



**DISTRICT OF COLUMBIA WATER AND SEWER AUTHORITY  
227<sup>th</sup> MEETING OF THE BOARD OF DIRECTORS  
Thursday, January 5, 2017  
9:30 a.m.  
5000 Overlook Avenue, SW  
Room 407**

- I. Call to Order (Chairman Matthew Brown)**
- II. Roll Call (Linda Manley, Board Secretary)**
- III. Approval of December 1, 2016 Minutes**
- IV. Chairman's Overview**
- V. Committee Reports**
  1. Finance and Budget Committee (**Timothy Firestine**)
  2. Environmental Quality and Sewerage Services Committee (**Chairman Brown**)
  3. Water Quality and Water Services Committee (**Rachna Butani**)
- VI. CEO/General Manager's Report (CEO/General Manager George Hawkins)**
- VII. Summary of Contracts (FYI)**
- VIII. Consent Items (Joint Use)**
  1. Approval to Execute Final Form of Certain Documents, Authorizing the Sale and Setting Terms and Details of the Series 2017A and Series 2017B Bonds – Resolution No. 17-00 (Recommended by Finance and Budget Committee 12/14/16)
  2. Approval to Execute Option Year One of Contract No. 15-PR-WWT-53B, PVS Technology – Resolution No. 17-01 (Recommended by the Environmental Quality and Sewerage Services Committee 12/15/16)
  3. Approval to Execute Option Year One of Contract No. 15-PR-WWT-53A, Carter & Carter Enterprises Inc.– Resolution No. 17-02 (Recommended by Environmental Quality and Sewerage Services Committee 12/15/16)
  4. Approval to Execute Contract No. DCFA #458-WSA, World Water Works, Inc. – Resolution No. 17-03 (Recommended by Environmental Quality and Sewerage Services Committee 12/15/16)
  5. Approval to Execute Supplemental Agreement No. 04 of Contract No. DCFA #429-WSA, Arcadis District of Columbia, PC - Resolution No. 17-04 (Recommended by Environmental Quality and Sewerage Services Committee 12/15/16)

6. Approval to Execute Supplemental Agreement No. 05 of Contract No. DCGA #441, PEER Consultants, PC - Resolution No. 17-05 (Recommended by Environmental Quality and Sewerage Services Committee 12/15/16)

**IX. Consent Items (Non-Joint Use)**

1. Approval to Execute Contract No. 150210, Anchor Construction Corporation – Resolution No. 17-06 (Recommended by Environmental Quality and Sewerage Services Committee 12/15/16)
2. Approval to Execute Contract No. DCFA #478-WSA, Rummel, Klepper & Kahl, LLP – Resolution No. 17- 07 (Recommended by Environmental Quality and Sewerage Services Committee 12/15/16)
3. Approval to Execute Additional Funding to Option Year Four of Contract No. WAS-11-057-AA-SH, Business Promotion Consultants, Inc.(Neptune Meter Parts) – Resolution No. 17-08 (Recommended by Water Quality and Water Services Committee 12/15/16)
4. Approval to Execute Option Year Four of Contract No. 12-070-AA-SC, Business Promotion Consultants, Inc. (Meter Lids) – Resolution No. 17-09 (Recommended by Water Quality and Water Services Committee 12/15/16)
5. Approval to Execute Contract No. 17-PR-CCO-07, Mueller Systems– Resolution No, 17-10 (Recommended by Water Quality and Water Services Committee 12/15/16)

**X. Executive Session** – To discuss legal, confidential and privileged matters pursuant to Section 2-575(b) of the D.C. Official Code<sup>1</sup>

**XI. Adjournment**

<sup>1</sup> The DC Water Board of Directors may go into executive session at this meeting pursuant to the District of Columbia Open Meetings Act of 2010, if such action is approved by a majority vote of the Board members who constitute a quorum to discuss: 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.

**Upcoming Committee Meetings (5000 Overlook Avenue SW (Blue Plains – 4<sup>th</sup> Floor)**

- Governance Committee - Wednesday, January 11<sup>th</sup> @ 9:00 a.m.
- Human Resource and Labor Relations Committee/with Union Presidents– Wednesday, January 11<sup>th</sup> @ 11:00 a.m.
- Environmental Quality and Sewerage Services Committee – Thursday, January 19<sup>th</sup> @ 9:30 a.m.
- Water Quality and Water Services Committee – Thursday, January 19<sup>th</sup> @ 11:00 a.m.
- Audit Committee – Thursday, January 25<sup>th</sup> at 9:30 a.m.



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

**226<sup>th</sup> MEETING  
THURSDAY, DECEMBER 1, 2016**

**MINUTES**

**Present Directors**

Matthew T. Brown, Chairman, District of Columbia  
Nicholas A. Majett, Prince George's County  
Ellen Boardman, District of Columbia  
Bonnie Kirkland, Alternate for Timothy Firestine, Montgomery County  
Sarah Motsch, Alternate for James Patteson, Fairfax County  
Bradley Frome, Prince George's County  
Howard Gibbs, Alternate for Vacant Principal, District of Columbia  
Rachna Butani Bhatt, District of Columbia  
Elisabeth Feldt, Montgomery County  
Obiora "Bo" Menkiti, District of Columbia

**Present Alternate Director**

Rev. Kendrick Curry, District of Columbia  
David Lake, Montgomery County

**DC Water Staff**

George S. Hawkins, CEO/General Manager  
Henderson J. Brown, General Counsel  
John Madrid, Controller  
Linda R. Manley, Board Secretary

Chairman Brown called the 226<sup>th</sup> Meeting of the District of Columbia Water and Sewer Authority's Board of Directors to order at 9:35 a.m. Ms. Manley called the roll and a quorum was established.

CFO Mark Kim provided four possible assistance options to explore. The first was to provide discounted rates or credits for certain customers which is done now for some rates, charges, and fees. Mr. Kim reported that the third option was to establish a new assistance fund modeled after CAP. The fourth option was to develop alternative rate structures. The Committee also discussed the affordability solution of broadening the customer base to include reevaluating exempt customers and bringing tourists and suburban jurisdictions into the ratepayer's system.

Ms. Butani Bhatt reported that Board members asked about the cost of the study. Mr. Kim stated that the last cost of service study for restructuring of water and sewer rates, fees, and charges cost approximately \$300,000 and took over 18 months to complete. The Committee discussed limiting the size of the study.

**Joint Meeting of the D.C. Retail Water and Sewer Rates Committee and Finance and Budget Committee**

Reported by: Rachna Butani Bhatt

Ms. Butani Bhatt stated that the Committees met jointly and received from CFO Kim the final recommendation on the CRIAC Restructuring Study. He presented information on the Capital Assistance Program and noted that since 2009 the number of CAP customers had declined steadily by nearly 30 percent, which mirrors DOEE's LIHEAP Program. CFO Kim explained that when a credit is introduced, a revenue shortfall results. The Authority is using the projected FY 2016 surplus to cover the loss of revenue for the FY 2017 and 2018 CAP CRIAC. Ms. Butani Bhatt indicated that after 2018 other customers' rates would have to be increased to cover the shortfall.

Management recommended a 50 percent credit based on the Committee meetings and D.C. Water's analysis of the economics. After debating the live date, it was agreed that the Committees would recommend to the full Board approval of the 50 percent credit and an effective date of May 2017.

Ms. Butani Bhatt stated that CFO Kim made a presentation on the Proposed FY 2018 Budget which included a Proposed Operating Budget of \$561.9 million, a Proposed Ten-Year Capital Improvement Plan and disbursements of \$3.75 billion, a Lifetime Project Budget of \$10.9 billion, and proposed revenues of \$617.2 million. Mr. Kim's staff members Annie Fulton George, Manager of Capital Budget, and Lola Oyeyemi, Manager of Operating Budgets, provided overviews of their respective budgets and information on the materialized savings resulting from the performance of the Digester Project and the impact of the consent decree modification on affordability.

The Committees agreed on recommending for Board approval the action items: the FY 2018 Proposed Budget and expansion of the CAP to provide 50 percent credits for eligible customers that are billed monthly for CRIAC. For more details on the issues discussed in the joint meeting, please refer to the minutes and meeting materials found on D.C. Water's website.

**Finance and Budget Committee**

Reported by: Matthew Brown, Board Chairman

Chairman Brown stated that the Committee meeting was very brief. It was mainly a report on the current year financials. He asked that they address it by exception and stated that questions would be directed to the staff. Chairman Brown reported that they of course

**Joint Meeting of the Water Quality and Water Services Committee and the Environmental Quality and Sewerage Services Committee**

Reported by: David Lake

Mr. Lake indicated that the Committees met jointly on November 17, 2016 to review the FY 2017 through FY 2025 Proposed Lifetime Capital Projects, and to discuss the ten-year Disbursement Plan. The details are available on the website in the minutes. Leonard Benson, Chief Engineer, reviewed the lifetime budgets, the disbursements, and major initiatives. He reported that there are projects in the plan that have been unfunded and they discussed how those projects were being covered. Mr. Lake stated that there were two action items recommended to the Board for approval. The Proposed Lifetime Capital Projects Budget for FY 2017 to 2026 is \$10.27 billion, \$27 million above the prior approved budget. Disbursements are a key part of the retail rate structure, so the Disbursement Plan is noteworthy. It is for \$3.75 billion, and the Lifetime budget is for \$10.9 billion.

Chairman Brown commended Mr. Benson, CFO Mark Kim, Ms. Maldonado, and the whole leadership team for balancing the needs of D.C. Water with the rates that the customers can pay.

**Water Quality and Water Services Committee**

Reported by: Rachna Butani Bhatt

Mr. Butani Bhatt indicated that the Committee met on November 17, 2016. Charles Kiely, Assistant General Manager for Customer Care and Operations, reported that coliform testing was at zero for October and November. He stated that this is excellent since they had expected a couple of positives in the fall because of the hot summer.

For Lead and Copper Rule Monitoring, Mr. Kiely stated that for the first time in ten years at the early date of November 17, they have received enough samples, 110, and that they are at the 90<sup>th</sup> percentile, with 3.4 parts per billion which is excellent.

David Walls, Manager of Distribution, updated on the 9,500 public fire hydrants and reported that 54 hydrants were out of service and 34 defective.

Ms. Butani Bhatt said that Craig Fricke, Manager of Enterprise Asset Management, presented information on the Asset Management Program's Kanew Project, a long-term strategic planning model for the renewal of water and sewer mains. It is a system-wide statistical model that predicts renewal needs and timing for different pipes. The model facilitated the development of an application, a risk tool, to determine the risk score for every water and sewer pipe in the D.C. water system. Mr. Fricke reported that Kanew was developed in cooperation with the Water Research Foundation. It uses an anticipated life expectancy, and age distribution of the pipes to calculate annual renewal needs. He stated that about 14 miles of sanitary sewer a year should be renewed. The target is to decrease it to about 8 miles a year over time, focusing mostly on the vitrified clay pipes. The median age of the pipes in the system will be reduced from 80 plus years to about 45 years. The residual life will be increased from just over 25 years to about 45 years. Mr. Fricke indicated that the focus now is to finalize the initial Asset Management Plan which documents all the work they have done to date and the tools utilized. It is expected that the bulk of their efforts should be substantially completed by March or April of 2017.

**General Manager's Report**

Reported by: George S. Hawkins, CEO/General Manager

Mr. Hawkins informed the Board about late-breaking news concerning an oil sheen discovered on the Potomac River which appeared to have originated at White's Ferry or Dickerson, Maryland. It was being investigated and he anticipated an update any time. Mr. Hawkins explained that this was a good collaborative effort between the Maryland, Virginia, the District of Columbia environmental agencies, and the Aqueduct, D.C. Water, Fairfax Water, and WSSC. He indicated that as usual, Mr. Kiely, Assistant General Manager for Customer Care and Operations, leads D.C. Water's team. EPA's top water monitoring system has been deployed at the Aqueduct's Dalecarlia and is testing the intake water and the treated water. D.C. Water will be notified of the issues that are discovered. Mr. Hawkins stated that the oil appears to be hydraulic or a lubricating oil. For an additional precaution, he indicated that the Upper Falls intake has been closed and they are using water from the Lower Falls intake. EPA has taken the lead in the regional response and D.C. Water leads the local response. He assured everyone that if there were serious concerns uncovered, they would be prepared to close both intakes and inform customers to take conservation measures since the water in storage would be used. They have already prepared the communication that will go out to the public if serious problems are uncovered.

Ms. Feldt thanked Mr. Hawkins for D.C. Water's efforts. She stated that Montgomery County and WSSC were obviously following the situation and they recognized that there was still a lot of work to be done to establish definitively the source of the oil.

Mr. Hawkins assured everyone that every agency that is relevant has mobilized, that inspectors are out on the scene, and that the work is being done. He stated that he was glad the Board Retreat would commence on Thursday evening and that they would at that time come back to the Board with a challenge or opportunity statement. One challenge is concerning sewer capital investment and others are capital and operational needs that all infrastructure agencies face. Different aspects of this will be discussed during the Retreat. At the Retreat Friday, the opportunities and options available will be covered and Mr. Hawkins noted that the Board will be informed of those that are in full implementation mode and about possible solutions. He informed them that for the first time on the agenda there will be a period of time when the Board can meet on its own, as requested at the last retreat.

The budget and financial plan was also mentioned by Mr. Hawkins. He stated that there are two pillars of the Enterprise that are relevant, the first being the people which they need to treat fairly by paying them well and giving them good benefits. The second pillar is to be careful and steward the revenue and ratepayers' funds that support the Enterprise. This is important to be mindful of in compensation negotiations and budget negotiations. The needs of the Enterprise always seem to be greater than the funding and needs are seem compelling.

