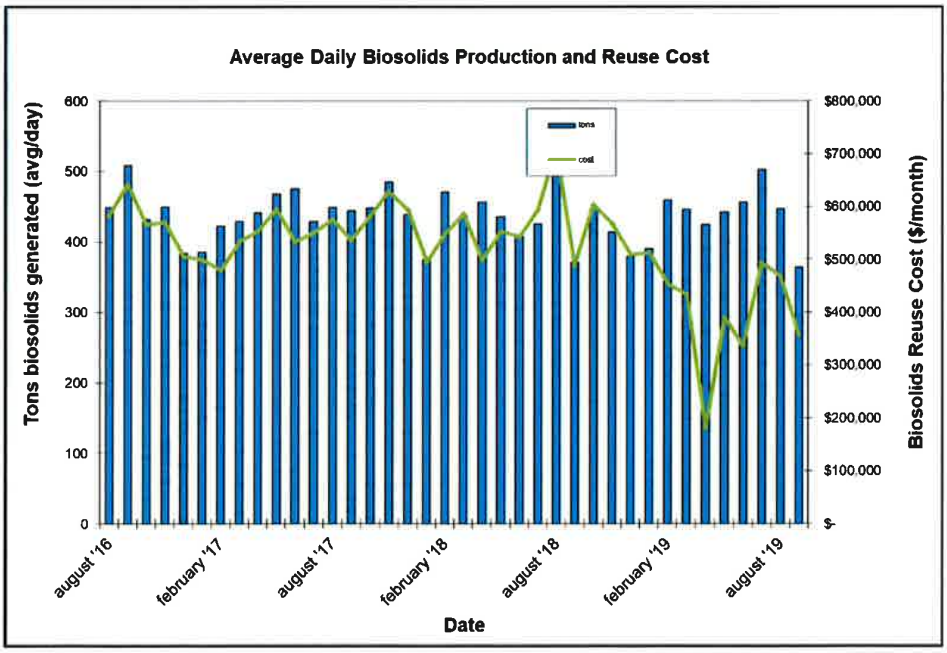


RESOURCE RECOVERY

In September, biosolids hauling averaged wet 389 tons per day (wtpd). The average percent solids for the Class A material was 31.4%. The average quanities of Class A biosolids transported and applied on farms by the three contracts and the quantites marketed as Bloom are shown on the graph above. In September, 3,530 wet tons of Bloom were distributed to 28 customers.



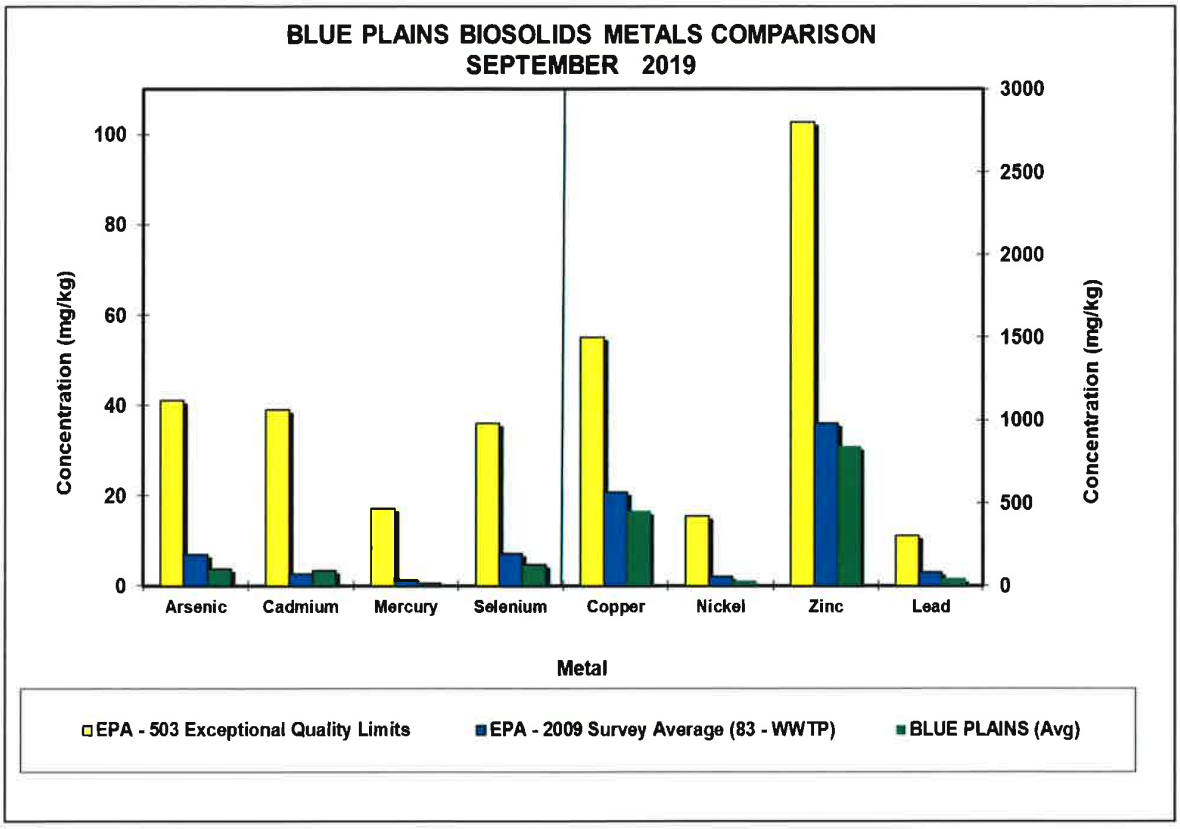
The graph below shows average daily biosolids produced and the associated monthly cost for reuse (transportation and application cost) for a three-year period ending September 2019. In September, diesel prices averaged $3.20/gallon, and with the contractual fuel surcharge, the weighted average biosolids reuse cost (considering the marketed material) was $32.78 per wet ton.



Product Quality

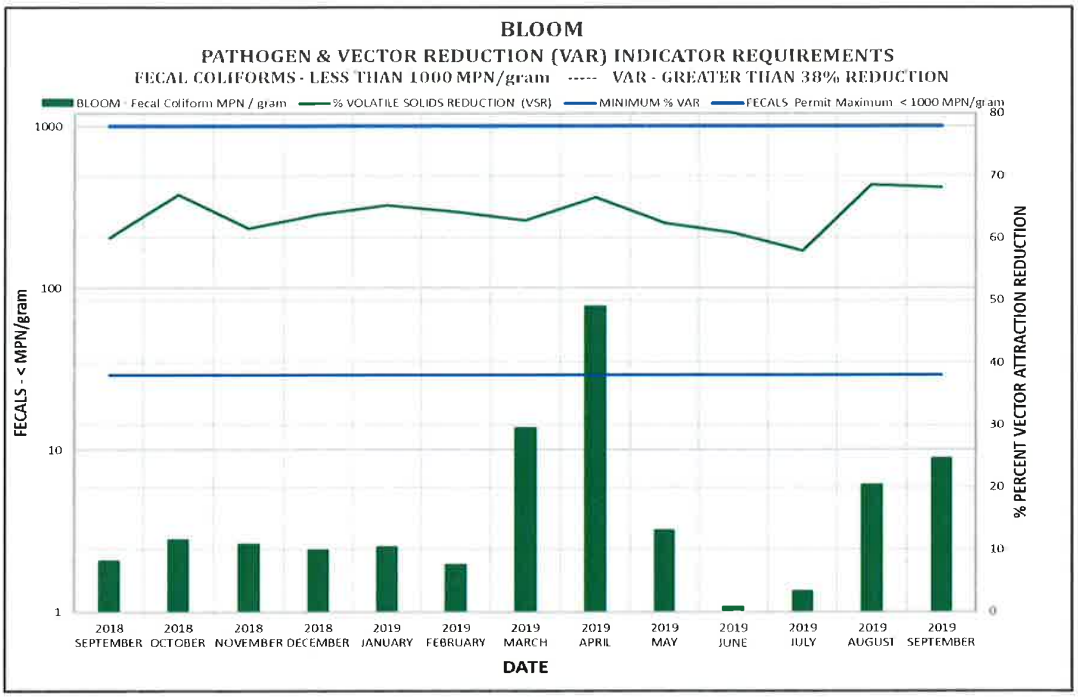
Metals

All biosolids produced during the month of September met Class A Exceptional Quality (EQ) requirements required by EPA. The graph below shows the EPA regulated heavy metals average concentrations in the Class A biosolids. The concentrations are considerably below the regulated exceptional quality limits (EPA-503 Exceptional Quality Limits) and the national average (EPA-2009 Survey Average).



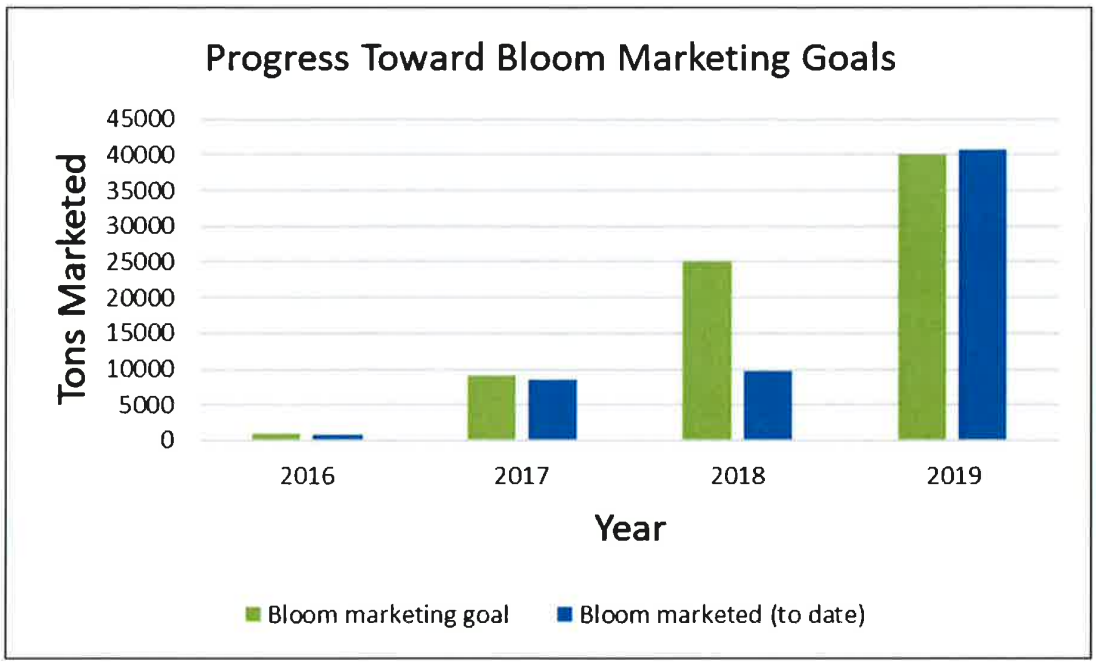
Fecal Coliform and Vector Attraction

The graph below shows both Vector Attraction Reduction (VAR) and Fecal Coliform (FC) results in the Class A product, both of which are required to maintain the Class A Exceptional Quality (EQ) status. Vector Attrraction Reduction is measured by the reduction in Volatile Solids (VS) or organic compounds that are odorous and attract nuisance vectors such as flies and rodent. DC Water anaerobic digesters reduced VS by over 65 percent, well above the required 38 percent minimum. In addition, the graph shows fecal coliforms levels in the Class A product. Fecal coliforms are indicators of disease causing organisim (pathogens), and must be below 1,000 MPN/g to meet Class A standards.



Bloom Marketing

Bloom sales as of October 1st totaled 40,658 tons for the fiscal year. This represents 102% of the FY19 goal (40,000 tons).



WATER QUALITY & PRETREATMENT

The Blue Plains Water Quality & Pretreatment group manages the Industrial Pretreatment Program, including temporary dewatering dischargers (construction dewatering, etc.) and dental dischargers, as well as the Hauled Waste Program. Staff also provide specialized sampling and program management support for the Blue Plains NPDES permit, including low level PCB and mercury monitoring as well as storm water management and regulatory compliance support.

