



DISTRICT OF COLUMBIA WATER AND SEWER AUTHORITY

Board of Directors

*Meeting of the
Environmental Quality and Operations Committee*

*5000 Overlook Avenue, SW, Room 407
Thursday, February 16, 2017
9:30 a.m.*

- | | | | |
|-------------------|-------------|--|-------------------------------|
| | I. | Call to Order | James Patteson
Chairperson |
| 9:30 a.m. | II. | AWTP Status Updates
1. BPAWTP Performance | Aklile Tesfaye |
| 9:45 a.m. | III. | Clean Rivers Quarterly Update | Carlton Ray |
| 10:00 a.m. | IV. | Action Items | John Bosley/Len Benson |
| | | Joint Use | |
| | | 1. Contract No. 100020 - Enhanced Nitrogen Removal Facilities Second Contract – Change Order No. 66, Ulliman Schutte Construction, LLC | |
| | | 2. WAS-12-029-AA - JR Electrical Power Distribution Equipment, M.C. Dean | |
| | | Non-Joint Use | |
| | | 1. Contract No. 160170 - “O” Street Pumping Station Odor Control System, Skanska USA Building Inc. | |
| 10:15 a.m. | V. | CIP Quarterly Update | Liliana Maldonado |
| 10:30 a.m. | VI. | Water Quality Monitoring | Charles Kiely |
| | | 1. Coliform Testing | |
| | | 2. LCR Compliance Testing | |
| 10:45 a.m. | VII. | Fire Hydrant Upgrade Program | David Wall |
| | | 1. Status Report of Public Fire Hydrants | |
| | | 2. Out of Service Fire Hydrant Map | |

10:55 a.m. VIII. Other Business/Emerging Issues

11:00 a.m. IX. Adjournment

James Patteson
Chairperson

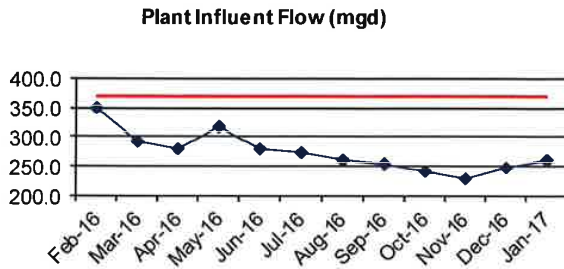
* The DC Water Board of Directors may go into executive session at this meeting pursuant to the District of Columbia Open Meetings Act of 2010, if such action is approved by a majority vote of the Board members who constitute a quorum to discuss: matters prohibited from public disclosure pursuant to 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. Assistant General Manager, Waste Water Treatment: Modify the Annual Total Nitrogen Load graph by adjusting the start date of the line showing the EPA permit limit, to start from January 2015 as opposed to January 2004. **[Done]**
2. Assistant General Manager, Waste Water Treatment: Insert the word “national average” in the legend of the graphs containing the ‘EPA 2009 Mean’ component. **[Done]**
3. Chief Engineer, DC Water: For Action Item 2, amend the fact sheet to reflect that the original contract was for both Raw Wastewater Pump Stations No.1 and No. 2. **[Done]**
4. Chief Engineer, DC Water: For Action Item 2, add explanatory note to the fact sheet regarding some of the work dictated by the NPDES Permit and consent decree. Also include the attachment provided at the EQSS Committee Meeting *Background and Rationale for Supplemental Agreement No. 9* (January 18, 2017) with the fact sheet. **[Done]**
5. Manager, Asset Management: Prepare a discussion for a future Committee meeting regarding the monitoring of system-wide Key Performance Indicators (KPIs). **[To be scheduled for a future meeting in conjunction with Item 7.]**
6. Manager, Asset Management: Provide a system-wide GIS map showing COF and LOF for the District. **[To be completed]**
7. General Manager and CEO: Present options for meaningful metrics that will aid in deciding type and level of information that should be presented to the Committee at the monthly meetings versus information that should be included in the General Manager's report. **[Management is evaluating this issue and will be reporting to the Committee in the upcoming months]**
8. Manager, Asset Management: Prepare briefing to the Committee regarding DC Water's Vertical Assets Reliability Program. **[To be scheduled for a future meeting]**
9. Chief Marketing Officer: Provide total cost figure regarding planned, Bloom related, 2017 marketing activities and initiatives. **[Done]**
10. Chief Marketing Officer: Provide information to the Committee regarding potential air quality concerns because of open-air curing of the Bloom product. **[Under Investigation]**

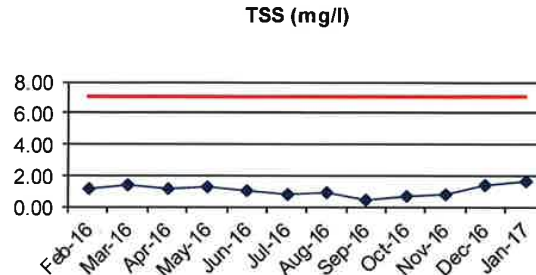
BLUE PLAINS ADVANCED WASTEWATER TREATMENT PLANT **PERFORMANCE REPORT – JANUARY 2017**

Average plant performance for the month was excellent with all effluent parameters well below the seven-day and monthly NPDES permit requirements. The monthly average influent flow was 260 MGD. There was 20 million gallons of Excess Flow during this reporting period. The following Figures compare the plant performance with the corresponding NPDES permit limits.



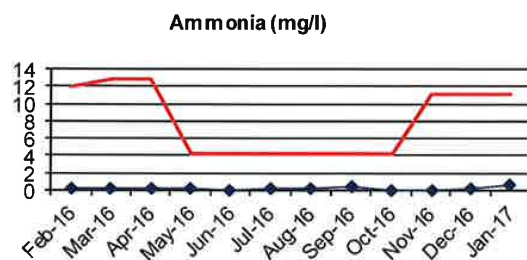
■ Influent Flow — Average Design Capacity

This graph illustrates the monthly average influent flow to the plant. The design average flow is 370 MGD. Blue Plains has a revised 4-hour peak flow capacity of 511 MGD through complete treatment. Flows up to 336 MGD in excess of the 511 MGD peak capacity receive primary treatment, disinfection and dechlorination.



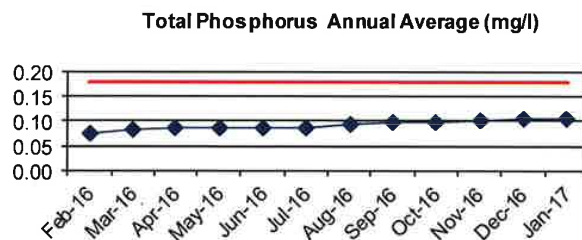
■ Effluent TSS — Permit Limit

Effluent Total Suspended Solids (TSS) is a measure of the amount of solid material that remains suspended after treatment. The effluent TSS concentration for the month averaged 1.62 mg/L, which is below the 7.0 mg/L permit limit.



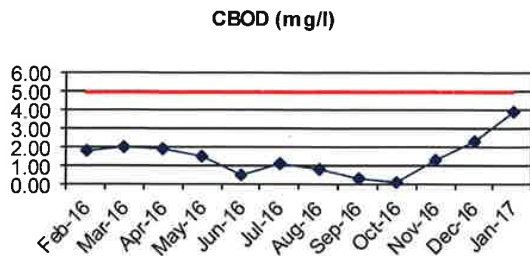
■ Effluent NH3 — Permit Limit

The Ammonia Nitrogen (NH₃-N) is a measure of the nitrogen found in ammonia. For the month, effluent NH₃-N concentration averaged 0.61 mg/L and is below the average 11.1 mg/L limit.



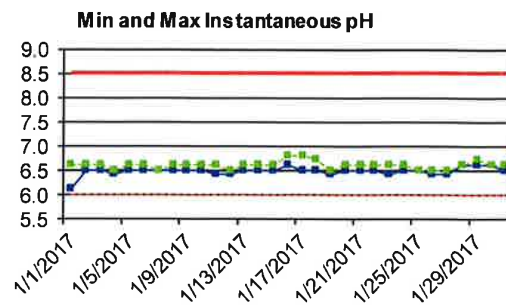
■ Effluent TP — Permit Limit

The Total Phosphorus (TP) is a measure of the particulate and dissolved phosphorus in the effluent. The annual average effluent TP concentration is 0.09 mg/L, which is below the 0.18 mg/L annual average limit.



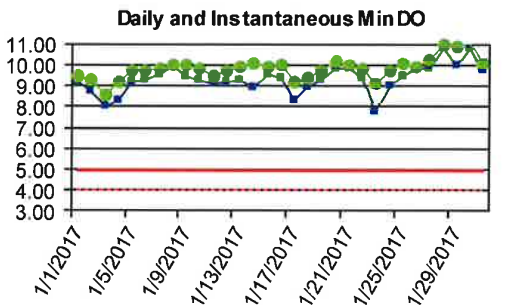
■ Effluent CBOD — Permit Limit

Carbonaceous Biochemical Oxygen Demand (CBOD) is a measure of the amount of dissolved oxygen required for the decomposition of organic materials. The effluent CBOD concentration averaged 3.94 mg/L (partial month), which is below the 5.0 mg/L limit.



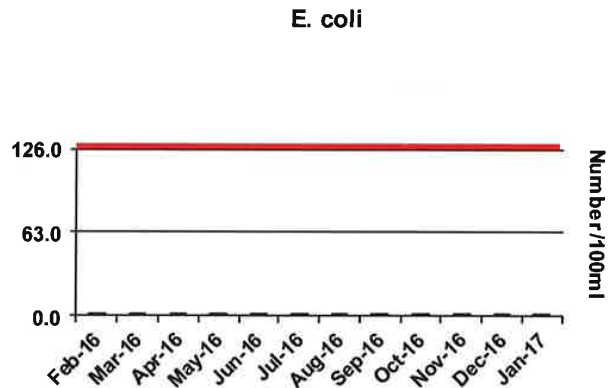
● MAX pH ■ MIN pH — Upper Limit - - Lower Limit

pH is a measure of the intensity of the alkalinity or acidity of the effluent. The minimum and maximum pH observed were 6.1 and 6.8 standard units, respectively. The pH was within the permit limits of 6.0 and 8.5 for minimum and maximum respectively.



● MIN Daily Average ■ Instant MIN DO
— MIN Daily Average Limit - - Instant MIN Limit

Dissolved Oxygen (DO) is a measure of the atmospheric oxygen dissolved in wastewater. The DO readings for the month are within the permit limits. The minimum daily average is 8.6 mg/L. The minimum instantaneous DO reading is 7.8 mg/L. The minimum permit limits are 5.0 mg/L and 4.0 mg/L respectively.

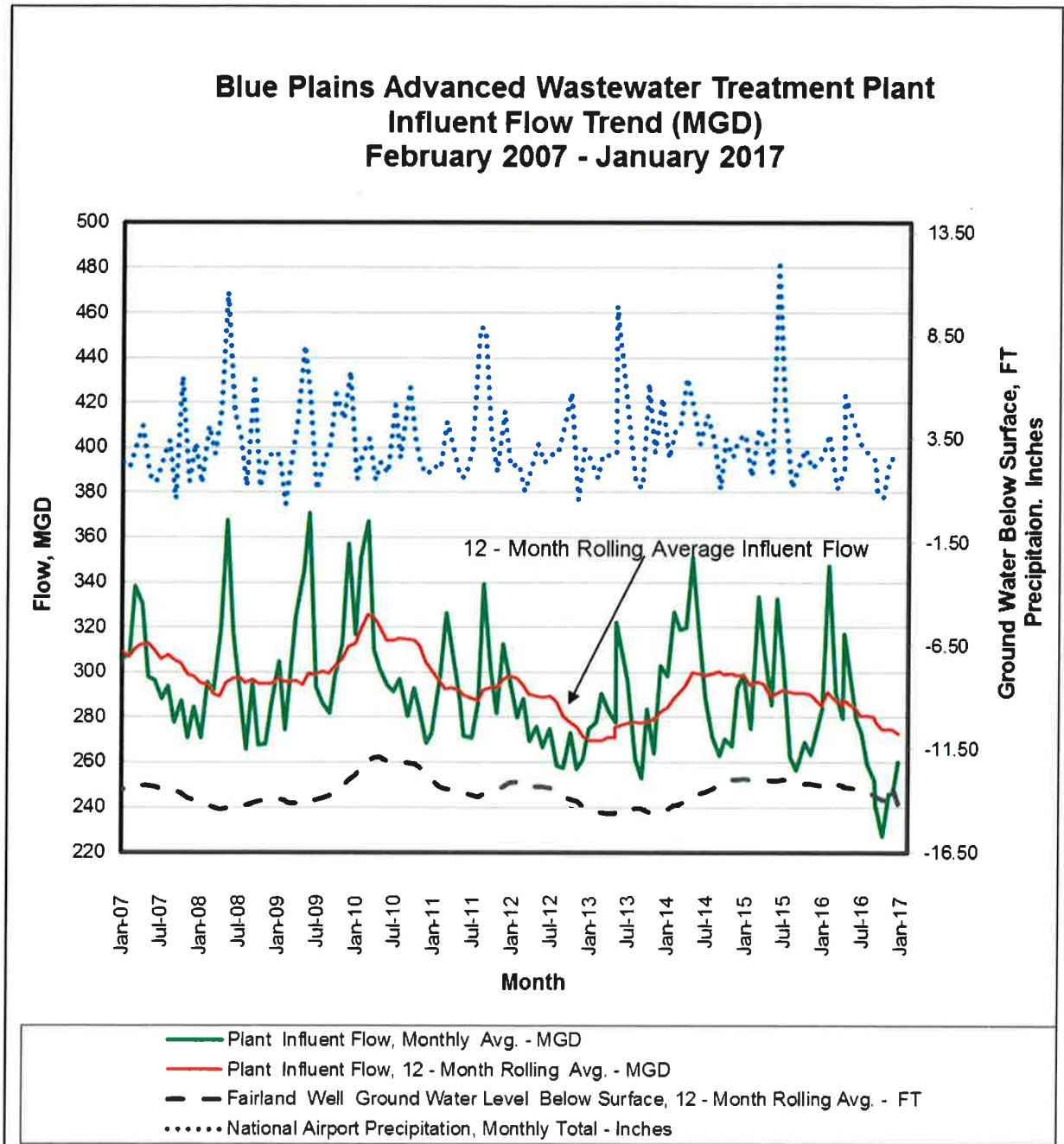


■ E. Coli Geomean — Permit Limit

E.coli is an indicator of disease causing organisms (pathogens). The E.coli permit limit is 126/100mL. The E coli geometric mean is 1.2 /100mL, and well below the permit limit.

