

Budget Committees (November 15, 2016)

DISTRICT OF COLUMBIA WATER AND SEWER AUTHORITY

Board of Directors

Finance and Budget Committee

Wednesday, December 14, 2016

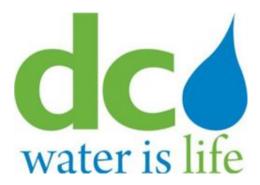
11:30 a.m.

1.	Call to OrderTimothy L. Firestine, Chairperson					
2.	November 2016 Financial Report (Attachment 1)					
3.	FY 2017 Plan of Finance					
4.	Action Items A. 2017A Bond Resolution and Related Documents (Attachment 2)					
5.	Agenda for January Committee Meeting (Attachment 3)Timothy L. Firestine					
6.	Adjournment					
FC	FOLLOW-UP ITEM – Joint Meeting of the DC Retail Water and Sewer Rates and Finance and					

1. Modify the Comparison by Cost Category table for the FY 2018 Operating Budget to include the FY 2016 Projections and Capital Labor. (Chairman Firestine) Status: See Attachment 4.

^{*} 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)(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.

ATTACHMENT 1



Fiscal Year 2017

Monthly Financial Report

Period Ending November 30, 2016

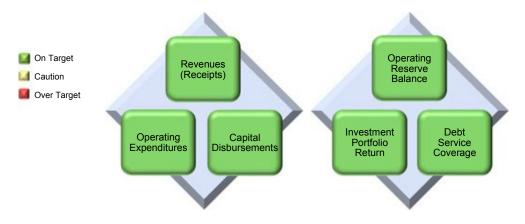
DEPARTMENT OF FINANCE, ACCOUNTING & BUDGET

Mark Kim, Chief Financial Officer
Robert Hunt, Director, Finance
Syed Khalil, Director, Rates & Revenue
John Madrid, Controller
Annie Fulton-George, Capital Budget Manager
Lola Oyeyemi, Operating Budget Manager

NOVEMBER 2016

EXECUTIVE SUMMARY

At this early stage in the fiscal year, we are on track with budgetary expectations and targeted performance metrics. The table below summarizes the first two months of FY 2017 with approximately 16.6 percent of the fiscal year completed.



(\$ in millions)								
	Budget	YTD Budget Budget Actual			Variance Favorable (Unfavorable)			
Revenues (Receipts)*	\$595.4	\$99.2	\$111.4	\$12.2	12.3%	18.7%		
Expenditures*	\$535.8	\$89.3	\$76.3	\$13.0	14.6%	14.2%		
Capital Disbursements	\$507.0	\$82.7	\$92.4	(\$9.7)	(11.7%)	18.2%		
* Straight-lined (2/12 of budget)							

Highlights:

- FY 2018 approved budget summary available online at www.dcwater.com and the book publication planned for January 2017
- FY 2016 year-end audits are currently underway and being conducted in accordance with auditing standards generally accepted in the United States. Anticipated completion:
 - Financial Statements Audit December 20, 2016
 - A133 Audit January 2017
- DC Water is preparing documents for the 2017A & B series bonds estimated to total \$300 million for committee review and Board adoption. The bond sale is scheduled for the last week in January 2017
- DC Water won The Bond Buyer's Non-traditional Deal of the Year Award for the recent issuance of its 2016B Environmental Impact Bond

Mark T. Kim, Chief Financial Officer

Fiscal Year-to-Date As of November 30, 2016

Operating Revenues (\$000's)									
	A FY 2017	B* YTD	С	D=C/A ACTUAL %	E=C-B VARIANCE \$	F = E/B VARIANCE %			
Category	BUDGET	BUDGET	ACTUAL	BUDGET	Fav/(Unfav)	Fav/(Unfav)			
Res. / Comm. / Multi.	\$328,988	54,831	\$60,456	18.4%	\$5,625	10.3%			
Federal	57,540	9,590	14,212	24.7%	4,622	48.2%			
Municipal (DC Govt.)	17,505	2,918	940	5.4%	(1,977)	(67.8%)			
DC Housing	8,372	1,395	606	7.2%	(789)	(56.6%)			
Metering Fee	10,776	1,796	1,991	18.5%	195	10.8%			
Water System Replacement Fee (WSRF)	39,717	6,620	7,202	18.1%	582	8.8%			
Wholesale	81,468	13,578	16,513	20.3%	2,935	21.6%			
PILOT/ROW	21,082	3,514	4,124	19.6%	611	17.4%			
All Other	29,998	5,000	5,409	18.0%	410	8.2%			
TOTAL	\$595,446	\$99,241	\$111,454	18.7%	\$12,214	12.3%			

^{*}Straight-lined (2/12 of budget)

VARIANCE ANALYSIS FOR MAJOR REPORTED ITEMS

At this early stage of FY 2017, cash receipts are within budget. At the end of November 2016, cash receipts totaled \$111.4 million, or 18.7 percent of the revised FY 2017 budget. Several categories of customers make payments on a quarterly basis, including the Federal Government (which made their first quarterly payment in October), and wholesale customers (who made their first quarterly payment in November).

<u>District Government</u> – Receipts are lower at \$0.9 million or 5.4 percent of the revised budget. The District Government did not pay the October billed amount of \$1.6 million in November. The overdue amount was collected on December 6, 2016 and will be reflected in the next month's report.

<u>DC Housing</u> – Receipts are lower at \$0.6 million or 7.2 percent of the revised budget. The DC Housing Authority did not pay October billed amount of \$0.8 million in November. The overdue amount is expected to be collected in December.

Fiscal Year-to-Date As of November 30, 2016

Operating Expenditures (\$000's)									
	A FY 2017	B* YTD	С	D = C/A ACTUAL %	E=B-C VARIANCE \$	F = E/B VARIANCE %			
Category	BUDGET	BUDGET	ACTUAL	BUDGET	Fav/(Unfav)	Fav/(Unfav)			
Personnel	\$144,761	\$24,127	\$23,320	16.1%	\$807	3.3%			
Contractual Services	82,760	13,793	10,689	12.9%	3,104	22.5%			
Water Purchases	29,278	4,880	4,626	15.8%	253	5.2%			
Supplies & Chemicals	34,709	5,785	4,478	12.9%	1,307	22.6%			
Utilities	28,670	4,778	3,456	12.1%	1,322	27.7%			
Small Equipment	1,230	205	55	4.5%	150	73.2%			
SUBTOTAL O&M	\$321,408	\$53,568	\$46,625	14.5%	\$6,943	13.0%			
Debt Service	169,346	28,224	26,172	15.5%	2,052	7.3%			
PILOT/ROW	21,057	3,510	3,510	16.7%	0	0.0%			
Cash Financed Capital Improvements	24,014	4,002	0	0.0%	4,002	100.0%			
TOTAL OPERATING	\$535,825	\$89,304	\$76,306	14.2%	\$12,998	14.6%			
Capital Labor	(24,934)	(4,156)	(2,729)	10.9%	(1,427)	34.3%			
TOTAL NET OPERATING	\$510,891	\$85,149	\$73,577	14.4%	\$11,571	13.6%			

^{*}Straight-lined (2/12 of budget)

VARIANCE ANALYSIS FOR MAJOR REPORTED ITEMS

Total Operating expenditures for this period are in line with expectations. For this period, operating expenditures (including debt services and the right of way and PILOT fees) totaled \$76.3 million or 14.2 percent of the FY 2017 Board-approved budget of \$535.8 million.

These numbers include estimated incurred but unpaid invoices and are subject to revision in subsequent months. The FY 2016 closeout process continues, which entails finalizing a number of GAAP-related accruals.