Industrial Pretreatment Program

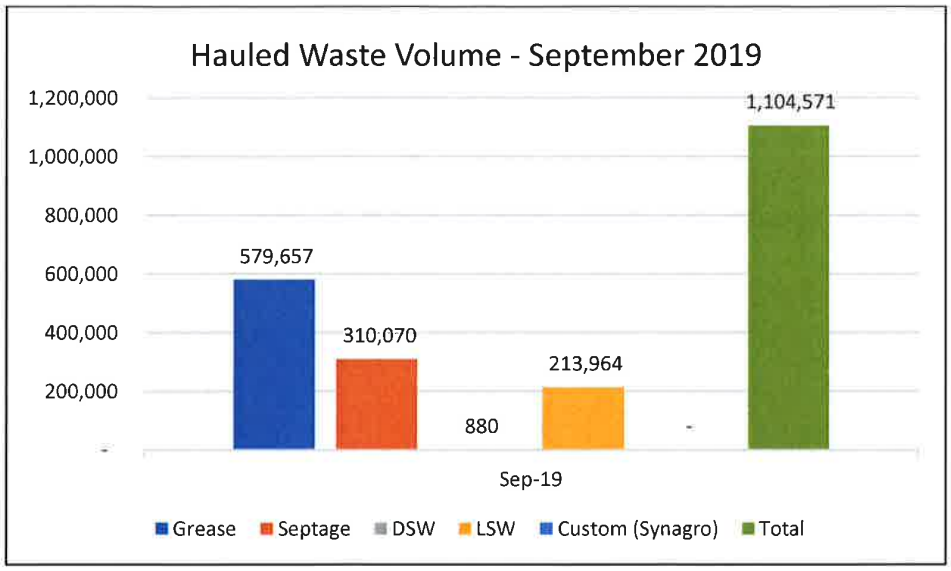
DC Water currently manages eleven (11) Significant Industrial User (SIU) and seventeen (17) Non-Significant Industrial User (NSIU) wastewater discharge permits. One SIU permit was renewed and reclassified as a NSIU permit this month. Staff conducted an inspection and at one non-permitted IU this month (DC Department of Public Works Benning Road Transfer Station). All SIUs and NSIUs are currently in compliance with discharge standards.

DC Water currently manages 98 Temporary Discharge Authorization (TDA) permits, primarily for construction site discharges of groundwater and/or surface runoff in the combined sewer area. Two new TDA permits were issued this month. All TDA permittees are currently in compliance with discharge standards.

Hauled Waste Program

DC Water currently manages 37 Waste Hauler permits for discharge of domestic septage, portable toilet waste, grease trap waste, groundwater or surface runoff, and other types of waste (if approved in advance and meet pretreatment standards). Three Waste Hauler permits were renewed this month.

DC Water received 546 hauled waste loads (1,104,571 gallons) from permitted haulers this month. Manifest forms from each truck entering the plant are collected by the security guards and picked up daily by Pretreatment staff and information is manually entered into an access database. Two hauled waste samples were collected this month and results were in-compliance with discharge criteria.



Revenue Generation

The following billing (revenue) and receivables (cash) occurred this month for Groundwater/Retail Sewer (GWRS) billing for disposal fees in accordance with TDA permits issued under the Industrial Pretreatment Program, Industrial User (IU) billing for high strength waste, permitting fees, and annual compliance fees issued under the Industrial Pretreatment Program, and Waste Hauler (WH) billing for permitting and disposal fees issued under the Hauled Waste Program:

Cat. Code	FY 19 (Oct-Sep) Revenue Posted	FY 19 (Oct-Sep) Cash Received
GWRS	$370,937.62	$118,359.63
IU	$135,726.90	$129,936.42
WH	$781,981.02	$858,295.96
Total	**$1,288,645.54**	**$1,106,592.01**

DISTRICT OF COLUMBIA WATER AND SEWER AUTHORITY

David Gadis, CEO and General Manager

Leonard Benson, Sr. Vice President and Chief Engineer

Wet Weather Treatment Operating Parameters

Flow Distribution to Complete Treatment and Wet Weather Treatment

Environmental Quality & Operations Committee
November 21, 2019

dc clean RIVERS PROJECT

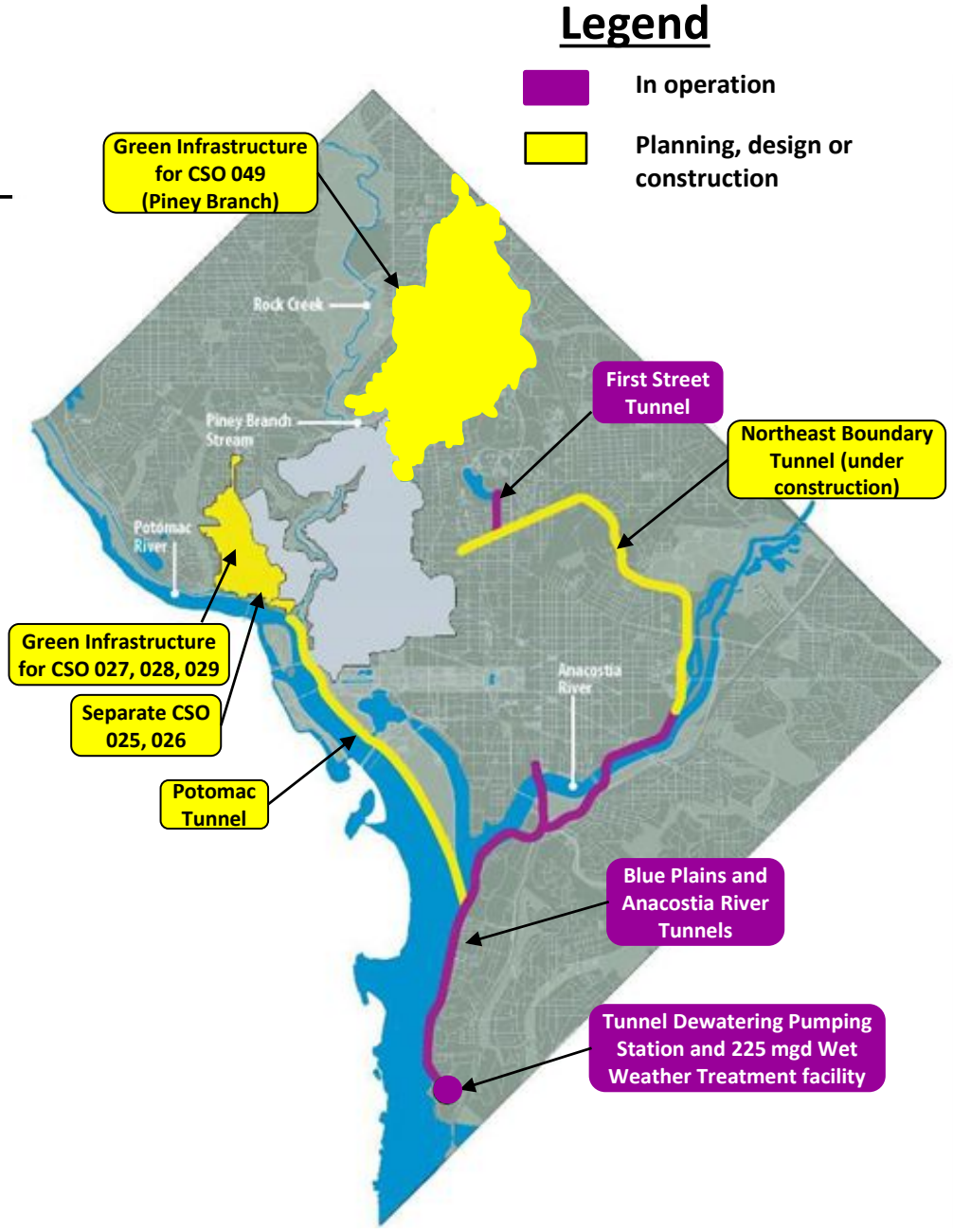
EQ&OPs – Action Item

Vice President, Wastewater Operations, DC Water: Provide a presentation on the Advanced Wastewater Treatment Plant and Wet Weather Treatment Facility operating parameters and the flow split logic relative to the volume of CSO flow captured in the tunnels going through the AWWTP versus the WWTF. **[Target: November 2019]**

dc clean RIVERS PROJECT

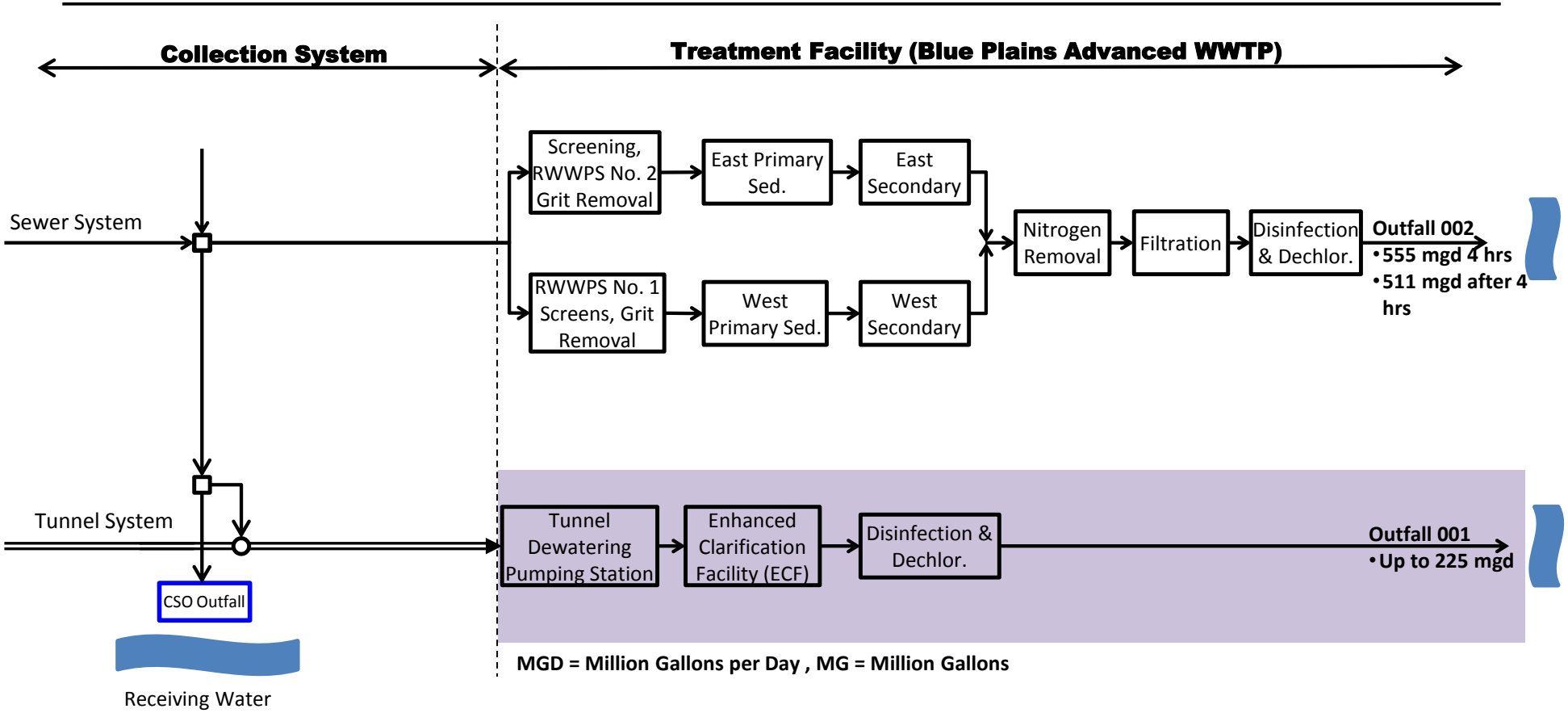
Portions of Tunnel System in Service

- Anacostia Tunnel system from Blue Plains to RFK Stadium in service since March 2018
  - Approx. 100 million gallons of storage
  - Intercepts all Anacostia CSOs
- Northeast Boundary Tunnel under construction
  - Adds another 90 million gallons of storage
  - Scheduled to be placed in operation in 2023