The awards received by D.C. Water were mentioned by Mr. Hawkins and he indicated how proud he was about them all. He pointed to one other award from the Engaging Local Government Leaders organization which is about getting young and talented professionals to work in local government. They have created a whole network and created a national contest to identify the top five local government entities in their national review. He indicated that he was glad that D.C. Water came in fifth since it was the only non-city.

Mr. Hawkins stressed the good news concerning the Impervious Area Charge (IAC) and the fact that when it was started in 2009 D.C. Water had 372,946 ERUs and raised \$450,000 a month.



**DISTRICT OF COLUMBIA  
WATER AND SEWER AUTHORITY**

**Board of Directors**

**Finance and Budget Committee**

**Wednesday, December 14, 2016**

**11:30 a.m.**

**MEETING MINUTES**

**Committee Members (via conference call)**  
Timothy L. Firestine, Committee Chairperson  
Matthew Brown, District of Columbia  
Sara Motsch, Fairfax County

**DC Water Staff**  
Mark Kim, Chief Financial Officer  
George Hawkins, General Manager  
Linda Manley, Board Secretary

**Other Presenters and Guests**  
Ryan Callender, Bond Counsel, Squire Patton  
Boggs

**Call to Order**

Chairperson Timothy L. Firestine called the meeting to order at 11:33 am.

**November 2016 Financial Report**

Mr. Mark Kim, CFO, reported that DC Water's operating revenues and expenses are on track for the period to date. Total revenues are at \$111.5 million or 19 percent, operating expenditures at \$73.6 million or 14.4 percent and capital disbursements at \$92.4 million or 18.2 percent of budget in the respective categories.

He noted that the higher than budgeted year-to-date capital disbursements were for the Clean Rivers project, however it is anticipated that they will come back in line with the budget later in the fiscal year.

Mr. Kim apprised the committee that the financial audit is currently in progress and management expects an opinion from KPMG by December 20, 2016.

**FY 2017 Plan of Finance**

Mr. Kim reported that management is preparing for the upcoming bond offering of \$300 million with targeted sale date of late January/early February 2017. This bond deal will comprise of \$200 million in traditional debt and \$100 million in green bonds, to finance a portion of the Clean Rivers project. The committee members had a discussion and reviewed the financing terms and documentations, which include the Board Resolution, Preliminary Offering Statement, Twenty-Second Supplemental Indenture and the Bond Purchase Agreement.



**District of Columbia  
Water and Sewer Authority**

**Board of Directors**

**Environmental Quality and Sewerage  
Services Committee Meeting  
Thursday, December 15, 2016**

**9:30 a.m.**

**MEETING MINUTES**

**Committee Members**

Mathew T. Brown, Board Chairman  
Howard Gibbs  
Adam Ortiz

**DC Water Staff Present**

Biju George, Chief Operating Officer  
Len Benson, Chief Engineer  
Linda Manley, Secretary to the Board  
Henderson L. Brown, General Counsel

**I. Call to Order**

Mr. Brown called the meeting to order at 9:37 A.M.

**II. AWTP STATUS UPDATES**

**1. BPAWTP Performance**

Mr. Aklile Tesfaye, Assistant General Manager for Wastewater Treatment reported on the performance of the Blue Plains Advanced Wastewater Treatment Plant (AWTP) (by exception). Mr. Tesfaye stated that all performance parameters were excellent and all permit requirements were met.

The Committee inquired as to why Ammonia permit levels varied throughout the year. Mr. Tesfaye replied that permit limits reflect the varying impact of Ammonia Nitrogen on water quality through different season cycles (i.e., summer versus winter months). He noted, however, that the actual discharge limits were consistently and significantly below permit limits throughout the year.

**III. DC CLEAN RIVERS GREEN INFRASTRUCTURE CONTRACTS**

Mr. Carlton Ray, Director, DC Clean Rivers (DCCR) Project, gave an update on the Rock Creek Project A Design-Build and Construction Management Services (by exception). Mr. Ray asked if there were questions from the Committee on material outlined in the prepared presentation.

The Committee inquired as to how DC Water selected the specific location of the RC-A facilities. Mr. Ray responded by stating it is the desire of DC Water to minimize, to the extent possible, the



The Committee inquired if the requested modification will be the final modification and whether all the ongoing projects will be completed by June 2017. Mr. Benson responded in the affirmative.

**Action Item 5:** Request to execute a supplemental agreement to provide asset management, operations and engineering support to the Department of Wastewater Treatment.

The Committee inquired if this modification was partly the result of new assets being identified and added to DC Water's inventory. Mr. Benson responded in the affirmative. He stated that implementation of DC Water's Asset Management Plan (AMP) occurred after the original contract was awarded. The Committee also inquired if this work would be ongoing as more new assets are being identified and added to DC Water's inventory. Mr. Benson replied in the affirmative and added that the duration of this contract is until December 2019.

### **NON JOINT USE**

1. Contract No. 150210, Anchor Construction Corporation.
2. Contract No. DCFA #478-WSA, Rummel, Klepper & Kahn, LLP

Mr. Len Benson, Chief Engineer, presented Action Items 1 and 2.

**Action Item 1:** Request to execute a design-build contract to provide final design and construction of Division RC-A-Rock Creek Project A Green Infrastructure (GI) in support of the DC Clean Rivers Project. This work is required by a Consent Decree.

Mr. Benson stated the designation of Anchor as a Certified Business Enterprise (CBE) is missing from the fact sheet and the correction will be included in the final fact sheet.

The Committee inquired if the proceeds from the recent Bond sales were being used to finance this project and whether the performance of the project will be monitored to ensure the requirements stipulated in the finance agreements are met. Mr. Benson and Mr. Ray replied that both of the non-joint use projects being recommended for action are financed via the Bond sale and that their performance will be monitored to ensure compliance with the requirements.

The Committee also inquired if Anchor is a CBE and who, other than Anchor, will perform the additional 45% of the CBE work. Mr. Benson responded that Anchor is a CBE and that as a CBE, it will utilize best efforts to meet or exceed the CBE objectives for the project by involving other CBE firms or self-performing additional portions of the work as final construction needs are identified. The Committee inquired as to how Anchor, a construction firm, will be conducting a design-build project. Mr. Benson and Mr. Ray responded that Anchor has partnered with two design firms and will be utilizing them for the design work. The Committee also inquired if the monitoring of these projects for fulfillment of requirements set in the Bond sale finance agreements will be a separate task. Mr. Benson responded that it will be a smaller, separate project that will be authorized by the General Manager.

**Action Item 2:** Request to execute an architectural and engineering services contract to provide onsite construction management of Division RC-A – Rock Creek Project A (GI) and Division PR-A1 – Potomac River Project A1 (GI) DC Clean Rivers Project during construction contracts. This work is required by a Consent Decree.

The Committee recommended all action items to the full Board.



**DISTRICT OF COLUMBIA WATER AND SEWER AUTHORITY**

**BOARD OF DIRECTORS  
WATER QUALITY AND WATER SERVICES COMMITTEE**

**MEETING MINUTES  
THURSDAY, DECEMBER 17, 2016**

**Present Board Members**

(By Conference Telephone Call))

Rachna Butani Bhatt  
Howard Gibbs  
Board Chairman Matthew Brown  
Rev. Kendrick Curry

**Present D.C. Water Staff**

George Hawkins, General Manager  
Charles Kiely, Assistant General Manager  
for Customer Care and Operations  
Linda Manley, Board Secretary

**I. Call to Order**

Committee Chair Rachna Butani called the meeting to order.

**II. Water Quality Monitoring**

**A. Total Coliform Testing (TCR)**

Charles Kiely provided an update on the Total Coliform Testing monitoring for November resulted in two positives at a construction site. This is a non-issue for November since the upstream and downstream samples since they came back negative. Overall the water quality monitoring for total coliform is fine. He stated that they started out with a tough month in December because they had four hits out of the 115 samples. Two were at a primary site at a grocery store approved by EPA and the downstream sample was related. Mr. Kiely stated that the distribution system is fine and all the sample results have been negative after the first positive they had. There is no issue today but the water quality technicians are analyzing that area to determine how this primary site will be treated in the future. There is nothing that suggests there will be another problem in December. Problems of this type do happen but it is usually related to a faucet or something else in the site. Mr. Kiely stated that if they decide that they want to drop the site, they must make a request for EPA approval of a new site.

#### IV. Non-Joint Use Contracts

Ms. Butani Bhatt asked Mr. Kiely to brief the Committee on the contracts up for Board approval. Mr. Kiely stated that the first contract was for business promotion consultants related to the purchase of meter lids as part of the AMR Project. As part of the AMR technologies, the steel lids they use to use are being replaced because data cannot be transmitted through them. He reported that they use to use a composite concrete lid that was designed for the District. The contract is for the purchase of lids as part of the AMR Project. Chairman Brown asked for a justification of why they would not go out to bid this contract. Dan Bey, Procurement Department, stated that the vendor owns the mold for these lids, so it cannot be outsourced for competitive bidding. Mr. Gibbs asked about how much the lids cost. Mr. Kiely stated that they originally purchased over 100,000 concrete polymer lids as part of the original AMR project and they began to disintegrate after about three years. They received complaints about trips and falls. They are now targeting replacing 83,000 lids in 24 months and that is why the total aggregate sum is high. Mr. Kiely stated that they negotiated a 17 percent per unit reduction in cost.

Mr. Kiely stated that the second contract is to purchase 1 ½ and 2 inch meters under the AMR Replacement Project. D.C.'s standard design is a positive displacement (PD) meter. Most D.C. accounts have 1 inch and under meters, so they went out for a separate bid. The 1 ½ and 2 inch meters are in residential homes that have sprinkler systems or larger services. Not all manufacturers continue to manufacture PD meters that are 1 ½ and 2 inch.

Ms. Butani Bhatt asked if they usually place in the fact sheets what others bid for contracts. Mr. Bey said that it is usually included but they did not in this case. He stated that they can provide the information. Ms. Butani Bhatt said that she wanted to see this for all contracts and the other Committee members agreed. Mr. Kiely said that the information would be forwarded.

Rev. Kendrick asked that they also include the preference price reduction award which is a reduction of \$100,000 for the LSBE. Ms. Butani Bhatt stated that the actual amount is included when they are explaining why a certified business did not get the award. Rev. Kendrick indicated that the preference price reduction award would be helpful to know.

Mr. Kiely reported that the last fact sheet is with BPI and is related to parts. This contract is for the purchase price for parts for upgrading the six inch and larger meters. Because of the location, the meters are not easy to replace and often require bringing in the contractor for excavation, etc. Mr. Kiely stated that D. C. Water staff will gut the meters and then rebuild them. This contract will result in lower costs.

A Committee member requested that they provide the number of 1 ½ and 2 inch meters and 6 inch and larger meters. He wanted an idea of the value versus the number of units that need to be replaced. Mr. Kiely said that they would provide the counts.

Ms. Butani Bhatt asked for further questions or comments and there were none. The contracts were recommended for full Board approval. She then asked for a motion to go into Executive Session and it was so moved and seconded. Ms. Manley conducted a roll call vote and the motion was passed unanimously. The Committee went into Executive Session.

Upon reconvening the public meeting, Ms. Butani Bhatt adjourned the meeting.

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**Interpretation of Charts** ..... A

**Color Key**

<b>Red</b>	<b>Did not meet Target</b>
<b>Yellow</b>	<b>Missed Target but within acceptable range</b>
<b>Green</b>	<b>Met/Exceeded Target</b>
<b>Gray</b>	<b>Budget/Target Value</b>
<b>&lt;transparent&gt;</b>	<b>Green/Yellow/Red based on comparison</b>

## Message from the CEO/GM

property in joint ventures with other firms, developing Blue Drop to provide services to other utilities, and a host of exciting yet daunting potential international markets.

After a speedy lunch, the Board then hosted a first – a Board only meeting that lasted into the afternoon. I will be meeting with Chairman Brown and several Board members after the January Board meeting to discuss follow-up steps from the Retreat – which include issues pertaining to labor negotiations, affordability and oversight of the new revenue opportunities. In my view, this is precisely the outcome I hoped to gain from the Retreat – and hugely look forward to further engagement in the year ahead. I want to particularly thank Board Secretary Linda Manley for once again handling the logistics with her excellent assistant Alphonso Kilgore Stukes. Chief Operating Officer Biju George took the lead in developing the agenda with the Board Chair, ably assisted by Sarah Neiderer and Tera Fong. Most significantly, however, we are thankful for the time, wisdom and effort invested by our volunteer Board members. We honor and respect your commitment to this glorious enterprise.

### **Trump Transition**

One of the greatest accomplishments of human culture – the peaceful transfer of power within the most powerful country in the World – is obviously about to occur in Washington, DC. Along with the throngs that will arrive for the inauguration will come thousands of new government officials and appointees. In preparation for this change, the Trump Transition team has been asking for assistance from subject matter experts on issues of national concern. One area that was highlighted by both parties in the campaign is the need for infrastructure investment. The Trump Transition has highlighted infrastructure as one of its priorities, and highlighted water infrastructure as a need within that context. I have agreed to be part of a small group of experts advising the Trump Transition on how to develop a water infrastructure program. As I am writing this update, I have finished submitting proposals to structure and fund a national lead-in-water program; and to support a public-to-public platform to help improve the update of technology in the water sector I have been calling Blue Wave. I have also written a summary of a program I call LIWAP – or a low income assistance program for water utility bills based on the existing LIHEAP program for heating assistance. In all of these areas, my ideas are founded on the hard-won experience we have gained at DC Water and the ground-breaking efforts that we have developed in concert with the Board. I have set aside my personal misgivings about the electoral results to seek to help an Administration that will be the governing entity for our country for at least the next four years. I will report how these efforts unfold in future GM Reports.