Fiscal Year-to-Date As of November 30, 2016

Capital Disbursements (\$000's)									
	A FY 2017	B YTD	С	D = C/A ACTUAL %	E=B-C VARIANCE \$	F=E/B VARIANCE %			
Service Area	BUDGET	BUDGET	ACTUAL	BUDGET	Fav/(Unfav)	Fav/(Unfav)			
Non Process Area	\$34,150	\$5,692	\$2,806	8.2%	2,885	50.7%			
Wastewater Treatment	123,789	20,631	21,741	17.6%	(1,109)	(5.4%)			
Combined Sewer Overflow	184,387	30,731	44,003	23.9%	(13,272)	(43.2%)			
Stormwater	1,706	284	406	23.8%	(122)	(42.8%)			
Sanitary Sewer	38,302	6,384	7,322	19.1%	(938)	(14.7%)			
Water	58,819	9,803	8,628	14.7%	1,175	12.0%			
SUBTOTAL: CAPITAL PROJECTS	\$441,153	\$73,526	\$84,906	19.2%	(\$11,380)	(15.5%)			
Capital Equipment	54,949	9,158	7,477	13.6%	1,681	18.4%			
Washington Aqueduct	10,896	0	0	0.0%	0	0.0%			
SUBTOTAL: ADD'L CAPITAL PROGRAMS	\$65,845	\$9,158	7,477	11.4%	\$1,681	18.4%			
TOTAL	\$506,998	\$82,684	\$92,383	18.2%	(\$9,699)	(11.7%)			

VARIANCE ANALYSIS FOR MAJOR REPORTED ITEMS

At the end of November 2016, capital disbursements are \$92.4 million or 18.2 percent of the revised FY 2017 budget. Higher than planned disbursements are mainly attributable to capital projects, offset by under spending in capital equipment.

<u>Capital Projects</u> - Project performance will be reviewed in detail as part of the quarterly CIP update by the Department of Engineering & Technical Services to the Environmental Quality & Sewerage Services, Water Quality & Water Services, and Finance & Budget Committees in February 2017.

<u>Capital Equipment</u> - Lower than planned disbursements are primarily attributable to unused funds in the Authority-wide reserve as well as a reduction in spending as the Automated Meter Reading (AMR) Replacement Program prepares for system-wide installations.

<u>AMR Replacement Program</u> – In November, the Board of Directors approved the selection of Smart Grid Solutions, LLC for the AMR installation contract, which is slated to begin work in January. After the initial ramp-up period, installation is projected to average 5,000 meters/MTUs per month, using the seed stock purchased primarily in September – October 2016.

Fiscal Year-to-Date As of November 30, 2016

Cash Investments and Insurance (\$ in millions)

Cash Balances

Rate Stabilization Fund Account (RSF) DC Insurance Reserve Operating Reserve Accounts	\$51.5 1.0 135.5
Operating Cash Balance Including RSF	\$188.0
Debt Service Reserve - Series 1998 Bond Fund- Construction Fund 2015A Bond Fund- Construction Fund 2015B Bond Fund- Construction Fund 2016B	23.7 78.6 16.8 24.5
Total All Funds	\$331.6

OVERALL PORTFOLIO PERFORMANCE

- The operating reserve balance was \$135.5 million as compared to the operating reserve level objective of \$125.5 million for FY 2017
- Average cash balance for the month of November was \$153.6 million
- Total investment portfolio was in compliance with the Authority's Investment Policy
- Operating funds interest income for November (on a cash basis) was \$104,874;
 YTD \$212,078
- A detailed investment performance report is attached

Fiscal Year-to-Date As of November 30, 2016

Cash Flow Summary (\$000's)

			YTD		
	Annual Budget Cash Basis	YTD 17% Cash Budget	Actual Cash Oct. 1, 2016 - Nov. 30, 2016	Variance Favorable (Unfavorab	•
OPERATING BUDGET					
Cash Provided					
Retail	\$462,898	\$77,150	\$85,406	\$8,257	11%
Wholesale	81,468	\$13,578	16,513	2,935	22%
Other	50,757	\$8,459	9,534	1,074	13%
Total Cash Provided	595,123	99,187	111,454	12,266	12%
Operating Cash Used					
Personnel Services	122,827	20,471	16,953	3,518	17%
Contractual Services	82,760	13,793	13,895	(102)	-1%
Chemicals & Supplies	34,709	5,785	5,383	402	7%
Utilities	28,670	4,778	2,188	2,590	54%
Water Purchases	29,278	4,880	4,915	(36)	-1%
Small Equipment	1,230 299,474	205	93 43,428	6,485	55% 13%
Total Operating Cash Used	299,474	49,912	43,426	6,465	13%
Defeasance D.S./Cash Financed Capital Construction	24,199	4,033	0	4,033	100%
Other Cash Used					
Debt Service	167,733	27,955	26,172	1,784	6%
Payment In Lieu of Taxes/Right of Way	21,057	3,510	5,264	(1,755)	-50%
Total Other Cash Used	188,790 512,463	31,465 85,411	31,436 74,864	29 10,547	0% 12%
Total Casil Oseu	512,463	05,411	74,004	10,547	1276
Net Cash Provided (Used) by Operating Act.	82,660	13,777	36,590	22,813	
CAPITAL BUDGET					
Cash Provided					
Debt Proceeds	195,903	32,651	9,839	(22,811)	-70%
EPA Grants	25,013	4,169	2,298	(1,871)	-45%
Transfer from Operations	100,633	16,772	0 161	(16,772)	-100% -25%
Interest Income Wholesale Capital Contributions	1,283 107,732	214 17,955	21,738	(53) 3,783	-25% 21%
Total Cash Provided	430,564	71,761	34,036	(37,725)	-53%
Cash Used	100 100	20.004	00.000	(40.000)	400/
DC Water Capital Program	496,102	82,684	93,020 0	(10,336)	-13% 100%
Washington Aqueduct Projects Total Cash Used	10,896 506,998	1,816 84,500	93,020	1,816 (8,520)	-10%
Net Cash/PAYGO Provided (Used) by Cap. Act.	(\$76,434)	(\$12,739)	(\$58,984)	(\$46,245)	
Net Casil/PATGO Provided (Used) by Cap. Act.	(\$76,434)	(\$12,739)	(\$50,564)	(\$40,245)	
Beginning Balance, October 1 (Net of Rate Stab. Fund) Projected	\$162,652		\$162,652		
Plus (Less) Operating Surplus	82,660	13,777	36,590		
Wholesale Customer Refunds from Prior Years	(10,000)	(1,667)	0		
Interest Earned From Bond Reserve	323	54	0		
Prior Year Federal Billing Reconciliation	(19,201)	(3,200)	(4,800)		
Cash Used for Capital	(76,434)	(12,739)	(58,984)		
Balance Attributable to O&M Reserve	\$140,000		\$135,457		
	Current				
OTHER CASH RESERVES	Balance				
Rate Stabilization Fund	\$51,450				
DC Insurance Reserve	1,043				

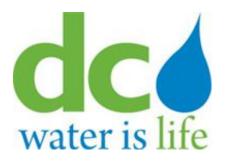
APPENDIX

Investment Report9



DC Water

Investment Performance Report – November 2016



DC Water Finance Division Economic Update

ECONOMIC COMMENTARY

- Since the Presidential election, yields on fixed-income securities have increased sharply. The yield on 2-year U.S. Treasury Notes increased 0.28% during the month reaching a high of 1.12%. Long-term maturities increased even more during the month.
- ➤ With the November Federal Open Market Committee ("FOMC") meeting less than one week prior to the Presidential election, the FOMC decided to postpone raising rates. The FOMC meets on December 13th 14th. The market is pricing in a 100% probability of the Federal Reserve raising rates at the meeting by ½%.
- ➤ The United States labor market added 178,000 jobs in November. The unemployment rate declined to 4.6%.

PORTFOLIO RECAP

- The portfolio is diversified among Bank Deposits, U.S. Treasuries, Federal Agencies, Supranational Bonds, Commercial Paper, Negotiable CDs, Corporate Notes/Bonds, Municipal Bonds, FDIC Insured CDs, and SEC registered money market funds.
- > The overall yield-to-maturity on cost of the portfolio is 0.77%.

Operating Reserve

- In order to maintain the duration of the portfolio, PFM purchased \$2.8 million of 2½-year U.S. Treasuries and \$895,000 of 3-year Corporate Notes.
- PFM sold \$675,000 of 2-year U.S. Treasuries and swapped into 2-year Supranational Bonds. This trade generated an additional 0.22% of yield.
- The Authority purchased \$5.1 million of 1-year CDs through CDARs.