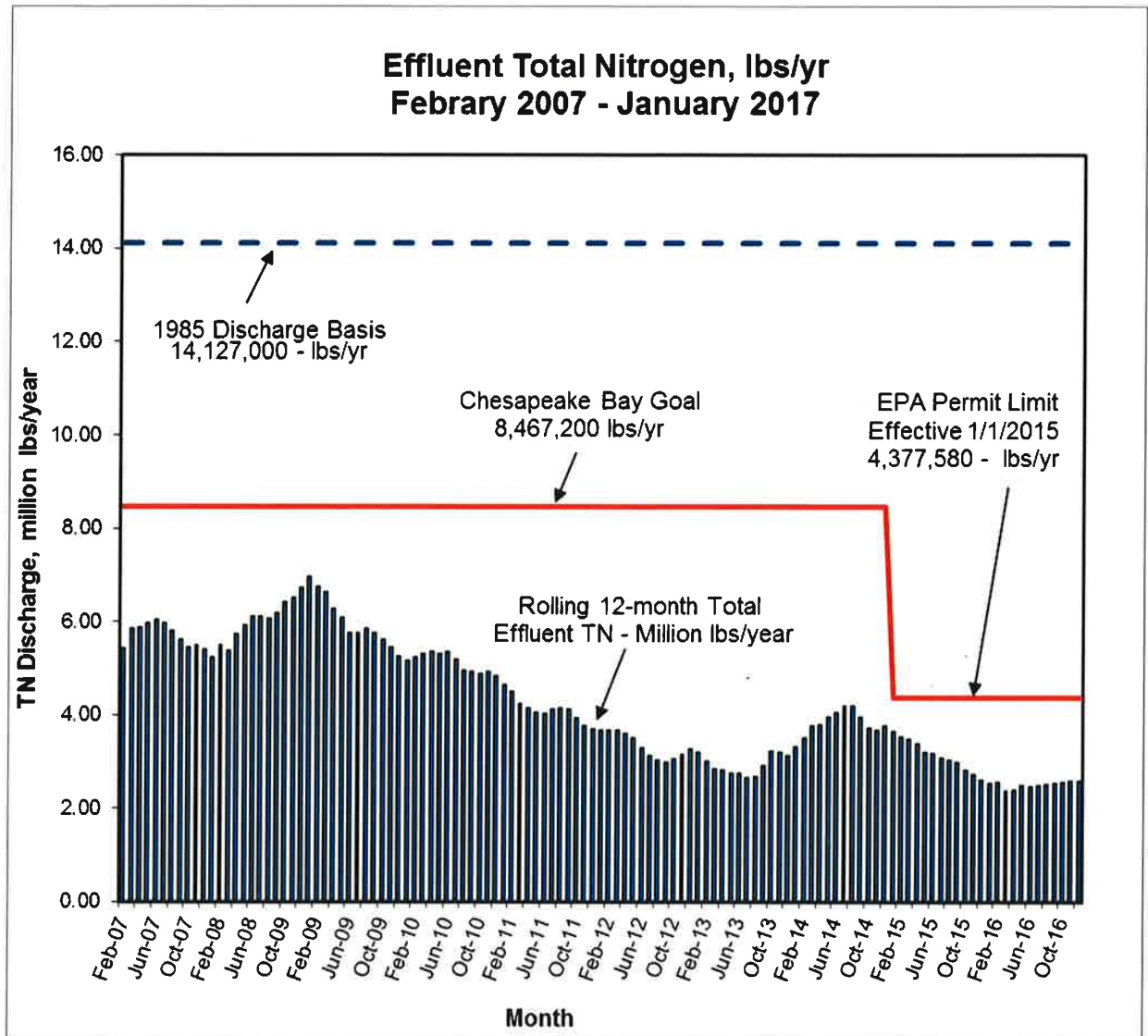
Plant Influent Flow Trend

The graph below shows influent flow trend to the plant over a 10-year period ending January 2017. While for any given month the flow is weather dependent, the 12-month rolling average influent flow has remained at or below 300 since February 2011.



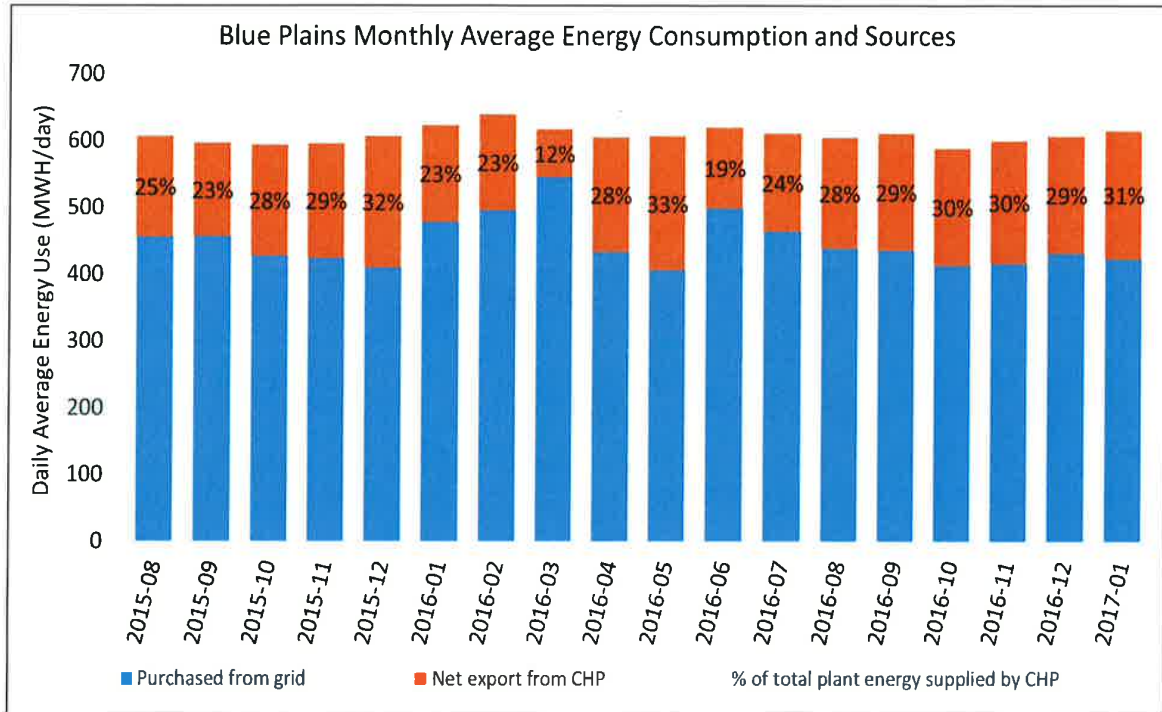
Blue Plains Total Nitrogen (TN) Removal Performance

The graph below shows the rolling 12-month total effluent TN over a 10-year period ending January 2017. During the month, the TN average concentration and total load in the effluent were 4.35 mg/L and 292,409 lbs. respectively. The effluent quality is on track to remain below the NPDES permit annual load limit of 4,377,580 lbs.



Blue Plains Electricity Generation and Usage

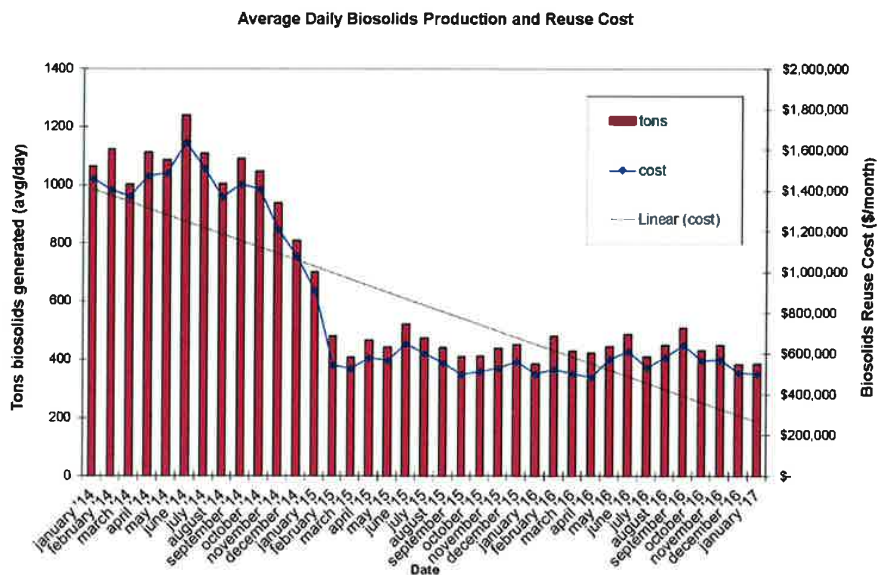
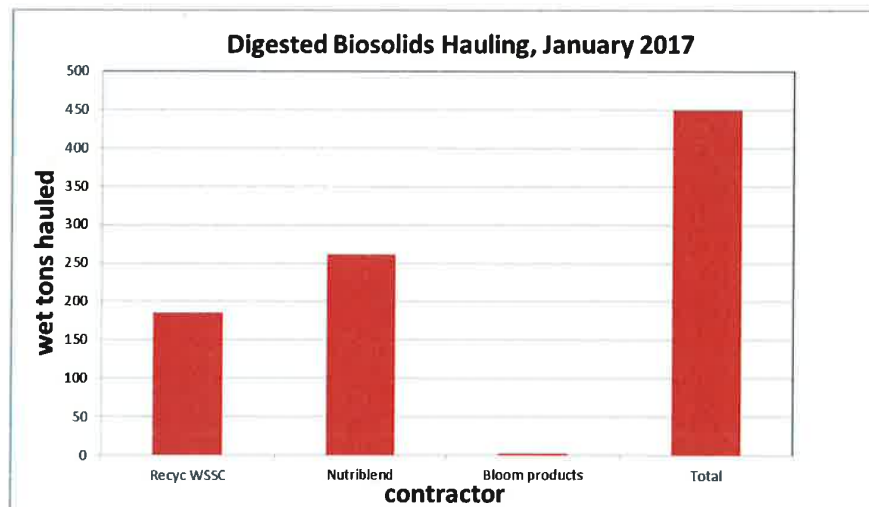
The average energy consumed at Blue Plains was 616 MWH/day for the month of January, while the average energy purchased from PEPCO was 424 MWH/day. Approximately 2.4 MWH of electricity was used per million gallon of wastewater that was fully treated. The CHP facility exported an average of 192 MWH/day, making up for 31% of total energy consumed at Blue Plains.



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 (exported) by CHP are indicated by the blue and orange highlights, respectively.

RESOURCE RECOVERY

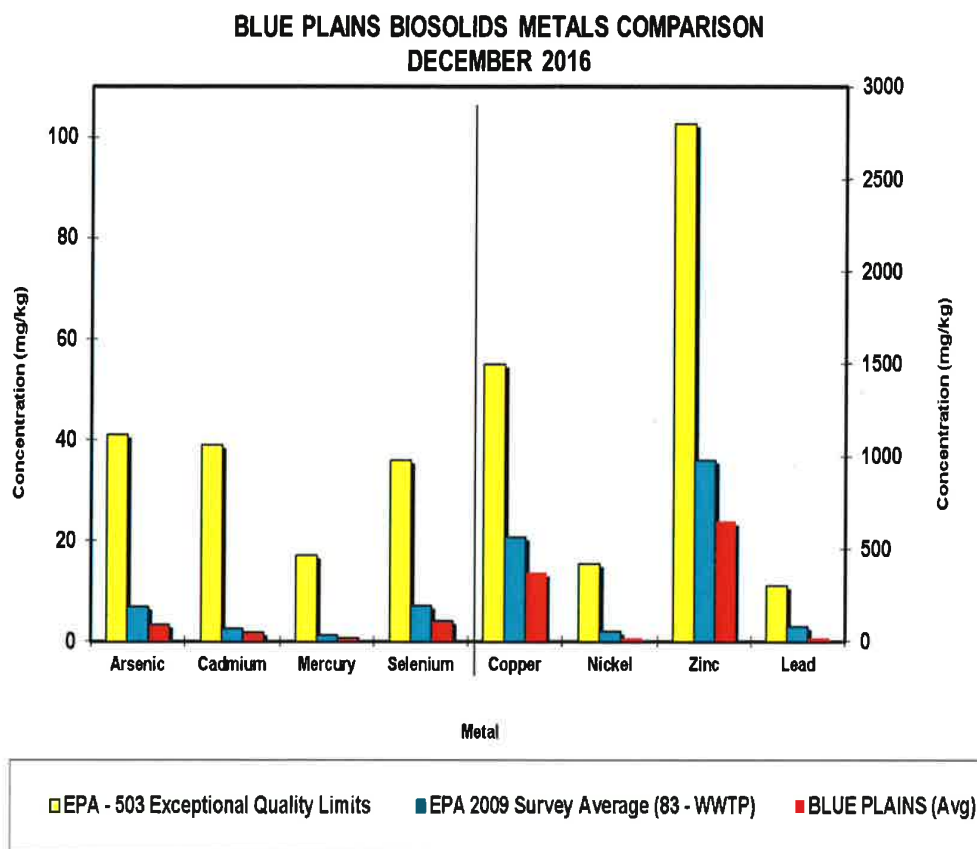
In January, biosolids hauling averaged 450 wet tons per day (wtpd). The graph below shows the total hauling by contractor for the month of January. The average percent solids for the digested material was 29.2%. At the end of January the Cumberland County storage pad had 6,361 tons (~25,000 tons capacity), Cedarville lagoon had zero tons of Blue Plains biosolids (~30,000 tons capacity), Goochland pad had 791 tons, and Fauquier lagoon had 462 tons (~15,000 tons capacity).



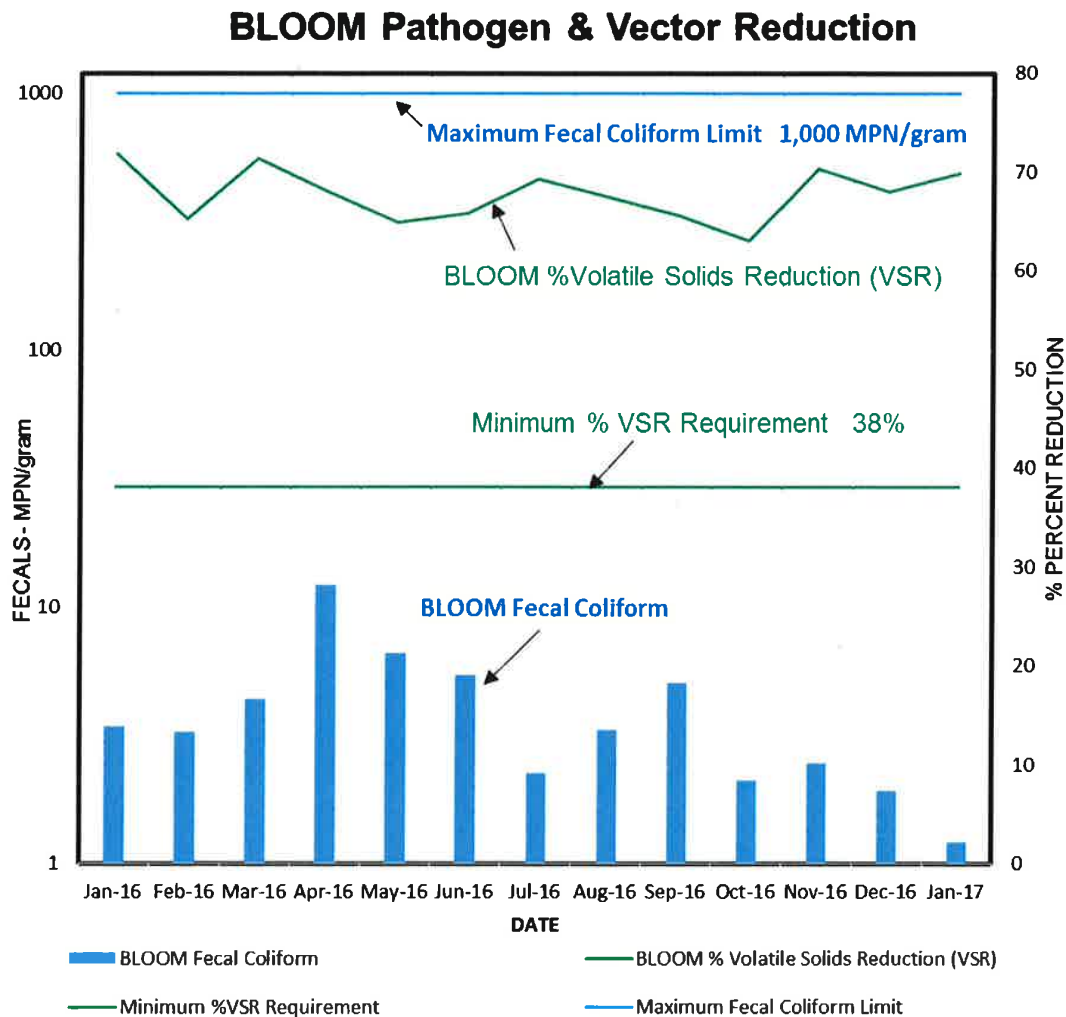
In January, diesel prices averaged \$2.65/gallon and with the contractual fuel surcharge, the weighted average biosolids reuse cost was \$41.16 wet ton.