### **Audit**

On December 20th, the Authority completed the independent audit of its FY16 financial statements and received an unmodified or "clean" audit opinion from KPMG. In addition, this is the first Audit with KPMG in which the Authority did not receive any findings in its Report on Internal Controls. Previously, the Authority had been cited by KPMG with 5 significant deficiencies in 2013; 3 significant deficiencies in 2014; and 1 significant deficiency in 2015.

Team FAB is very proud of its continuous improvement in strengthening internal controls and receiving no findings this year marks a significant accomplishment.

## Message from the CEO/GM

Project. Also, important information was shared pertaining to the Lead Service Replacement program, as part of this ongoing project.

- At his request, DC Water's outreach team welcomed incoming ANC 2E Commissioner Joseph Gibbons to Blue Plains to provide a brief discussion on the various ways in which DC Water with ANCs on our various construction projects, specifically those projects taking place in and immediately surrounding the Georgetown community.
- DC Water attended the November monthly meeting of ANC 5A to discuss events succeeding the 8-inch water main break which impacted homeowners within the 1200 block of Delafield Place, NE.
- As part of its Speakers Bureau, DC Water attended the monthly meeting of the Hillwood Condominium Association to provide educational materials and information on the following topics: Water Conservation; How to Spot Water Leaks Inside the Home.
- DC Water attended the Mayor's Annual Senior Holiday Celebration, providing its Mobile Water Conservation Unit and a host of educational materials and giveaways.
- In support of its local Small Diameter Water Main Replacement Project in the Bloomingdale neighborhood, DC Water hosted a public meeting to provide important information pertaining to its Lead Service Replacement program, as part of this project.

### *Drinking Water Marketing and Communications*

- External Affairs presented at ANC 2A's monthly meeting about lead in drinking water and minimizing lead exposure on 11/16.
- External Affairs coordinated emergency communications with DC Water's Office of Emergency Management, the Washington Aqueduct, and other regional utilities during the Potomac Spill Event in December.
- External Affairs coordinated with the MWCOG Community Engagement Campaign to run movie theater ads for the Protect Your Pipes campaign during the week of 11/25-12/1.

### *Customer Newsletter*

The December customer newsletter included a cover story on the new meter replacement program, a story on water main break season, a General Manager's message on giving to SPLASH, how to protect your pipes from the cold, the Let's talk About Water program hosted by OEA and an ad for the Pope Branch Park Clean-up event.

### *Tours*







- 25 Engineers from the Department of Defense
- 10 representatives from the DC sustainable Energy Utility
- 4 Municipal Analysts
- 5 DC Residents
- 20 students from Capitol Hill Day School
- 15 Policy Fellows from American Association for the Advancement of Science
- 35 representatives from the EPA (25 from the Office of Water)
- 18 USAID Engineers
- 10 representatives from WSSC
- 5 Municipal Analysts from T. Rowe Price

# ORGANIZATIONAL PERFORMANCE DASHBOARD (NOVEMBER, 2016)

## Financial Highlights

<b>Net Operating Cash</b> Actual <b>36590</b> Target <b>13776</b> ( \$ tho )	<b>Operating Revenues</b> Actual <b>111</b> Target <b>99</b> ( \$ mil )	<b>Operating Expenses</b> Actual <b>76</b> Target <b>89</b> ( \$ mil )	<b>Capital Disbursements</b> Actual <b>92</b> Target <b>83</b> ( \$ mil )
<b>Operating Cash Balance</b> Actual <b>154</b> Target <b>126</b> ( \$ mil )	<b>Delinquent Account Receivables</b> Actual <b>2</b> Target <b>3</b> ( % )	<b>Core Investments Yield</b> Actual <b>1.13</b> Target <b>1.1</b> ( % )	<b>Short Term Investment Yield</b> Actual <b>0.64</b> Target <b>0.37</b> ( % )


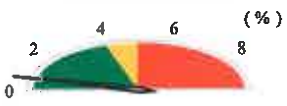
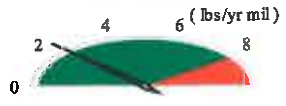

## Customer Care and Operations Highlights

<b>Call Center Performance</b>  Nov <b>71</b> 85 (% of calls rec)	<b>Command Center Performance</b>  Nov <b>94</b> 85 (% of calls rec)	<b>First Call Resolution</b>  Nov <b>83</b> 75 (% of calls rec)	<b>Emergency Response Time</b>  Nov <b>94</b> 90 (% of calls rec)
<b>Fire Hydrants out of Service</b>  Nov <b>41</b> ( count )	<b>Fire Hydrant Insp. and Maint.</b> <b>1149</b> ( count )	<b>Fire Hydrants Replaced</b>  Nov <b>12</b> ( YTD count )	<b>Permit Processing within SLA</b> <b>78</b> ( % )

## Low Income Assistance Program

<b>Splash Contributions</b> Actual <b>17</b> Target <b>13</b> ( \$ tho )	<b>Customer Assistance Program</b> Previous <b>1</b> Current <b>45</b> ( \$ tho )
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## Operational Highlights

<b>Lead Concentration</b> 0 25 50 75 ( ppb ) 	<b>Total Coliform Rule</b> 0 2 4 6 8 ( % ) 	<b>Biosolids Production</b> <b>450</b> ( wet tons )	<b>Total Nitrogen</b> 0 2 4 6 8 ( lbs/yr mil ) 
<b>Plant Effluent Flow</b> 0 250 500 750 ( gal mil ) 	<b>Excess Flow</b> <b>0</b> ( gal mil )	<b>Water Main Leaks</b> <b>62</b> ( count )	<b>Water Valve Leaks</b> <b>1</b> ( count )
<b>Non-Revenue Water</b> Sold <b>10</b> Purchased <b>14</b> ( CCF mil )	<b>Sewer Main Backups</b> <b>4</b> ( count )	<b>Sewer Lateral Backups</b> <b>201</b> ( count )	<b>Dry Weather CSO</b> <b>0</b> ( events )
<b>Recruitment Activity</b> Filled <b>14</b> Open <b>131</b> ( count )	<b>Electricity Usage</b> <b>15284</b> ( MWh )	<b>Employee Lost Time Accidents</b> <b>8</b> ( count )	<b>Vendor Payments</b> Actual <b>98</b> Target <b>97</b> ( % )



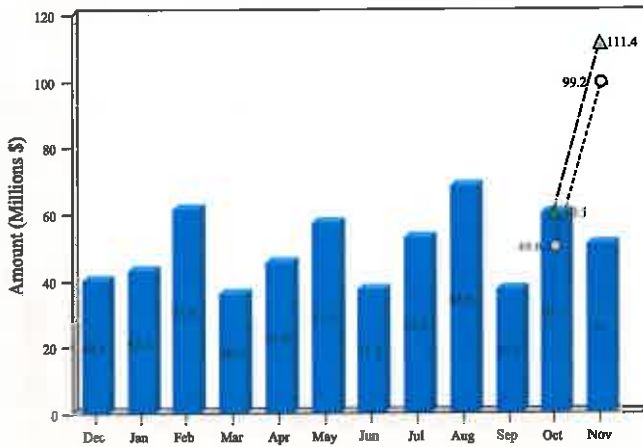
**FINANCIAL HIGHLIGHTS**

**REVENUES AND OPERATING EXPENSES**

**OPERATING REVENUES**

Monthly & Cumulative Revenue compared to YTD Budget

- Actual Monthly Revenue
- ▲ YTD Cumulative Revenue FY-2017
- YTD Cumulative Budget FY-2017

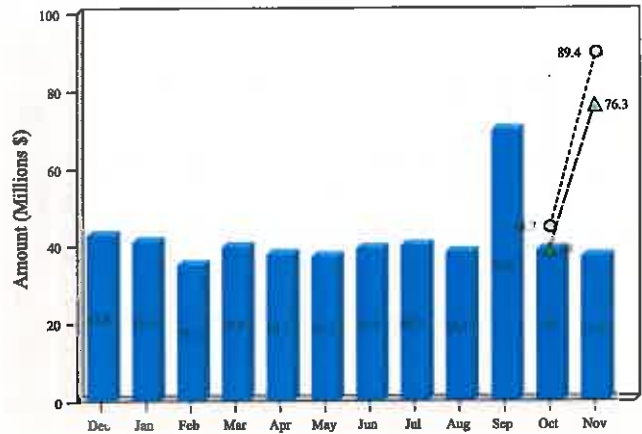


Revenue to date for November was above Budget by \$12 Million

**OPERATING EXPENSES**

Monthly & Cumulative Expenditure compared to YTD Budget

- Actual Monthly Expenses
- ▲ YTD Cumulative Expenditure FY-2017
- YTD Cumulative Budget FY-2017



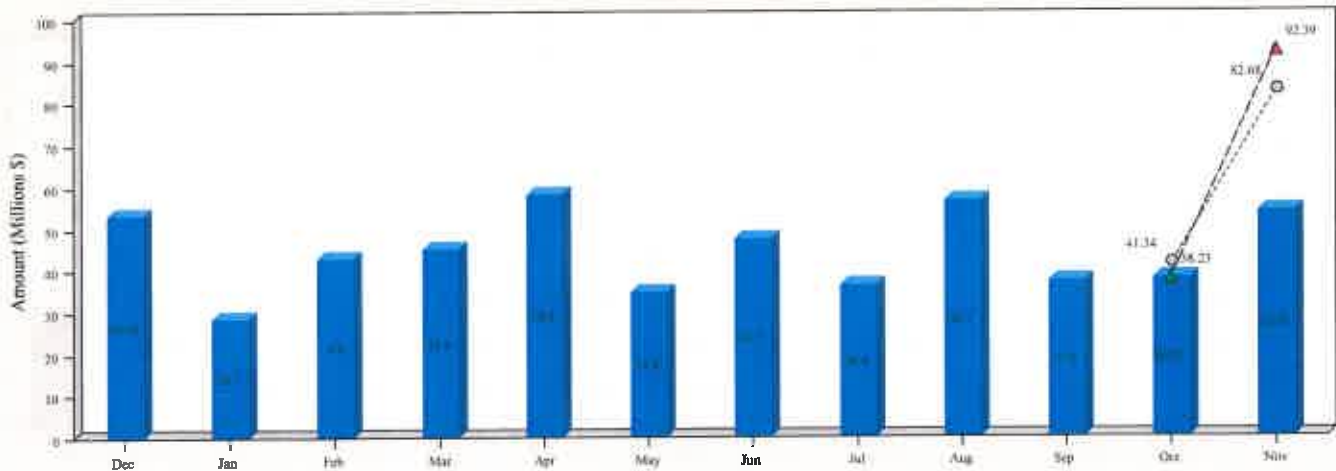
Expenditure to date for November was below budget by \$13 Million

**CAPITAL SPENDING**

**CAPITAL DISBURSEMENTS**

Monthly & Cumulative Disbursements compared to YTD Budget

- Actual Monthly Disbursements
- ▲ YTD Cumulative Disbursements FY-2017
- YTD Cumulative Budget FY-2017



Disbursements to date for November were above budget by \$10 Million



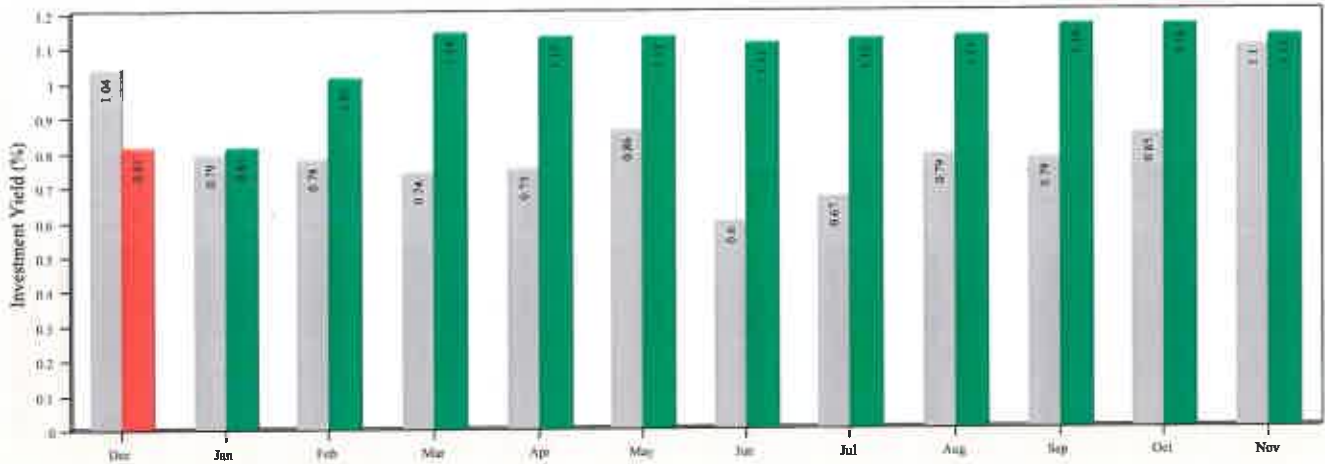
**FINANCIAL HIGHLIGHTS**

**INVESTMENT YIELD**

**CORE INVESTMENTS YIELD**

Monthly Yield compared to Merrill Lynch Benchmark

- Actual Monthly Yield (%)
- Merrill Lynch 1-3 Year Treasury Index - Book Value (%)