Debt Service Reserve Fund

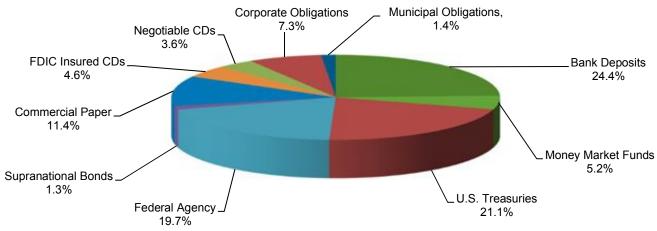
 PFM took advantage of the sharp rise in interest rates to extend the Debt Service Reserve Fund. PFM sold \$11.5 million of 4- to 5-month U.S. Treasuries and purchased U.S. Treasuries in the 1 1/4- to 2-year range.

2016B Construction Fund

• PFM purchased \$24.6 million of U.S. Treasuries at an average yield of 0.55%.



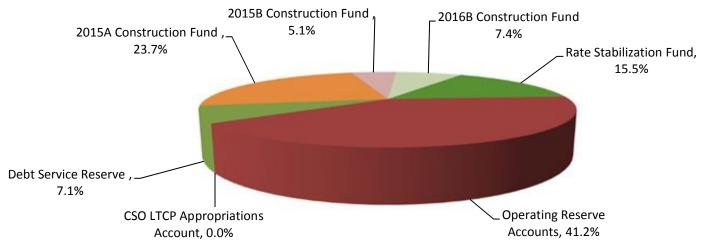
DC Water Finance Division Investments - By Security Type As of November 30, 2016



	Book Value +	Asset	Permitted
Security Type	Accrued Interest	Allocation	By Policy
Bank Deposits	80,954,799	24.4%	100.0%
Money Market Funds	17,244,267	5.2%	100.0%
U.S. Treasuries	69,885,547	21.1%	100.0%
Federal Agency	65,483,523	19.7%	80.0%
Supranational Bonds	4,470,652	1.3%	30.0%
Commercial Paper	37,887,306	11.4%	35.0%
FDIC Insured CDs	15,229,790	4.6%	30.0%
Negotiable CDs	12,011,005	3.6%	30.0%
Corporate Obligations	24,083,485	7.3%	30.0%
Municipal Obligations	4,725,958	1.4%	20.0%
Total	\$ 331,976,332	100.0%	



DC Water Finance Division Investment Analysis – By Fund As of November 30, 2016



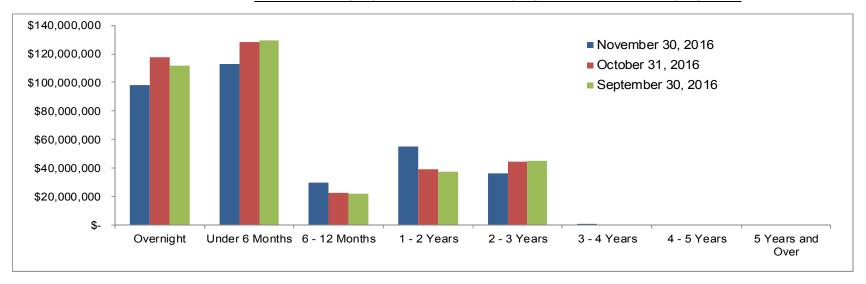
Fund Name	A	Book Value + ccrued Interest	Yield-to- Maturity at Cost	Effective Duration (years)	Weighted Average Maturity (days)
Rate Stabilization Fund	\$	51,450,000	0.40%	0.00	1.0
Operating Reserve Accounts	\$	136,816,122	1.03%	1.24	466.5
CSO LTCP Appropriations Account	\$	513	0.37%	0.00	1.0
Debt Service Reserve	\$	23,612,569	0.81%	1.18	434.3
2015A Construction Fund	\$	78,757,858	0.76%	0.18	64.6
2015B Construction Fund	\$	16,831,317	0.20%	0.00	1.0
2016B Construction Fund	\$	24,507,952	0.54%	0.42	155.0
Total	\$	331,976,332	0.77%	0.67	250.1



DC Water Finance Division Investment Analysis – By Maturity

Maturity Distribution	November 30, 2016	October 31, 2016	September 30, 2016
Overnight \$	98,199,066.33 \$	117,606,276.66 \$	111,674,294.78
Under 6 Months	112,781,028.42	128,106,278.48	129,458,444.16
6 - 12 Months	29,430,961.36	22,564,074.54	22,068,973.19
1 - 2 Years	54,774,749.79	38,869,304.27	37,442,006.67
2 - 3 Years	35,895,750.93	44,453,365.31	44,850,593.01
3 - 4 Years	894,775.23	-	-
4 - 5 Years	-	-	-
5 Years and Over	-	-	

Totals \$ 331,976,332.06 \$ 351,599,299.26 \$ 345,494,311.81



Investment Policy Compliance with



DC Water Finance Division Investments – Issuer Allocation

Credit Ratings

vater is me	Credit Ratings S&P / Moody's	Book Value		Investment Policy Limit	Compliance with Investment Policy
	SQF / MOOUY S	DOOK Value		Lillit	investment roncy
Bank Deposits					
TD Bank		80,954,799.27	24.4%	100.0%	Yes
Sub-Total Bank Deposits	-	80,954,799.27	24.4%	100.0%	Yes
Money Market Mutual Funds					
Wells Fargo Treasury Plus MMF	AAAm	17,066,840.41	5.1%	50.0%	Yes
Wells Fargo Government MMF	AAAm	177,426.65	0.1%	50.0%	Yes
Sub-Total Money Market Mutual Funds	-	17,244,267.06	5.2%	100.0%	Yes
U.S. Treasuries					
Treasury Note	AA+ / Aaa	69,885,546.86	21.1%	100.0%	Yes
Sub-Total Treasuries	-	69,885,546.86	21.1%	100.0%	Yes
Federal Agencies					
Fannie Mae	AA+ / Aaa	10,191,397.88	3.1%	40.0%	Yes
Federal Home Loan Bank	AA+ / Aaa	10,036,671.91	3.0%	40.0%	Yes
Freddie Mac	AA+ / Aaa	45,255,453.09	13.6%	40.0%	Yes
Sub-Total Federal Agencies	_	65,483,522.88	19.7%	80.0%	Yes
Supranational Bonds					
African Development Bank	AAA / Aaa	1,409,152.82	0.4%	5.0%	Yes
Inter-American Development Bank	AAA / Aaa	1,257,621.62	0.4%	5.0%	Yes
International Bank for Reconstruction and Development	AAA / Aaa	1,803,878.01	0.5%	5.0%	Yes
Sub-Total Supranational Bonds	_	4,470,652.45	1.3%	30.0%	Yes
Commercial Paper					
Canadian Imperial Holding	A-1 / P-1	11,121,482.43	3.4%	5.0%	Yes
Bank of Montreal Chicago	A-1 / P-1	9,974,648.90	3.0%	5.0%	Yes
BNP Paribas NY Branch	A-1 / P-1	16,791,174.40	5.1%	5.0%	Yes*
Sub-Total Commercial Paper	-	37,887,305.73	11.4%	35.0%	Yes
FDIC Insured Certificates of Deposit					
CDARS - Placed by Industrial Bank	NR / NR	15,229,790.28	4.6%	5.0%	Yes
Sub-Total FDIC-Insured Certificates of Deposit	-	15,229,790.28	4.6%	30.0%	Yes

^{*}At the date of acquisition, less than 5.0% of DC Water's investments were invested in BNP Paribas commercial paper