dc clean RIVERS PROJECT

Blue Plains Schematic

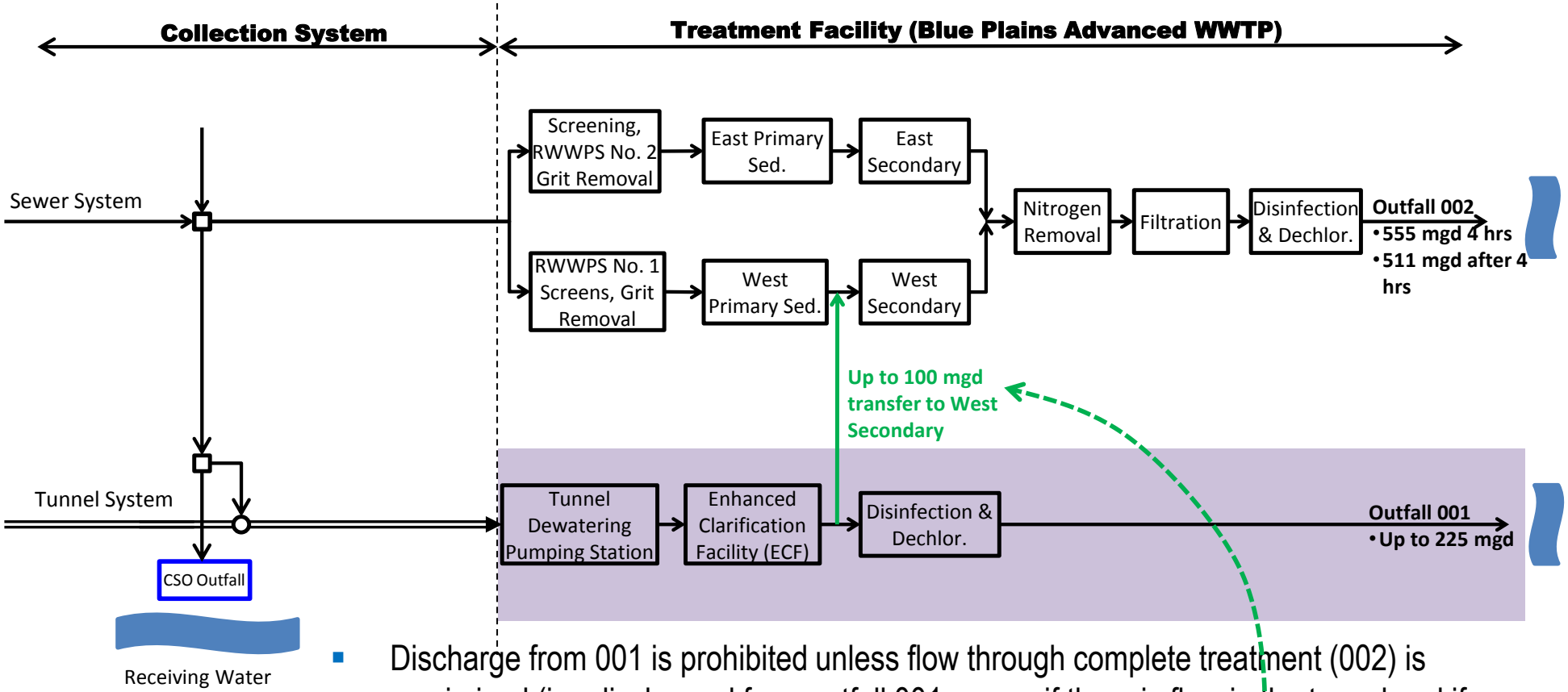


Maximizing complete treatment

"All combined sewer flow stored in the CSO storage tunnels shall be emptied in a manner as to maximize treatment of stored flows through complete treatment at Blue Palins and to optimize conditions for maintaining the availability of storage volume in the tunnel system"

4

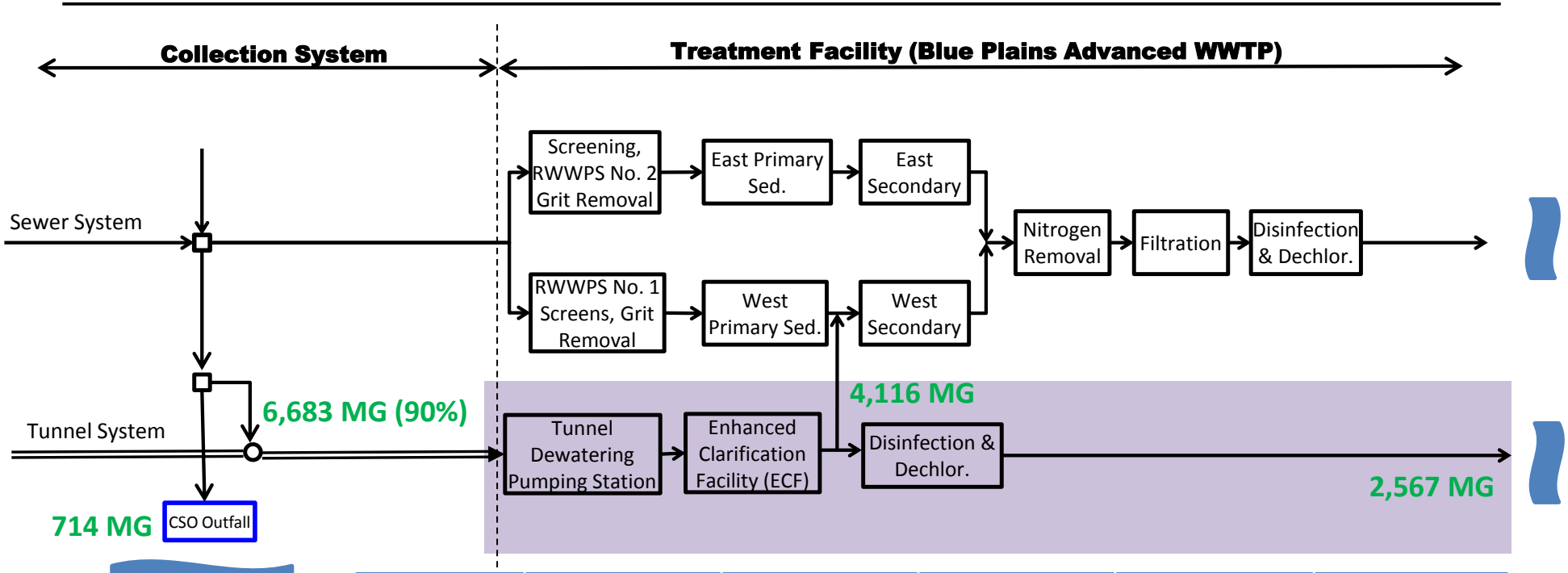
Wet Weather Operations



- Discharge from 001 is prohibited unless flow through complete treatment (002) is maximized (i.e. discharged from outfall 001 occurs if there is flow in the tunnel and if complete treatment rates are maximized)
- Up to 100 mgd can be transferred back to complete treatment to achieve maximum treatment rates thru complete treatment
- Dewater the tunnel within 59 hours after the end of the last rain event

dc clean RIVERS PROJECT

Performance to Date (May 2018 – October 2019)



Rainfall, DCA Gauge, (in)	Volume Captured by Tunnel (MG)	Measured Overflow, MG	% captured	Volume Discharge to 001 (MG)	% of Captured Volume to 001
96.19	6,683	714	**90%**	2,567	**38%**

- **38%** of volume captured by tunnel has been treated and discharged from outfall 001
- **62%** has been treated and discharged from outfall 002 (complete treatment)

District of Columbia Water and Sewer Authority

Capital Improvement Program Report

FY-2019 4th Quarter
July 1st through Sept 30th, 2019

Board of Directors
Environmental Quality and Operations Committee

David L. Gadis CEO and General Manager
Leonard R. Benson, Senior Vice President and Chief Engineer

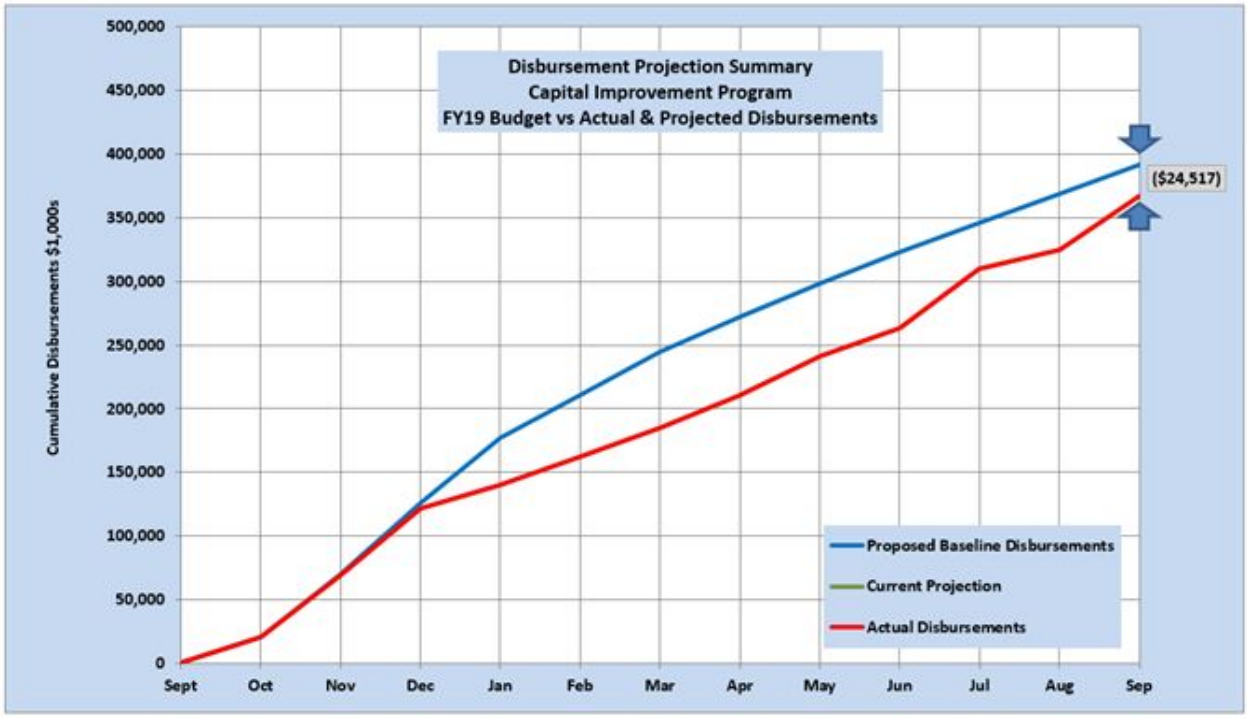
November 2019

Capital Improvement Program Report
4th Quarter FY2019

CIP Disbursement Performance

The actual program disbursements through the end of the fiscal year compared with the FY19 baseline are shown in the chart below:

Disbursement Summary



*Note: FY19 Baseline was set in Dec, therefore Oct/Nov Actual disbursements match the Baseline disbursements.

The fiscal year 2019 CIP disbursements were $367,152,000 through the end of September 2019, which met the baseline disbursement projection of $391,670,000 within $24,517,000 (6%).

Final disbursements within the service areas are as follows:

Non-Process Facilities
Baseline Disbursements $15,309,000
Actual Disbursements $8,529,000 ($6.8M below baseline projection)

Significant project variances are listed below:

- *Non-Process Facilities Program – ($6.1M below baseline)*
  - The disbursements for project DS - New HQ Building were less than anticipated due to the delay in retention release for the HQ building.

Wastewater Treatment Service Area
Baseline Disbursements $69,979,000
Actual Disbursements $53,127,000 ($16.9M below baseline projection)

Significant project variances are listed below:

- *Plantwide Projects Program Area – ($5.7M below baseline)*
  - The disbursements for various projects were lower than anticipated, mainly attributable to delays in both initiation and completion of projects.
- *ENR Facilities Program Area – ($6.9M below baseline)*
  - The disbursements for various projects were lower than anticipated, mainly attributable to delays in closeouts of projects.

For clarity, the Combined Sewer Overflow (CSO) Service Area comments are addressed separately by the CSO and DC Clean Rivers Program Areas:

Combined Sewer Overflow Program Area
Baseline Disbursements $7,491,000
Actual Disbursements $6,417,000 ($1.0M below baseline projection)

There were no significant project variances for this service area over the fiscal year.

DC Clean Rivers Program Area
Baseline Disbursements $187,859,000
Actual Disbursements $215,335,000 ($27.3M above baseline projection)

Significant project variances are listed below:

- The Clean Rivers Program actual disbursements for FY19 exceeded the planned disbursement due to:
  - Northeast Boundary Tunnel actual construction progress was better than the original assumed progress in the forecast prepared by Clean Rivers using historical data from previous tunnel construction projects;
  - Payment of a settlement amount to contractor of Poplar Point Pump Station.

Stormwater Service Area
Baseline Disbursements $4,220,000
Actual Disbursements $2,210,000 ($2.0M below baseline projection)

Significant project variances are listed below:

- *Stormwater Program Management - ($1.0M below projection)*
  - The disbursements for project AT00 - Stormwater Program Management were lower than forecast due to reduced CIP spending allowing us to bring work in-house and reduce

program management consultant spending. Deferral of lower priority CIP projects and tasks also resulted in reduced program management consultant spending.

Sanitary Sewer Service Area
Baseline Disbursements $44,926,000
Actual Disbursements $36,224,000 ($8.7M below baseline projection)

Significant project variances are listed below:

- *Sanitary Trunk Sewers Program Area – ($3.6M below baseline)*
  - The disbursements for project IL - Creekbed Sewer Rehabilitation 2 were $1.0M below baseline, mainly attributable to a delay in the contract closeout.
  - The disbursements for project LZ00 - Potomac Interceptor Projects - Rehab Phase 2 were $1.4M below baseline, mainly attributable to the extended CFR durations.
- *Sewer Ongoing Program Area - ($2.3M below baseline)*
  - The disbursements for the Sewer Ongoing (IR&R) program were below the forecast but within the expected limits of the forecasting accuracy as the number and size of repairs are difficult to predict year on year.
- Sanitary Pumping Facilities – ($*1.3M below baseline)*
  The disbursements for project GZ - Sewer Instrumentation & Control were $0.9M below baseline, mainly attributable to delays in the procurement process.