BLOOM Product Quality

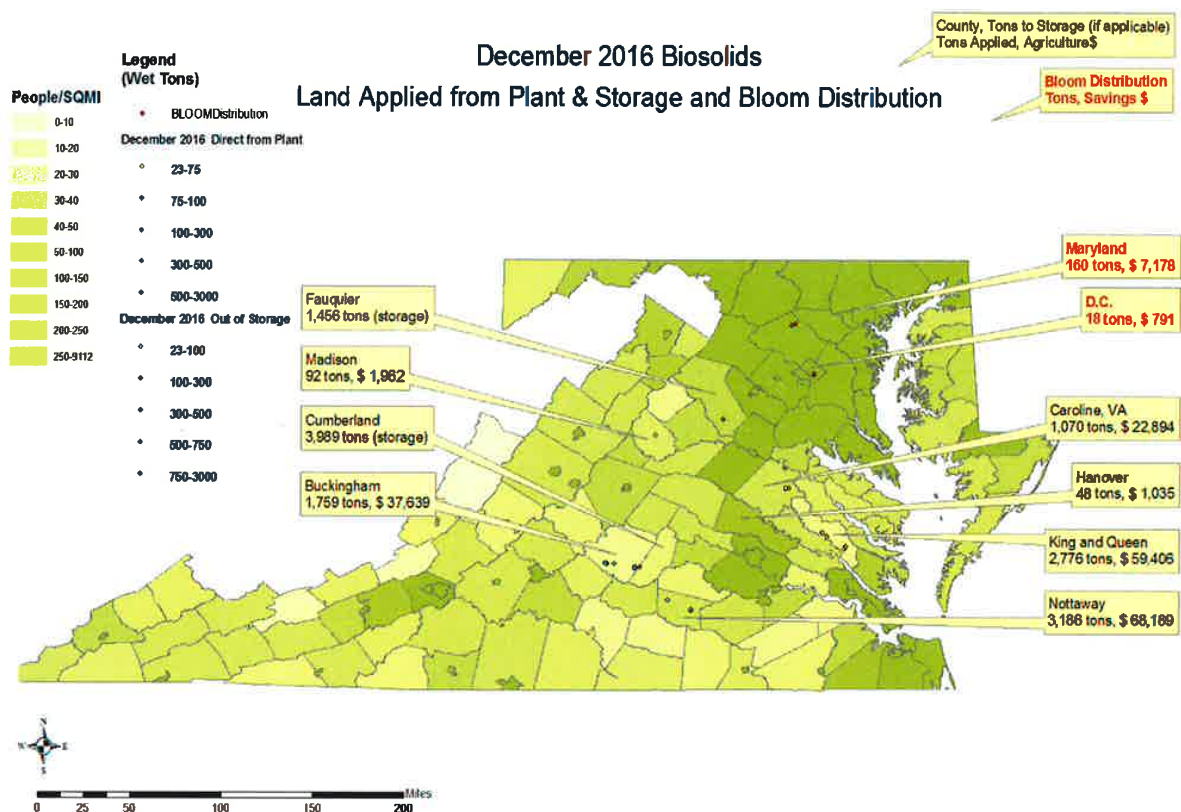
The graph below show the EPA regulated heavy metals in the Blue Plains biosolids for the month of December 2016. As can be seen in the graphs, the Blue Plains levels are considerably below the regulated exceptional quality limits and the EPA 2009 national average.



The graph below shows both Vector Attraction Reduction (VAR) and Fecal Coliform results in the final Bloom product, both of which are required to maintain the Class A Exceptional Quality (EQ) status of the Bloom product. Volatile Solids (VS) are organic compounds that may be odorous and attract nuisance vectors (i.e. flies or rodents). DC Water digesters reduce VS by 65-70%, well above the required 38% minimum. In addition, this graph shows fecal coliforms (FC) levels in DC Water's final Bloom product. Fecal coliforms are indicators of disease causing organism (pathogens), and must be below 1000 MPN/g to meet Class A standards. Bloom FC levels are 2 or 3 orders of magnitude less than the maximum allowable level.



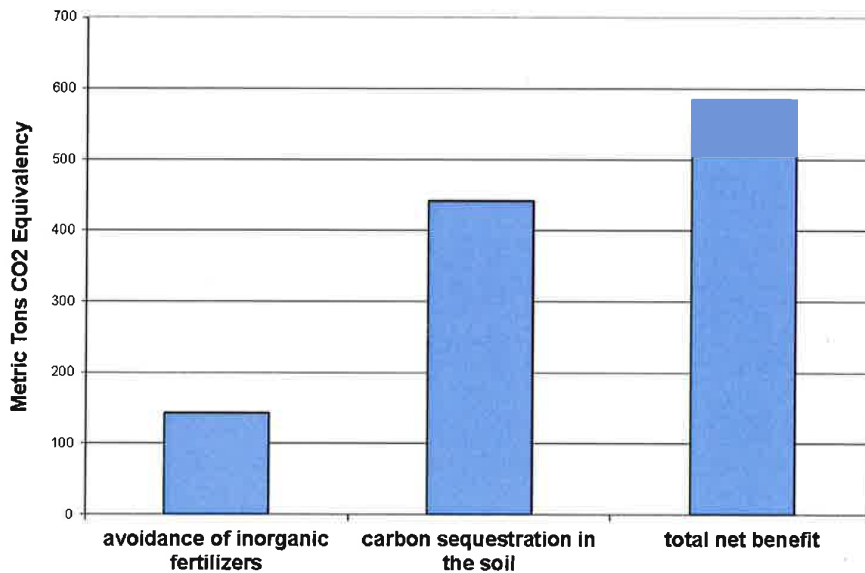
Biosolids Applications and Agricultural \$'s for December 2016



Environmental Benefits

The quantity land applied in December coming directly from the plant and from storage facilities equaled 1,002 tons. Taking into account the fuel required to transport biosolids to the field, the net benefit of the land applied material is 896 metric tons CO₂ equivalent avoided emissions. This is equivalent to taking 2,042,743 car miles off the road in the month of December (assumes 20 mpg, 19.4 lb CO₂ equivalent emissions/gallon gas – EPA estimate). The cumulative total avoided carbon emission since, January 2006 is 151,984 metric tons CO₂ equivalent.

DCWater Biosolids Recycling Program Greenhouse Gas Balance Benefits December 2016 Totals



CLEAN WATER QUALITY AND TECHNOLOGY

The Department of Clean Water Quality and Technology includes the research and development, pretreatment and laboratory programs. A summary of activities for each group is provided below.

Research and Development

The research and development team continues to work on research topics associated with the planning and operation of Blue Plains. The current focus of research is to optimize treatment process capacity and to work toward achieving energy neutral operations.

Filtrate Treatment Facility Startup Strategy Testing at Pilot Scale

The Filtrate Treatment Facility (FTF) is designed to remove nitrogen from the digested solids dewatering filtrate stream before it is routed back to the Blue Plains main liquid stream processes. The FTF process is comprised of 6 DEMON® sequential batch reactors (SBR) for removal of ammonia using the deammonification process. The DEMON® process relies on two main groups of bacteria that work together to remove nitrogen. The first group, called aerobic ammonia oxidizing bacteria (AOB), convert ammonia to nitrite. The second group, called anaerobic ammonia oxidizers (anammox), convert ammonia and nitrite to nitrogen gas. The nitrogen gas is released to the atmosphere and thus removed from the filtrate. To help prepare for commissioning of the full scale filtrate treatment facility (FTF) in Spring of 2017, the research and development group is conducting pilot-scale testing to evaluate the strategy for bringing the process to the design loading and ensuring proper enrichment of anammox bacteria during commissioning. The full scale FTF Commissioning Team will consider the pilot results along with operations and contractual requirements to conduct the overall commissioning work.

To start up the process in a reasonable time to handle the current loads, AOB and anammox are seeded into the process. While AOBs are abundant in the sludge from the Blue Plains nitrogen removal process, anammox bacteria are not, and thus, will be obtained from other DEMON® plants. Due to limitation in the available quantity of anammox seed compared to the size of the Blue Plains installation, the FTF process will not be able to fully treat the entire filtrate load when operation is initiated. Instead, the load will be slowly increased as the microorganisms acclimate and grow in the system, until the full load is being treated.

The startup strategy entails several phases where the SBRs are started in either nitrification mode (started up with sludge from Blue Plains Nitrification/Denitrification facility only) or DEMON mode (started up with nitrification sludge and anammox seed). In the first phase, 1 or 2 SBRs will startup in DEMON® mode. The remaining SBRs will start in the nitrification mode. Initially, the SBRs will be loaded at approximately 0.1 kg N/m³.d. In each consecutive phase, two additional reactors will be switched from nitrification mode to demon mode until all 6 SBRs are running in DEMON® mode. It is anticipated that the facility will be running at approximately 0.38 kg N/m³.d loading (with 6 SBRs in service) when commissioning is complete.

The pilot testing to simulate the startup phases for the full scale process began in late November 2016 [Exhibit A]. The main objectives of the pilot testing include the following:

- Determine the time required to acclimate and enrich AOBs and select against the growth of undesirable nitrite oxidizing bacteria (NOB) that convert nitrite to nitrate.
- Develop an operating strategy to switch from nitrification mode to deammonification mode.
- Determine the time required to enrich anammox and achieve the design loading conditions.
- Assess operational issues and identify and additional provisions that need to be made to ensure successful startup.



Exhibit A: FTF Pilot Facility at Blue Plains AWTP

The first pilot phase included starting up in nitrification mode and is now complete. In this mode, the pilot was seeded with sludge from the Blue Plains main nitrogen removal process. The pilot started at a loading rate of 0.2 kg N/m³.d and with filtrate to dilution water ratio of approximately 1:4 (ratio accounts for dilution water that is added at the belt presses as well as additional dilution at the pilot). The required dilution ratio was determined based on the target effluent ammonia concentration and the amount of alkalinity available in the filtrate to remove ammonia. The target effluent ammonia was 250 mg N/L and 1:1 molar ratio of ammonia-N to alkalinity resulted in a required feed concentration of ammonia of 500 mg N/L.

The testing showed that AOB enrichment takes approximately 1 month before NOBs are effectively washed out of the system and nitrite begins to accumulate [Exhibit B]. Filtrate quality is critical to the FTF operation. When high solids are present in the filtrate, the AOB activity is negatively impacted and dissolved oxygen set point is increased to compensate for the loss of activity. The load was increased when pH dropped below 7.

Highlights from the next phase of testing, which involves switching the process from nitrification to DEMON[®] mode, will be presented in a future GM report.

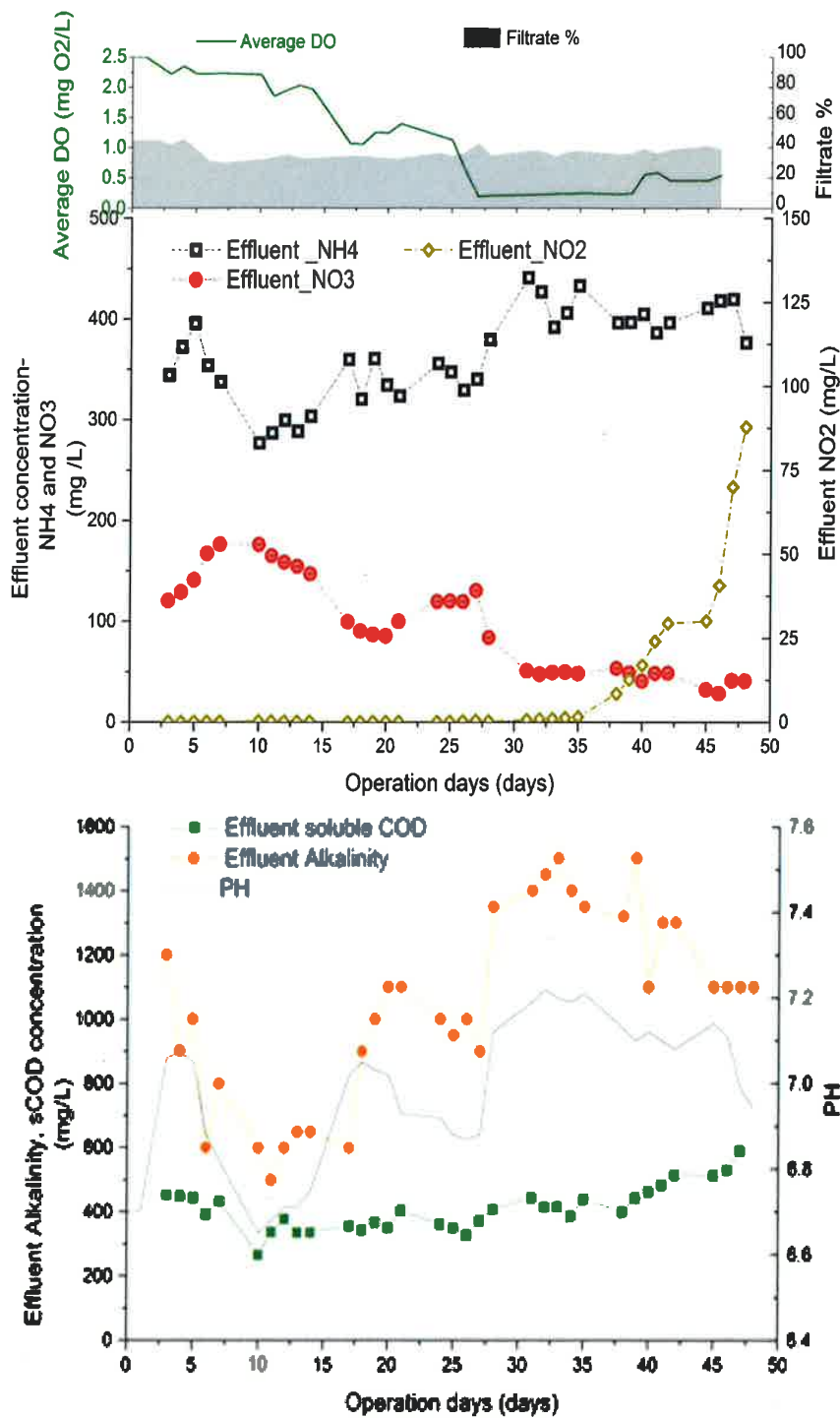


Exhibit B: FTF Pilot Data from the Nitrification Mode Showing Nitrite (NO₂) Accumulation Observed after Approximately One Month of Operation

Blue Plains Main Laboratory

The Main Laboratory staff conducts analyses on Blue Plains AWTP effluent for NPDES Permit requirements, as well as on biosolids, pretreatment samples, storm water runoff, and process samples, on a daily basis, 365 days a year. The laboratory currently analyzes approximately 2,800 samples each month and conducts approximately 8,000 analyses, including Total Suspended Solids; Volatile Suspended Solids; Total and Volatile Solids; Ammonia Nitrogen; Nitrite and Nitrate Nitrogen; Total, Soluble, and Ortho Phosphorus; Total and Soluble Kjeldahl Nitrogen; Carbonaceous Biochemical Oxygen Demand; Chemical Oxygen Demand; Total Alkalinity and Hardness; and Fecal Coliform and E. Coli microbiological testing.

This month, the laboratory continued the analysis of Belt Filter Press cake samples for fecal coliform bacteria for DC Water's Class A Biosolids reporting, as well as digester samples from the new Cambi Thermal Hydrolysis and Anaerobic Digestion facility, including Total and Volatile Solids, Total and Volatile Suspended Solids, Ammonia Nitrogen, alkalinity and pH. Fecal coliforms in the BFP dewatered cake and TS and VS upstream and downstream of the digestion process are monitored to show compliance with 40 CFR 503 Pathogen and Vector Attraction Reduction requirements.

The laboratory also assisted the Department of Sewer Services conducting microbiological analysis of water samples for E. Coli bacteria, as well as monitoring the Northeast Boundary Swirl Facility Effluent for NPDES compliance. Laboratory staff also participated in the WWOA Executive Board.

Blue Plains Pretreatment Program

The Blue Plains Pretreatment Program manages the Industrial Pretreatment Program, including temporary dewatering dischargers from construction and other activities, as well as the Hauled Waste Program. Additional responsibilities include providing specialized sampling and program management support for the Blue Plains NPDES permit and facilitating the quarterly Blue Plains Storm Water Committee meetings.

Industrial Pretreatment Program

DC Water currently manages fourteen (14) Significant Industrial User (SIU) permits and sixteen (16) Non-Significant Industrial User (NSIU) wastewater discharge permits. One NSIU permit was renewed this month for Georgetown University (GU) and an inspection was also conducted at GU. Compliance monitoring was conducted at one SIU (WMATA Northern Bus Division) and one NSIU (Government Publishing Office). DC Water received monthly self-compliance monitoring reports for six (6) SIUs and one NSIU. Semi-annual compliance monitoring reports for some SIUs and NSIUs were also received this month. All SIUs and NSIUs are in compliance with discharge standards for the current month.

DC Water currently manages 72 Temporary Discharge Authorization (TDA) permits, primarily for construction site discharges of groundwater and/or surface runoff in the combined sewer area. Six new TDA permits were issued this month. All TDA discharges are currently in compliance with pretreatment standards.