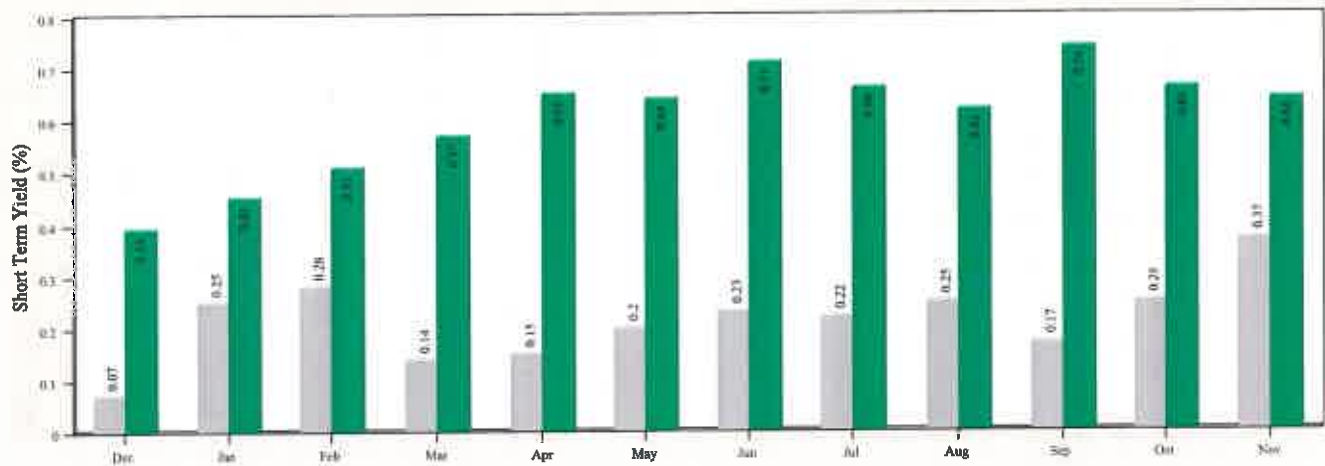


Yield for November was higher than the treasury index by 0.03%

**SHORT TERM INVESTMENT YIELD**

Short Term Yield compared to Merrill Lynch Benchmark

- Actual Monthly Yield (%)
- Merrill Lynch 3-Month Treasury Index - Book Value (%)



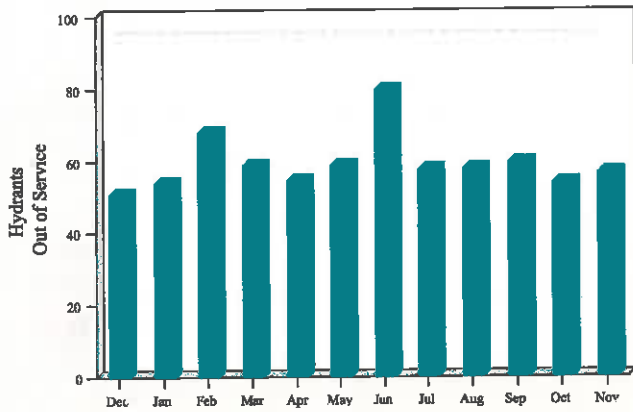
Short Term Yield for November was higher than the Merill Lynch yield by 0.27%

**CUSTOMER CARE AND OPERATIONS HIGHLIGHTS**

**FIRE HYDRANTS**

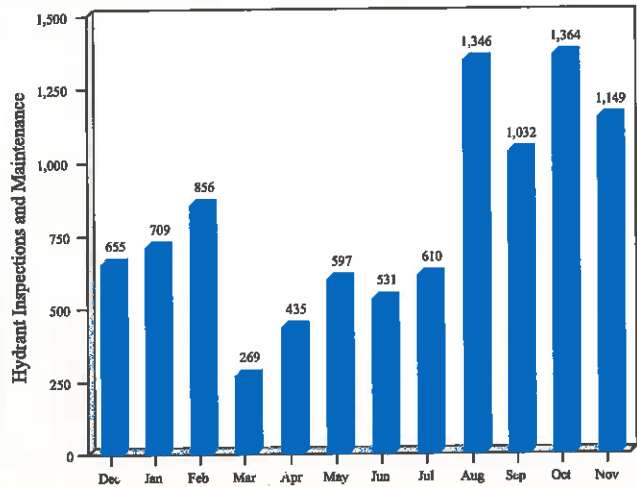
**FIRE HYDRANTS OUT OF SERVICE (OOS)**  
Total Hydrants Out of Service against Target

- Out of Service Fire Hydrants (Defective OOS Hydrants)
- In-Operational - OOS Due to Inaccessibility or Temporary Work
- Out of Service Hydrants Target (96)



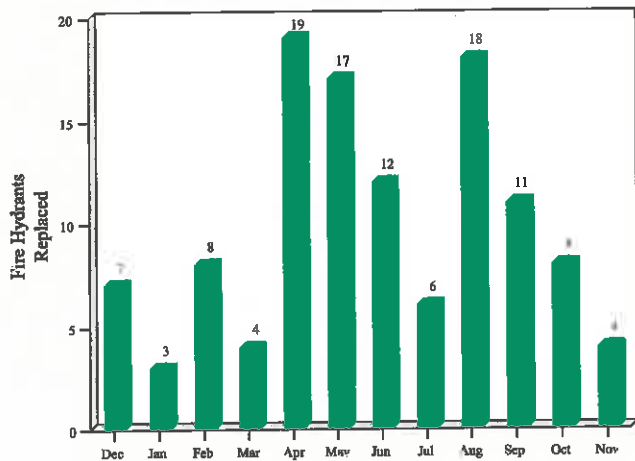
**Fire Hydrant Inspections and Maintenance**  
Total Hydrant Inspection and Maintenance Work Orders Completed per Month

- Hydrant Inspections and Maintenance



**FIRE HYDRANT REPLACEMENTS**  
Total Hydrants Replaced per Month

- Hydrants Replaced
- Annual Replacement Target (250)



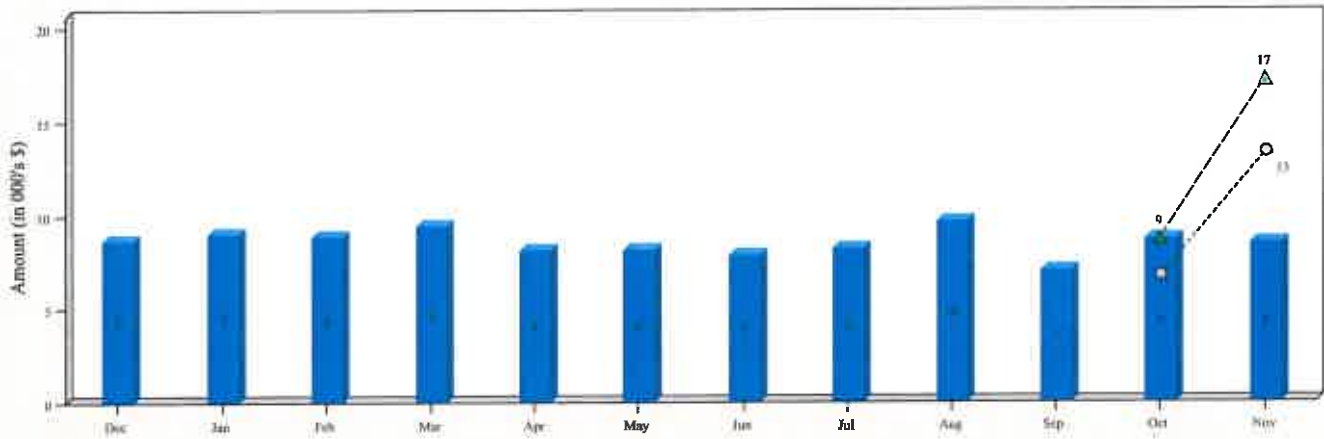
Total replacements as of November were 12 against annual projections of 250

**LOW INCOME ASSISTANCE PROGRAM**

**SPLASH PROGRAM**

**SPLASH CONTRIBUTIONS**  
 Monthly and Cumulative Contributions compared to YTD Target

- Monthly Contributions (in 000's)
- △ YTD Cumulative Contributions FY-2017 (in 000's)
- Projected YTD Target FY-2017 (in 000's)

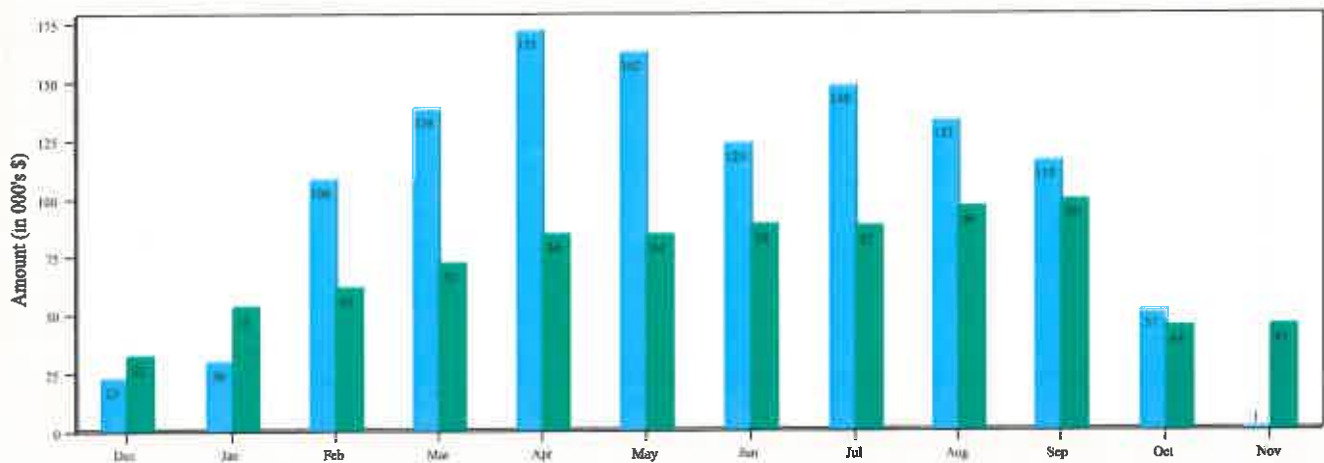


Total SPLASH Contributions to date for November were above target by \$4,000

**CUSTOMER ASSISTANCE PROGRAM (CAP)**

**CUSTOMER ASSISTANCE PROVIDED**  
 Monthly Assistance Provided compared to corresponding Previous Year Periods

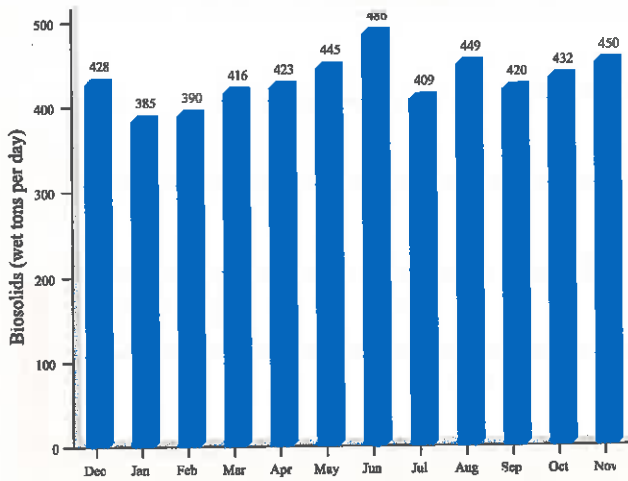
- Actual Monthly Amount - Previous Year (in 000's)
- Actual Monthly Amount - Current Year (in 000's)



**OPERATIONAL HIGHLIGHTS**

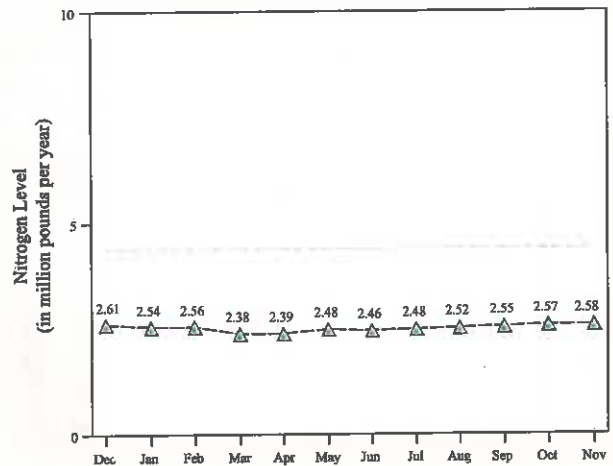
**WASTEWATER TREATMENT**

**BIOSOLIDS PRODUCTION**  
Average Daily Biosolids Production  
Average Daily Biosolids Hauled



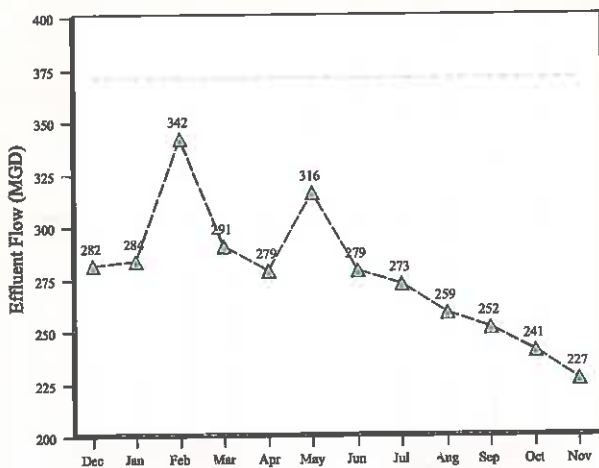
*Biosolids Average Daily Production for November was 450 wet tons per day*

**TOTAL NITROGEN**  
Total Nitrogen compared to New Permit Levels  
Nitrogen Annually Load (lbs/yr)  
New Permit Limit - 4.38 Million (lbs/yr)