DC Water Finance Division Investments – Issuer Allocation

water is me	Credit Ratings S&P / Moody's	Book Value		Investment Policy Limit	Compliance with Investment Policy
Negotiable Certificates of Deposit					
Canadian Imperial Bank NY	A-1 / P-1	1,802,777.50	0.5%	5.0%	Yes
HSBC Bank USA NA	A-1+ / P-1	1,801,047.35	0.5%	5.0%	Yes
Nordea Bank Finland NY	AA- / Aa3	1,800,287.50	0.5%	5.0%	Yes
Rabobank Nederland NV	A-1 / P-1	1,802,140.00	0.5%	5.0%	Yes
Skandinaviska Enskilda Banken NY	A-1 / P-1	1,801,110.00	0.5%	5.0%	Yes
Svenska Handelsbanken NY	A-1+ / P-1	1,800,476.22	0.5%	5.0%	Yes
US Bank NA Cincinatti	AA- / Aa1	1,203,166.04	0.4%	5.0%	Yes
Sub-Total Negotiable Certificates of Deposit		12,011,004.61	3.6%	30.0%	Yes
Corporate Obligations					
Apple Inc.	AA+ / Aa1	1,449,866.79	0.4%	5.0%	Yes
Bank of Montreal	A+ / Aa3	904,227.88	0.3%	5.0%	Yes
Bank of New York Mellon	A / A1	1,800,637.81	0.5%	5.0%	Yes
Bank of Nova Scotia	A+ / Aa3	1,814,013.79	0.5%	5.0%	Yes
Berkshire Hathaway Inc	AA / Aa2	351,113.13	0.1%	5.0%	Yes
Cisco Systems Inc.	AA- / A1	1,561,655.59	0.5%	5.0%	Yes
Chevron	AA- / Aa2	1,804,002.28	0.5%	5.0%	Yes
Exxon Mobil	AA+ / Aaa	1,805,546.25	0.5%	5.0%	Yes
General Electric	AA- / A1	585,007.26	0.2%	5.0%	Yes
IBM	AA- / Aa3	2,255,356.11	0.7%	5.0%	Yes
Merck & Co.	AA / A1	731,186.26	0.2%	5.0%	Yes
Microsoft	AAA / Aaa	596,504.77	0.2%	5.0%	Yes
Pfizer Inc.	AA / A1	894,775.23	0.3%	5.0%	Yes
Royal Bank of Canada	AA- / Aa3	1,755,211.86	0.5%	5.0%	Yes
Toronto Dominion Bank NY	AA- / Aa1	903,841.01	0.3%	5.0%	Yes
Toyota Motor Credit Corp	AA- / Aa3	1,533,121.53	0.5%	5.0%	Yes
Walmart Stores Inc.	AA / Aa2	803,014.41	0.2%	5.0%	Yes
Wells Fargo & Company Notes	A / A2	1,120,629.52	0.3%	5.0%	Yes
Westpac Banking	AA- / Aa2	1,413,773.79	0.4%	5.0%	Yes
Sub-Total Corporate Obligations		24,083,485.27	7.3%	30.0%	Yes
Municipal Obligations					
Connecticut State	AA- / Aa3	990,624.58	0.3%	5.0%	Yes
Florida State	AA / Aa3	1,816,222.50	0.5%	5.0%	Yes
Mississippi State	AA / Aa2	120,218.00	0.0%	5.0%	Yes
Regional Transportation Authority, IL	AA / Aa3	1,798,892.57	0.5%	5.0%	Yes
Sub-Total Municipal Obligations		4,725,957.65	1.4%	20.0%	Yes
Grand Total		\$ 331,976,332.06	100.0%		



DC Water Finance Division Book Value Performance As of November 30, 2016

The portfolio is in compliance with the Authority's Investment Policy

	Trailing 1 Months		Trailing	3 Months	Trailing 6 Months		Trailing 12 Months	Trailing 24 Months
	Periodic	Annualized	Periodic	Annualized	Periodic	Annualized		
Total Rate Stabilization Fund	0.03%	0.40%	0.10%	0.40%	0.25%	0.49%	0.58%	0.59%
Operating Reserve Accounts	0.08%	0.93%	0.28%	1.13%	0.60%	1.20%	1.14%	1.00%
Total Debt Service Reserve	0.07%	0.90%	0.18%	0.74%	0.35%	0.70%	0.62%	0.66%
2015A Construction Fund	0.06%	0.77%	0.18%	0.74%	0.35%	0.70%	0.57%	n/a
2015B Construction Fund	0.09%	1.06%	0.20%	0.82%	0.42%	0.83%	0.63%	n/a
2016B Construction Fund	0.03%	0.40%	n/a	n/a	n/a	n/a	n/a	n/a
Short-Term	0.05%	0.64%	0.17%	0.68%	0.34%	0.67%	0.61%	0.49%
Merrill Lynch 3-Month Treasury Index (Book Value) ¹	0.03%	0.37%	0.07%	0.26%	0.12%	0.25%	0.22%	0.13%
Core (1+ Years)	0.09%	1.13%	0.29%	1.15%	0.57%	1.13%	1.07%	0.98%
Merrill Lynch 1-3 Year Treasury Index (Book Value) ²	0.09%	1.10%	0.23%	0.91%	0.40%	0.80%	0.82%	0.75%

⁽¹⁾ The Merrill Lynch 3-Month Treasury Bill is an unmanaged index tracking the on-the-run Treasury Bill. The Index is produced and maintained by Merrill Lynch & Co. Performance for this index is shown on a book value basis.

⁽²⁾ The Merrill Lynch 3-Month Treasury Bill is an unmanaged index tracking a basket of U.S. Treasuries with 1 to 3 year maturities. The Index is produced and maintained by Merrill Lynch & Co. Performance for this index is shown on a book value basis.