Hauled Waste Program

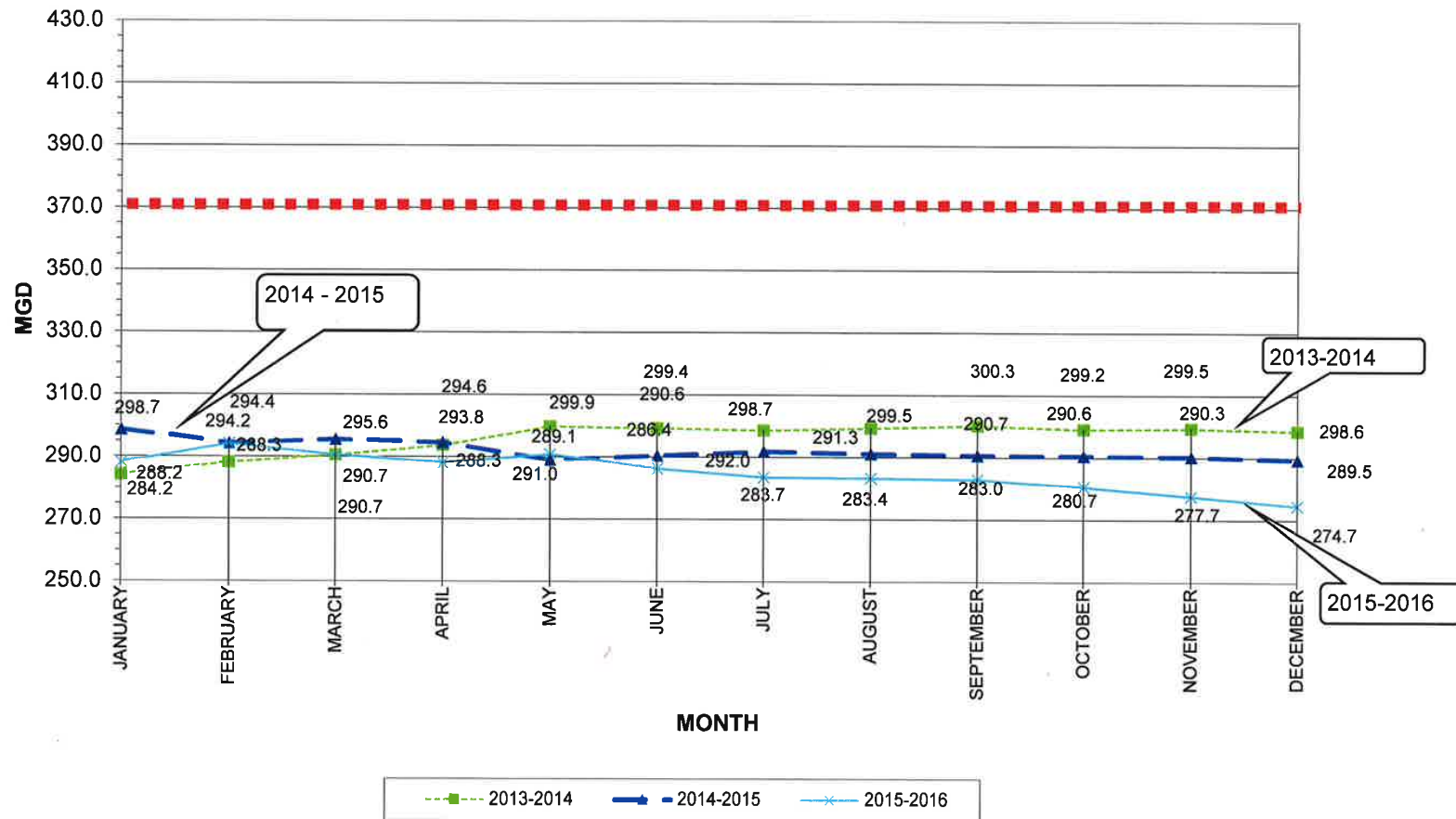
As of the end of the current month, the hauled waste program had 33 permitted haulers authorized to discharge domestic septage, portable toilet waste, grease trap waste, groundwater or surface runoff, and other types of waste, if approved in advance and have been characterized and meet pretreatment standards. DC Water collected fees from ten waste haulers this month, including those on a monthly payment plan option.

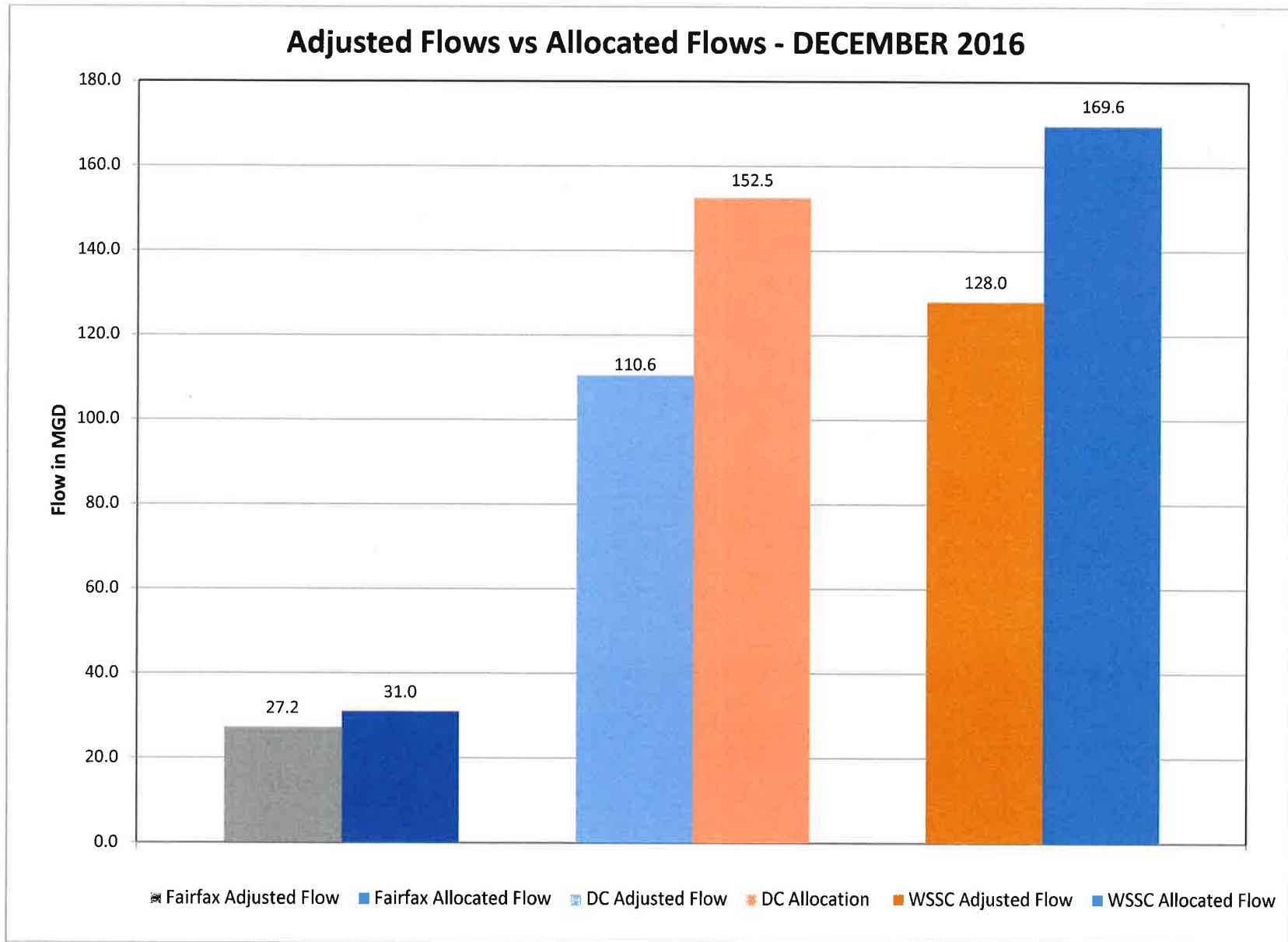
DC Water received 850 hauled waste loads (1,755,530 gallons) from permitted haulers this month. Manifest forms from each truck entering the plant are collected by the security guards and picked up daily by Pretreatment staff. Data is entered into an Excel spreadsheet to track the volume and type of loads being discharged daily and the results of sampling. Three hauled waste samples were collected this month.

NPDES Permit Sampling

Pretreatment staff collected one 24-hour composite wet weather low level PCB sample at outfall 002 and one grab sample for low level PCB at outfall 001.

**BLUE PLAINS
ADVANCED WASTEWATER TREATMENT PLANT
12 MONTH ROLLING AVERAGE FLOWS
AS OF THE MONTH OF DECEMBER 2016**







District of Columbia Water and Sewer Authority
George S. Hawkins, General Manager

Briefing on:

DC Clean Rivers Project Quarterly Update

Briefing for:

Environmental Quality & Operations Committee Meeting

February 16, 2017



DCWATER.COM

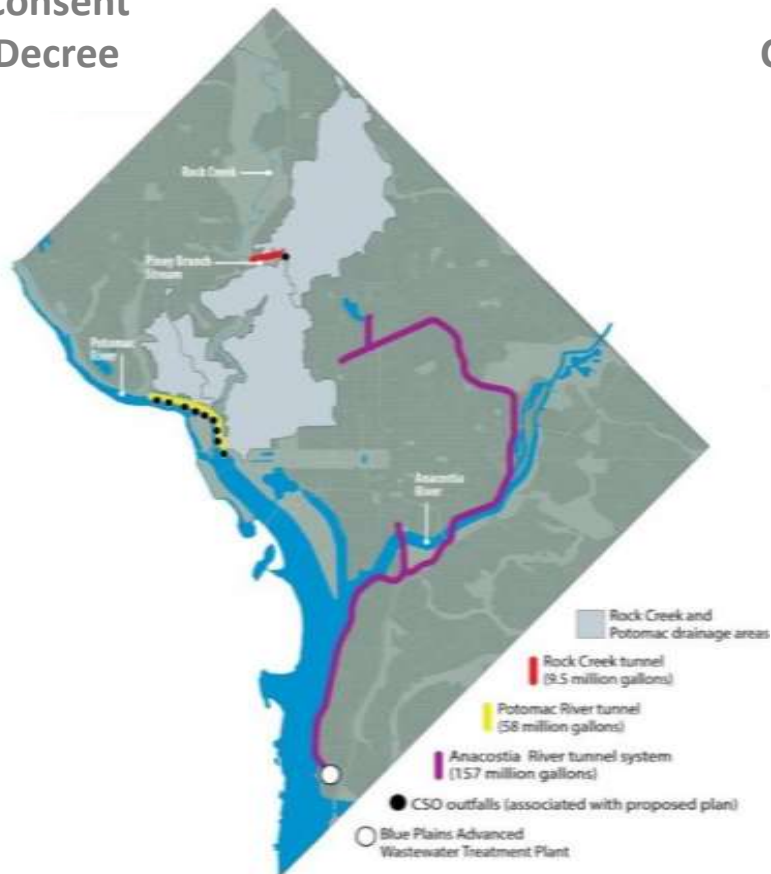
Agenda

- Overview
- Progress Summary
- Spending Status
- Schedule Status

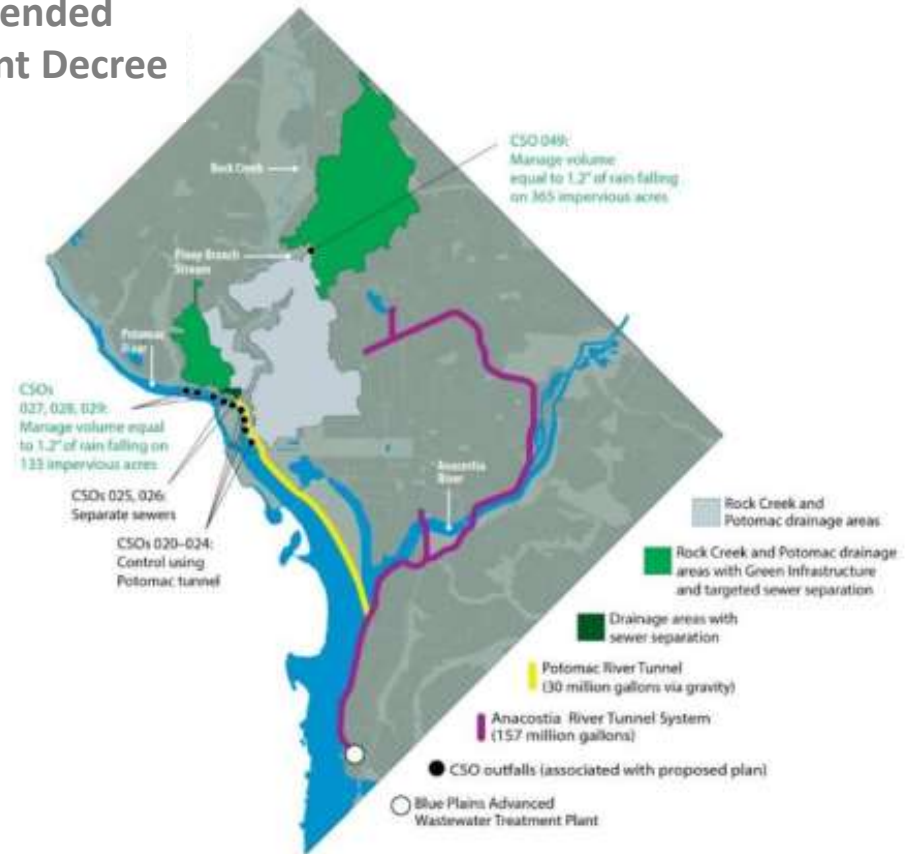


Amended Consent Decree (Jan 14, 2016)

Consent Decree



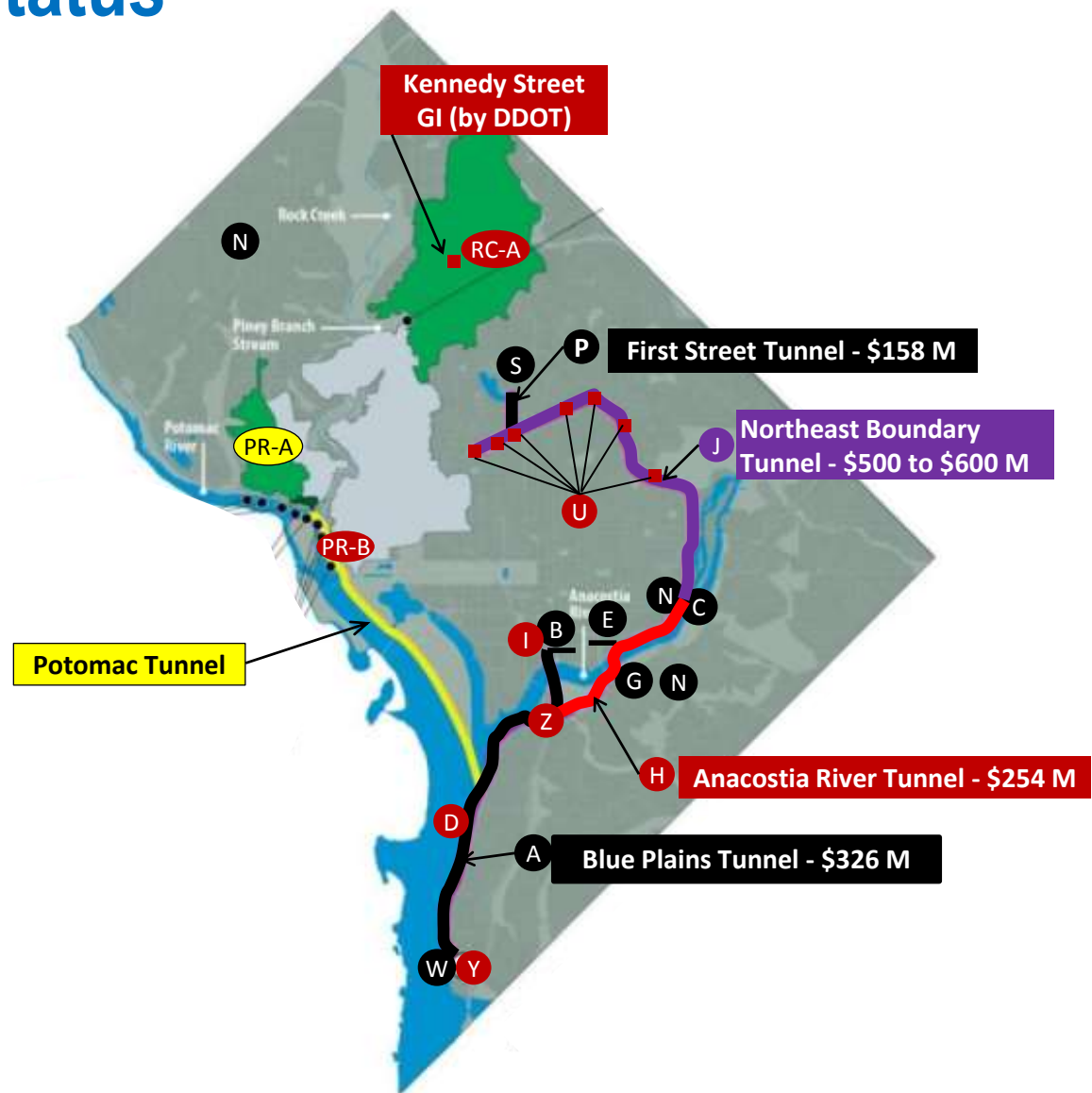
Amended Consent Decree



- Gave us an additional 5 years
- Deferred \$400 M± in spending for Potomac Tunnel

Clean Rivers Project Status

Division	Name
Completed Projects █	
W	Blue Plains Tunnel Site Prep
A	Blue Plains Tunnel
C	CSO 019 Overflow and Diversions
B	Tingey Street Diversions
E	M Street Diversion Sewer
G	CSO 007 Diversion Facilities
N	Low Impact Dev @ DC Water Facilities
P	First Street Tunnel
S	Irving Street Green Infrastructure
Projects in Construction █	
H	Anacostia River Tunnel
D	JBAB Overflow & Diversion Facilities
I	Main Pumping Station Diversions
U	Northeast Boundary Utility Relocations
Z	Poplar Point Pump. Sta. & MOS Diversion
Y	Blue Plains Tunnel Dewatering Pumping Station and Enhanced Clarification Facility (Managed by DETS)
PR-B	CSO 021 Diversions at Kennedy Center
RC-A	Rock Creek GI Project A
--	Kennedy Street GI (by DDOT)
Projects in Procurement █	
J	Northeast Boundary Tunnel
Projects in Planning or Design █	
PR-A	Potomac River GI Project A
--	Potomac Tunnel EIS



Blue Plains Tunnel Wins ENR Best National Project for Water / Environmental

Judges Pick Winners for ENR's Best of the Best Projects Competition

Competition spotlights the pinnacle of project achievement across the U.S.