Water Service Area
Baseline Disbursements $61,884,000
Actual Disbursements $45,310,000 ($16.6M below baseline projection)

Significant project variances are listed below:

- *Water Distribution System program area ($8.4M)*
  - The disbursements for project C9 - Large Diameter Water Mains were $1.8M lower than anticipated due to suspension of work to ensure water pressure over the high demand summer period.
  - The disbursements for project O3 - Small Diameter Water Main Rehab 11 were $2.4M lower than anticipated due to delay in close out.
- *Water Ongoing Program Area - ($1.8M below baseline)*
  - The disbursements for the Water Ongoing (IR&R) program were below the forecast but within the expected limits of the forecasting accuracy as the number and size of water main breaks are difficult to predict year on year.
- *Water Storage Facilities Program Area - ($4.1M below baseline)*
  - The disbursements for multiple projects in the Water Storage Facilities Program Area were slightly less than anticipated.
- *Water Program Management - ($0.7M below projection)*
  - The disbursements for Water Program Management were lower than forecast due to reduced CIP spending allowing us to bring work in-house and reduce program management consultant spending.

Capital Improvement Program Report
4th Quarter FY2019

Priority 1 Projects (Court Ordered, Stipulated Agreements, etc.)

All priority 1 projects are on schedule and within budget.

Significant Contract Actions Anticipated – 6 Month Look-Ahead

Project	Name	Contract Type	Joint Use?	Cost Range	Committee	BOD
JF00	Construction of Flood Seawall – Segment C	Construction	Yes	$5M - $10M	EQ & Ops Nov	Dec
HH00	Construction of New Fleet Facility	Construction	Yes	$15M - $20M	EQ & Ops Nov	Dec
HH00	Construction of New Sewer Headquarters	Construction	Yes	$10M - $14M	EQ & Ops Nov	Dec
F100	Small Diameter Water Main Repl. 13b	Construction	No	$5M - $10M	EQ & Ops Nov	Dec
LZ00	Potomac Interceptor – Phase 5 Pipe Rehab MH30-31	Construction	Yes	$10M - $15M	EQ & Ops Dec	Jan
Multiple	Waste-Water Program Manager	Professional Services	Yes	$20M -25M	EQ & Ops Dec	Jan
F100	Small Diameter Water Main Repl. 13a	Construction	No	$5M - $10M	EQ & Ops Jan	Feb
F100	Small Diameter Water Main Repl. 13d	Construction	No	$5M - $10M	EQ & Ops Feb	Mar
F100	Small Diameter Water Main Repl. 13c	Construction	No	$5M - $10M	EQ & Ops Apr	May
F200	Small Diameter Water Main Repl. 14a	Construction	No	$10M - $15M	EQ & Ops Jun	Jul

Capital Improvement Program Report
4th Quarter FY2019

Schedule - Key Performance Indicators
Capital Improvement Program

Summary:
For the 4th Quarter, three of the three Key Performance Indicators (KPIs) completed this period were achieved within 90 days of their target date. Four will be completed outside the 90-day threshold.

#	Performance
11	KPIs completed within threshold
0	KPIs completed outside threshold
6	KPIs expected to be completed outside threshold
11	Total KPIs completed to date
17	Total KPIs this year

Reasons for any KPIs not meeting the 90-day threshold this period (Q4):
The Design Start milestone for project QS01 - Local Sewer Rehab Project 5-1 has slipped due to change in the design packaging approach.
The Construction Substantial Completion for project C904 - 66" Low Service Steel Main at 8th Street NE & SE has slipped due to suspension of work to ensure water pressure over the high demand summer period.
The Construction Substantial Completion for project I801 - Large Valve Replacements 11R has slipped due to unresolved disputes under negotiation, legal counsel involved.
The project OE01 FY15 - Plantwide Storm Drainage Improvements construction start has been moved to accommodate the project BX – Gravity Thickeners spending request.

The table below provides a detailed breakdown of each KPI due date grouped by Quarter:

Quarter	Job Code	Job Name	Activity Name	Due Date (Baseline)	Estimated Complete Date	Actual Complete Date	Variance (positive is early)	Met within 90 days
Q1	DZ02	Div RC-A - Rock Creek Project 1 (GI)	Construction Substantial Completion Milestone (KPI)	9-Oct-18		9-Oct-18	0	✓
Q2	J306	National Arboretum Sewer Rehab (Eastside Interceptor)	Construction Substantial Completion	22-Jan-19		24-Jan-19	-2	✓

Capital Improvement Program Report
4th Quarter FY2019

Quarter	Job Code	Job Name	Activity Name	Due Date (Baseline)	Estimated Complete Date	Actual Complete Date	Variance (positive is early)	Met within 90 days
Q2	DE02	Small Diameter Water Main Replacement 12B	Construction Substantial Completion	25-Jan-19		23-Jan-19	2	✓
Q2	O302	Small Diameter Water Main Replacement 11b	Construction Substantial Completion	1-Feb-19		27-Dec-18	36	✓
Q2	MA01	St. Elizabeth Water Tank	Construction Substantial Completion	24-Jan-19		24-Dec-18	31	✓
Q2	IL10	Creekbed Sewer Rehabilitation Rock Creek Oregon Avenue	Construction Substantial Completion	19-Feb-19	30-Apr-20		-436	x
Q2	DE01	Small Diameter Water Main Replacement 12A	Construction Substantial Completion	30-Apr-19		20-Dec-18	131	✓
Q3	AL05	Plantwide Projects Program Management	MFU6 - Start Milestone	1-May-19		29-May-19	-28	✓
Q3	LZ09	PI Phase 6 Pipe Rehab at Clara Barton Pkwy and I495	Design Start Milestone	19-Jun-19	29-Feb-20		-255	x
Q3	FQ01	FQ01 Main & O St. PS Intermediate Upgrades	Construction Substantial Completion	30-Jun-19		30-May-19	-20	✓
Q4	QS01	Local Sewer Rehab Project 5-1	Design Start Milestone	15-Jul-19	07-Jul-21		-732	x
Q4	C904	66" Low Service Steel Main at 8th Street NE & SE	Construction Substantial Completion	5-Jul-19	30-Apr-20		-300	x
Q4	I801	Large Valve Replacements 11R	Construction Substantial Completion	31-Jul-19	30-Sep-20		-427	x
Q4	CZ07	Potomac Project 1 (GI)	Substantial Completion Milestone	31-Jul-19		8-Mar-19	145	✓
Q4	FA03	Soldiers Home Reservoir Upgrade	Construction Start Milestone	8-Aug-19		9-Oct-19	-63	✓
Q4	UC06	Upgrades to Filtration Influent Pumps 1-10	Construction Start Milestone	13-Aug-19		10-Oct-19	-57	✓
Q4	OE01	FY15 - Plantwide Storm Drainage Improvements	Construction Start Milestone	17-Sep-19	17-Sep-21		-731	x

Table Key: Positive variance = Finishing earlier than baseline plan Bold = Actual Date achieved

Overview of FY 2019 to FY2028 Proposed CIP Further Discussion

Environmental Quality and Operations Committee
November 21, 2019
Adam Ortiz, **Committee Chair**

DISTRICT OF COLUMBIA WATER AND SEWER AUTHORITY

Leonard Benson, Senior Vice President and Chief Engineer

Small Diameter Water Main unlined Cast Iron pipe tuberculation

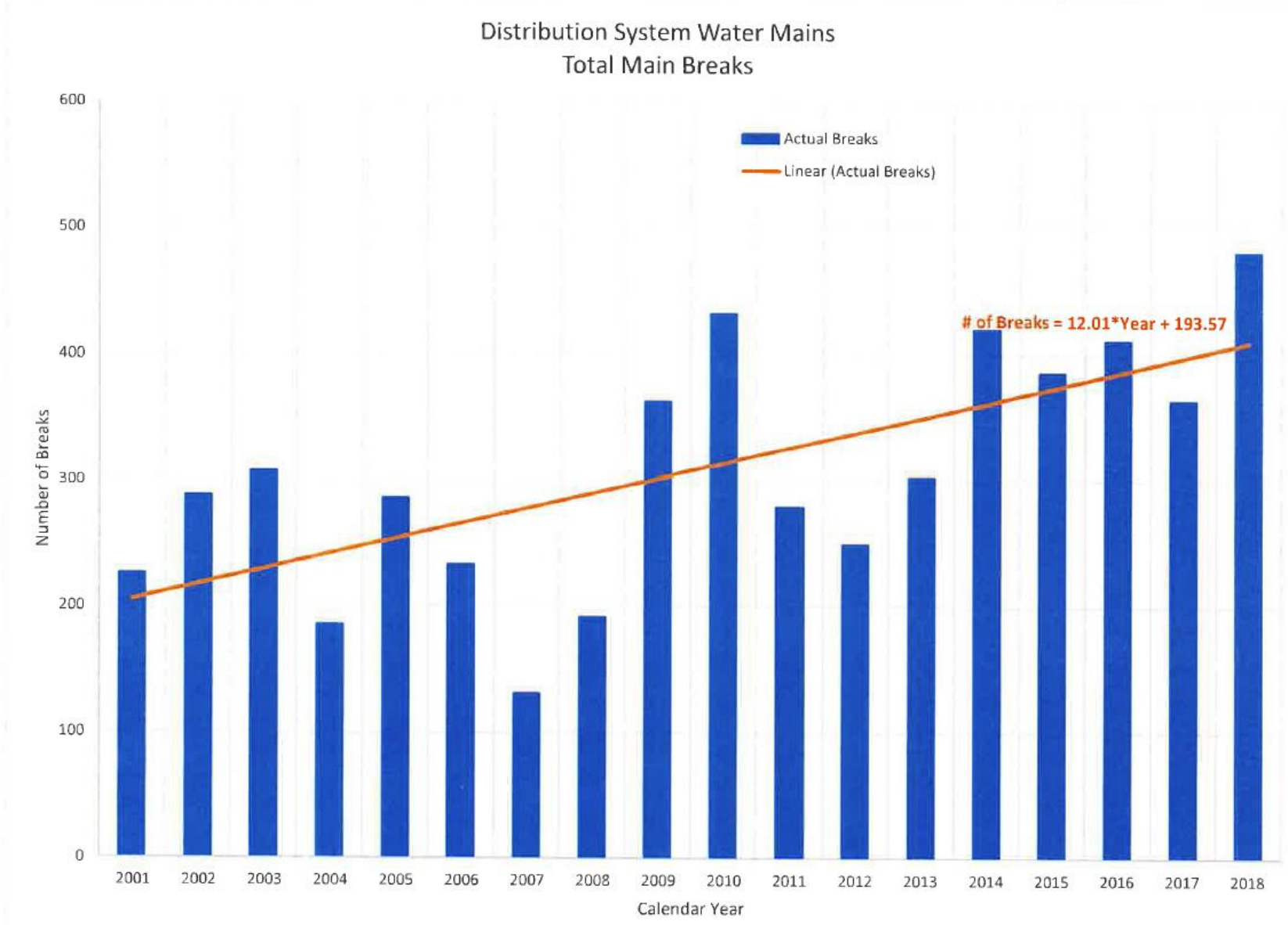
10th St at Otis St, NE (10" VCP, deformed, broken