MARKET VALUE + AMORTIZED COST +



DC Water Finance Division Portfolio Holdings by Fund

DESCRIPTION	CUSIP	PA	R AMOUNT	COUPON RATE	MATURITY DATE	SETTLEMENT DATE	YTM AT COST	ORIGINAL COST	ACCRUED INTEREST	ACCRUED INTEREST	TOTAL VALUE
Rate Stabilization Fund											
TD BANK BANK DEPOSIT		\$	51,450,000		12/1/2016		0.40%	\$ 51,450,000	\$ 51,450,000		\$ 51,450,000.00
Operating Reserve Accounts											, , , , , , , , , , , , , , , , , , , ,
TD BANK BANK DEPOSIT		\$	29,504,286		12/1/2016		0.90%				
WELLS FARGO GOVERNMENT MMF			177,427		12/1/2016		0.25%	177,427	177,427	177,427	
INDUSTRIAL BANK CDARS			2,539,450	0.450	1/19/2017	1/21/2016	0.45%	2,539,450	2,549,356	2,549,356	
BNP PARIBAS NY BRANCH COMM PAPER	09659BQH6		1,800,000		3/17/2017	6/20/2016	1.04%	1,786,095	1,795,041	1,794,541	
CANADIAN IMPERIAL BANK NY YCD	13606JYY9		1,800,000	1.010	4/6/2017	4/10/2015	1.01%	1,800,000	1,802,938	1,802,778	
RABOBANK NEDERLAND NV CERT DEPOS	21684BXH2		1,800,000	1.070	4/21/2017	4/27/2015	1.07%	1,800,000	1,802,831	1,802,140	
NORDEA BANK FINLAND NY CD	65558LFA5		1,800,000	1.150	5/26/2017	5/29/2015	1.15%	1,800,000	1,801,351	1,800,288	
SVENSKA HANDELSBANKEN NY FLT CERT DEPOS			1,800,000	1.375	8/24/2017	11/24/2015	0.84%	1,800,000	1,802,690	1,800,476	
US BANK NA CINCINNATI (CALLABLE) CD	90333VPF1		1,200,000	1.375	9/11/2017	9/11/2014	1.41%	1,198,068	1,207,311	1,203,166	
MS ST TXBL GO BONDS	605581FX0		120,000	1.090	10/1/2017	2/18/2015	1.09%	120,000	120,301	120,218	
INDUSTRIAL BANK CDARS			5,035,026	0.350	10/12/2017	10/13/2016	0.35%	5,035,026	5,037,398	5,037,398	
ROYAL BANK OF CANADA CORP NOTES	78010U4A2		850,000	1.400	10/13/2017	10/15/2014	1.41%	849,873	851,918	851,549	
INDUSTRIAL BANK CDARS			5,065,244	0.400	11/10/2017	11/10/2016	0.40%	5,065,244	5,066,420	5,066,420	
	83050FBG5		1,800,000	1.480	11/16/2017	11/17/2015	1.48%	1,800,000	1,798,671	1,801,110	
	40428AR41		1,800,000	1.496	11/17/2017	11/18/2015	0.97%	1,800,000	1,803,819	1,801,047	
,	166764AA8		900,000	1.104	12/5/2017	11/26/2014	1.26%	895,743	903,184	903,417	
GENERAL ELECTRIC CO NOTES	369604BC6		550,000	5.250	12/6/2017	11/26/2014	1.45%	611,727	586,366	585,007	
US TREASURY NOTES	912828UE8		1,275,000	0.750	12/31/2017	5/6/2016	0.71%	1,275,847	1,276,661	1,279,559	
TOYOTA MOTOR CREDIT CORP NOTE	89236TCA1		590,000	1.450	1/12/2018	1/12/2015	1.50%	589,192	593,243	592,999	
WESTPAC BANKING CORP NOTES	961214BZ5		1,400,000	1.600	1/12/2018	4/29/2015	1.27%	1,412,306	1,408,150	1,413,774	
INDUSTRIAL BANK CDARS			2,563,284	0.600	1/18/2018	1/21/2016	0.60%	2,563,284	2,576,616	2,576,616	
IBM CORP NOTES	459200HZ7		2,250,000	1.125	2/6/2018	2/6/2015	1.23%	2,243,138	2,252,947	2,255,356	
WAL MART STORES INC. CORP NOTES	931142CJ0		750,000	5.800	2/15/2018	6/12/2015	1.30%	838,382	802,892	803,014	
EXXON MOBIL CORP NOTES	30231GAL6		1,800,000	1.305	3/6/2018	3/6/2015	1.31%	1,800,000	1,804,317	1,805,546	
FNMA NOTE	3135G0J61		2,250,000	0.875	3/28/2018	3/4/2016	0.97%	2,245,500	2,249,983	2,250,549	
REGIONAL TRANS AUTH, IL TXBL REV BONDS	7599112M1		1,800,000	1.250	5/4/2018	5/20/2016	1.44%	1,793,358	1,797,702	1,798,893	
MERCK & CO GLOBAL NOTES	58933YAG0		731,000	1.300	5/18/2018	3/27/2015	1.31%	730,664	730,899	731,186	
BANK OF NEW YORK MELLON CORP (CALLABLE)	06406HDB2		1,800,000	1.600	5/22/2018	5/29/2015	1.60%	1,799,838	1,804,111	1,800,638	
US TREASURY NOTES	912828VE7		450,000	1.000	5/31/2018	12/30/2015	1.21%	447,768	449,801	448,623	
BANK OF NOVA SCOTIA CORP NOTE (CALLABLE)	064159GM2		1,800,000	1.700	6/11/2018	6/11/2015	1.72%	1,799,154	1,814,628	1,814,014	
CISCO SYSTEMS INC CORP NOTE	17275RAU6		1,550,000	1.650	6/15/2018	6/17/2015	1.66%	1,549,737	1,567,726	1,561,656	
FEDERAL HOME LOAN BANKS AGCY	3130A8BD4		2,830,000	0.875	6/29/2018	5/27/2016	0.99%	2,823,180	2,831,295	2,835,288	
FEDERAL HOME LOAN BANKS AGCY	3130A8BD4		1,675,000	0.875	6/29/2018	8/12/2016	0.85%	1,675,637	1,675,766	1,681,725	
TOYOTA MOTOR CREDIT CORP	89236TCP8		935,000	1.550	7/13/2018	7/13/2015	1.58%	934,205	941,170	940,123	
INTL BANK OF RECON AND DEV SN NOTES	459058FE8		900,000	0.875	7/19/2018	4/19/2016	0.95%	898,407	897,043	901,726	
FHLB NOTES	3130A8PK3		3,675,000	0.625	8/7/2018	8/12/2016	0.81%	3,661,844	3,649,643	3,671,111	
BERKSHIRE HATHAWAY INC GLOBAL NOTES	084670BX5		220,000	1.150	8/15/2018	8/15/2016	1.16%	219,974	219,651	220,722	
AFRICAN DEVELOPMENT BANK NOTE	00828EBB4		700,000	1.625	10/2/2018	11/3/2016	1.12%	706,699	705,066	708,294	
FHLMC REFERENCE NOTE	3137EAED7		2,375,000	0.875	10/12/2018	9/16/2016	0.90%	2,373,979	2,367,272	2,378,411	
US TREASURY NOTES	912828A34		3,925,000	1.250	11/30/2018	11/9/2015	1.18%	3,932,973	3,934,488	3,930,380	
US TREASURY NOTES	912828A34		3,000,000	1.250	11/30/2018	5/6/2016	0.83%	3,031,641	3,007,252	3,024,770	
	912828A75		5,150,000	1.500	12/31/2018	12/4/2015	1.22%	5,193,654	5,219,747	5,212,078	
WELLS FARGO & COMPANY NOTES	94974BFQ8		1,103,000	2.150	1/15/2019	10/7/2015	1.77%	1,116,225	1,117,543	1,120,630	
	037833BQ2		545,000	1.700	2/22/2019	2/23/2016	1.71%	544,907	548,896	547,453	
FNMA BENCHMARK NOTE	3135G0J53		2,250,000	1.000	2/26/2019	2/23/2016	1.08%	2,244,690	2,244,694	2,251,974	
FNMA BENCHMARK NOTE	3135G0J53		825,000	1.000	2/26/2019	8/8/2016	0.90%	827,087	823,055	829,010	