Janice L. Tuchman
Editor-in-Chief
Engineering News-Record
tuchmanj@enr.com



January 30, 2017

Carlton Ray
DC Water
5000 Overlook Avenue, SW
Washington DC 20032

Dear Carlton Ray,

Congratulations! *Engineering News-Record* is pleased to recognize your project, Blue Plains Tunnel, as 2016's Best of the Best from across the U.S. in the Water/Environment category. The competition honors construction and design excellence of projects completed in the past year.





PROGRESS SUMMARY



APPENDIX – MAJOR ACCOMPLISHMENTS FY 2016 QUARTER 4 UPDATE



Division H – Anacostia River Tunnel

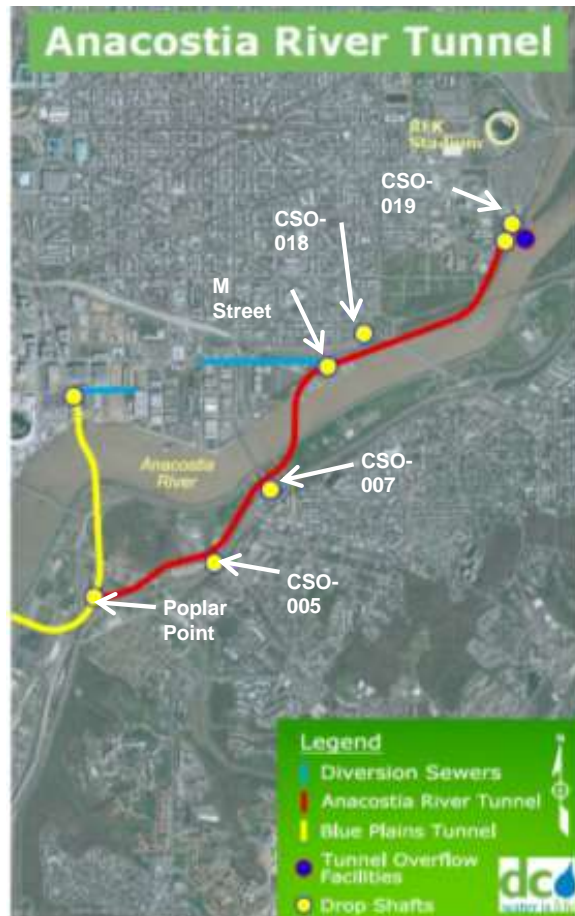
Progress at-a-Glance



Key Map

Design-Build: Impregilo Healy Parsons Joint Venture
Contract Price: \$253.9M Percent Complete: 74.3%

Financials as of December 25, 2016



CSO 019-CSA ISCT/NEBTS/Approach Channel

- Placed concrete for the first lift of the ISCT Liner Lift #1 on December 13, 2016.
 - Continued demolishing the NEBTS roof
 - Installing sheet piles for the approach channel
- \$ 25.86M completed to-date
\$ 10.17M remaining



CSO 018-CSA Approach Channel/NSS/Adit

- Placed concrete for the base slab for the approach channel on December 1, 2016.
 - Excavating for OCVF NSS SOE.
 - Drilled adit pre-support holes in the shaft
- \$ 5.11M completed to-date
\$ 8.65M remaining



M Street CSA Approach Channel/ Shaft

- Excavating approach channel
 - Placed concrete for the base de-aeration slab on November 30, 2016.
- \$ 8.75M completed to-date
\$ 2.05M remain



Anacostia River Tunnel Drive

- Hole Through at PPJS 11/5/16
 - Continued stripping utilities and TBM demobilization.
- \$ 32.07M ART Tunnel to-date
\$ 0.39M ART Tunnel remaining
\$ 18.40M Segment Fab/Del. payment to-date
\$ 0.00M Segments remaining



CSO 007-CSA Shaft/NSS/Adit

- Excavating for NSS SOE.
 - Placed concrete for the Surge Riser Lift #2 on December 14, 2016.
- \$ 2.66M completed to-date
\$ 2.60M remaining



CSO 005-CSA Shaft/NSS/Adit

- IHPJV installed and placed PVC drop pipe on November 29, 2016.
 - Placed concrete for Surge Riser Lift #3 on December 13, 2016.
 - Excavating for NSS SOE.
- \$ 3.26M completed to-date
\$ 2.93M remaining



Poplar Point (PPJS) Shaft

- Completed site mob and prepared shaft for TBM arrival
 - Cutter head was removed from the shaft on January 5, 2017.
- \$ 0.21M completed to-date
\$ 1.65M remaining



Div D – JBAB Overflow and Diversion Structures



Design-Build: Corman Construction
Contract Price: \$40M - Percent Complete: 44%
As of January 1, 2017

JBAB Diversion Structure is designed to capture flow from the Potomac Outfall Sewers (POS) to convey it to the Blue Plains via BPT. JBAB Overflow Structure will allow overflow to the Anacostia when BPT is at capacity.

- Diversion Structure concrete is approx. 45% complete
- Approach Channel concrete is approx. 75% complete
- Overflow Structure concrete is approx. 33% complete
- Ventilation Facility concrete is approx. 61% complete

Overflow Structure



Div Z - Poplar Point Pumping Station Replacement and Main Outfall Sewers Diversion



Key Map

Contractor: EE Cruz
Contract Price: \$53.4M - Percent Complete 44%
As of January 1, 2017

The Poplar Point Pumping Station serves the sewer system on the east side of the Anacostia. It lifts sewage from the Anacostia Main Interceptor (AMI) up into the outfall sewers for conveyance to Blue Plains.

- Pump Station concrete is approx. 75% complete
- Discharge Connection Chamber concrete is approx. 90% complete
- Main Outfall Sewer concrete is approx. 25% complete
- Completed 72% of the Water Line Relocation at Anacostia Main Interceptor Diversion Chamber (AMI-DC)
- Installed 15% of Ductile Iron Force Main for Pumping Station



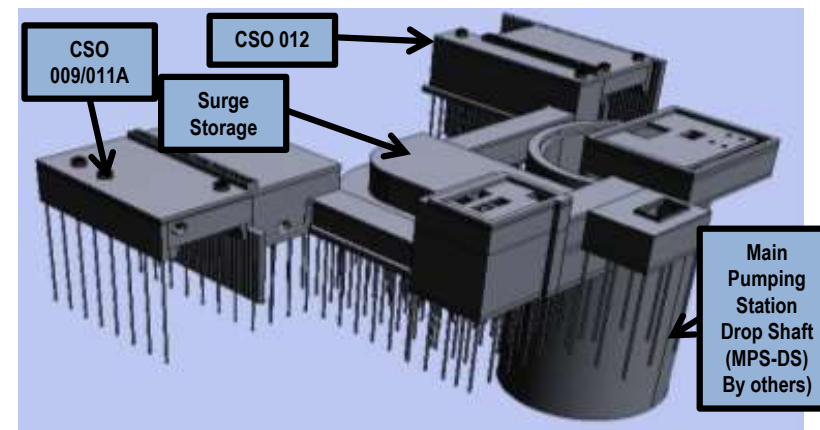
Div I – Main Pumping Station (MPS) Diversions



Design-Build: Corman Construction
Contract Price: \$53M - Percent Complete: 57%
As of January 1, 2017

MPS Diversions intercept flows from Tiber Creek Sewer, Canal Street Sewer and New Jersey Ave Trunk Sewer and redirects them to BPT during wet weather.

- Completed 65% of CSO 009/011 Diversion Chamber
- Completed 68% of CSO 012 Diversion Chamber
- Completed 74% of Surge Tank / Junction Chamber
- Completed 32% of Venting Facility
- Completed 24% of Channel from CSO 009 to CSO 012



Mayor's Task Force Report on the Prevention of Flooding in Bloomingdale and LeDroit Park



Mayor's Task Force report delivered in December 2012

Over 25 Recommendations



Project Complete

Procurement

1. SHORT-TERM (COMPLETED)

- Installation of storm drains and a five-foot-wide storm sewer
- Backwater valve and rain barrel program

2. MEDIUM-TERM (COMPLETED)

IRVING STREET GREEN INFRASTRUCTURE PROJECT

- Construction of bioretention facilities
- 0.4 million gallons

MCMILLAN STORMWATER STORAGE PROJECT

- Repurpose Sand Filtration cells as stormwater storage
- In-line sewer storage
- 3.6 million gallons

FIRST STREET TUNNEL PROJECT

- Construction of a new tunnel
- Construction of diversion facilities to divert flows to tunnel
- 9 million gallons

3. LONG-TERM (2023)

NORTHEAST BOUNDARY TUNNEL PROJECT

- A large, deep sewer tunnel that will increase the capacity of the sewer system and control CSO discharges
- Completion in 2023

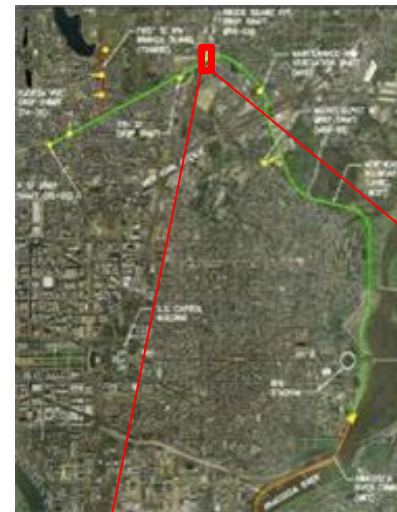


Div U: NEBT Utility Relocations

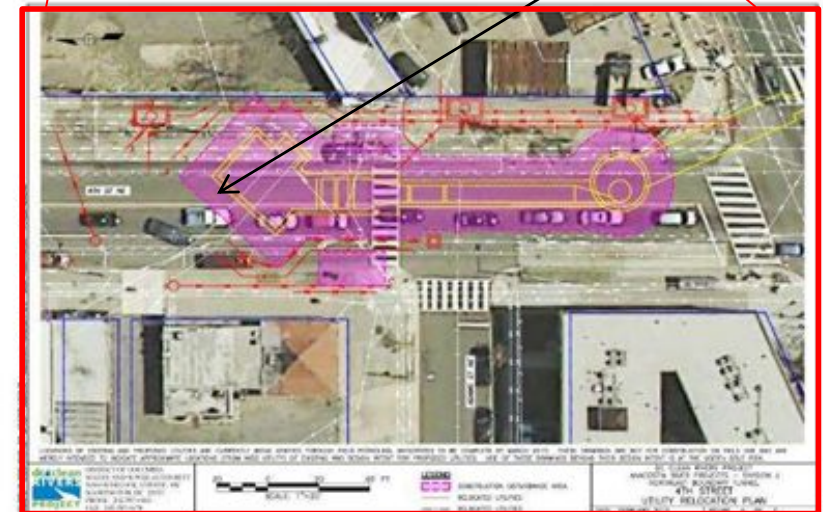


Contractor: Fort Myer Construction
Contract Price: \$16.99M Percent Complete: 13%
Financials as of January 1, 2017

- Purpose: Clear surface work sites to make way for NEBT Tunnel Contractor
- Completed 43% of R Street Water Main Relocations
- Completed 30% of R Street Sewer Relocations
- Completed 90% of 4th Street Water Main Relocations
- Completed 79% of 4th Street Sewer Relocations
- Completed 35% of Mt. Olivet Drop Shaft Water Main Relocations



Zone to be cleared of utilities

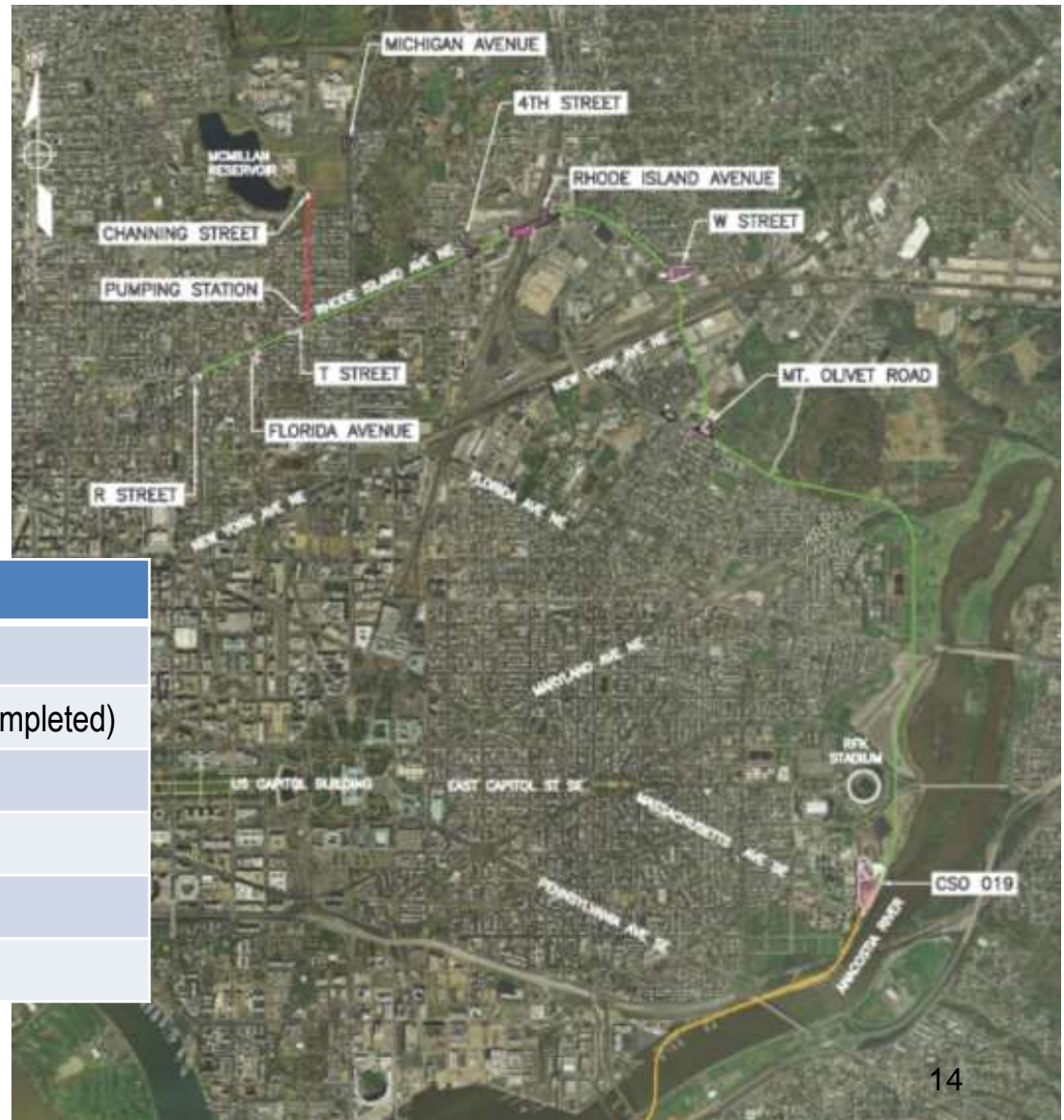


Example: 4th & Rhode Island Ave NE 13

Division J – Northeast Boundary Tunnel



- 23 foot diameter tunnel
- 60 to 140 feet deep
- 27,000 feet long
- 7 shafts and 5 diversion chambers, stormwater inlets
- Estimated construction value: \$500 – \$600 million