Budget Theme: Stewardship, Accountability & Sustainability

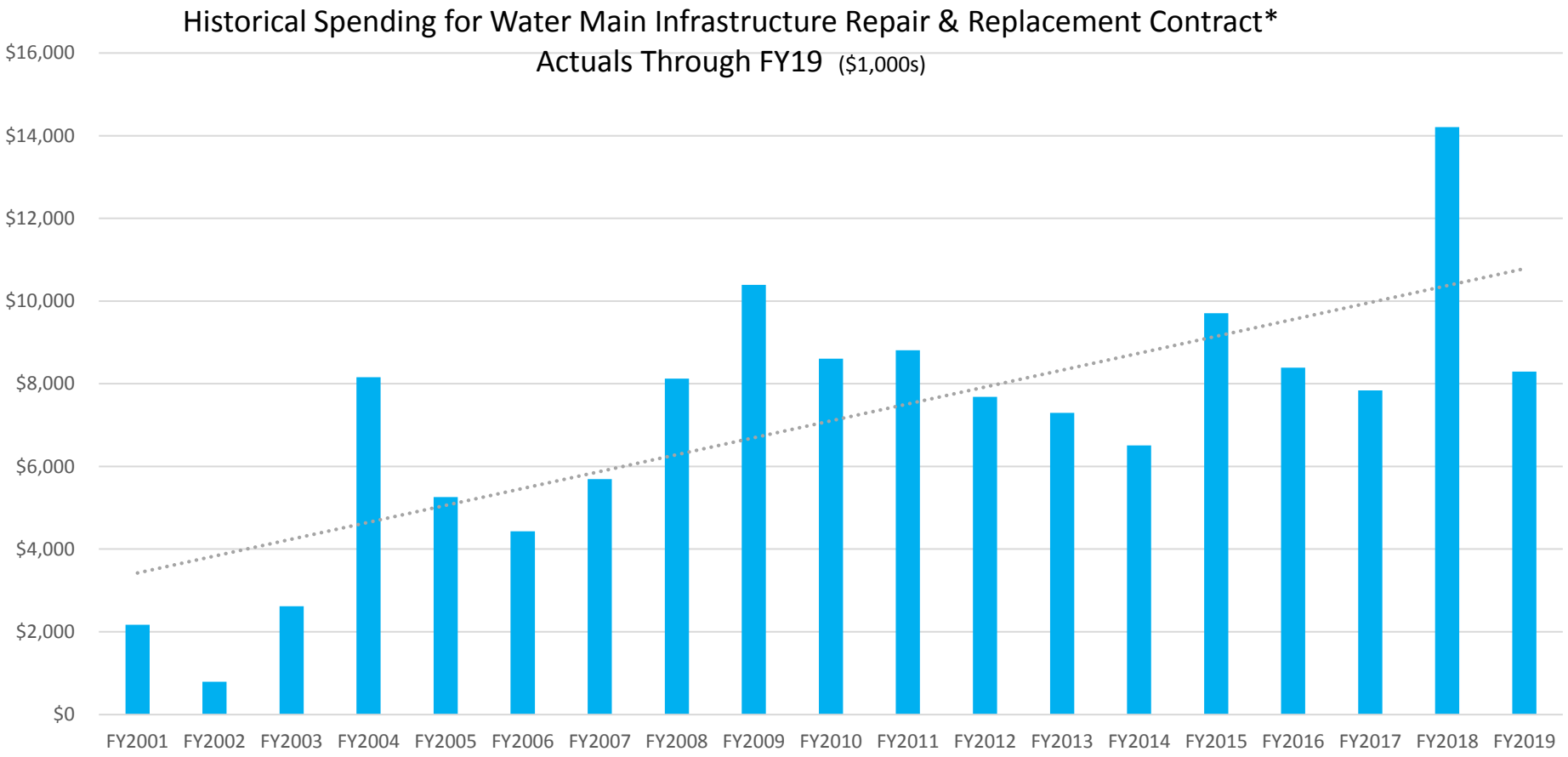
Agenda

- Water and Sewer Failures and Costs
- Impact of Replacement/Rehab Rates on System Age