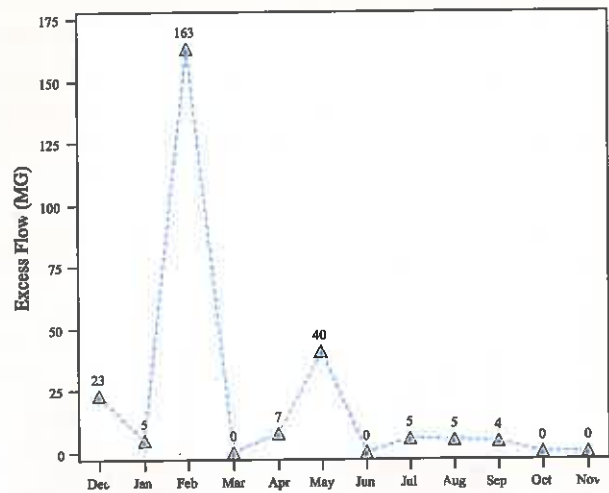
*Nitrogen level for November was below permit by 1.8 million lbs/yr*

**PLANT EFFLUENT FLOW**  
Effluent Flow compared to Plant Design Average Limit  
Effluent Flow  
Design Average (370 mgd)



*In November, Effluent flow was below design by 143 MGD*

**EXCESS FLOW**  
Excess Flow



*No excess flow was recorded in November 2016*

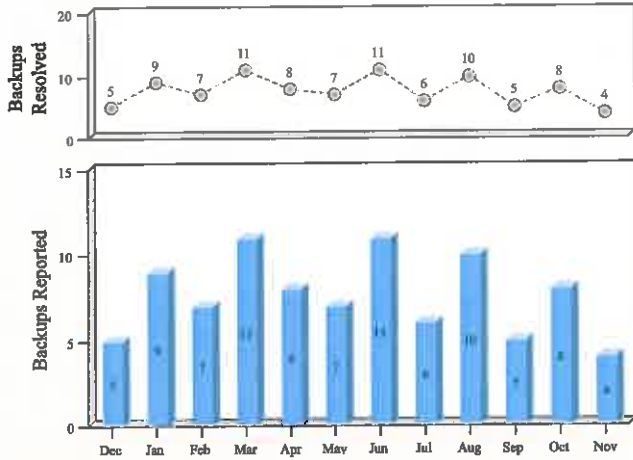
**OPERATIONAL HIGHLIGHTS**

**SEWER SYSTEM OPERATIONS**

**SEWER MAIN BACKUPS**

*Sewer Mains Backed Up and Relieved per Month*

- Pending Main Backups
- Main Backups Reported
- Main Backups Resolved

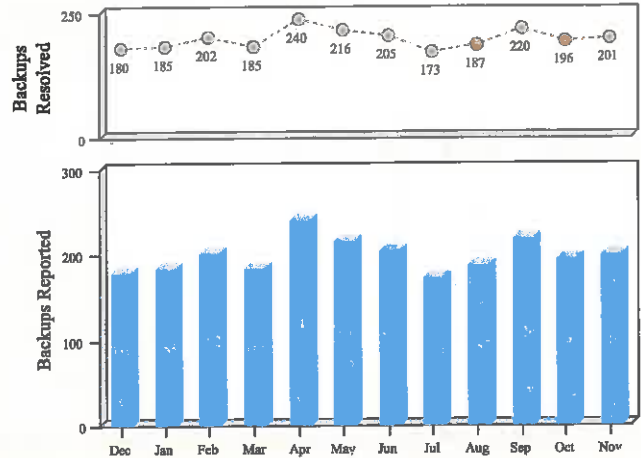


*No pending main backups reported*

**SEWER LATERAL BACKUPS**

*Sewer Laterals Backed Up and Relieved per Month*

- Pending Lateral Backups
- Lateral Backups Reported
- Lateral Backups Resolved



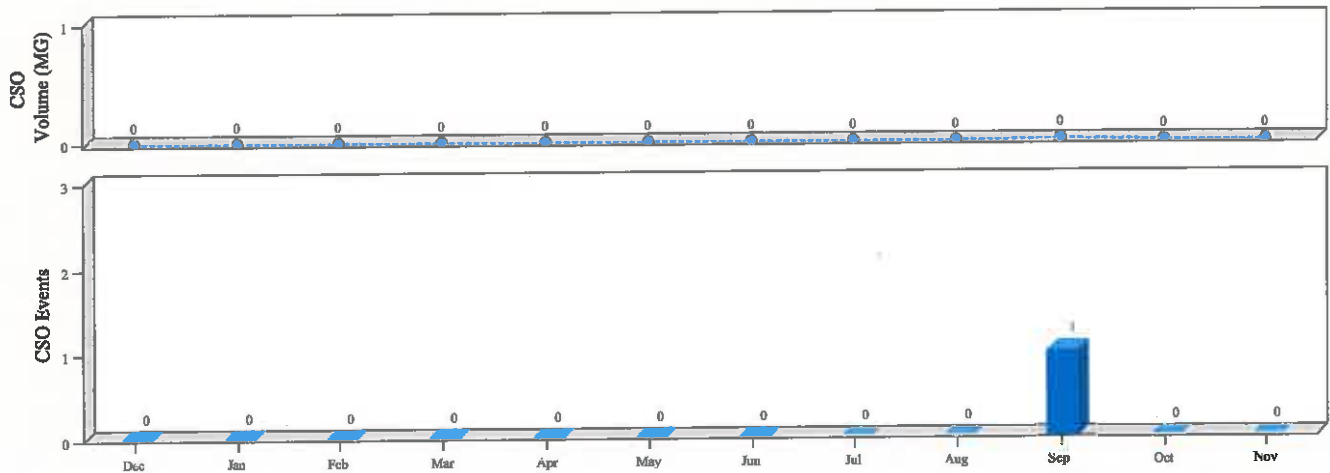
*No pending lateral backups reported*

**COMBINED SEWER SYSTEM**

**DRY WEATHER CSO EVENTS**

*Combined Sewer Overflow Volume and No of Events per Month*

- Number of CSO Events
- Overflow Volume (MG)



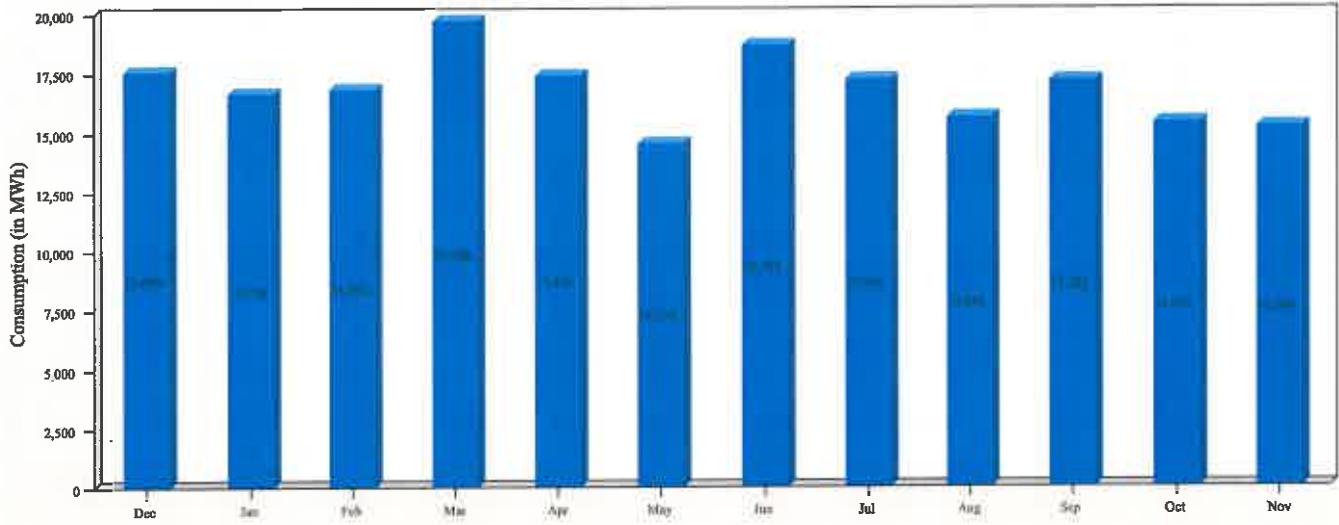
*No dry weather Combined Sewer Overflow event was recorded in November 2016*

**OPERATIONAL HIGHLIGHTS**

**ENERGY**

**ELECTRICITY USAGE SUMMARY**

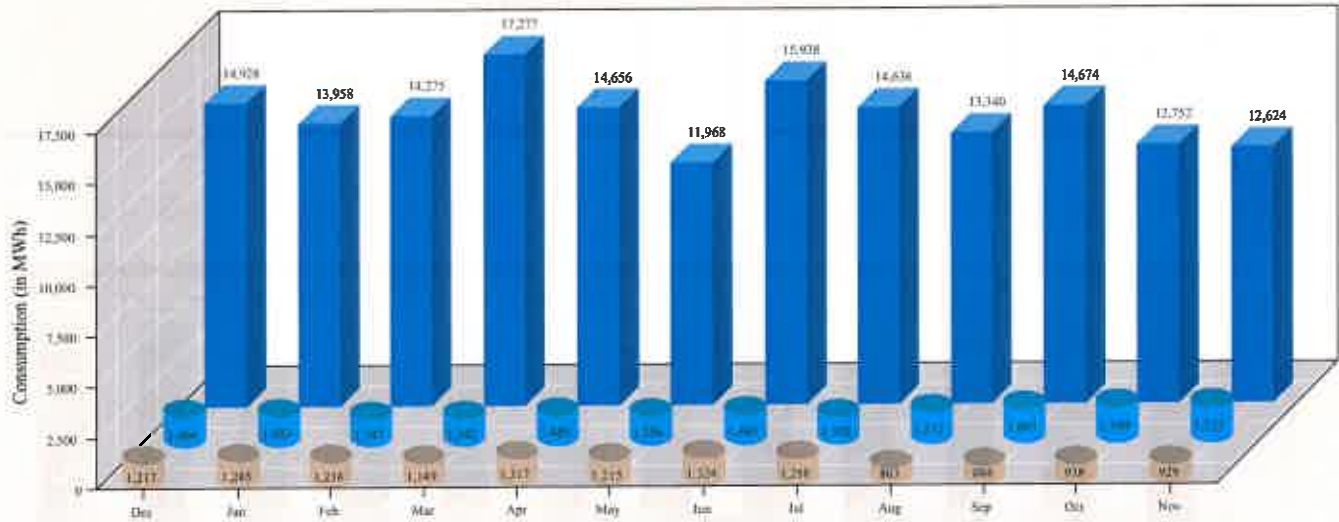
■ Total Consumption (MWh)



*Electricity Consumption in November was 15,284 MWh*

**ELECTRICITY USAGE BY SERVICE AREA**

■ Sewer Pumping ■ Water Pumping ■ Waste Water Treatment



*Wastewater treatment had the highest electricity consumption in November at 12,624 MWh*

**INTERPRETATION OF CHARTS:**

***FINANCIAL HIGHLIGHTS***

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**Revenue, Expenditure, Capital Disbursement**

- Bulls eye shows the variance for YTD budget against actual for revenues, expenditures and capital disbursements
- Bar graph shows **total** for the fiscal year budgeted(grey)-revenues, expenditures and capital disbursements against YTD actual(blue)
- Horizontal line graph shows a YTD progress analysis as compared to the previous year

**Net Operating Cash**

- Bar graph shows monthly net operating cash provided/used
- Line graph denoted by (Δ) compares YTD actual against budget (O). This element is dynamically color coded\*

**Operating Revenues**

- Bar graph shows monthly operating revenues
- Line graph denoted by (Δ) compares YTD revenue against budget (O). This element is dynamically color coded\*

**Operating Expenses**

- Bar graph shows monthly operating expenses
- Line graph denoted by (Δ) compares YTD expenditure against budget (O). This element is dynamically color coded\*\*

**Capital Disbursements**

- Bar graph shows monthly capital disbursements
- Line graph denoted by (Δ) compares YTD disbursements against budget (O). This element is dynamically color coded\*\*

**Operating Cash Balance**

- Bar graph shows monthly average cash balance compared to the target of \$125 million; indicated by grey dotted line

**Delinquent Account Receivables**

- Bar graph shows monthly Receivables to Revenue ratio against target of 3%; indicated by grey dotted line. This element is dynamically color coded\*\*
- Line graph denoted by (Δ) shows delinquency in actual dollars

**Investment Cash Earnings**

- Bar graph shows monthly investment cash earnings
- Line graph denoted by (Δ) compares the YTD earnings against budget (O). This element is dynamically color coded\*

**Core Investments Yield**

- Bar graph shows the monthly investment yield compared to the monthly target (grey) benchmark as set by the US Treasury Bill. This element is dynamically color coded\*

**Short Term Investment Yield**

- Bar graph shows the monthly short term investment yield compared to the monthly short term target (grey) benchmark as set by the US Treasury Bill. This element is dynamically color coded\*

Dynamic Color Coding Legend

*	**
<p><b>Red -</b> when the actual is <b>lower</b> than 3% of budget or target</p> <p><b>Yellow -</b> when the actual is <b>within</b> 3% of budget or target</p> <p><b>Green -</b> when the actual is <b>equal to or higher</b> than budget or target</p>	<p><b>Red -</b> when the actual is <b>higher</b> than 3% of budget or target</p> <p><b>Yellow -</b> when the actual is <b>within</b> 3% of budget or target</p> <p><b>Green -</b> when the actual is <b>equal to or lower</b> than budget or target</p>

Symbols where the color code applies- (Δ, □)

A



**LOW INCOME ASSISTANCE PROGRAM**

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**SPLASH Contributions**

- Bar graph shows monthly SPLASH contributions
- Line graph denoted by (Δ) shows the YTD contributions against target (O). This element is color coded\*\*\*

**Customer Assistance Program (CAP)**

- Bar graph shows monthly CAP assistance
- Line graph denoted by (Δ) shows the YTD contributions against budget (O). This element is color coded\*\*\*

**OPERATIONAL HIGHLIGHTS**

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**Lead and Copper Rule (LCR) Compliance**