Milestone	Date
Issue RFP Documents	June 1, 2016 (Completed)
Collaboration	June 2016 – January 2017 (Completed)
Technical Evaluation	March 2017 – May 2017
Award	July 6, 2017
NTP	September 18, 2017
Construction Complete	August 2023

Div PR-B – CSO 021 Diversion Facilities (Kennedy Center)



Key Map

Design-Builder: Davis Construction
Contract Price: \$33.95M - Percent Complete: 25%
As of January 1, 2017

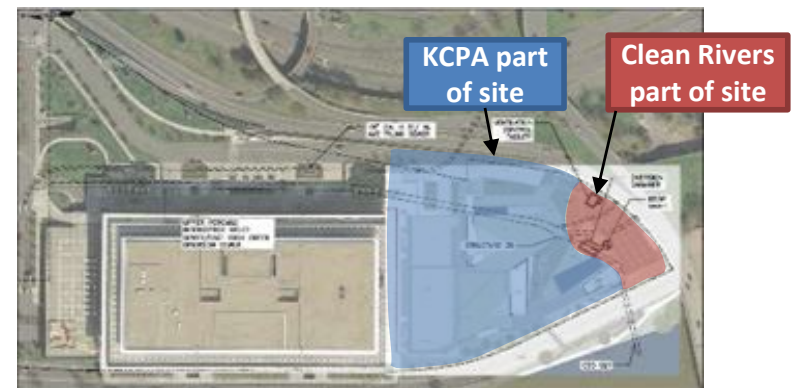
Clean Rivers - CSO 021 Diversion

Facilities intercept flows from the CSO 021 and redirects them to future Potomac River Tunnel during wet weather

- Completed installation of 95% of Secant Piles
- Completed 36" Storm Drain Relocation
- Completed Jet Grouting in the Drop Shaft Area
- Started Maintenance of Flow activity

Kennedy Center for the Performing Arts (KCPA) Expansion

Rehearsal space, parking garage, pavilions, reflecting pool and other enhancements constructed by KCPA



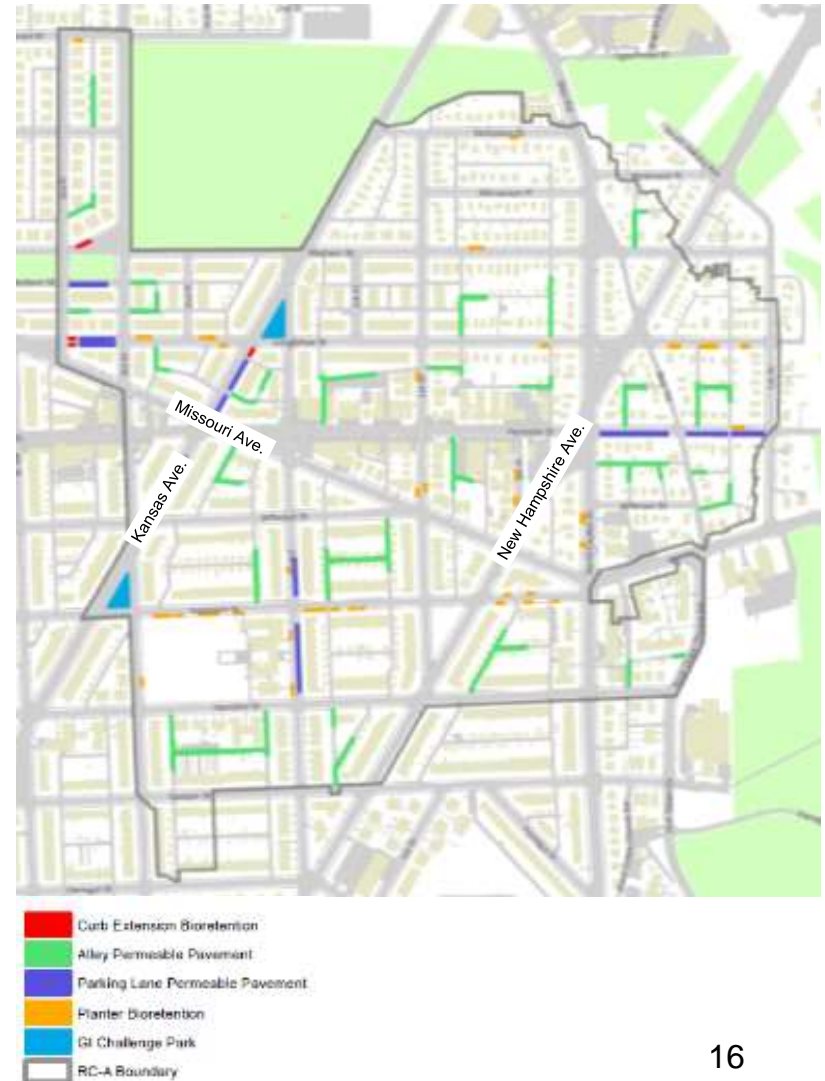
Division RC-A: Rock Creek GI Project A



Project Schedule:

Item	Status
Request For Proposal (RFP) Development	Complete
Procurement	Complete
Design-Build Notice to Proceed	Complete - February 2017 (CD deadline Mar 30, 2017)
Place in Operation	CD Deadline Mar 30, 2019

Project Boundary:

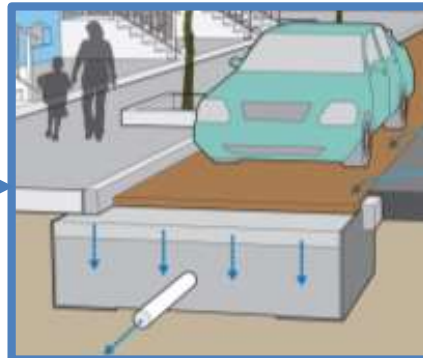


Division PR-A: Potomac River Project A

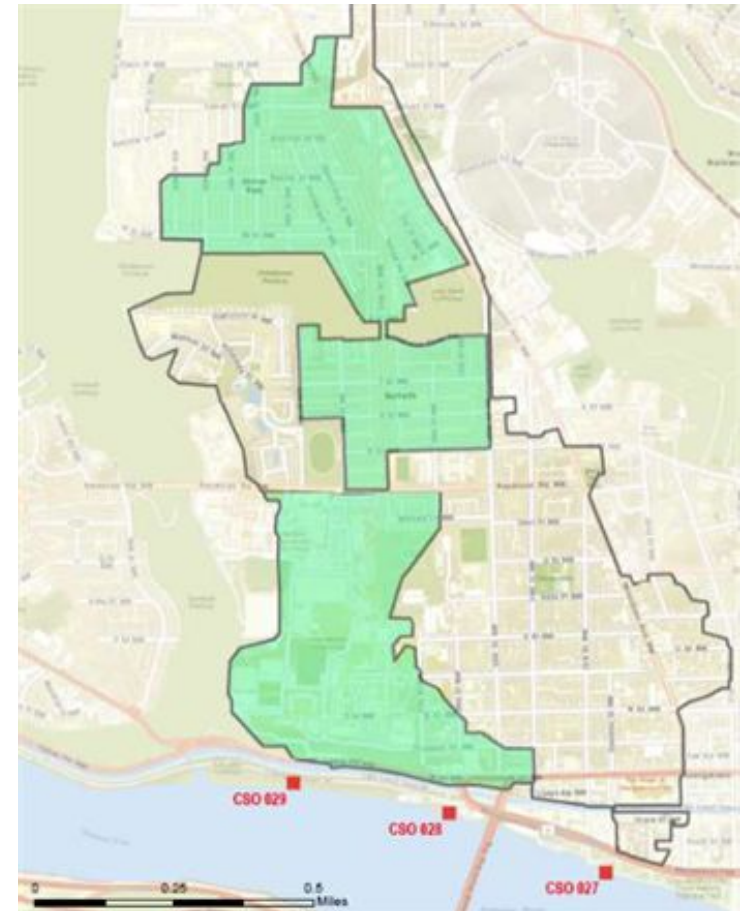


- **RFP Development Underway, includes:**

- Planter Bioretention
- Curb Extension Bioretention
- Alley Permeable Pavement
- Parking Lane Permeable Pavement



Project Boundary:



Kennedy Street GI Challenge Streetscape Project (DDOT Project)



- **Kennedy Street Green Infrastructure Streetscape Project**
 - Being constructed with DDOT's Kennedy Street Improvements Project
 - Groundbreaking held on October 21, 2016



Groundbreaking – October 21, 2016



DDOT – Kennedy Street NW Improvement
(Georgia Avenue – New Hampshire Avenue NW)

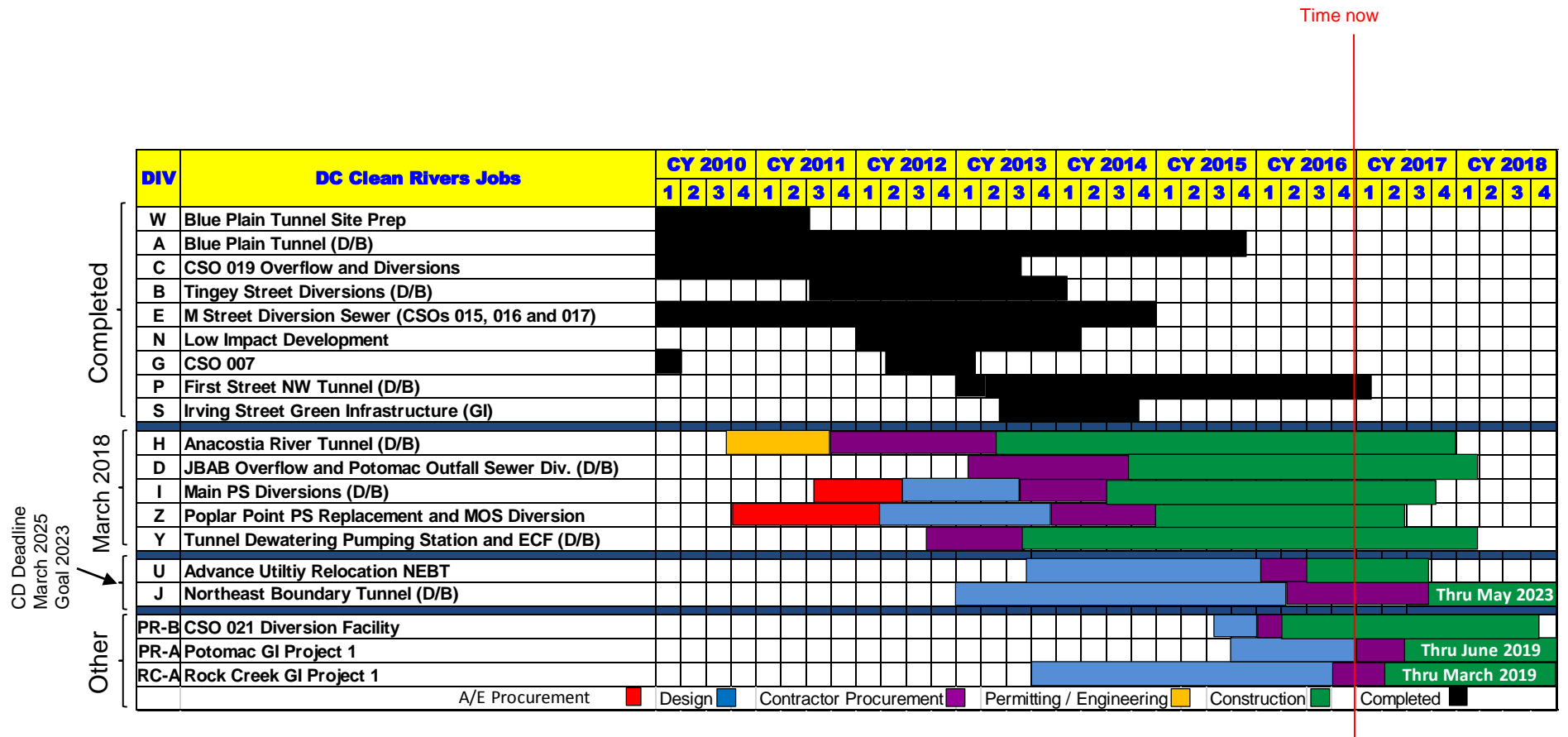
GI Challenge Streetscape
(100 Block Kennedy Street NW)

Green Jobs MOA: GI Certification Program

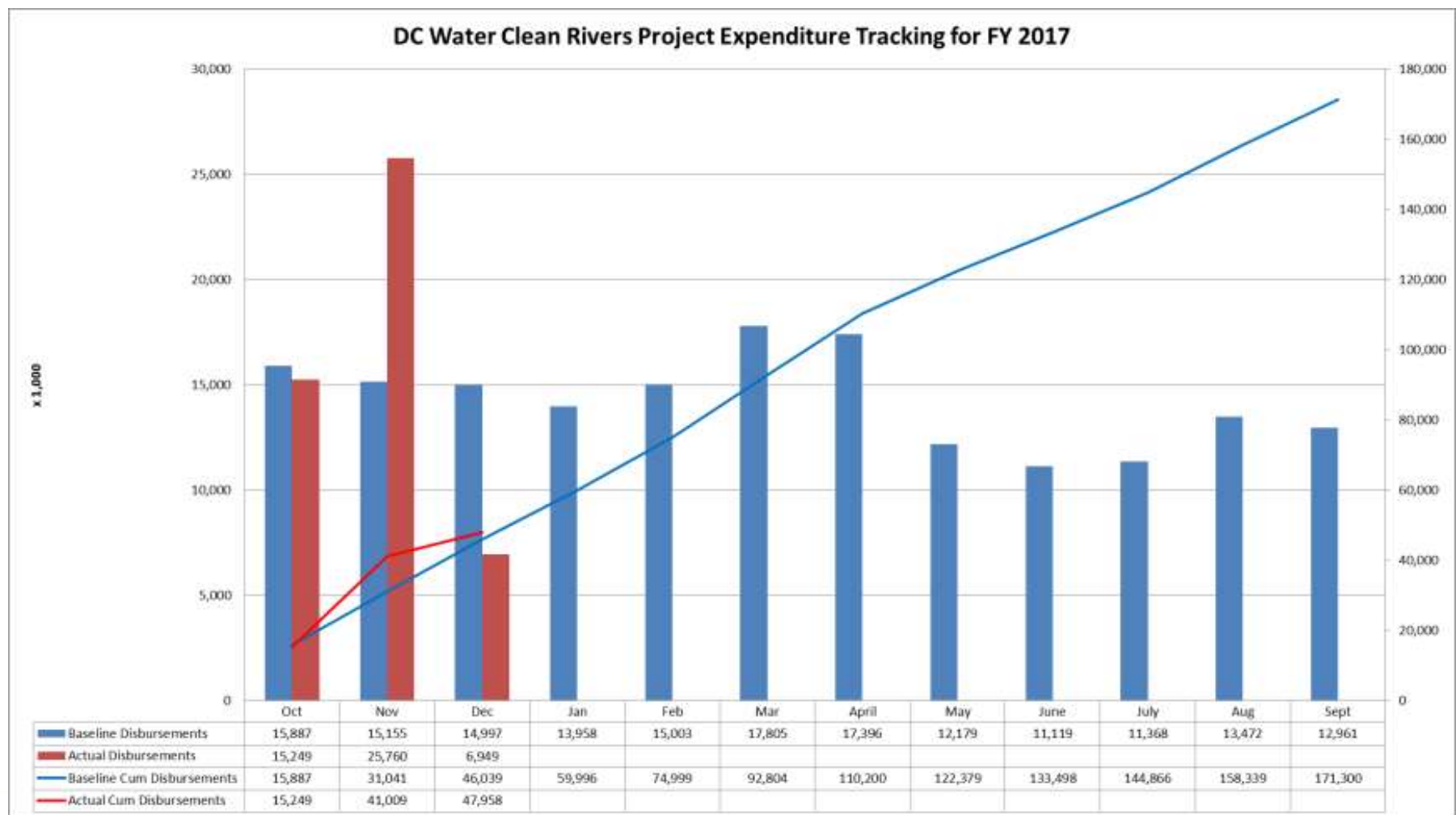
- **Status:**
 - Training:
 - DC training completed in late 2016 with 2 cohorts led by:
 - University of the District of Columbia
 - Washington Parks and People
 - Exam:
 - First National GI Certification Program (NGICP) exam held December 13, 2016
 - First certifications awarded January 26, 2017
 - 62 certified nationally, 8 certified in DC
 - Second NGICP exam to be held in June 2017
 - 14 partner jurisdictions formalized to date (commitments totaling \$700K)
 - Website live: www.ngicp.org
 - Governing Body, Strategic Advisory Group, and Technical Advisory Group meeting regularly



DC Clean Rivers Schedule



FY2017 Spending Status



- Fiscal Year 2017 spending for first quarter is on track.