DC Water Finance Division Portfolio Holdings by Fund

water 18 life DESCRIPTION	CUSIP	PAR AMOUNT	COUPON RATE	MATURITY DATE	SETTLEMENT DATE	YTM AT COST	ORIGINAL COST	MARKET VALUE + ACCRUED INTEREST	AMORTIZED COST + ACCRUED INTEREST	TOTAL VALUE
Operating Reserve Accounts										
FNMA BENCHMARK NOTE	3135G0J53	1,425,000	1.000	2/26/2019	9/2/2016	0.97%	1,425,926	1,421,640	1,429,596	
BERKSHIRE HATHAWAY INC NOTES	084664CG4	130,000	1.700	3/15/2019	3/15/2016	1.73%	129,901	130,408	130,391	
FREDDIE MAC NOTES	3137EADZ9	1,700,000	1.125	4/15/2019	5/31/2016	1.10%	1,701,309	1,694,999	1,703,536	
US TREASURY NOTES	912828D23	1,465,000	1.625	4/30/2019	6/29/2016	0.70%	1,502,998	1,480,200	1,499,427	
US TREASURY NOTES	912828D23	2,820,000	1.625	4/30/2019	11/14/2016	1.06%	2,858,555	2,849,259	2,861,751	
INTER-AMERICAN DEVELOPMENT BANK	458182DX7	1,260,000	1.000	5/13/2019	4/12/2016	1.10%	1,256,220	1,244,420	1,257,622	
CHEVRON CORP NOTES	166764BH2	900,000	1.561	5/16/2019	5/16/2016	1.56%	900,000	895,232	900,585	
FHLB GLOBAL NOTE	3130A8DB6	1,840,000	1.125	6/21/2019	6/3/2016	1.14%	1,839,227	1,837,856	1,848,548	
FL ST BOARD ADMIN FIN CORP TXBL REV BD	341271AA2	1,800,000	2.163	7/1/2019	3/8/2016	2.16%	1,800,000	1,835,267	1,816,223	
BANK OF MONTREAL	06367THQ6	900,000	1.500	7/18/2019	7/18/2016	1.53%	899,136	893,319	904,228	
FHLMC REFERENCE NOTE	3137EAEB1	2,250,000	0.875	7/19/2019	7/20/2016	0.96%	2,244,555	2,227,599	2,252,372	
ROYAL BANK OF CANADA CORP NOTES	78012KRK5	900,000	1.500	7/29/2019	7/29/2016	1.54%	898,974	892,679	903,663	
APPLE INC CORP NOTES	037833CB4	900,000	1.100	8/2/2019	8/4/2016	1.13%	899,100	889,646	902,414	
MICROSOFT CORP NOTES	594918BN3	595,000	1.100	8/8/2019	8/8/2016	1.14%	594,387	588,845	596,505	
TORONTO DOMINION BANK NY CORP NOTES	89114QBJ6	900,000	1.450	8/13/2019	7/13/2016	1.45%	899,919	891,603	903,841	
CT ST TXBL GO BONDS	20772J3D2	985,000	1.300	8/15/2019	8/17/2016	1.23%	987,128	978,475	990,625	
INTL BANK OF RECON AND DEV SN NOTE	459058FK4	900,000	0.875 1.000	8/15/2019 8/28/2019	7/13/2016 9/2/2016	0.88%	899,811	885,986	902,152	
FNMA NOTES	3135G0P49	1,450,000				1.05%	1,447,738	1,437,406	1,451,507	
FNMA NOTES	3135G0P49	1,975,000	1.000	8/28/2019	10/5/2016	1.02%	1,973,815	1,957,846	1,978,762	
AFRICAN DEVELOPMENT BANK NOTE	00828EBQ1	700,000	1.125	9/20/2019	9/20/2016	1.16%	699,258	691,977	700,859	
PFIZER INC CORP NOTE PFIZER INC CORP NOTE	717081EB5	595,000 300,000	1.700 1.700	12/15/2019 12/15/2019	11/21/2016	1.72% 1.73%	594,572	594,014	594,857 299,919	
PFIZER INC CORP NOTE	717081EB5	300,000	1.700	12/15/2019	11/21/2016	1.73%	299,775	299,503	299,919	136,816,121.55
Debt Service Reserve									·	
WELLS FARGO TREASURY PLUS MMF		\$ 1,639		12/1/2016		0.20% \$				
US TREASURY NOTES	912828PA2	6,257,000	1.875	9/30/2017	6/29/2015	0.76%	6,412,692	6,331,000	6,334,594	
US TREASURY NOTES	912828TS9	5,415,000	0.625	9/30/2017	4/26/2016	0.75%	5,405,058	5,411,456	5,414,983	
US TREASURY NOTES	912828Q45	6,820,000	0.875	3/31/2018	11/2/2016	0.76%	6,831,189	6,819,778	6,840,725	
US TREASURY NOTES	912828RH5	4,975,000	1.375	9/30/2018	11/15/2016	1.00%	5,009,786	5,009,581	5,020,629 \$	23,612,569.38
CSO LTCP Appropriations Account									Ψ	23,012,309.30
TD BANK BANK DEPOSIT		513		12/1/2016		0.37%	513	513	513	540.45
2015A Construction Fund									\$	513.45
WELLS FARGO TREASURY PLUS MMF		\$ 233,189		12/1/2016		0.20%	\$ 233,189	\$ 233.189	\$ 233.189	
BNP PARIBAS NY BRANCH COMM PAPER	09659BM98	15,000,000	-	12/9/2016	3/16/2016	1.02%	14,887,217	14,998,470	14,996,633	
CANADIAN IMPERIAL HOLDING COMM PAPER	13607EMW6	11,130,000	_	12/30/2016	4/8/2016	0.96%	11,051,874	11,125,359	11,121,482	
FHLMC NOTES	3137EADT3	38,800,000	0.875	2/22/2017	10/30/2015	0.56%	38,961,408	38,928,942	38,921,134	
BANK OF MONTREAL CHICAGO COMM PAPER	06366GQ36	10,000,000	-	3/3/2017	6/16/2016	1.00%	9,928,356	9,976,390	9,974,649	
US TREASURY NOTES	912828SM3	3,500,000	1.000	3/31/2017	11/2/2015	0.58%	3,520,508	3,511,712	3,510,771	
OO INCAGONI NOTEG	3120200IVI3	3,300,000	1.000	3/3/1/2017	11/2/2013	0.3070	3,320,300	3,311,712	5,510,771	78,757,857.92
2015B Construction Fund										
WELLS FARGO TREASURY PLUS MMF		\$ 16,831,317		12/1/2016		0.20%	\$ 16,831,317	\$ 16,831,317		10.001.017.00
2016B Construction Fund									\$	16,831,317.29
WELLS FARGO TREASURY PLUS MMF		\$ 695		12/1/2016		0.20% \$	\$ 695	\$ 695	\$ 695	
US TREASURY BILL	912796KU2	24,564,000	_	5/4/2017	11/10/2016	0.54%	24,499,520	24,503,990	24,507,257	
OO THE ROOM DILL	312/30102	24,504,000	-	3/7/2017	11/10/2010	0.54 /0	24,400,020	24,505,990	24,307,237	24,507,952.47
									Ψ	24,001,002.41
						_	\$ 331,633,469.20	\$ 331,675,774.63	\$ 331,976,332.06 \$	331,976,332.06



DC Water Finance Division Security Purchases Last 6 Months

CUSIP	DESCRIPTION	PAR	COUPON	MATURITY DATE	SETTLE DATE	YTM	TRANSACTION AMOUNT
Operating Res	serve Accounts						
3130A8DB6	FHLB GLOBAL NOTE	1,840,000.00	1.13	6/21/2019	6/3/2016	1.14	1,839,227.20
09659BQH6	BNP PARIBAS NY BRANCH COMM PAPER	1,800,000.00	-	3/17/2017	6/20/2016	1.05	1,786,095.00
912828D23	US TREASURY NOTES	5,350,000.00	1.63	4/30/2019	6/29/2016	0.70	5,502,940.22
912828WL0	US TREASURY NOTES	1,300,000.00	1.50	5/31/2019	7/8/2016	0.67	1,332,848.81
89114QBJ6	TORONTO DOMINION BANK NY CORP NOTES	900,000.00	1.45	8/13/2019	7/13/2016	1.45	899,919.00
459058FK4	INTL BANK OF RECON AND DEV SN NOTE	900,000.00	0.88	8/15/2019	7/13/2016	0.88	899,811.00
06367THQ6	BANK OF MONTREAL	900,000.00	1.50	7/18/2019	7/18/2016	1.53	899,136.00
3137EAEB1	FHLMC REFERENCE NOTE	2,250,000.00	0.88	7/19/2019	7/20/2016	0.96	2,244,555.00
78012KRK5	ROYAL BANK OF CANADA CORP NOTES	900,000.00	1.50	7/29/2019	7/29/2016	1.54	898,974.00
037833CB4	APPLE INC CORP NOTES	900,000.00	1.10	8/2/2019	8/4/2016	1.13	899,100.00
3135G0J53	FNMA BENCHMARK NOTE	825,000.00	1.00	2/26/2019	8/8/2016	0.90	830,799.75
594918BN3	MICROSOFT CORP NOTES	595,000.00	1.10	8/8/2019	8/8/2016	1.14	594,387.15
3130A8BD4	FEDERAL HOME LOAN BANKS AGCY	1,675,000.00	0.88	6/29/2018	8/12/2016	0.85	1,677,387.11
3130A8PK3	FHLB NOTES	3,675,000.00	0.63	8/7/2018	8/12/2016	0.81	3,662,162.51
3137EADZ9	FREDDIE MAC NOTES	2,500,000.00	1.13	4/15/2019	8/15/2016	0.89	2,526,700.00
084670BX5	BERKSHIRE HATHAWAY INC GLOBAL NOTES	220,000.00	1.15	8/15/2018	8/15/2016	1.16	219,973.60
20772J3D2	CT ST TXBL GO BONDS	985,000.00	1.30	8/15/2019	8/17/2016	1.23	987,127.60
3135G0J53	FNMA BENCHMARK NOTE	1,425,000.00	1.00	2/26/2019	9/2/2016	0.97	1,426,163.75
3135G0P49	FNMA NOTES	2,350,000.00	1.00	8/28/2019	9/2/2016	1.05	2,346,334.00
3137EAED7	FHLMC REFERENCE NOTE	2,375,000.00	0.88	10/12/2018	9/16/2016	0.90	2,373,978.75
00828EBQ1	AFRICAN DEVELOPMENT BANK NOTE	700,000.00	1.13	9/20/2019	9/20/2016	1.16	699,258.00
3135G0P49	FNMA NOTES	1,975,000.00	1.00	8/28/2019	10/5/2016	1.02	1,975,625.42
RE0959594	INDUSTRIAL BANK CDARS	5,035,025.80	0.35	10/12/2017	10/13/2016	0.35	5,035,025.80
00828EBB4	AFRICAN DEVELOPMENT BANK NOTE	700,000.00	1.63	10/2/2018	11/3/2016	1.12	707,679.12
RE0959610	INDUSTRIAL BANK CDARS	5,065,244.30	0.40	11/10/2017	11/10/2016	0.41	5,065,244.30
912828D23	US TREASURY NOTES	2,820,000.00	1.63	4/30/2019	11/14/2016	1.06	2,860,326.93
717081EB5	PFIZER INC CORP NOTE	300,000.00	1.70	12/15/2019	11/21/2016	1.73	299,775.00
717081EB5	PFIZER INC CORP NOTE	595,000.00	1.70	12/15/2019	11/21/2016	1.72	594,571.60
Total Debt Ser	rvice Reserve						
912828Q45	US TREASURY NOTES	6,820,000.00	0.88	3/31/2018	11/2/2016	0.76	6,836,599.16
912828RH5	US TREASURY NOTES	4,975,000.00	1.38	9/30/2018	11/15/2016	1.00	5,018,430.88
2015A Constru	ction Fund						
06366GQ36	BANK OF MONTREAL CHICAGO COMM PAPER	10,000,000.00	-	3/3/2017	6/16/2016	1.01	9,928,355.56
2015B Constru	ction Fund						
46640PPU1	JP MORGAN SECURITIES LLC COMM PAPER	10,000,000.00	-	2/28/2017	6/16/2016	0.96	9,932,894.40
2016B Constru							
912796KU2	US TREASURY BILL	24,564,000.00	<u>-</u>	5/4/2017	11/10/2016	0.55	24,499,519.50