Water Main Breaks

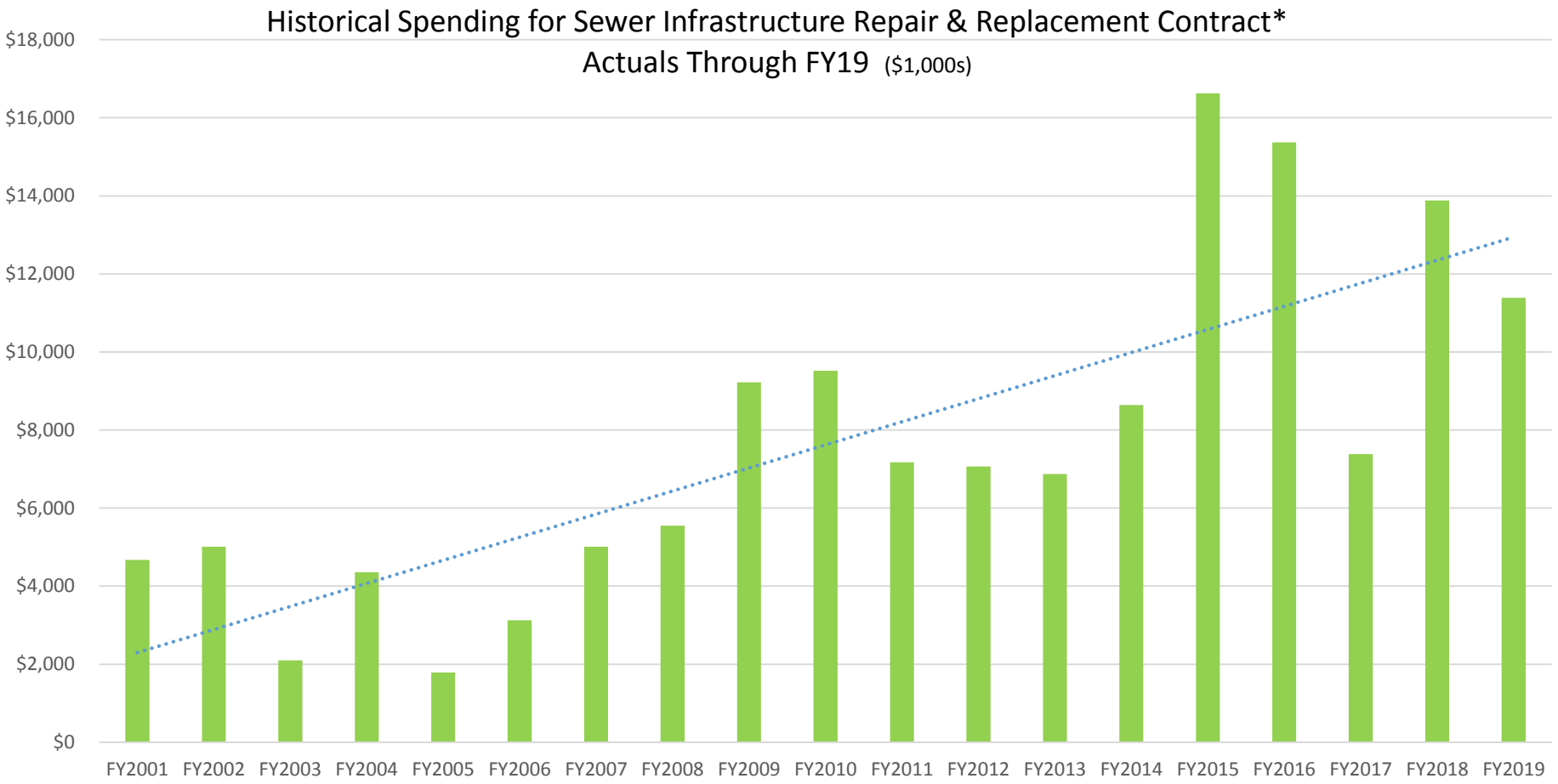


Maintenance and Repair Costs – Water System



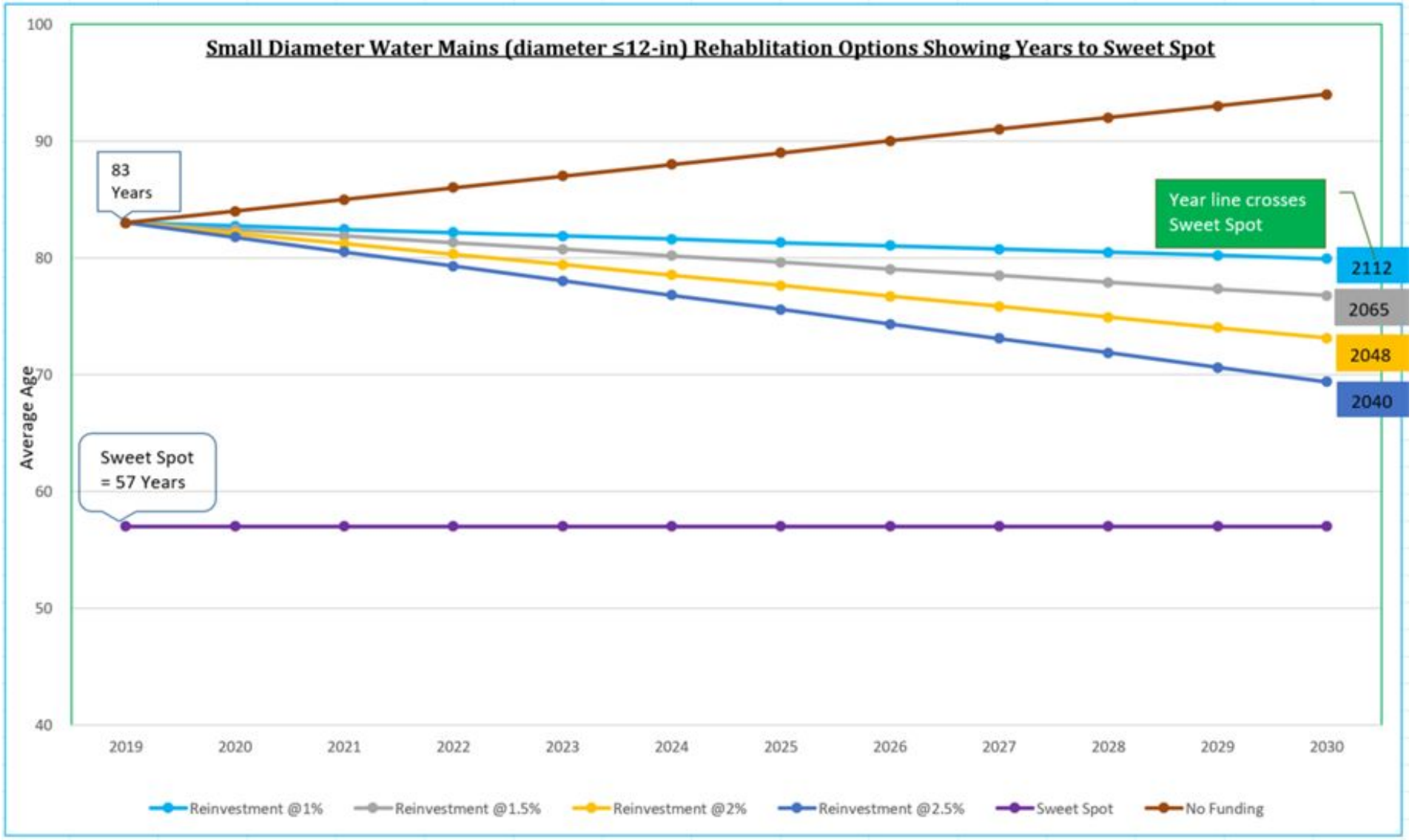
*Does not include in house costs

Maintence and Repair Costs – Sewer System

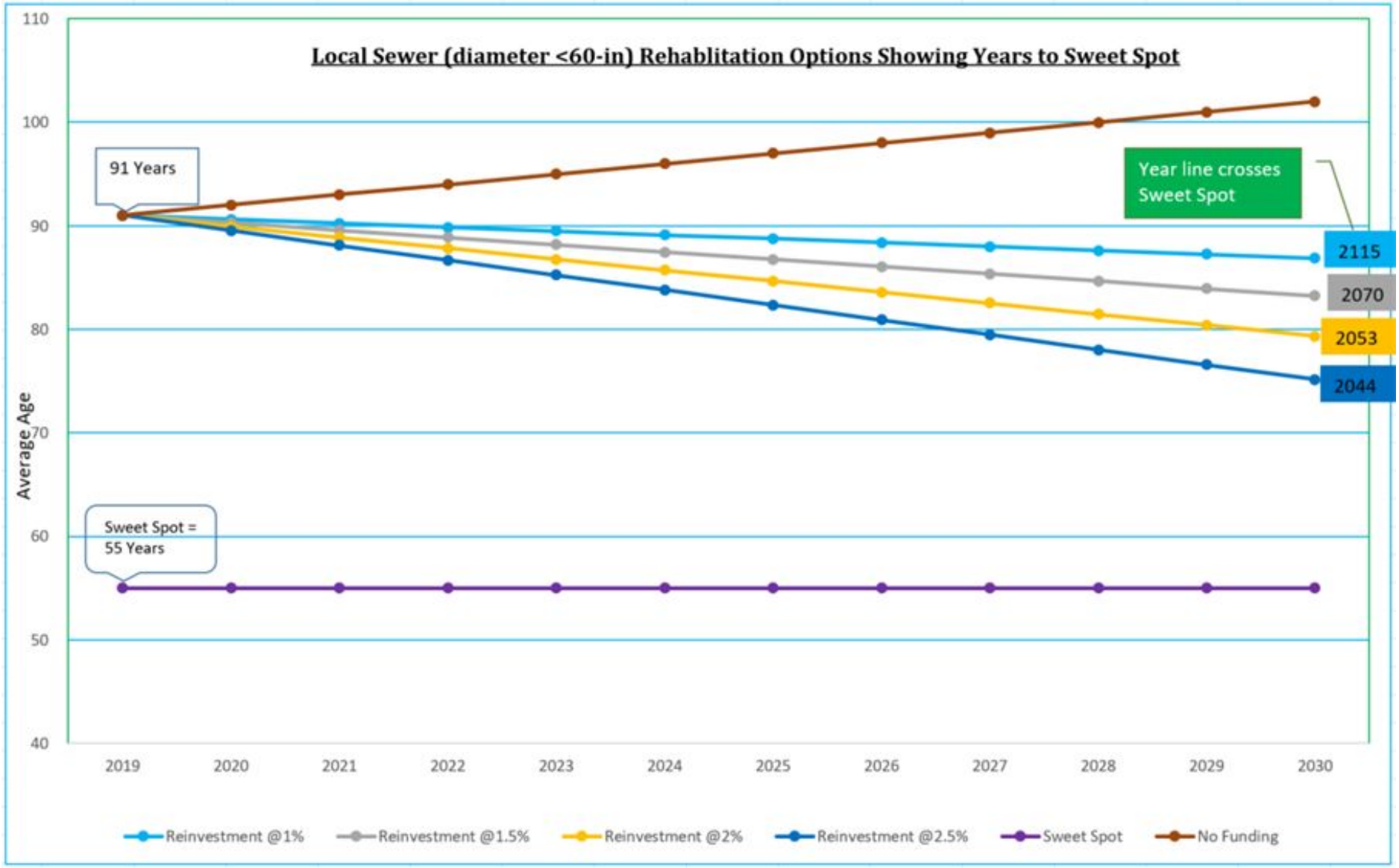


*Does not include in house costs

Investment Options: Small Dia. Water Mains



Investment Options: Local Sewers



Alternative Small Sewer and Water Pipe Replacement/Rehab CIP Scenarios

	Modified Baseline		Alternative Scenarios					
Annual Replacement/Rehabilitation Ten-Year Capital Projects	**1%**	**$4.4 Billion**	**1.5%**	**$4.70 Billion**	**2.0%**	**$4.97 Billion**	**2.5%**	**$5.24 Billion**
CIP Analysis	Miles/year	Sweet Spot # of Years *	Miles/year	Sweet Spot # of Years *	Miles/year	Sweet Spot # of Years *	Miles/year	Sweet Spot # of Years *
Small Diameter Water Mains (replacement)	11.0 mi	91	16.5 mi	45	22.0 mi	28	27.5 mi	20
Sewer Lines <60" dia. (rehabilitation)	17.5 mi	94	26.0 mi	49	34.7 mi	31	43.4 mi	23
Ten-year increase vs. Modified Baseline			$271 million		$542 million		$814 million	
Ten-year increase vs. Approved Baseline	$745 million		$1.0 billion		$1.3 billion		$1.6 billion	

*The point in time remaining service life of the pipe system as a whole is about 50% of the expected service life.

DISTRICT OF COLUMBIA WATER AND SEWER AUTHORITY

David Gadis, CEO and General Manager

Leonard Benson, Sr. Vice President and Chief Engineer

Briefing on:

Relocation Cost for Fleet Facilities and Sewer Service Facility from 125 O Street

Briefing for:

Environmental Quality and Operations Committee

November 21, 2019

DCWATER.COM

Agenda

I. Current Facilities
II. Budget Funding
III. Fleet Maintenance Facility
IV. Sewer Service Facility
V. Headquarters - Pump Station Campus
VI. Summary

Current Issues

Current Facilities Location Issues:

- Both facilities are located at 125 O Street.
- Operational needs at both facilities are negatively impacted by changing neighborhood, including access restrictions during stadium events

Fleet Maintenance Facility:

Constructed in 1939
Current issues:

- Design of building limits access for vehicle bays, necessitating use of center space to fit in vehicle repairs.
- Available electricity at capacity. Unable to add equipment or upgrade operations without extensive reworking.
- Due to limited site and building space, it is difficult to meet any new EPA regulations.
- Yard storage is limited, due to number of vehicles parked at O Street.

Sewer Service Facility:

Constructed in 1940
Current Issues:

- Insufficient site space available for secure vehicle parking. There are congested parking areas, and limited space to maneuver large trucks.
- Insufficient space to house vacuum trucks in winter, which must be in heated space.

Relocation Opportunity

Relocation of both facilities will provide new upgrades and state-of-the-art facilities.

Fleet Maintenance Facility:

- Adequate on-site parking now provided for all sizes and types of DC Water vehicles, separated from employee and visitor vehicles.
- Direct outside vehicle access now provided to each work bay. No need to drive vehicles around inside facility.
- Localized and ambient vehicle exhaust recovery system provided.
- New vehicle wash bay provided, with pressurized automotive cleaning equipment.
- Non-slip shop floor coating provided for increased safety.
- Plentiful natural light provided in work bays and offices.
- Many energy saving features are added, including increased building insulation, high efficiency HVAC system, and LED lighting.
- Automotive parts department enlarged to provide adequate parts storage.
- Waste oil and fluid evacuation and containment system provided, with pumps and remote storage tank.
- Centralized vehicle fluid dispensing system provided at work bays with six different automotive fluids.
- Separate fire-resistant vehicle battery charging room provided.
- Localized spot coolers provided in service bays to improve workspace environment for technicians.
- Four different types of modern vehicle lifts provided: two-post lifts, scissor lifts, piston lift, and ramp lift.

Sewer Service Facility:

- Adequate on-site parking now provided for all sizes and types of DC Water vehicles, separated from employee and visitor vehicles.
- Six-compartment lighted concrete materials bins provided on site, covered to comply with EPA requirements.
- Large racks provided on site for pipe storage.
- Increased site and building security provided, including access control gates, card readers, and security cameras.
- Separate building provided for heated storage of vacuum trucks.
- Many energy saving features are added, including increased building insulation, high efficiency HVAC system, and LED lighting.
- Photovoltaic panels added to generate up to 10,000 kWh per year.

Budget Funding

RELOCATION FUNDING FROM DISTRICT – AND DC WATER BUDGET FUNDING

(Real Estate Funding Agreement Signed in December 2017)

DCW RELOCATION PROJECTS	DISTRICT FUNDING	PROJECT BUDGET/BID AMOUNT	TOTAL COST SHARED BETWEEN JURISDICTIONS
Walker Mill Road - Fleet Property	$ 708,000	$ 708,000	-0-
Fleet Relocation - Design	$ 2,500,000	$ 2,500,000	-0-
Fleet Maintenance Facility Relocation - Construction	$ 13,000,000	$ 17,800,000	$ 4,800,000
Fleet Vehicle Lifts	-0-	$ 1,426,785	$ 1,426,785
Sewer Services Relocation - Design	$ 1,500,000	$ 1,500,000	-0-
Sewer Services Relocation - Construction	$ 10,500,000	$ 12,916,000	$ 2,416, 000
Ames Place Acquisition	$ 8,529,000	$ 8,529,000	-0-
Ames Place Due Diligence	$ 171,000	$ 171,000	-0-
DCW Staff/Consultants	$ 160,000	$ 160,000	-0-
Floatable Debris	$ 350,000	$ 350,000	-0-
Perimeter Fencing	$ 1,500,000	$ 1,500,000	-0-
TOTAL	**$38,918,000**	**$ 47,560,785**	**$ 8,642,785**

Fleet Maintenance Facility

FUNDING VS. BID AMOUNT:

Funding from District:	$13,000,000
Bid Amount:	$17,800,000
Lifts Bid Amount:	$ 1,426,785
Difference:	$ 6,226,785

- Budget for Fleet was negotiated based on an estimate of $15.2 million in 2015 – with projected start of construction in 2016.
- Construction cost in the District region escalated according to professional estimators as much as 6.4% in years 17 and 18.
- The cost for this project, based on the bid, showed construction cost increasing about 17.1% from year 2015 or on average about 4% a year.
- Vehicle lifts were not included in $15.2 million estimate, as were not considered 'hard' construction cost by District.
- In addition – the following items were not accounted for in the original project cost – and are cost associated with jurisdictional, energy code and LEED requirements.

Fleet Maintenance Facility

In addition to one-for-one replacement of existing functions located at the existing O Street DC Water Fleet Maintenance Facility, the following items are required to comply with current codes and standards to construct a new maintenance facility at Prince George's County.

Added Scope Item	Purpose	Approx. Cost
Vegetative roof	Stormwater management requirement	1,180,000
Separate overhead door for each work bay	Safety requirement	650,000
Paving increase	Required to accommodate DC Water vehicles	534,000
Separated vehicle wash bay	EPA requirement	362,000
Underground storm chambers	Stormwater management requirement	239,000
Additional wall insulation & vapor barrier	Energy code requirement	213,000
Additional roof insulation	Energy code requirement	197,000
Elevator	ADA requirement	129,000
Bio-retention ponds	Stormwater management requirement	71,000
Access control gates	Security requirement	61,000
Additional landscaping	Prince George's County requirement	60,000
Lightning protection	Electrical code requirement	39,000
Add fire lines and hydrants	Prince George's County requirement	26,000
Lighting control devices	Energy code requirement	16,000
Total		**3,777,000**

Fleet Maintenance Facility

Fleet Maintenance Facility

Sewer Service Facility

FUNDING VS. BID AMOUNT:

Funding from District: $10,500,000

Bid Amount: $12,916,000

Difference: $2,416,000

- Original estimate for Sewer Service Project was $12,200,00.
- It included items District did not want to include in relocation reimbursement, such as covered/heated parking for vacuum trucks.
- Items not included or were added due to regulatory approval are as follows:

Sewer Service Facility

Upgrades from existing DC Water Sewer Services Facility at O Street, resulting from relocation to new facility at Ames Place.

Added Scope Item	Purpose	Approx. Cost
Paving increase	Required to accommodate DC Water vehicles	821,000
Vacuum truck storage building	Required to accommodate DC Water vehicles	509,000
Additional landscaping	DC Zoning requirement	320,000
Solar photovoltaic panel system	LEED advancement	227,000
Vegetative roof	Stormwater requirement	201,000
Elevator	ADA requirement	129,000
Outdoor pipe storage racks	Operational requirement	96,000
Additional wall insulation & vapor barrier	Energy code requirement	82,000
Additional roof insulation	Energy code requirement	45,000
Traffic control devices	Safety and security requirements	35,000
Lightning protection	Electrical code requirement	25,000
Total		**2,490,000**

Sewer Service Facility

Sewer Service Facility

Headquarters-Pump Station Campus

ADDITIONAL DC WATER HEADQUARTERS - PUMP STATION CAMPUS ENHANCEMENTS

- Construction of new entrance from 1st Street to west entrance
  - drive entrance for trucks servicing the pump station
  - delivery trucks for Headquarters
  - pump station – staff vehicles
- Improvements to road on east side of Main Pump Station
  - repaving – and storm water management improvements
- Intersection of N. Place and Canal Street
  - paving and grading to transition HQO entrance with improvements planned for N. Place
- Security Fencing
  - installation of new fencing to secure west property line of entrance (to N. Place); north property line of O Pump Station

Summary

SUMMARY OF COST TO BE SHARED:

- New Fleet Maintenance Facility: $4,800,000
- Vehicle Lifts: $1,426,875
- New Sewer Service Facility: $2,416,000

- **Total Shared Cost : $8,642,875**

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

ACTION REQUESTED

GOODS AND SERVICES CONTRACT OPTION YEAR
BIOSOLIDS MANAGEMENT
(Joint Use)

This contract action is to exercise option year 1 in the amount of $2,000,000.00.

CONTRACTOR/SUB/VENDOR INFORMATION

PRIME:	SUBS:	PARTICIPATION:
Nutri-Blend Inc. P.O. Box 38060 Richmond, VA 23231	N/A	N/A

DESCRIPTION AND PURPOSE

Base Year Contract Value:	$2,000,000.00
No. Option Years:	2
Base Year Modification Value:	$398,644.00
Base Year Modification Dates:	05-24-2019 – 12-31-2019
Option Year 1 Value:	**$2,000,000.00**
Option Year 1 Dates:	**01-01-2020 – 12-31-2020**

Purpose of the Contract:

The purpose of this contract is to purchase biosolids management services. The contractor, Nutri-Blend, removes biosolids from the Dewatered Biosolids Loading Facility, and manages its disposition.

Contract Scope:

DC Water purchases biosolids management services under this contract. These services include: removing biosolids from the Dewatered Biosolids Loading Facility; transporting biosolids to designated agricultural applications such as farms, compost facilities, and reclamation sites in the mid-Atlantic region; managing nutrient loading as well as land permits; and submitting required reports to DC Water as well as other regulatory agencies.

Spending Previous year:

Cumulative Contract Value:	01-01-2019 to 12-31-2019: $2,398,644.00
Cumulative Contract Spending:	01-01-2019 to 10-08-2019: $1,879,222.00

Contractor's Past Performance:

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

No LBE/LSBE participation.