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

ACTION REQUESTED

**CONSTRUCTION CONTRACT CHANGE ORDER:
Enhanced Nitrogen Removal Facilities Second Contract
(Joint Use)**

Approval to execute Change Order No. 66 for \$1,040,000. The modification exceeds the General Manager's approval authority.

CONTRACTOR/SUB/VENDOR INFORMATION

PRIME:	SUBS:	PARTICIPATION:
Ulliman Schutte Construction, LLC 7615 Standish Place Rockville, MD 20855	Monumental Concrete Supply Clinton, MD MBE	11.0%
	Hi-Mark Construction Group Inc. Washington, DC MBE	7.0%
	Elite Hauling Clinton, MD WBE	2.0%

DESCRIPTION AND PURPOSE

Original Contract Value:	\$ 97,118,000.00
Value of this Change Order:	\$ 1,040,000.00
Cumulative CO Value, including this CO:	\$ 11,033,936.00
Current Contract Value, including this CO:	\$108,151,936.00
Original Contract Time:	1440 Days (3 Years, 11 Months)
Time extension, this CO:	426 Days
Total CO contract time extension:	809 Days (2 Years, 2 Months)
Contract Start Date (NTP):	04-04-2011
Anticipated Contract Completion Date:	05-31-2017
Cumulative CO % of Original Contract:	11.4%
Contract completion %:	99.5%

Purpose of the Contract:

To build a pump station, buildings and process facilities for Enhanced Nitrogen Removal facilities.

Contract Scope:

- Demolition of Lime Building
- Nitrification reactors effluent tunnel
- Pump station and channels
- Process facilities

Previous Change Order Scope:

- One hundred and eight (108) compensable calendar day time extension to contract final completion due to delays incurred during modification to the Denitrification Return Sludge Gallery Make-up Air Power and Controls.

Current Change Order Scope:

- Settlement for the Request for Equitable Adjustment resulting from differing site conditions encountered during construction of the riser shaft.

PROCUREMENT INFORMATION

Contract Type:	Fixed Price	Award Based On:	Lowest responsive, responsible bidder.
Commodity:	Construction	Contract Number:	100020
Contractor Market:	Open Market		

BUDGET INFORMATION

Funding:	Capital	Department:	Wastewater Engineering
Service Area:	Wastewater Treatment	Department Head:	Diala Dandach
Project:	E9		

USER SHARE INFORMATION

User	Share %	Dollar Amount
District of Columbia	41.22%	\$ 428,688.00
Washington Suburban Sanitary Commission	45.84%	\$ 476,736.00
Fairfax County	4.56%	\$ 47,424.00
Loudoun County & Potomac Interceptor	8.38%	\$ 87,152.00
Total Estimated Dollar Amount	100.00%	\$1,040,000.00

 2-9-17
 Mark Kim Date
 Chief Financial Officer

 2/9/17
 Dan Bae Date
 Director of Procurement

 2-8-17
 Leonard R. Benson Date
 Chief Engineer

 George S. Hawkins Date
 General Manager

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

ACTION REQUESTED

**GOODS AND SERVICES CONTRACT OPTION YEAR
Electrical Power Distribution Equipment Service
(Joint Use)**

Approval to exercise option year four (4) for electrical power distribution equipment service contract in the amount of \$2,490,000.00

CONTRACTOR/SUB/VENDOR INFORMATION

PRIME: M.C. Dean Inc. 22461 Shaw Road Dulles, VA 20166	SUBS: N/A	PARTICIPATION: N/A
--	---------------------	------------------------------

DESCRIPTION AND PURPOSE

Original Contract Value:	\$2,490,000.00
Original Contract Dates:	03-26-2013 - 03-25-2014
No. of Option Years in Contract:	4
Option Year 1 Value:	\$2,490,000.00
Option Year 1 Dates:	03-26-2014 - 03-25-2015
Option Year 2 Value:	\$2,960,000.00
Option Year 2 Dates:	03-26-2015 - 03-25-2016
Option Year 3 Value:	\$2,527,000.00
Option Year 3 Dates:	03-26-2016 - 03-25-2017
Option Year 4 Value:	\$2,490,000.00
Option Year 4 Dates:	03-26-2017 - 03-25-2018

Purpose of the Contract:

DC Water's Department of Maintenance Services (DMS) and Department of Distribution & Conveyance Systems (DDCS) have a continuing need for annual maintenance of high and low voltage switchgear throughout DC Water facilities.

Switchgear is the combination of electrical disconnect switches, fuses or circuit breakers used to control, protect and isolate electrical equipment. Switchgear is used both to de-energize equipment to allow work to be done and to clear faults downstream.

Contract Scope:

To provide up to thirteen (13) experienced power distribution test technicians and one (1) supervisor, along with replacement parts for repair, calibration and annual maintenance of high and low voltage switchgear equipment and other associated devices. Two (2) of the test technicians provided shall be capable of making modifications to the switchgear prints using CAD technology at various DC Water facilities. These modified prints provide maintenance specifications for high and low voltage switchgear to ensure reliable electrical power distribution for the overall operations.

Spending Previous Year:

Cumulative Contract Value:	03-26-2013 to 03-25-2017: \$10,467,000.00
Cumulative Contract Spending:	03-26-2013 to 01-30-2017: \$9,130,113.51

Contractor's Past Performance:

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

No LBE/LSBE participation.

PROCUREMENT INFORMATION

Contract Type:	Fixed Price	Award Based On:	Best Value
Commodity:	Services	Contract Number:	WAS-12-029-AA-JR
Contractor Market:	Open Market with Preference Points		

BUDGET INFORMATION

Funding:	Operating	Department:	DMS
Service Area:	Blue Plains	Department Head:	Anthony Mack

ESTIMATED USER SHARE INFORMATION

User	Share %	Dollar Amount
District of Columbia	41.92%	\$838,400.00
Washington Suburban Sanitary Commission	43.33%	\$866,600.00
Fairfax County	9.81%	\$196,200.00
Loudoun Water	4.29%	\$85,800.00
Other (PI)	0.65%	\$13,000.00
TOTAL ESTIMATED DOLLAR AMOUNT	100.00%	\$2,000,000.00

BUDGET INFORMATION


Funding:	Operating	Department:	DDCS
Service Area:	Other	Department Head:	Charles Sweeney

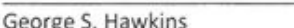
ESTIMATED USER SHARE INFORMATION

User	Share %	Dollar Amount
District of Columbia	83.65%	\$409,885.00
Washington Suburban Sanitary Commission	12.07%	\$59,143.00
Fairfax County	2.84%	\$13,916.00
Loudoun Water	1.25%	\$6,125.
Other (PI)	0.19%	\$931.00
TOTAL ESTIMATED DOLLAR AMOUNT	100.00%	\$490,000.00

 12/7/17
 Akile Tesfaye
 Assistant General Manager,
 Blue Plains
 Date

 2/9/17
 Mark Kim
 Chief Financial Officer
 Date

 2/7/17
 Charles Kiely
 Assistant General Manager,
 Customer Care & Operations
 Date

 _____
 George S. Hawkins
 General Manager
 Date

 2/8/17
 Dan Bao
 Director of Procurement
 Date

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

ACTION REQUESTED

CONSTRUCTION CONTRACT:

**"O" Street Pumping Station Odor Control System
(Non-Joint Use)**

Approval to execute a construction contract for \$11,033,997.00

CONTRACTOR/SUB/VENDOR INFORMATION

PRIME: Skanska USA Building Inc. 700 King Farm Boulevard Suite 200 Rockville, MD 20850	SUBS: <u>MBE/WBE Planned Goals:</u> <div style="text-align: right;"> MBE \$4,008,745 WBE \$ 661,586 </div> *See Attachment A for list of line item participation goals.	PARTICIPATION: <div style="text-align: right;"> 36.3% 6.0% </div>
--	--	--

* Final sub-contracts for work to be undertaken are still being negotiated by Contractor. However, they have identified categories where MBE and WBE firms will be selected to perform the work. As contractor is still in final negotiations with sub-contractors, the specific names of firms selected have not been finalized. Skanska has committed to meet or exceed the above stated goals for MBE and WBE.

DESCRIPTION AND PURPOSE

Contract Value, Not-To-Exceed:	\$11,033,997.00
Contract Time:	381 Days (1 Year, 16 Days)
Anticipated Contract Start Date (NTP):	3/15/2017
Anticipated Contract Completion Date:	3/31/2018
Bid Opening Date:	1/13/2017

Other firms submitting proposals/ qualification statements:

American Contracting & Environmental Services
Norair Engineering
Skanska**
W.M Schlosser

**Asterisk indicates short listed firm.

Purpose of the Contract:

To provide code required ventilation rates in the various areas of the O Street Pumping Station and provide upgraded odor control and electrical support for the new and future equipment.

Contract Scope:

- Provide upgrades to supply air for the Screen Room, Scrubber Room, Sanitary Wet Well and Stormwater Wet Well.
- Install an upgraded odor control system including instrumentation and control for the Screen Room, Scrubber Room, Sanitary Wet Well and Stormwater Wet Well.
- Install new 480 volt motor control center for the new and future equipment

PROCUREMENT INFORMATION

Contract Type:	Fixed Price	Award Based On:	Lowest responsive, responsible bidder
Commodity:	Construction	Contract Number:	160170
Contractor Market:	Open Market		

BUDGET INFORMATION


Funding:	Capital	Department:	Engineering and Technical Services
Service Area:	Sewer	Department Head:	Liliana Maldonado
Project:	FQ		

ESTIMATED USER SHARE INFORMATION

User	Share %	Dollar Amount
District of Columbia	100.00%	\$11,033,977.00
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%	\$11,033,997.00

 / 2/9/17
 Mark Kim
 Chief Financial Officer
 Date

 / 2/9/17
 Dan Bae
 Director of Procurement
 Date

 / 2.8.17
 Leonard R. Benson
 Chief Engineer
 Date

_____/_____
 George S. Hawkins
 General Manager
 Date

Attachment A

SKANSKA

February 6, 2017

**DC Water Odor Control- Projected
MBE/WBE Subcontracting Plan**

Bid Package Number	Description	From Current Bidder					Total Anticipated				
		Best Value	MBE % (32% Goal)	MBE \$	WBE % (6% Goal)	WBE \$	Best Value	MBE % (32% Goal)	MBE \$	WBE % (6% Goal)	WBE \$
02A	Demolition	\$ 29,900	100.00%	\$ 29,900	0.00%	\$ -	\$ 29,900	100.00%	\$ 29,900	0.00%	\$ -
03A	Concrete	\$ 67,067	0.00%	\$ -	0.00%	\$ -	\$ 67,067	100.00%	\$ 67,067	0.00%	\$ -
05A	Steel	\$ 644,267	22.00%	\$ 141,739	0.00%	\$ -	\$ 644,267	22.00%	\$ 141,739	0.00%	\$ -
08A	Doors and Frames	\$ 48,521	0.00%	\$ -	6.00%	\$ 2,911	\$ 48,521	60.00%	\$ 29,113	6.00%	\$ 2,911
23A	Mechanical	\$ 6,076,360	32.00%	\$ 1,944,435	6.00%	\$ 364,582	\$ 6,076,360	36.50%	\$ 2,217,871	7.50%	\$ 455,727
26A	Electrical	\$ 2,219,500	32.00%	\$ 710,240	6.00%	\$ 133,170	\$ 2,219,500	36.50%	\$ 810,118	7.50%	\$ 166,463
32A	Fencing	\$ 18,000	100.00%	\$ 18,000	0.00%	\$ -	\$ 18,000	100.00%	\$ 18,000	0.00%	\$ -
	Skanska Costs	\$ 608,082	0.00%	\$ -	0.00%	\$ -	\$ 608,082	36.00%	\$ 218,910	6.00%	\$ 36,485
	Allowances By DC Water	\$ 814,000	0.00%	\$ -	0.00%	\$ -	\$ 814,000	36.00%	\$ 293,040	0.00%	\$ -
	Construction Contingencies	\$ 508,300	0.00%	\$ -	0.00%	\$ -	\$ 508,300	36.00%	\$ 182,988	0.00%	\$ -
	TOTAL CONSTRUCTION COST	\$ 11,033,997	25.78%	\$ 2,844,314	4.54%	\$ 500,663	\$ 11,033,997	36.33%	\$ 4,008,745	6.00%	\$ 661,586

District of Columbia Water and Sewer Authority

Capital Improvement Program Report



**FY-2017 1st Quarter
October 1st through December 31st, 2016**

**Board of Directors
Environmental Quality and Operations Committee**

**George S. Hawkins, General Manager
Leonard R. Benson, Chief Engineer**

February 2017

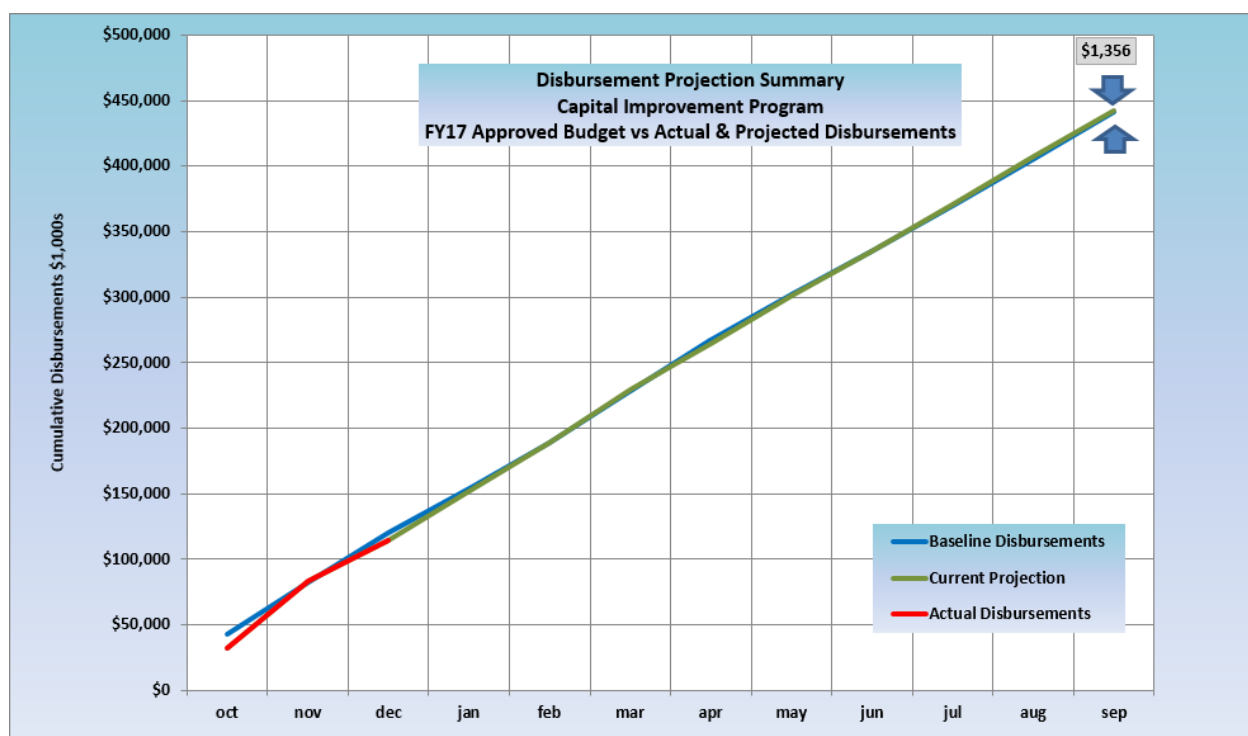


Capital Improvement Program Report 1st Quarter FY2017

CIP Disbursement Performance

Current projected program disbursements through the end of the fiscal year compared with the approved FY17 baseline are shown in the chart below:

Disbursement Summary



Current projected fiscal year 2017 CIP disbursements are \$442,510,000 through the end of December 2016, which is slightly (0.3%) above the baseline disbursement projection of \$441,154,000.