DC Water Finance Division Security Sales Last 6 Months

CUSIP	DESCRIPTION	PAR	COUPON	MATURITY DATE	SETTLE DATE	YTM	TRANSACTION AMOUNT
Operating Res	erve Accounts						
912828WL0	US TREASURY NOTES	1,815,000.00	1.50	5/31/2019	6/3/2016	1.03	1,840,392.11
3130A5EP0	FHLB GLOBAL NOTES	1,775,000.00	0.63	5/30/2017	6/20/2016	0.66	1,775,083.82
3135G0JA2	FNMA NOTES	3,500,000.00	1.13	4/27/2017	6/29/2016	0.59	3,522,286.25
912828TB6	US TREASURY NOTES	1,850,000.00	0.75	6/30/2017	6/29/2016	0.51	1,861,379.85
3137EADJ5	FREDDIE MAC GLOBAL NOTES	515,000.00	1.00	7/28/2017	7/8/2016	0.61	519,415.84
912828TG5	US TREASURY NOTES	810,000.00	0.50	7/31/2017	7/8/2016	0.55	811,326.12
89114QAQ1	TORONTO DOMINION BANK NY CORP NT	900,000.00	1.13	5/2/2017	7/13/2016	0.96	903,157.87
912828NR7	US TREASURY NOTES	150,000.00	2.38	7/31/2017	7/13/2016	0.54	154,487.89
912828TG5	US TREASURY NOTES	750,000.00	0.50	7/31/2017	7/13/2016	0.54	751,396.59
06366RVD4	BANK OF MONTREAL CORP NOTES (CALLABLE)	550,000.00	1.30	7/14/2017	7/18/2016	1.05	551,437.94
06366RVD4	BANK OF MONTREAL CORP NOTES (CALLABLE)	350,000.00	1.30	7/14/2017	7/18/2016	1.05	350,915.06
912828D23	US TREASURY NOTES	315,000.00	1.63	4/30/2019	7/20/2016	0.81	323,201.88
912828WL0	US TREASURY NOTES	585,000.00	1.50	5/31/2019	7/20/2016	0.81	597,533.15
912828WL0	US TREASURY NOTES	1,300,000.00	1.50	5/31/2019	7/20/2016	0.81	1,327,851.43
78010U4A2	ROYAL BANK OF CANADA CORP NOTES	550,000.00	1.40	10/13/2017	7/29/2016	1.16	553,862.22
78010U4A2	ROYAL BANK OF CANADA CORP NOTES	350,000.00	1.40	10/13/2017	7/29/2016	1.16	352,457.78
912828C65	US TREASURY NOTES	715,000.00	1.63	3/31/2019	8/4/2016	0.76	735,171.19
912828D23	US TREASURY NOTES	160,000.00	1.63	4/30/2019	8/4/2016	0.77	164,378.26
36962G5N0	GENERAL ELEC CAP CORP GLOBAL NOTES	600,000.00	2.90	1/9/2017	8/8/2016	0.91	606,387.67
912828SH4	US TREASURY NOTES	800,000.00	1.38	2/28/2019	8/8/2016	0.80	816,375.00
912828RH5	US TREASURY NOTES	2,700,000.00	1.38	9/30/2018	8/12/2016	0.72	2,750,928.15
912828VE7	US TREASURY NOTES	1,620,000.00	1.00	5/31/2018	8/12/2016	0.75	1,630,381.93
912828VQ0	US TREASURY NOTES	895,000.00	1.38	7/31/2018	8/12/2016	0.70	907,148.17
912828D23	US TREASURY NOTES	2,450,000.00	1.63	4/30/2019	8/15/2016	0.79	2,516,126.70
912828VQ0	US TREASURY NOTES	200,000.00	1.38	7/31/2018	8/15/2016	0.74	202,596.47
912828D23	US TREASURY NOTES	960,000.00	1.63	4/30/2019	8/17/2016	0.77	986,445.65
3137EADJ5	FREDDIE MAC GLOBAL NOTES	500,000.00	1.00	7/28/2017	9/2/2016	0.66	501,987.22
36962G5N0	GENERAL ELEC CAP CORP GLOBAL NOTES	600,000.00	2.90	1/9/2017	9/2/2016	0.88	606,821.67
89114QAQ1	TORONTO DOMINION BANK NY CORP NT	300,000.00	1.13	5/2/2017	9/2/2016	1.10	301,164.00
89114QAQ1	TORONTO DOMINION BANK NY CORP NT	790,000.00	1.13	5/2/2017	9/2/2016	1.10	793,065.20
912828UE8	US TREASURY NOTES	1,425,000.00	0.75	12/31/2017	9/2/2016	0.75	1,426,914.36
912828WD8	US TREASURY NOTES	2,350,000.00	1.25	10/31/2018	9/16/2016	0.82	2,382,392.33
05253JAF8	ANZ BANKING GROUP LTD CORP NOTES	700,000.00	1.25	6/13/2017	9/20/2016	1.16	702,812.64
05253JAF8	ANZ BANKING GROUP LTD CORP NOTES	500,000.00	1.25	6/13/2017	10/5/2016	1.14	502,319.44
05253JAF8	ANZ BANKING GROUP LTD CORP NOTES	550,000.00	1.25	6/13/2017	10/5/2016	1.14	552,551.39
06366RVD4	BANK OF MONTREAL CORP NOTES (CALLABLE)	850,000.00	1.30	7/14/2017	10/5/2016	1.18	853,268.25
912828A34	US TREASURY NOTES	675,000.00	1.25	11/30/2018	11/3/2016	0.90	683,500.61
3137EADZ9	FREDDIE MAC NOTES	2,500,000.00	1.13	4/15/2019	11/14/2016	1.09	2,504,240.62
3137EADZ9	FREDDIE MAC NOTES	350,000.00	1.13	4/15/2019	11/14/2016	1.09	350,593.69
3135G0P49	FNMA NOTES	900,000.00	1.00	8/28/2019	11/21/2016	1.31	894,379.00