PROCUREMENT INFORMATION

Contract Type:	Good and Services	**Award Based On:**	Best Value
Commodity:	Biosolids	**Contract Number:**	18-PR-DWT-38
Contractor Market:	Open Market with Preference Points for Local and Small Businesses		

BUDGET INFORMATION

Funding:	Operating	**Department:**	Department of Resource Recovery
Service Area:	Blue Plains AWTP	**Department Head:**	Chris Peot

ESTIMATED USER SHARE INFORMATION

User - Operating	Share %	Dollar Amount
District of Columbia	45.15%	$903,000.00
Washington Suburban Sanitary Commission	39.61%	$792,200.00
Fairfax County	9.76%	$195,200.00
Loudoun Water	4.74%	$94,800.00
Potomac Interceptor	0.74%	$14,800.00
TOTAL ESTIMATED DOLLAR AMOUNT	**100.00%**	**$2,000,000.00**

11/7/19
Aklile Tesfaye Date
VP of Wastewater Operations

11/8/2019
Dan Bae Date
VP of Procurement and Compliance

FOR DAN BAE

11/13/19
Matthew T. Brown Date
CFO and EVP of 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

GOODS AND SERVICES CONTRACT OPTION YEAR

Janitorial Cleaning Service
(Joint Use)

Approval to exercise Option Year One (1) for the Janitorial Services Contract in the amount of $883,211.67.

CONTRACTOR/SUB/VENDOR INFORMATION

PRIME:	SUBS:	PARTICIPATION:
Clean Team Janitorial Service 700 12th Street, NW. Suite 700 Washington, DC 20005 LSBE	N/A	100%

DESCRIPTION AND PURPOSE

Base Period Contract Value:	$855,608.28
Original Contract Dates:	10-21-2018 – 10-20-2019
No. of Option Years in Contract:	2
Modification 1 Value:	$0.00
Modification 1 Dates:	10-21-2019 – 12-31-2019
Option Year 1 Value:	**$883,211.67**
Option Year 1 Dates:	**01-01-2020 – 12-31-2020**

Purpose of the Contract:

DC Water's Department of Facilities Services needs a contract to provide professional janitorial and cleaning services to be performed at multiple facilities throughout the Authority.

Contract Scope:

The contractor shall furnish the management, labor, materials, supplies, and equipment necessary to provide janitorial services for DC Water's working spaces located at Blue Plains, O Street Pumping Station, Bryant Street, Potomac Interceptor, Reno Pumping Station and DC Water's Headquarters.

The contractor is NOT responsible for cleaning the following areas: Mechanical equipment rooms, electrical distribution rooms and closets, telephone distribution rooms and closets, servers and data rooms and elevator equipment rooms.

Spending Previous Year:

Cumulative Contract Value:	10-21-2018 to 10-20-2019: $855,608.28
Cumulative Contract Spending:	10-21-2018 to 10-15-2019: $725,492.00

Contractor's Past Performance:

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

PROCUREMENT INFORMATION

Contract Type:	Goods and Services	**Award Based On:**	Highest-Ranking Score
Commodity:	Janitorial Services	**Contract Number:**	18-PR-DFS-29
Contractor Market:	Open Market with Preference Points for LBE and LSBE Participation		

BUDGET INFORMATION

Funding:	Operating	**Department:**	Facilities Services
Project Area:	DC Water wide	**Department Head:**	Brent Chris

ESTIMATED USER SHARE INFORMATION

User – Operating (3410X00-54090)	Share %	Dollar Amount
District of Columbia	84.61%	$747,285.39
Washington Suburban Sanitary Commission	11.11%	$98,124.82
Fairfax County	2.74%	$24,200.00
Loudoun Water	1.33%	$11,746.72
Potomac Interceptor	0.21%	$1,854.74
TOTAL ESTIMATED DOLLAR AMOUNT	**100.00%**	**$883,211.67**

Maureen Holman / 11/12/2019
Maureen Holman Date
EVP of Administrative Services

11/12/19
Dan Bae Date
VP of Procurement and Compliance

11/13/19
Matthew T. Brown Date
CFO and EVP of 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

GOODS AND SERVICES CONTRACT AWARD

Utility Locating and Marking Services

(Joint Use)

Approval to execute contract award for Utility Locating and Marking Services in the amount of $2,500,000.00 for the three-year contract term (1-year base plus 2 option years).

CONTRACTOR/SUB/VENDOR INFORMATION

PRIME:	SUBS:	PARTICIPATION:
Dynamic Concepts, Inc. (DCI) 1730 17th Street, NE Washington, DC 20002 (LBE)	N/A	100%

DESCRIPTION AND PURPOSE

Original Contract Value:	$2,500,000.00
No. of Option Years:	2
Anticipated Contract Start Date:	04-01-2020
Anticipated Base Period Completion	03-31-2021
Proposals Received:	4
Proposal Price Range:	$2,336,982.20 to $4,834,082.50
Preference Points Received:	5

Purpose of the Contract:

The contract will fill the Department of Water Services' and the Department of Sewer Services' need for underground utility locating and marking services.

Contract Scope:

The scope of the contract includes the locating, identifying, and appropriately marking of underground assets prior to excavation work being performed by DC Water and other excavators.

Supplier Selection:

DC Water advertised an RFP for utility locating and marking services. The RFP was an open market procurement with preference points given for Local Business Enterprise (LBE) and Local Small Business Enterprise (LSBE) participation. Four proposals were received in response to the solicitation. The evaluation committee ranked Dynamic Concepts, Inc. the highest and most capable of meeting DC Water's requirements. Dynamic Concepts, Inc. received the highest total technical and price score.

PROCUREMENT INFORMATION

Contract Type:	Fixed Price	**Award Based On:**	Highest Rated Proposal
Commodity:	Goods and Services	**Contract Number:**	19-PR-DWS-29
Contractor Market:	Open Market with Preference Points for LBE and LSBE participation		

BUDGET INFORMATION

Funding:	Joint Use - Indirect - Operating	**Department:**	Sewer Services/Water Services,
Service Area:	DC Water Wide	**Department Head:**	Jason Hughes

ESTIMATED USER SHARE INFORMATION

User	Share %	Dollar Amount
District of Columbia	45.15%	$1,128,750.00
Washington Suburban Sanitary Commission	39.61%	$990,250.00
Fairfax County	9.76%	$244,000.00
Loudoun Water	4.74%	$118,500.00
Other (PI)	0.74%	$18,500.00
TOTAL ESTIMATED DOLLAR AMOUNT	100.00%	$2,500,000.00

11/6/19

Biju George Date
Executive Vice President, Operations and Engineering

11/7/19

Dan Bae Date
VP of Procurement and Compliance

11/12/19

Matthew T. Brown Date
CFO and EVP of 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

GOODS AND SERVICES CONTRACT AWARD

Heavy Duty Fleet Vehicle Lifts for New Fleet Maintenance Facility (Joint Use)

Approval to execute contract award for the purchase of sixteen (16) Fleet Vehicle Lifts for the planned Fleet Maintenance Facility in Capital Heights, MD in the amount of $1,426,785.

CONTRACTOR/SUB/VENDOR INFORMATION

PRIME:	SUBS:	PARTICIPATION:
Alan Tye & Associates LLC 9669-D Main St. Fairfax, VA 22031 (LSBE)	N/A	100%

DESCRIPTION AND PURPOSE

Original Contract Value:	$1,426,785.00
No. of Option Years:	0
Anticipated Contract Start Date:	1-20-2020
Anticipated Base Period Completion	12-18-2020
Proposals Received:	3
Proposal Price Range:	$1,426,785.00 to $1,595,217.00
Preference Points Received:	10

Purpose of the Contract:

A new Fleet Maintenance facility is planned to relocate the Department of Fleet Management to Capital Heights, MD. The contract will fill the Department of Fleet Management's need for the supply and installation of new Heavy-Duty Vehicle Lifts in the new facility capable of handling all of DC Water's vehicles.

Contract Scope:

The scope of the contract includes the supply, delivery, installation and two years parts and labor warranty for sixteen (16) vehicle lifts to be installed in the planned Fleet Maintenance Facility in Capitol Heights, MD.

Supplier Selection:

DC Water advertised an RFP for the purchase and installation of sixteen (16) vehicle lift consisting of four (4) different configurations of lifts. The RFP was an open market procurement with preference points given for Local Business Enterprise (LBE) and Local Small Business Enterprise (LSBE) participation. The RFP invitation was sent to 53 vendors. Three bids were received. Only two vendors quoted all four styles of lifts required. The evaluation committee ranked Alan Tye & Associates the highest and most capable of meeting DC Water's requirements. Alan Tye & Associates was the lowest bidder, quoting approximately 9% lower than Rotary Lifts.

Savings:

A cost avoidance of approximately $214,000.00 or 15% will be achieved by DC Water contracting for the purchase of the Vehicle Lifts and avoiding the new facility's General Contractor's markup for purchasing the lifts for the new facility.

PROCUREMENT INFORMATION

Contract Type:	Fixed Price	**Award Based On:**	Highest Rated Proposal
Commodity:	Goods and Services	**Contract Number:**	19-PR-DET-28
Contractor Market:	Open Market with Preference Points for LBE and LSBE participation		

BUDGET INFORMATION

Funding:	Capital Project – HH-CAPM	**Department:**	Fleet Management
Service Area:	Non-Process Facilities	**Department Head:**	Tim Fitzgerald

ESTIMATED USER SHARE INFORMATION

User	Share %	Dollar Amount
District of Columbia*	100.00%	$ 1,426,785.00
Washington Suburban Sanitary Commission	0.00%	$
Fairfax County	0.00%	$
Loudoun Water	0.00%	$
Other (PI)	0.00%	$
TOTAL ESTIMATED DOLLAR AMOUNT	100.00%	$1,426,785.00

*In accordance with the Blue Plains Intermunicipal Agreement of 2012 a proposed user share is in development. The project cost will be allocated following IMA partner review and approval.

for M. Holman 11/14/19
Maureen Holman Date
EVP of Administration

11.14.2019
Dan Bae Date
VP of Procurement and Compliance

FOR DAN BAE

11/14/19
Matthew T. Brown Date
CFO and EVP of 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:

DC WATER FLEET MAINTENANCE FACILITY
(Joint Use)

Approval to execute a construction contract for $17,800,000.00

CONTRACTOR/SUB/VENDOR INFORMATION

PRIME:	SUBS:		PARTICIPATION:
HESS Construction & Engineering Services, Inc 804 West Diamond Avenue Suite 200 Gaithersburg, MD 20818	C&H Mechanical Annapolis, MD	MBE	7.0%
	Ironshore Contracting Baltimore, MD	MBE	4.5%
	Matadi Construction Silver Spring MD	MBE	1.9%
	GeoTech Engineers Beltsville, MD	MBE	0.5%
	Paragon Chantilly VA	MBE	0.4%
	Jett Caulking Glen Burnie, MD	MBE	0.3%
	Debra's Glass Rockville, MD	WBE	2.7%
	Oelmann Electric Supply Lutherville, MD	WBE	1.3%
	Century Fence Construction Upper Marlboro, MD	WBE	1.1%
	Gryphon Tile Middletown, VA	WBE	0.4%
	Steel Products Rockville, MD	WBE	0.1%

DESCRIPTION AND PURPOSE

Contract Value, Not-To-Exceed:	$17,800,000.00	
Contract Time:	330 Days	(11 Months)
Anticipated Contract Start Date (NTP):	01-06-2020	
Anticipated Contract Completion Date:	12-04-2020	
Bid Opening Date:	09/18/2019	
Bids Received:	3	
Other Bids Received		
Dustin Construction	$ 18,464,000.00	
W.M. Schlosser	$ 18,622,000.00	

Purpose of the Contract:
To construct a new Fleet Maintenance Facility at Walker Mill Road, Prince George's County Maryland in accordance with agreement between DC Water and District of Columbia to relocate fleet operations from 125 O Street SE.

Contract Scope:

- To construct a new 26,200 square feet Fleet Maintenance Facility on 6.25-acre site on Walker Mill Road, Prince George's County Maryland. Of the 6.25 acres, approximately 3.51 will be

developed as part of the project for the building and site; remaining area is partly wet-lands and/or to be used for future needs.

- The front elevation will be two-stories with parts storage area, locker-shower rooms, offices, and break room.
- The rear of the building will feature 18 maintenance vehicle bays and attached wash bays, tool storage, tire storage and small parts storage. Vehicle bays will be fully equipped with automotive repair/maintenance systems and equipment.
- The recessed floor pits and rough-ins for vehicle lifts will be included in the base contract, while the vehicle lifts will be furnished and installed under a separate contract.

PROCUREMENT INFORMATION

Contract Type:	Fixed Price	**Award Based On:**	Lowest responsive, responsible bidder
Commodity:	Construction	**Contract Number:**	190070
Contractor Market:	Open Market		

BUDGET INFORMATION

Funding:	Capital	**Department:**	Engineering
Service Area:	Non-Process Facilities	**Department Head:**	Leonard R. Benson
Project:	HH		

ESTIMATED USER SHARE INFORMATION

User	**Share %	Dollar Amount
District of Columbia*	100.00%	$ 17,800,000.00
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%**	**$ 17,800,000.00**

* $13 million of the total contract will be paid to DC Water from District of Columbia following DC Water Board of Directors approval.