- Line graph denoted by (Δ, O) shows semi-annual LCR monitoring results against target of 15ppb; indicated by grey dotted line. This element is color coded\*\*\*\*

**Total Coliform Rule (TCR)**

- Line graph denoted by (Δ) shows total coliform positives against the EPA maximum contaminant level of 5%. This element is color coded\*\*\*\*

**Biosolids Production**

- Bar graph shows monthly average daily biosolids production

**Total Nitrogen**

- Line graph denoted by (Δ) shows monthly total nitrogen level against the current permit (dark grey) and 2015 permit (light grey) levels. This element is color coded\*\*\*\*

**Plant Effluent Flow**

- Line graph denoted by (Δ) shows monthly influent flow against the plant design average limit of 370MGD. This element is color coded\*\*\*\*

**Excess Flow**

- Line graph denoted by (Δ) shows monthly excess flow

**Water Main Leaks**

- Bar graph shows the water main leaks reported
- The bar graph is stacked(dark blue) to show the pending leaks carried over from the previous month if any; bar graph(light blue) shows new water main leaks reported for the given month
- Line graph denoted by (O) shows the number of main leaks repaired per month

**Water Valve Leaks**

- Bar graph shows the water valve leaks reported
- The bar graph is stacked(dark blue) to show the pending leaks carried over from the previous month if any; bar graph(light blue) shows new water valve leaks reported for the given month
- Line graph denoted by (O) shows the number of valve leaks repaired per month

Dynamic Color Coding Legend

***	****
<p><b>Red-</b> when the actual is lower than 5% of budget or target</p> <p><b>Yellow-</b> when the actual is within 5% of budget or target</p> <p><b>Green-</b> when the actual is equal to or higher than budget or target</p>	<p><b>Red-</b> when the actual is higher than 5% of budget or target</p> <p><b>Yellow-</b> when the actual is within 5% of budget or target</p> <p><b>Green-</b> when the actual is equal to or lower than budget or target</p>

Symbols where the color code applies- (Δ, □)



**Vendor Payment Performance**

- Bar graph shows monthly Vendor Payment Performance percentage against monthly target of 97%; indicated by grey dotted line. This element is dynamically color coded\*\*
- Line graph denoted by (O) shows the YTD vendor payment performance %.

Dynamic Color Coding Legend

<p>***</p> <p><b>Red-</b> when the actual is <b>lower</b> than 5% of budget or target</p> <p><b>Yellow-</b> when the actual is <b>within</b> 5% of budget or target</p> <p><b>Green-</b> when the actual is <b>equal to or higher</b> than budget or target</p>	<p>****</p> <p><b>Red-</b> when the actual is <b>higher</b> than 5% of budget or target</p> <p><b>Yellow-</b> when the actual is <b>within</b> 5% of budget or target</p> <p><b>Green-</b> when the actual is <b>equal to or lower</b> than budget or target</p>
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Symbols where the color code applies- (Δ, □)

E

5. **Resolution No. 17-05 - Execute Supplemental Agreement No. 05 of Contract No. DCFA #441, PEER Consultants, PC. The purpose of the supplemental agreement is to provide start-up, operations and maintenance engineering services. The work will be assigned as task orders on an as needed basis. The supplemental agreement amount is \$7,962,816.44. (Recommended by Environmental Quality and Sewerage Services Committee 12/15/16)**

**Non-Joint Use Contracts**

1. **Resolution No. 17-06 - Execute Contract No. 150210, Anchor Construction Corporation. The purpose of the contract is to provide the final design and construction of Division RC-A-Rock Creek Project A Green Infrastructure in support of the DC Clean Rivers Project. This work is required by a Consent Decree. The contract amount is \$26,841,393.50. (Recommended by Environmental Quality and Sewerage Services Committee 12/15/16)**
2. **Resolution No. 17-07 - Execute Contract No. DCFA #478-WSA, Rummel, Klepper & Kahl, LLP. The purpose of the contract is to provide onsite construction management of Division RC-A-Rock Creek Project A (GI) and Division PR-A1-Potomac River Project A1(GI) DC Clean Rivers Project during construction contracts. The contract amount is \$3,467,419. (Recommended by Environmental Quality and Sewerage Services Committee 12/15/16)**
3. **Resolution No. 17-08 - Execute additional funding of Contract No. WAS-11-057-AA-SH, Business Promotion Consultants, Inc. The purpose of the contract is to supply parts for water meters manufactured by Neptune and purchased through Business Process Consultants. The additional funding amount is \$300,000. (Recommended by Water Quality and Water Services Committee 12/15/16)**
4. **Resolution No. 17-09 - Execute Option Year Four of Contract No., WAS-12-070-AA-SC, Business Promotion Consultants, Inc. The purpose of the contract is to provide meter lids for daily operations and to support DC Water's Automated Meter Reading (AMR) Replacement Program. The option amount is \$1,300,000. (Water Quality and Water Services Committee 12/15/16)**
5. **Resolution No. 17-10 - Execute Contract No. 17-PR-CCO-07, Mueller Systems. The purpose of the contract is to provide 1.5-inch and 2-inch**

Presented and Adopted: January 5, 2017  
Subject: Approving the Final Form of Certain Documents,  
Authorizing the Sale and Setting Terms and Details  
of the Series 2017A and Series 2017B Bonds

#17-00  
RESOLUTION  
OF THE  
BOARD OF DIRECTORS  
OF THE  
DISTRICT OF COLUMBIA WATER AND SEWER AUTHORITY

The Board of Directors ("Board") of the District of Columbia Water and Sewer Authority ("Authority"), at its meeting on January 5, 2017, by a vote of \_\_\_\_\_ ( ) in favor and \_\_\_\_\_ ( ) opposed, decided to approve the following:

**WHEREAS**, the Authority is authorized pursuant to the *Water and Sewer Authority Establishment and Department of Public Works Reorganization Act of 1996*, as amended, D.C. Code Section 34-2201.01 et seq. (the "WASA Act"), and the *District of Columbia Water and Sewer Authority Act of 1996*, Public Law 104-184; 110 Stat. 1696, to issue revenue bonds for undertakings authorized by the WASA Act, including to finance or refinance any cost, as defined in the WASA Act, D.C. Code Section 34-2202.01(2); and

**WHEREAS**, in accordance with the WASA Act, the Authority and Wells Fargo Bank, National Association, as trustee (the "Trustee") (its predecessors in that capacity having been Norwest Bank Minnesota, N.A. and Wells Fargo Bank Minnesota, N.A.), entered into the Master Indenture of Trust, dated as of April 1, 1998 (the "Master Indenture" and, as supplemented and amended, the "Indenture"), to provide for financing or refinancing the acquisition, construction, operation, maintenance and extension of the System (as defined in the Master Indenture) by the issuance of bonds, notes and other obligations payable solely from Net Revenues (as such terms are defined in the Master Indenture); and

**WHEREAS**, the Authority has heretofore entered into twenty-one (21) supplemental indentures of trust with the Trustee in connection with the issuance of Senior Debt and Subordinate Debt (both as defined in the Indenture) or to amend and clarify the Master Indenture; and

**WHEREAS**, the Authority now intends (i) to issue Public Utility Senior Lien Revenue Bonds, Series 2017A (Green Bonds) (the "Series 2017A Bonds") to (a) finance a portion of the costs of the Authority's DC Clean Rivers Project (as defined in the preliminary Official Statement, dated January [ ], 2017, for the Series 2017A/B Bonds); (b) fund a Series 2017A Debt Service Reserve Requirement, (as defined herein), if determined necessary; and (c) pay certain costs of issuance; (ii) to issue Public Utility

date of issuance and delivery of the Series 2017A/B Bonds, as originally executed and as it may be amended from time to time in accordance with its terms.

“Financial Advisor” means, collectively, Public Financial Management, Inc. and G~Entry Principle, P.C.

“Interest Payment Dates” means for the Series 2017A/B Bonds, each April 1 and October 1, commencing on the April 1 or October 1 specified in the Certificate of Award as the first Interest Payment Date, and thereafter during the time the Series 2017A/B Bonds are Outstanding.

“Series 2017A Debt Service Reserve Requirement” means, if determined in the Certificate of Award to be necessary, a required fund balance in the Series 2017A Debt Service Reserve Account or Accounts established under the Twenty-Second Supplemental Indenture, the amount of which shall be specified in the Certificate of Award, but which shall not exceed the maximum amount permitted to constitute a “reasonably required reserve or replacement fund” under the size limitation set forth in Section 1.148-2(f)(2) of the Treasury Regulations promulgated under the Code (taking into account any moneys in any other fund or account that may be required to be included in such computation) unless the Authority furnishes to the Trustee an opinion of nationally recognized bond counsel to the effect that the existence of a balance in the Series 2017A Debt Service Reserve Account in the amount of the specified required fund balance will not cause the interest on any Series 2017A Bonds intended to be excluded from gross income for federal income tax purposes not to be so excluded.

“Series 2017A/B Original Purchasers” for the Series 2017A/B Bonds means the purchasers identified as such in the Bond Purchase Agreement for the Series 2017A/B Bonds.

“Series 2017B Debt Service Reserve Requirement” means, if determined in the Certificate of Award to be necessary, a required fund balance in the Series 2017B Debt Service Reserve Account or Accounts established under the Twenty-Second Supplemental Indenture, the amount of which shall be specified in the Certificate of Award, but which shall not exceed the maximum amount permitted to constitute a “reasonably required reserve or replacement fund” under the size limitation set forth in Section 1.148-2(f)(2) of the Treasury Regulations promulgated under the Code (taking into account any moneys in any other fund or account that may be required to be included in such computation) unless the Authority furnishes to the Trustee an opinion of nationally recognized bond counsel to the effect that the existence of a balance in the Series 2017B Debt Service Reserve Account in the amount of the specified required fund balance will not cause the interest on any Series 2017B Bonds intended to be excluded from gross income for federal income tax purposes not to be so excluded.

“Twenty-Second Supplemental Indenture” means the Twenty-Second Supplemental Indenture of Trust by and between the Authority and the Trustee, dated as of the same date as and relating to the Series 2017A/B Bonds.

for each maturity of the Series 2017A/B Bonds bearing the same series or subseries designation.

(c) Interest Rates and Principal Maturities. The Series 2017A/B Bonds shall bear interest on their unpaid principal amount payable on each Interest Payment Date, commencing on the first Interest Payment Date specified in the Certificate of Award, at such fixed rates per annum as set forth in the Certificate of Award as provided in Section 4(c) hereof, provided however, that the "true interest cost" (i.e., interest cost on bonds defined as the rate, compounded semiannually, necessary to discount the amounts payable on the respective interest and principal payment dates to the purchase price received for the bonds) on the Series 2017A/B Bonds shall not exceed five and one half percent (5.50%) per annum. The principal of the Series 2017A/B Bonds shall be paid in such amounts on each principal retirement date (whether at stated maturity date or a mandatory redemption date) as set forth in the Certificate of Award, provided that the final principal retirement date shall be no later than December 31, 2056.

(d) Optional and Mandatory Redemption.

(i) *Optional* - The Series 2017A/B Bonds maturing on or before any date specified in the Certificate of Award as the Earliest Optional Redemption Date (which shall be no later than October 1, 2027) are not subject to prior optional redemption. Any Series 2017A/B Bond maturing after the Earliest Optional Redemption Date shall be subject to redemption at the option of the Authority, prior to their stated maturities on or after the Earliest Optional Redemption Date in whole or in part (in whole multiples of \$5,000) on any date, at redemption prices specified in the Certificate of Award, provided that no such redemption price (not including accrued interest) shall exceed 102% of the principal amount of the Series 2017A/B Bonds to be redeemed.

(ii) *Mandatory Sinking Fund Redemption* - Any Series 2017A/B Bonds may be designated in the Certificate of Award as Term Bonds and be subject to mandatory sinking fund redemption by lot on specified principal retirement dates at a price equal to 100% of the principal amount to be redeemed, plus accrued interest to the date of redemption.

(e) Redemption Provisions. Redemption of Series 2017A/B Bonds shall be effected in accordance with Article IV of the Master Indenture; provided, however, that notices of redemption of the Series 2017A/B Bonds sent pursuant to Section 402 of the Master Indenture may specify that the redemption is conditional upon the Authority's depositing the funds needed to effect that redemption prior to the specified redemption date.

(f) Places and Manner of Payment. The principal of and the interest and any redemption premium on the Series 2017A/B Bonds shall be payable at the places and in the manner specified in the Twenty-Second Supplemental Indenture.

any additional information that may be required or permitted to be stated therein by the terms of this Resolution and the Bond Purchase Agreement.

(d) Authorization of Bond Insurance and Qualified Reserve Credit Facilities. The submission of any applications to: (i) recognized providers of municipal bond insurance requesting the issuance of one or more municipal bond insurance policies to insure the Authority's obligation to make payments of principal of and interest on the Series 2017A/B Bonds, and (ii) potential providers of Qualified Reserve Credit Facilities, is hereby ratified and approved. The Authorized Officials are, and each of them is, hereby authorized to specify in the Certificate of Award that the Authority shall accept one or more commitments for insurance from such providers, and one or more commitments for a Qualified Reserve Credit Facility. There is hereby authorized to be paid from the moneys deposited in the Series 2017A Costs of Issuance Subaccount such amount as is required to pay the premium and expenses for such insurance policies and Qualified Reserve Credit Facilities relating to the Series 2017A Bonds. There is hereby authorized to be paid from the moneys deposited in the Series 2017B Costs of Issuance Subaccount such amount as is required to pay the premium and expenses for such insurance policies and Qualified Reserve Credit Facilities relating to the Series 2017B Bonds. The Authorized Officials are, and each of them is, hereby further authorized to enter into a reimbursement agreement with the provider of any Qualified Reserve Credit Facility to provide for the Authority's reimbursement of the provider for any amounts drawn under the Qualified Reserve Credit Facility in a manner consistent with the Indenture. Any determination of the Authorized Officials under this paragraph shall be based on the written advice of the Financial Advisor.