Current disbursement projections within the service areas are as follows:

Non Process Facilities

Baseline Disbursements \$34,150,000

Projected Disbursements \$33,202,000 (\$0.9M below baseline projection)

There are no significant project variances.



Capital Improvement Program Report 1st Quarter FY2017

Wastewater Treatment Service Area

Baseline Disbursements \$123,789,000

Projected Disbursements \$117,524,000 (\$6.3M below baseline projection)

Significant project variances are listed below:

- *Enhanced Nitrogen Removal Facilities Program Area – (\$3.7M below baseline)*
 - The disbursements for project EE - Filtrate Treatment Facilities are projected to be \$4.4M below the baseline largely due to greater than anticipated payments that occurred at the end of FY16 after the FY17 disbursement baseline was established.
- *Liquid Processing Program Area - (\$2.1M below baseline)*
 - The projected disbursements for project BV – Raw Wastewater Pump Station No. 2 Upgrades are \$1.1M below baseline partly due to the baseline cost projection not fully taking into account the longer than typical shop drawing submittals period required for the complex mechanical and electrical switchgear upgrades, and partly due to slower than anticipated shop drawing submittal progress by the contractor. The construction is still anticipated to be complete on time.

CSO Service Area

Baseline Disbursements \$184,387,000

Projected Disbursements \$200,148,000 (\$15.8M above baseline projection)

Significant project variances are listed below:

- *DC Clean Rivers Program Area – (\$10.1M above baseline)*
 - The projected disbursements for project CY - Anacostia Long Term Control Plan are \$12.2M above baseline largely due to a ramp up in construction activity leading to successfully meeting the Consent Decree date of March 23rd 2018.

Stormwater Service Area

Baseline Disbursements \$1,706,000

Projected Disbursements \$1,299,000 (\$0.4M below baseline projection)

There are no significant project variances for this service area.

Sanitary Sewer Service Area

Baseline Disbursements \$38,302,000

Projected Disbursements \$34,728,000 (\$3.6M below baseline projection)

There are no significant project variances for this service area:

- There are no significant project variances in the Sewer Service Area, however; the Sanitary Ongoing Sewer Projects and Sanitary Interceptor/Trunk Force Main Programs - had several



Capital Improvement Program Report 1st Quarter FY2017

small individual project variances, which collectively contributed to the projected \$3.6M below baseline disbursements for the Service Area.

Water Service Area

Baseline Disbursements \$58,819,000

Projected Disbursements \$55,608,000 (\$3.2M below baseline projection)

Significant project variances are listed below:

- *Water Distribution Program Area (\$3.0M below baseline)*
 - The projected disbursements for project O3 – Small Diameter Water Main Rehabilitation (SDWMR) 11 are \$2.8M lower than baseline due to later than anticipated issuance of Notice to Proceed (NTP) for SDWMR construction contract 11b, and the later than estimated construction NTP for SDWMR 11c – Cleaning and Lining, which was pushed back due to an extended permitting process.



Capital Improvement Program Report 1st Quarter FY2017

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

All priority 1 projects are on schedule and within budget.

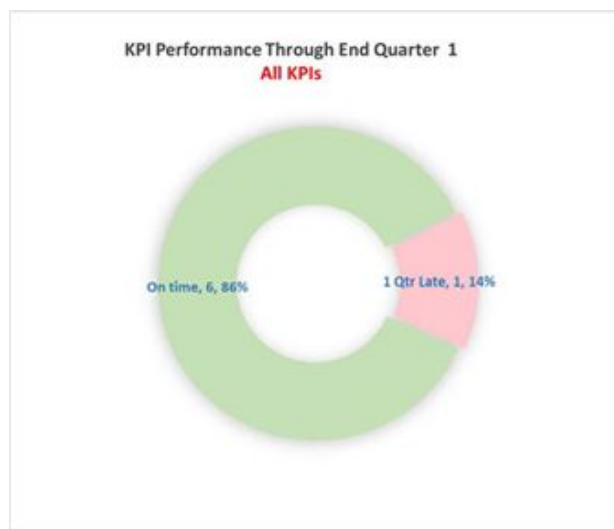
Large Contract Actions Anticipated – 6 Month Look-Ahead

Project	Name	Contract Type	Joint Use?	Cost Range	Committee	BOD
O3	Small Diameter Watermain Rehab 11c	Construction	No	\$5M - \$10M	EQ&Ops Apr	May
DE	Small Diameter Watermain Rehab 12a	Construction	No	\$5M - \$10M	EQ&Ops Feb	Mar



Capital Improvement Program Report 1st Quarter FY2017

Schedule - Key Performance Indicators, Capital Improvement Program



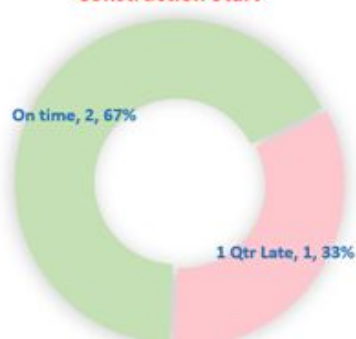
For the 1st Quarter, eight of the Key Performance Indicators (KPIs) were achieved on time; one of the remaining planned KPIs was not achieved, as follows:

1. The construction Notice to Proceed for Small Diameter Water Main Contract 11b, was delayed by 1 month for administrative reasons.

KPI Performance Through End Quarter 1
Design Start



KPI Performance Through End Quarter 1
Construction Start



KPI Performance Through End Quarter 1
Construction Substantial Completion





Capital Improvement Program Report 1st Quarter FY2017

FY2017 - KPI Report

DS	Design Start	Planned		On time	
CS	Construction Start	Early		1 Quarter Late	
CSC	Construction Substantial Completion			> 1 Quarter Late	
CO/PC	Consent Oder/Permit Compliance				

				QUARTER				To Date
Qtr.	Project	Job Name	KPI Name	1	2	3	4	
1	G800	Small Local Sewer Rehab 2	CSC					On time
1	CY25	Div P - First Street NW Branch Tunnel (Bloomingdale)	CSC					On time
1	G101	Rehab of Sewers in Georgetown	CS					On time
1	O302	Small Dia Watermain Repl 11b	CS					1 Qtr Late
1	IL10	Creekbed Sewer Rehabilitation Rock Creek Oregon Avenue	CS					On time
1	J001	B Street/New Jersey Ave. Trunk Sewer Rehab	DS					On time
1	F102	Small Diameter Water Main Repl 13B	DS					On time



Capital Improvement Program Report 1st Quarter FY2017

FY2017 - KPI Report

DS	Design Start	Planned		On time	
CS	Construction Start	Early		1 Quarter Late	
CSC	Construction Substantial Completion			> 1 Quarter Late	
CO/PC	Consent Oder/Permit Compliance				

Qtr.	Project	Job Name	KPI Name	QUARTER				To Date
				1	2	3	4	
2	GA01	Small Local Sewer Rehab 4	CSC					On time
2	XA10	Biosolids Combined Heat and Power (CHP)	CSC					On time
2	DE01	Small Diameter Water Main Repl 12A	CS					On time
2	DZ02	Div RC-A - Rock Creek Project 1 (GI)	CS					On time
2	F201	Small Diameter Water Main Repl 14A	DS					On time
2	FA03	Soldiers Home Reservoir Upgrade	DS					On time
2	NG04	Stormwater Pumping Stations Rehabilitation - Non-Grant Activities	DS					On time



Capital Improvement Program Report 1st Quarter FY2017

FY2017 - KPI Report

DS	Design Start	Planned		On time	
CS	Construction Start	Early		1 Quarter Late	
CSC	Construction Substantial Completion			> 1 Quarter Late	
CO/PC	Consent Oder/Permit Compliance				

Qtr.	Project	Job Name	KPI Name	QUARTER				To Date
				1	2	3	4	
3	BI01	Enhanced Nitrogen Removal (ENR) North	CSC					On time
3	G601	Sanitary Sewer Rehab and Repair Phase 2 (SUB)	CSC					On time
3	O301	Small Dia Watermain Repl 11a	CSC					On time
3	Q302	Pope Branch Stream Restoration and Sewer Replacement	CSC					On time
3	I802	Large Valve Replacements 12	CSC					On time
3	FQ01	FQ01 Main & O St. PS Intermediate Upgrades	CS					On time
3	CZ07	Potomac Project 1 (GI)	CS					On time
3	IM09	Joyce Road/Morrow Dr Sewer Rehabilitation	DS					On time



Capital Improvement Program Report 1st Quarter FY2017

FY2017 - KPI Report

DS	Design Start	Planned		On time	
CS	Construction Start	Early		1 Quarter Late	
CSC	Construction Substantial Completion			> 1 Quarter Late	
CO/PC	Consent Oder/Permit Compliance				

Qtr.	Project	Job Name	KPI Name	QUARTER				To Date
				1	2	3	4	
4	EE01	Biosolids Filtrate Treatment Facilities	CSC					On time
4	G100	Lining & Repair of Local Sewers	CSC					On time
4	I801	Large Valve Replacements 11R	CSC					On time
4	CY14	Div J - Northeast Boundary Tunnel	CS					On time
4	DE02	Small Diameter Water Main Repl 12B	CS					On time
4	LZ03	PI Phase 1 Pipe Rehab at Clara Barton Pkwy	DS					On time
4	F202	Small Diameter Water Main Repl 14B	DS					On time

Status Report of Public Fire Hydrants for DC Water Services Committee - February 1, 2017

	November Cmte. Report (Nov 07, 2016)	December Cmte. Report (Dec 05, 2016)	January Cmte. Report (Jan 05, 2017)	February Cmte. Report (Feb 01, 2017)
Public Fire Hydrants:	9,516	9,514	9,551	9,554
In Service:	9,462	9,457	9,496	9,492
Marked Out-of-Service (OOS)	54	57	55	62
OOS - defective requiring repair/replacement	34	41	40	44
% OOS requiring repair or replacement (DC Water goal is 1% or less OOS)	0.36%	0.43%	0.42%	0.46%
OOS - due to inaccessibility or temp construction work	20	16	15	18

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

Breakdown of Public Fire Hydrants Out-of-Service (OOS) as of February 1, 2017 62

Breakdown of Defective	0-7 Days	8-14 Days	15-30 Days	31-60 Days	61-90 Days	91-120 Days	> 120 Days	Total
Hydrant Needs Repair/Investigation	1	0	0	0	0	0	3	4
Needs Valve Investigation for Low Flow/Pressure or Shut Test for Replacement	0	0	0	2	1	1	1	5
Needs Replacement	3	2	2	3	7	3	15	35

Defective 44 ←

Breakdown of Others	0-7 Days	8-14 Days	15-30 Days	31-60 Days	61-90 Days	91-120 Days	> 120 Days	Total
Temporarily OOS as part of operations such as a main repair	3	4	0	1	1	0	1	10
Construction* - OOS	0	0	0	0	0	1	4	5
Obstructed Hydrant – OOS hydrant due to operation impeded by an obstruction.	0	0	0	0	0	0	3	3

Others 18 ←

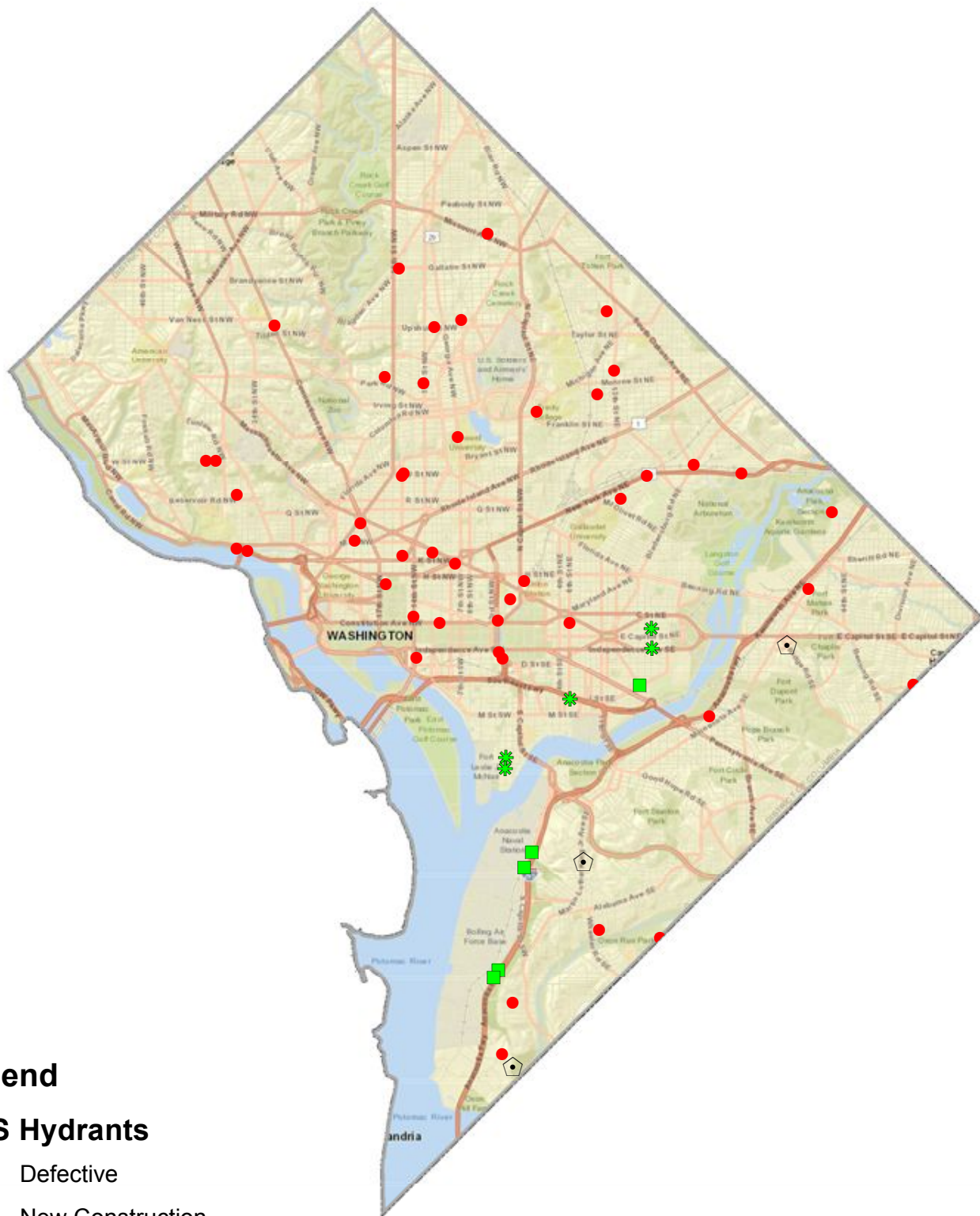
*Fire hydrants not accessible due to construction activities. Also includes new hydrants which have not yet been commissioned or old hydrants which will be abandoned as part of ongoing construction projects.

Status of Private Fire Hydrants-Based on FEMS Inspection Reporting

Private Hydrants:	1,319
• In Service:	1,190
• Out-of-Service (OOS):	129

Map of Public Out-of-Service Hydrants

February 9, 2017



Legend

OOS Hydrants

- Defective
- ✱ New Construction
- ⬠ Obstructed
- Temporary