** In accordance with the Blue Plains Intermunicipal Agreement of 2012 a proposed user share is in development. Project costs beyond those covered by the District of Columbia Government will be allocated following IMA partner review and approval.

B Benson / 11.14.19
Leonard R. Benson — Date
SVP and Chief Engineer

Joel M Grosser / 11.14.2019
Dan Bae, VP — Date
Procurement and Compliance FOR DAN BAE

Matthew Brown / 11/14/19
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:

DC WATER SEWER SERVICE FACILITY
(Joint Use)

Approval to execute a construction contract for $12,916,000.00.

CONTRACTOR/SUB/VENDOR INFORMATION

PRIME:	SUBS:		PARTICIPATION:
HESS Construction & Engineering Services, Inc 804 West Diamond Avenue Suite 200 Gaithersburg, MD 20818	Celsue Construction Laurel, MD	MBE	8.7%
	WSI, Inc. Baltimore, MD	MBE	7.2%
	Matadi Construction Silver Spring MD	MBE	1.9%
	C&H Mechanical Insulation Annapolis, MD	MBE	1.5%
	JK Tile Hyattsville, MD	MBE	0.9%
	Paragon Chantilly VA	MBE	0.5%
	Century Service Upper Marlboro, MD	WBE	1.2%
	Steel Products Rockville, MD	WBE	0.8%
	Allegany Door Hyattsville, MD	WBE	0.5%

DESCRIPTION AND PURPOSE

Contract Value, Not-To-Exceed:	$12,916,000.00	
Contract Time:	330 Days	(11 Months)
Anticipated Contract Start Date (NTP):	01-06-2020	
Anticipated Contract Completion Date:	12-04-2020	
Bid Opening Date:	10-16-2019	
Bids Received:	2	
Other Bids Received		
W.M. Schlosser	$ 12,922,000.00	

Purpose of the Contract:
To construct a new Sewer Services Facility at 3101 Ames Place, NE, in accordance with agreement between DC Water and District of Columbia to relocate Sewer Service operations from 125 O Street SE.

Contract Scope:

- To construct new Sewer Service facilities on a 3.95-acre site at 3101 Ames Place NE, to include a new 9,000 square foot building, and support facilities including secured parking for 120 DC Water vehicles of various sizes.
    - The building will be a two-story structure with offices and training/meeting space on 2nd floor and lockers, showers and break room on first.
    - The site will also feature a one-story, 3,500 square foot pre-engineered metal building to house DC Water's vacuum trucks, and other items requiring indoor storage.

- Open-air covered storage bins for fill dirt, sand, cold patch, etc., with concrete walls and metal roof; pipe rack storage facilities, security fencing around perimeter of site.

PROCUREMENT INFORMATION

Contract Type:	Fixed Price	**Award Based On:**	Lowest responsive, responsible bidder
Commodity:	Construction	**Contract Number:**	190080
Contractor Market:	Open Market		

BUDGET INFORMATION

Funding:	Capital	**Department:**	Engineering
Service Area:	Non-Process Facilities	**Department Head:**	Leonard R. Benson
Project:	HH		

***ESTIMATED USER SHARE INFORMATION**

User	**Share %	Dollar Amount
District of Columbia*	100.00%	$12,916,000.00
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%**	**$ 12,916,000.00**

* $10.5 million of the total contract will be paid to DC Water from District of Columbia following DC Water Board of Directors approval.

** In accordance with the Blue Plains Intermunicipal Agreement of 2012 a proposed user share is in development. Project costs beyond those covered by the District of Columbia Government will be allocated following IMA partner review and approval.

Leonard R. Benson / 11.14.19
SVP and Chief Engineer — Date

Dan Bae, VP / 11.14.2019 FOR DAN BAE
Procurement and Compliance — Date

Matthew T. Brown / 11/14/19
CFO and EVP
Finance and Procurement — Date

David L. Gadis /
CEO and General Manager — Date

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

ACTION REQUESTED

DESIGN-BUILD CONTRACT

BLUE PLAINS FLOODWALL – SEGMENT C PROJECT
(Joint Use)

Approval to execute a design-build contract for $ 5,528,680.00.

CONTRACTOR/SUB/VENDOR INFORMATION

PRIME:	SUBS:		PARTICIPATION:
Corman Kokosing Construction Company 12001 Guilford Road Annapolis Junction, MD 20701	**Design:**	**$ 726,978.27**	
	MBE	$ 207,000.00	28.0%
	WBE	$ 30,600.00	4.0%
	Construction:	**$ 4,801,701.73**	
	MBE	$ 1,536,593.45	32.0%
	WBE	$ 288,261.00	6.0%
	MBE/WBE Total	$2,062,454.45	
	See Attachment A for List of Subs.		

DESCRIPTION AND PURPOSE

Contract Value, Not-To-Exceed:	$ 5,528,680.00	
Contract Time:	593 Days	(1 Year, 8 Months)
Anticipated Contract Start Date (NTP):	01-13-2020	
Anticipated Contract Completion Date:	08-27-2021	
Technical and Price Proposals Received:	08-28-2019	
Other Teams Submitting Qualifications	2	
CPP Construction Company, Inc.		
Northeast Remsco Construction, Inc		

Purpose of the Contract:

Provide design and construction of 660 linear feet of floodwall, Segment C at Blue Plains Advanced Wastewater Treatment Plant. This is the continuation of floodwall construction to protect Blue Plains from the 500-year flood.

Contract Scope:

- Provide final siting and design of floodwall, approximately 660 linear feet, to elevation 17.2 feet (DC Datum).
- Develop and obtain permits for designed floodwall.
- Provide all materials and equipment together with the craft labor and supervision to construct the floodwall, with appropriate design submittals, construction, final documentation, and project closeout.

Federal Grant Status:

- Construction Contract is eligible for Federal grant funding assistance; inclusion in grant is pending availability of grant funds.

PROCUREMENT INFORMATION			
Contract Type:	Fixed Price	**Award Based On:**	Best Value
Commodity:	Design and Construction	**Contract Number:**	180070
Contractor Market:	Open Market		

BUDGET INFORMATION			
Funding:	Capital	**Department:**	Wastewater Engineering
Service Area:	Wastewater Treatment	**Department Head :**	David Parker (Acting)
Project:	JF		

ESTIMATED USER SHARE INFORMATION		
User	Share %	Dollar Amount
District of Columbia	25.53%	$ 1,411,653.10
Federal Funds	38.06%	$ 2,104,000.00
Washington Suburban Sanitary Commission	28.40%	$ 1,569,873.31
Fairfax County	5.19%	$ 286,988.18
Loudoun County & Potomac Interceptor	2.82%	$ 156,165.41
Total Estimated Dollar Amount	**100.00%**	**$ 5,528,680.00**

11.14.19
Leonard R. Benson
SVP and Chief Engineer

11.14.299 FOR DAN BAE
Dan Bae, VP
Procurement & Compliance

11/14/19
Matthew T. Brown
CFO and EVP
Finance & Procurement

David L. Gadis
CEO & General Manager

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

ACTION REQUESTED

ENGINEERING SERVICES SUPPLEMENTAL AGREEMENT:

Tunnel Dewatering Pump Station and Enhanced Clarification Facility - CM (Joint Use)

Approval to execute Supplemental Agreement No. 3 for $2,763,491. The modification exceeds the General Manager's approval authority.

CONTRACTOR/SUB/VENDOR INFORMATION

PRIME:	SUBS:		PARTICIPATION:
Arcadis District of Columbia, PC 7550 Teague Road Suite 210 Hanover, MD 21076 Headquarters Highlands Ranch, CO 80129	Delon Hampton & Associates Washington, DC	MBE	17.4%
	Cube Root Corporation Washington, DC	MBE	9.3%
	URS (AECOM) Washington, DC		7.6%

DESCRIPTION AND PURPOSE

Original Contract Value:	$20,698,656.00	
Value of this Supplemental Agreement:	$ 2,763,491.00	
Cumulative SA Value, including this SA:	$10,887,874.00	
Current Contract Value, Including this SA:	$31,586,530.00	
Original Contract Time:	1,890 Days	(5 Years, 2 Months)
Time extension, this SA:	321 Days	
Total SA contract time extension:	501 Days	(1 Years, 4 Months)
Contract Start Date:	08-28-2013	
Contract Completion Date:	03-13-2020	

Purpose of the Contract:

To provide onsite Construction Management Services for the Tunnel Dewatering Pump Station and Enhanced Clarification Facility (TDPS-ECF)

This work is required by Consent Decree.

Original Contract Scope:

- To provide construction management and related engineering services for the construction of a Tunnel Dewatering Pump Station and Enhanced Clarification Facility at the District of Columbia's Advanced Wastewater Treatment Plant at Blue Plains.

Previous Supplemental Agreement Scope:

- The scope remains the same as the original agreement; to provide construction management and related engineering services for the construction of a Tunnel Dewatering Pump Station and Enhanced Clarification Facility. Due to Contractor time extensions, the construction management scope was extended through April 28, 2019.

Current Supplemental Agreement Scope:

- To continue to provide construction management and related engineering services for the construction of a Tunnel Dewatering Pump Station and Enhanced Clarification Facility. Due to the Contractor continuing to work to complete the project, the construction management scope is extended through March 13, 2020.

Future Supplemental Agreement Scope:

- No future supplemental agreement is anticipated at this time.

PROCUREMENT INFORMATION			
Contract Type:	Cost Plus Fixed Fee	**Award Based On:**	Highest Ranking Score
Commodity:	Engineering Services	**Contract Number:**	DCFA #450-WSA
Contractor Market:	Open Market		

BUDGET INFORMATION			
Funding:	Capital	**Department:**	Wastewater Engineering
Service Area:	Wastewater	**Department Head:**	David Parker
Project:	E8		

ESTIMATED USER SHARE INFORMATION		
User	Share %	Dollar Amount
District of Columbia	41.22%	$ 1,139,110.99
Federal Funds	0.00%	$
Washington Suburban Sanitary Commission	45.84%	$ 1,266,784.27
Fairfax County	8.38%	$ 231,580.55
Loudoun County & Potomac Interceptor	4.56%	$ 126,015.19
Total Estimated Dollar Amount	**100.00%**	$ 2,763,491.00

11.14.19
Leonard R. Benson Date
SVP and Chief Engineer

11/14/19
Matthew T. Brown Date
CFO and EVP
Finance and Procurement

11.14.2019 FOR DAN BAE
~~Dan Bae~~, VP Date
Procurement and Compliance

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 13B (Non-Joint Use)

Approval to execute a construction contract for $5,324,461.00

CONTRACTOR/SUB/VENDOR INFORMATION

PRIME:	SUBS:		PARTICIPATION:
Anchor Construction Corporation 2254 25th Place, NE Washington , DC 20018	S & J Service Hyattsville, MD	MBE	29.2%
	J&M Trucking, Inc Bowie, MD	MBE	2.0%
	Kim Engineering, Inc Beltsville, MD	MBE	0.7%
	Keys Materials & Utilities, Inc Mount Airy, MD	WBE	5.3%
	Resource Industries, LLC Washington, DC	WBE	0.6%

DESCRIPTION AND PURPOSE

Contract Value, Not-To-Exceed:	$5,324,461.00
Contract Time:	289 Days (9 Months)
Anticipated Contract Start Date (NTP):	02-16-2020
Anticipated Contract Completion Date:	12-01-2020
Bid Opening Date:	10-02-2019
Bids Received:	4
Other Bids Received	
Sagres Construction Corporation	$5,662,705.00
Capitol Paving of DC, Inc	$5,909,958.00
Fort Myer Construction Corporation	$7,187,733.00

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 in the District of Columbia.

Contract Scope:

- Replace 1.54 miles of water mains ranging from six inch to twelve inches, associated valves and appurtenances.
- Install copper water services 2-inch and smaller in public and private space.
- Install 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.
- Install permanent pavement and provide surface restoration.

Federal Grant Status:

- Construction contract is funded in part by Federal grant.

PROCUREMENT INFORMATION

Contract Type:	Unit Price	**Award Based On:**	Lowest responsive, responsible bidder
Commodity:	Construction	**Contract Number:**	160140
Contractor Market:	Open Market		

BUDGET INFORMATION

Funding:	Capital	**Department:**	Engineering and Technical Services
Service Area:	Water	**Department Head:**	Craig Fricke
Project:	F1, BW		

ESTIMATED USER SHARE INFORMATION

User	Share %	Dollar Amount
District of Columbia	20.00%	$1,064,892.20
Federal Funds	80.00%	$4,259,568.80
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%**	**$5,324,461.00**

Leonard R. Benson November 6, 2019
Leonard R. Benson Date
SVP and Chief Engineer

Dan Bae November 6, 2019
Dan Bae, VP Date
Procurement and Compliance

Matthew T. Brown November 6, 2019
Matthew T. Brown Date
CFO and EVP
Finance and Procurement

David L. Gadis Date
CEO and General Manager