(e) Certificates. The Authorized Officials are, and each of them is, authorized and directed, in their official capacities, to execute and deliver to the Series 2017A/B Original Purchasers the certificates required by the Bond Purchase Agreement to be executed on behalf of the Authority.

(f) Delivery of Bonds. The Authorized Officials are, and each of them is, authorized and directed to make the necessary arrangements with the Series 2017A/B Original Purchasers to establish the date, location, procedure and conditions for the delivery of the Series 2017A/B Bonds to the Series 2017A/B Original Purchasers. The Authorized Officials are, and each of them is, further authorized and directed to make the necessary arrangements for the printing of the Series 2017A/B Bonds, and the execution, authentication and delivery of the Series 2017A/B Bonds to DTC for the accounts of the Series 2017A/B Original Purchasers in accordance with this Resolution and the Indenture, and upon the receipt of payment of the purchase price, to cause such amount to be applied in accordance with the terms and provisions of this Resolution and the Indenture.

Section 5. Allocation of Proceeds of the Series 2017A/B Bonds; Tax Covenants.

(a) Allocation of Proceeds of the Series 2017A/B Bonds. The proceeds from the sale of the Series 2017A/B Bonds shall be allocated, deposited and credited for

Authority within the meaning of Rule 15c2-12 of the Securities Exchange Commission, subject to completion as provided below.

The distribution by the Authority and by the Series 2017A/B Original Purchasers of the preliminary Official Statement and the Official Statement, in such form and with any changes as may be approved in writing by an Authorized Official, is hereby authorized and approved.

The Authority shall make sufficient copies of the Official Statement, with any supplements, available to the Series 2017A/B Original Purchasers to sell book entry interests in the Series 2017A/B Bonds, and will provide copies as appropriate to the Municipal Securities Rulemaking Board through its Electronic Municipal Market Access website at [www.emma.msrb.org](http://www.emma.msrb.org).

The Authorized Officials are each hereby authorized to furnish such information, to execute such instruments and to take such other action in cooperation with the Series 2017A/B Original Purchasers as may be reasonably requested to qualify the Series 2017A/B Bonds for offer and sale under the Blue Sky or other securities laws and regulations and to determine their eligibility for investment under the laws and regulations of such states and other jurisdictions of the United States of America as may be designated by the Series 2017A/B Original Purchasers; provided, however, that the Authority shall not be required to register as a dealer or broker in any such state or jurisdiction or become subject to the service of process in any jurisdiction in which the Authority is not now subject to such service.

The Authorized Officials are each hereby further authorized: (i) to supplement and complete the "deemed substantially final" preliminary Official Statement by affixing thereto or inserting therein information to identify the Series 2017A/B Original Purchasers and to specify the final principal amount, interest rates and redemption provisions of the Series 2017A/B Bonds, the price of the Series 2017A/B Bonds to the general public, any credit enhancement provisions with respect to the Series 2017A/B Bonds and any change in ratings of the Series 2017A/B Bonds resulting from such credit enhancement, and such other information as is necessary to supplement and complete the Official Statement with the approved and agreed upon terms of Series 2017A/B Bonds, and (ii) to make such other changes to the preliminary Official Statement or the Official Statement as are, in the judgment of an Authorized Official, necessary and appropriate in order to make the preliminary Official Statement or the Official Statement not materially misleading and to comply with applicable securities laws or otherwise to enable the Authority to fulfill its obligations regarding the preliminary Official Statement or the Official Statement under the Bond Purchase Agreement.

The Authority hereby covenants and agrees that it will comply with and carry out all of the provisions of the Continuing Disclosure Agreement. Notwithstanding any other provision of this Resolution or the Indenture, failure of the Authority to comply with the Continuing Disclosure Agreement shall not be considered an Event of Default; however, any Holder of Series 2017A/B Bonds may, and the Trustee may (and, at the request of the Holders of at least 25% in aggregate principal amount of Outstanding

Section 10. Effective Date. This Resolution shall take effect immediately.

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Secretary to the Board of Directors



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

**ACTION REQUESTED**

**GOODS AND SERVICES CONTRACT OPTION YEAR**

**FERRIC CHLORIDE  
(Joint Use)**

Approval to exercise option year one (1) for the supply and delivery of Ferric Chloride in the amount of \$1,443,487.50

**CONTRACTOR/SUB/VENDOR INFORMATION**

<b>PRIME:</b> PVS Technology 10900 Harper Avenue Detroit, MI 48213	<b>SUBS:</b> N/A	<b>PARTICIPATION:</b> N/A
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**DESCRIPTION AND PURPOSE**

<b>Original Contract Value:</b>	\$1,447,500.00
<b>Original Contract Dates:</b>	01-10-2016—01-09-2017
<b>No. of Option Years in Contract:</b>	4
<b>Option Year 1 Value:</b>	\$1,443,487.50
<b>Option Year 1 Dates:</b>	01-10-2017—01-09-2018

**Purpose of the Contract:**

This contract is to supply and deliver liquid ferric chloride to DC Water's Blue Plains Advanced Wastewater Treatment Facility. Ferric chloride removes phosphorous from wastewater in the plant's primary and secondary treatment stages, removes odor-causing compounds, and works with a polymer to coagulate and remove suspended solids.

**Contract Scope:**

The product provided under the contract is a 40% ferric chloride solution in water. Due to its critical importance and to ensure supply security, supply was awarded to two companies with independent supply chains. 70% of DC Water's requirements was awarded to Carter & Carter, and 30% was awarded to PVS Technology. Blue Plains is projected to consume approximately 23.5 million pounds of the solution during option year 1 period of the contract – about the same as was consumed in FY16. Accordingly, 7.05 million pounds will be supplied by PVS under option year 1 of this contract, and 16.45 million pounds will be delivered by Carter & Carter during option year 1 of their contract.

**Spending Previous Year:**

Cumulative Contract Value:	01-10-2016 to 01-09-2017: \$1,447,500.00
Cumulative Contract Spending:	01-10-2016 to 11-20-2016: \$906,910.62

**Contractor's Past Performance:**

According to the COTR, the Contractor's quality of product 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

**Presented and Adopted: January 5, 2017**

**SUBJECT: Approval to Execute Option Year One of Contract No. 15-PR-WWT-53A, Carter & Carter Enterprises Inc.**

**#17-02  
RESOLUTION  
OF THE  
BOARD OF DIRECTORS  
OF THE  
D.C. WATER AND SEWER AUTHORITY**

The Board of Directors ("Board") of the District of Columbia Water and Sewer Authority ("the Authority") at its meeting on January 5, 2017 upon consideration of a joint use matter, decided by a vote of \_\_\_() in favor and \_\_\_() opposed to execute Option Year One of Contract No. 15-PR-WWT-53A. Carter & Carter Enterprises Inc.

**Be it resolved that:**

The Board of Directors hereby authorizes the General Manager to execute Option Year One of Contract No. 15-PR-WWT-53A, Carter & Carter Enterprises Inc. The purpose of the option is to supply and deliver liquid ferric chloride to DC Water's Blue Plains Advanced Wastewater Treatment Facility. The option amount is \$3,281,775.

This Resolution is effective immediately.

\_\_\_\_\_  
Secretary to the Board of Directors

**PROCUREMENT INFORMATION**


<b>Contract Type:</b>	Good and Services	<b>Award Based On:</b>	Best Value
<b>Commodity:</b>	Ferric Chloride	<b>Contract Number:</b>	15-PR-WWT-53A
<b>Contractor Market:</b>	Open Market with Preference Points for LBE and LSBE Participation		

**BUDGET INFORMATION**

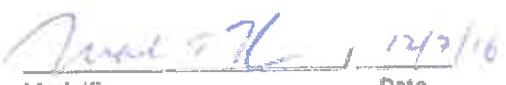
<b>Funding:</b>	Operating	<b>Department:</b>	Wastewater Treatment
<b>Project Area:</b>	Blue Plains	<b>Department Head:</b>	Salil M. Kharkar

**ESTIMATED USER SHARE INFORMATION**

User - Operating	Share %	Dollar Amount
District of Columbia	41.67%	\$1,367,515.64
Washington Suburban Sanitary Commission	43.21%	\$1,418,054.98
Fairfax County	10.45%	\$342,945.49
Loudoun Water	4.02%	\$131,927.36
Other (PI)	0.65%	\$21,331.54
<b>TOTAL ESTIMATED DOLLAR AMOUNT</b>	<b>100.00%</b>	<b>\$3,281,775.00</b>

  
 Akile Tesfaye  
 Assistant General Manager,  
 Support Services  
 Date: 12/7/16

  
 Dan Bae  
 Director of Procurement  
 Date: 12/7/16

  
 Mark Kim  
 Chief Finance Officer  
 Date: 12/7/16

  
 George S. Hawkins  
 General Manager  
 Date: 12/23/16

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

**ACTION REQUESTED**

**ENGINEERING SERVICES:**

**Filtrate Treatment Facility Deammonification Commissioning Services  
(Joint Use)**

Approval to execute an architectural and engineering services contract for \$1,395,150

**CONTRACTOR/SUB/VENDOR INFORMATION**

<b>PRIME:</b>	<b>SUBS:</b>	<b>PARTICIPATION:</b>
World Water Works, Inc 4000 SW 113 <sup>th</sup> Street Oklahoma City, OK 73173		

**DESCRIPTION AND PURPOSE**

Contract Value, Not-To-Exceed	\$1,395,150 00
Contract Time	553 Days (1 Year, 7 Months)
Anticipated Contract Start Date (NTP):	04-28-2017
Anticipated Contract Completion Date:	11-02-2018

**Purpose of the Contract:**

To provide professional services associated with commissioning, harvesting and providing anammox seed sludge and provisions for operational support for the Filtrate Treatment Facility (FTF) at DC Water Blue Plains Advanced Wastewater Treatment Plant (Blue Plains AWTP) to treat high-ammonia reject water from the dewatering of digested biosolids.

This is a sole-source contract to World Water Works as the exclusive provider of the DEMON<sup>®</sup> patented process in North America. As such, there are no subcontractors or other vendors providing support services.

**Contract Scope:**

- Prepare a commissioning plan.
- Provide pre-start-up commissioning activities including training DC Water's operations and process control staff in advance of the scheduled start-up for the FTF system.
- Harvest and deliver anammox seed sludge from multiple facilities in Europe to Blue Plains AWTP for start-up of the new FTF project.
- Provide start-up commissioning activities including providing an experienced deammonification operator for commissioning all six reactors.

**Presented and Adopted: January 5, 2017**

**SUBJECT: Approval to Execute Supplemental Agreement No. 04 of  
Contract No. DCFA #429-WSA, Arcadis District of  
Columbia, PC**

**#17-04  
RESOLUTION  
OF THE  
BOARD OF DIRECTORS  
OF THE  
D.C. WATER AND SEWER AUTHORITY**

The Board of Directors ("Board") of the District of Columbia Water and Sewer Authority ("the Authority") at its meeting on January 5, 2017 upon consideration of a joint use matter, decided by a vote of \_\_() in favor and \_\_() opposed to execute Supplemental Agreement No. 04 of Contract No. DCFA #429-WSA, Arcadis District of Columbia, PC

**Be it resolved that:**

The Board of Directors hereby authorizes the General Manager to execute Contract No. DCFA #429-WSA, Arcadis District of Columbia PC. The purpose of the contract is to provide onsite Construction Management Services for the Biosolids Management Program. The supplemental agreement amount is \$1,297,015.

This Resolution is effective immediately.

\_\_\_\_\_  
Secretary to the Board of Directors

**Current Supplemental Agreement Scope:**

- Extend the construction management services to accommodate time extension for construction and commissioning of the new system in addition to closing out of the 3 projects Main Process Train (MPT), Final Dewatering Facility (FDF) and Combined Heat & Power (CHP)

**PROCUREMENT INFORMATION**

<b>Contract Type:</b>	Cost Plus Fixed Fee	<b>Award Based On:</b>	Highest Ranking Score
<b>Commodity:</b>	Engineering Services	<b>Contract Number:</b>	DCFA #429-WSA
<b>Contractor Market:</b>	Open Market		


**BUDGET INFORMATION**


<b>Funding:</b>	Capital	<b>Department:</b>	Wastewater Engineering
<b>Service Area:</b>	Wastewater	<b>Department Head:</b>	Diala Dandach
<b>Project:</b>	XA		

**ESTIMATED USER SHARE INFORMATION**

User	Share %	Dollar Amount
District of Columbia	41.22%	\$ 534,629.58
Washington Suburban Sanitary Commission	45.84%	\$ 594,551.68
Fairfax County	8.38%	\$ 108,689.86
Loudoun County & Potomac Interceptor	4.56%	\$ 59,143.88
<b>Total Estimated Dollar Amount</b>	<b>100.00%</b>	<b>\$ 1,297,015.00</b>

 12/7/16  
 Mark Kim Date  
 Chief Financial Officer

 12/8/16  
 Dan Bae Date  
 Director of Procurement

 12-9-16  
 Leonard R. Benson Date  
 Chief Engineer

 12-23-16  
 George S. Hawkins Date  
 General Manager

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

**ACTION REQUESTED**

**ENGINEERING SERVICES SUPPLEMENTAL AGREEMENT:  
Operations and Maintenance Assistance Program IV  
(Joint Use)**

Approval to execute Supplemental Agreement No. 05 for \$7,962,816.44. The modification exceeds the General Manager's approval authority.

**CONTRACTOR/SUB/VENDOR INFORMATION**

<b>PRIME:</b>	<b>SUBS:</b>	<b>PARTICIPATION:</b>
PEER Consultants, PC 409 12 <sup>th</sup> Street, SW Suite 603 Washington, DC 20024	Delon Hampton & Associates Washington, DC MBE	11.3%
	E.B. Advanced, PC Washington, DC MBE	16.8%
(WBE)	AECOM Arlington, VA	10.6%

**DESCRIPTION AND PURPOSE**

Original Contract Value	\$17,987,367.00
Value of this Supplemental Agreement:	\$ 7,962,816.44
Cumulative SA Value, including this SA:	\$10,126,174.17
Current Contract Value, including this SA:	\$28,113,541.17
Original Contract Time	1825 Days (5 Years, 0 Months)
Time extension, this SA	1102 Days
Total SA contract time extension	1282 Days (3 Years, 6 Months)
Contract Start Date	06-29-2011
Contract Completion Date	12-31-2019

**Purpose of the Contract:**

To provide start-up, operations and maintenance engineering services. The work will be assigned as task orders on an as needed basis.

**Original Contract Scope:**

- Generate documents to fulfill EPA mandated requirements
- Develop equipment maintenance requirements and documentation
- Develop Standard Operating Procedures (SOPs)
- Provide services for Document Management

**Previous Supplemental Agreement Scope:**

- Provide the Department of Wastewater Treatment with Operations, commissioning, training, Maximo support and reliability maintenance support

**Current Supplemental Agreement Scope:**

- **Asset management Support**
  - Perform Asset Integration for all new assets
  - Perform Parts Integration for all assets through service manual reviews.
  - Develop Work Order and Preventive Maintenance (WO/PM) documents including Job Plans and schedules for PM's

**Presented and Adopted: January 5, 2017**

**SUBJECT: Approval to Execute Contract No. 150210,  
Anchor Construction Corporation**

**#17-06  
RESOLUTION  
OF THE  
BOARD OF DIRECTORS  
OF THE  
D.C. WATER AND SEWER AUTHORITY**

The Board of Directors ("Board") of the District of Columbia Water and Sewer Authority ("the Authority") at its meeting on January 5, 2017 upon consideration of a non-joint use matter, decided by a vote of \_\_\_() in favor and \_\_\_() opposed to execute Contract No. 150210. Anchor Construction Corporation.

**Be it resolved that:**

The Board of Directors hereby authorizes the General Manager to execute Contract No. 150210, Anchor Construction Corporation. The purpose of the contract is to provide the final design and construction of Division RC-A-Rock Creek Project A Green Infrastructure in support of the DC Clean Rivers Project. This work is required by a Consent Decree. The contract amount is \$26,841,393.50.

This Resolution is effective immediately.

\_\_\_\_\_  
Secretary to the Board of Directors



**PROCUREMENT INFORMATION**

<b>Contract Type:</b>	Fixed Price	<b>Award Based On:</b>	Best Value
<b>Commodity:</b>	Design and Construction	<b>Contract Number:</b>	150210
<b>Contractor Market:</b>	Open Market with CBE goal		

**BUDGET INFORMATION**


<b>Funding:</b>	Capital	<b>Department:</b>	DC Clean Rivers Project
<b>Service Area:</b>	Combined Sewer	<b>Department Head:</b>	Carlton Ray
<b>Project:</b>	DZ		

**USER SHARE INFORMATION**

User	Share %	Dollar Amount
District of Columbia	100.00%	\$26,841,393.50
Federal Funds	0.00%	\$ 0.00
Washington Suburban Sanitary Commission	0.00%	\$ 0.00
Fairfax County	0.00%	\$ 0.00
Loudoun County & Potomac Interceptor	0.00%	\$ 0.00
<b>Total Estimated Dollar Amount</b>	<b>100.00%</b>	<b>\$26,841,393.50</b>

 12/2/16  
 Mark Kim Date  
 Chief Financial Officer

 12/8/16  
 Dan Bae Date  
 Director of Procurement

 12-7-16  
 Leonard R. Benson Date  
 Chief Engineer

 12-23-16  
 George S. Hawkins Date  
 General Manager

**Presented and Adopted: January 5, 2017**

**SUBJECT: Approval to Execute Contract No. DCFA #478-WSA,  
Rummel, Klepper & Kahl, LLP**

**#17-07  
RESOLUTION  
OF THE  
BOARD OF DIRECTORS  
OF THE  
D.C. WATER AND SEWER AUTHORITY**

The Board of Directors ("Board") of the District of Columbia Water and Sewer Authority ("the Authority") at its meeting on January 5, 2017 upon consideration of a non-joint use matter, decided by a vote of \_\_\_() in favor and \_\_\_() opposed to execute Contract No. DCFA #478-WSA, Rummel, Klepper & Kahl, LLP.

**Be it resolved that:**

The Board of Directors hereby authorizes the General Manager to execute Contract No. DCFA #478-WSA, Rummel, Klepper & Kahl, LLP. The purpose of the contract is to provide onsite construction management of Division RC-A-Rock Creek Project A (G1) and Division PR-A1-Potomac River Project A1(G1) DC Clean Rivers Project during construction contracts. The contract amount is \$3,467,419.

This Resolution is effective immediately.

\_\_\_\_\_  
Secretary to the Board of Directors

**Contract Scope:**

Provide construction management, contract administration and resident engineering and inspection services to assist DC Water with Projects associated with the construction of Green Infrastructure (GI), including various bioretention and permeable pavement configurations, for the following

- Rock Creek Project A (Division RC-A), consisting of the construction of GI in the public Right of Way (ROW) to manage 1.2" of rain falling on the equivalent of approximately twenty (20) impervious acres within the Rock Creek sewershed, and the modification to the combined sewer structure 46 located on Canal Road NW,
- Potomac River Project A1 (Division PR-A1), consisting of the construction of GI in the public ROW to manage 1.2" of rain falling on the equivalent of approximately ten (10) impervious acres within the Potomac sewershed;
- The Kansas Avenue Green Infrastructure Parks Project and the Kennedy Street Green Infrastructure Streetscape, consisting each of GI construction on two (2) impervious acres within the Rock Creek sewershed; and
- Georgetown University GI, consisting of GI construction on the Georgetown University campus on the equivalent of approximately two (2) impervious acres within the Potomac sewershed.

Provide field inspection services for the oversight of the construction work as well as oversight during the green infrastructure maintenance period for the RC-A and PR-A1 projects

**Presented and Adopted: January 5, 2017**

**SUBJECT: Approval to Execute Additional Funding for Option Year Four of Contract No. WAS-11-057-AA-SH, Business Promotion Consultants, Inc.**

**#17-08  
RESOLUTION  
OF THE  
BOARD OF DIRECTORS  
OF THE  
D.C. WATER AND SEWER AUTHORITY**

The Board of Directors ("Board") of the District of Columbia Water and Sewer Authority ("the Authority") at its meeting on January 5, 2017 upon consideration of a non-joint use matter, decided by a vote of \_\_\_() in favor and \_\_\_() opposed to execute additional funding of Contract No. WAS-11-057-AA-SH. Business Promotion Consultants, Inc.

**Be it resolved that:**

The Board of Directors hereby authorizes the General Manager to execute additional funding of Contract No. WAS-11-057-AA-SH, Business Promotion Consultants, Inc. The purpose of the contract is to supply parts for water meters manufactured by Neptune and purchased through Business Process Consultants. The additional funding amount is \$300,000.

This Resolution is effective immediately.

\_\_\_\_\_  
Secretary to the Board of Directors

**PROCUREMENT INFORMATION**

<b>Contract Type:</b>	Firm Fixed	<b>Award Based On:</b>	Single Proposer
<b>Commodity:</b>	Goods and Services	<b>Contract Number:</b>	WAS-11-057-AA-SH
<b>Contractor Market:</b>	Open Market with Preference Points for LBE and LSBE Participation		

**BUDGET INFORMATION**

<b>Funding:</b>	Capital	<b>Department:</b>	Customer Service
<b>Service Area:</b>	Washington D.C. Customers	<b>Department Head:</b>	Tsedale Berhanu
<b>Project:</b>	EQP2350		


**ESTIMATED USER SHARE INFORMATION**

User	Share %	Dollar Amount
District of Columbia	100.00%	\$300,000.00
Washington Suburban Sanitary Commission	0.00%	\$0.00
Fairfax County	0.00%	\$0.00
Loudoun County	0.00%	\$0.00
Other (PI)	0.00%	\$0.00
<b>TOTAL ESTIMATED DOLLAR AMOUNT</b>	<b>100.00%</b>	<b>\$300,000.00</b>

 12/12/16  
 Charles Kiely  
 Assistant General Manager  
 Customer Care and Operations

 12/8/16  
 Dan Bae  
 Director of Procurement

 12/14/16  
 Mark Kim  
 Chief Financial Officer

 12-23-16  
 George S. Hawkins  
 General Manager

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

**ACTION REQUESTED**

**GOODS AND SERVICES CONTRACT OPTION YEAR**

**METER LIDS  
(Non-Joint Use)**

Approval to exercise Option Year Four (4) for the supply of meter lids in the amount of \$1,300,000.00.

**CONTRACTOR/SUB/VENDOR INFORMATION**

<b>PRIME:</b> Business Promotion Consultants Inc. 5028 Wisconsin Ave, NW, Suite 302 Washington, DC 20011 LSBE	<b>SUBS:</b> N/A	<b>PARTICIPATION:</b> N/A
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**DESCRIPTION AND PURPOSE**

Original Contract Value:	\$51,320.00
Original Contract Dates:	01-10-2013—01-09-2014
No. of Option Years in Contract	4
Option Year 1 Value:	\$80,000.00
Option Year 1 Dates:	01-10-2014—01-09-2015
Option Year 2 Value:	\$60,000.00
Option Year 2 Dates:	01-10-2015—01-09-2016
Option Year 3 Value:	\$50,000.00
Option Year 3 Dates:	01-10-2016—01-09-2017
Prior Modification Value	\$578,867.10
Prior Modification Dates	08-12-2013—01-09-2016
Option Year 4 Value:	\$1,300,000.00
Option Year 4 Dates:	01-10-2017—01-09-2018

**Purpose of the Contract:**

This contract is to provide meter lids for daily operations and to support DC Water's Automated Meter Reading (AMR) Replacement Program. Meter lids are approximately 11"-21" diameter plastic discs that cover in-ground pits in which water meters are installed. Meter lids are replaced when found to be damaged or excessively worn during day-to-day meter maintenance operations. Up to 60% of meter lids are expected to be replaced as part of the AMR Replacement Program, where about 85,000 small meters and Meter Transmission Units (MTUs) will be replaced to support DC Water's Advanced Meter Infrastructure.

**Reason for change:**

This modification is to exercise and fund Option Year 4 of the contract. The requested funding of \$1,300,000.00 is significantly higher than spending in previous years when new meter lids were purchased only for daily operations. This funding amount is sufficient to purchase the forecasted meter lid requirements for the Automated Meter Reading (AMR) Program and for daily operations.

DC Water negotiated approximately \$251,000 savings (17%) off of prior contract prices based on the size of the projected purchase, change in raw materials pricing, and change in manufacturing labor costs.

**Spending Previous Year:**

Cumulative Contract Value:	01-10-2013 to 01-09-2017: \$820,187.10
Cumulative Contract Spending	01-10-2013 to 11-23-2016: \$589,384.00

**Contractor's Past Performance:**

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

**Presented and Adopted: January 5, 2017**

**SUBJECT: Approval to Execute Contract No. 17-PR-CCO-07, Mueller Systems**

**#17-10  
RESOLUTION  
OF THE  
BOARD OF DIRECTORS  
OF THE  
D.C. WATER AND SEWER AUTHORITY**

The Board of Directors ("Board") of the District of Columbia Water and Sewer Authority ("the Authority") at its meeting on January 5, 2017 upon consideration of a non-joint use matter, decided by a vote of \_\_\_() in favor and \_\_\_() opposed to execute Contract No. 17-PR-CCO-07, Mueller Systems.

**Be it resolved that:**

The Board of Directors hereby authorizes the General Manager to execute Contract No. 17-PR-CCO-07, Mueller Systems. The purpose of the contract is to provide 1.5-inch and 2-inch positive displacement meters to fulfill a requirement of their Automated Meter Reading (AMR) program. This program is to upgrade meter equipment to be compatible with DC Water's new Advanced Meter Infrastructure (AMI) system. The contract amount is \$1,700,000.

This Resolution is effective immediately.

\_\_\_\_\_  
Secretary to the Board of Directors

**PROCUREMENT INFORMATION**

<b>Contract Type:</b>	Firm Fixed	<b>Award Based On:</b>	Lowest Price Offer
<b>Commodity:</b>	Goods and Services	<b>Contract Number:</b>	17-PR-CCO-07
<b>Contractor Market:</b>	Supplier Invitation, with Preference Points for LBE and LSBE Participation		

**BUDGET INFORMATION**

<b>Funding:</b>	Capital	<b>Department:</b>	Customer Service
<b>Service Area:</b>	Washington D.C. Customers	<b>Department Head:</b>	Tsedale Berhanu
<b>Project:</b>	EQP2340 and EQP2350		

**ESTIMATED USER SHARE INFORMATION**

User	Share %	Dollar Amount
District of Columbia	100.00%	\$1,700,000.00
Washington Suburban Sanitary Commission	0.00%	\$0.00
Fairfax County	0.00%	\$0.00
Loudoun County	0.00%	\$0.00
Other (PI)	0.00%	\$0.00
<b>TOTAL ESTIMATED DOLLAR AMOUNT</b>	<b>100.00%</b>	<b>\$1,700,000.00</b>

  
 Charles Kiely  
 Assistant General Manager,  
 Customer Care and Operations  
 Date: 12/16/16

  
 Dan Bae  
 Director of Procurement  
 Date: 12/7/16

  
 Mark Kim  
 Chief Financial Officer  
 Date: 12/7/16

  
 George S. Hawkins  
 General Manager  
 Date: 12/23/16