DC Water Finance Division Security Sales Last 6 Months

CUSIP	DESCRIPTION	PAR	COUPON MATURITY DATE		SETTLE DATE	YTM	TRANSACTION AMOUNT
Total Debt Ser	vice Reserve						
912828MV9	US TREASURY NOTES	6,538,000.00	3.25	3/31/2017	11/2/2016	0.47	6,631,582.42
912828SM3	US TREASURY NOTES	5,000,000.00	1.00	3/31/2017	11/15/2016	0.59	5,013,935.87
2015A Construc	ction Fund						
912828SM3	US TREASURY NOTES	9,875,000.00	1.00	3/31/2017	6/16/2016	0.53	9,932,420.78
912828SM3	US TREASURY NOTES	1,625,000.00	1.00	3/31/2017	9/22/2016	0.45	1,637,403.60
2015B Construc	ction Fund						
912828J35	US TREASURY NOTES	9,925,000.00	0.50	2/28/2017	6/16/2016	0.49	9,939,951.56
912828J35	US TREASURY NOTES	25,140,000.00	0.50	2/28/2017	8/29/2016	0.48	25,205,112.94
912828RJ1	US TREASURY NOTES	1,250,000.00	1.00	9/30/2016	8/29/2016	0.37	1,255,840.69
912828RU6	US TREASURY NOTES	5,285,000.00	0.88	11/30/2016	8/29/2016	0.35	5,303,390.55
46640PPU1	JP MORGAN SECURITIES LLC COMM PAPER	10,000,000.00	-	2/28/2017	8/29/2016	0.97	9,951,708.30
912828RJ1	US TREASURY NOTES	4,200,000.00	1.00	9/30/2016	9/22/2016	0.28	4,220,738.22
89233GLW4	TOYOTA MOTOR CREDIT CORP COMM PAPER	8,175,000.00	-	11/30/2016	11/7/2016	0.43	8,172,806.38

Investment Performance Report - November 2016



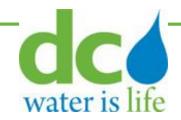
DC Water Finance Division Security Maturities Last 6 Months

CUSIP	DESCRIPTION PAR COUPO		COUPON	MATURITY DATE	SETTLE DATE	YTM	TRANSACTION AMOUNT
Operating Rese	erve Accounts						
RE0908369	INDUSTRIAL BANK CDARS	5,017,482.34	0.35	10/13/2016	10/13/2016	0.00	5,035,043.53
RE0960964	INDUSTRIAL BANK CDARS	5,045,079.12	0.40	11/10/2016	11/10/2016	0.00	5,065,259.44
2015A Construc	ction Fund						
912828QR4	US TREASURY NOTES	13,725,000.00	1.50	6/30/2016	6/30/2016	0.00	13,725,000.00
912828RF9	US TREASURY NOTES	6,450,000.00	1.00	8/31/2016	8/31/2016	0.00	6,450,000.00
2015B Construc	ction Fund						
46640PF16	JP MORGAN SECURITIES LLC COMM PAPER	19,000,000.00	-	6/1/2016	6/1/2016	0.00	19,000,000.00
06538BJG9	BANK OF TOKYO MITSUBISHI COMM PAPER	9,000,000.00	-	9/16/2016	9/16/2016	0.00	9,000,000.00
21687ALW1	COOPERATIEVE RABOBANK U.A. COMM PAPER	10,000,000.00	-	11/30/2016	11/30/2016	0.00	10,000,000.00
89233GLW4	TOYOTA MOTOR CREDIT CORP COMM PAPER	6,825,000.00	-	11/30/2016	11/30/2016	0.00	6,825,000.00

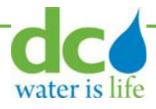


DC Water Finance Division Upcoming Transaction Cash Flows Next 30 Days

DATE	TRANSACTION	CUSIP	DESCRIPTION	COUPON	MATURITY DATE	PAR VALUE/SHARES	PRINCIPAL	INTEREST	TOTAL
12/05/16	INTEREST	166764AA8	CHEVRON CORP (CALLABLE) GLOBAL NOTES	1.104	12/05/17	900,000.00	0.00	4,968.00	4,968.00
12/06/16	INTEREST	369604BC6	GENERAL ELECTRIC CO NOTES	5.250	12/06/17	550,000.00	0.00	14,437.50	14,437.50
12/11/16	INTEREST	064159GM2	BANK OF NOVA SCOTIA CORP NOTE (CALLABLE)	1.700	06/11/18	1,800,000.00	0.00	15,300.00	15,300.00
12/15/16	INTEREST	17275RAU6	CISCO SYSTEMS INC CORP NOTE	1.650	06/15/18	1,550,000.00	0.00	12,787.50	12,787.50
12/21/16	INTEREST	3130A8DB6	FHLB GLOBAL NOTE	1.125	06/21/19	1,840,000.00	0.00	10,350.00	10,350.00
12/29/16	INTEREST	3130A8BD4	FEDERAL HOME LOAN BANKS AGCY	0.875	06/29/18	1,675,000.00	0.00	7,328.13	7,328.13
12/29/16	INTEREST	3130A8BD4	FEDERAL HOME LOAN BANKS AGCY	0.875	06/29/18	2,830,000.00	0.00	12,381.25	12,381.25
12/31/16	INTEREST	912828A75	US TREASURY NOTES	1.500	12/31/18	5,150,000.00	0.00	38,625.00	38,625.00
12/31/16	INTEREST	912828UE8	US TREASURY NOTES	0.750	12/31/17	1,275,000.00	0.00	4,781.25	4,781.25

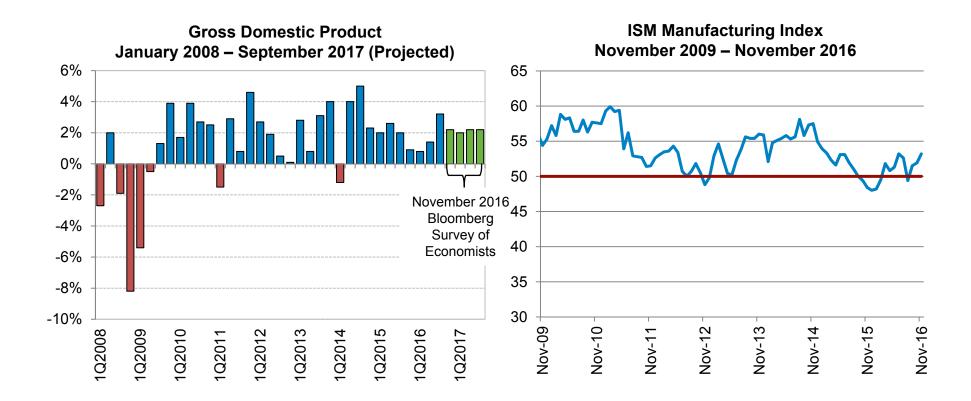


Appendix: Economic Update

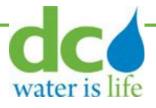


Gross Domestic Product

- U.S. Gross Domestic Product ("GDP") grew at an annual rate of 3.2% in the third quarter of 2016.
- The ISM Manufacturing Index rose slightly from 51.9 in October to 53.2 in November.

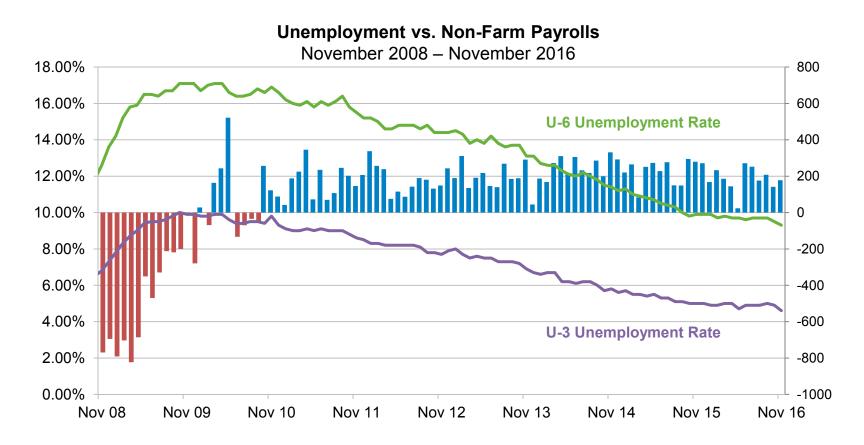


Source: Bloomberg



U.S. Labor Market

- The U.S. labor market added 178,000 jobs in November, short of the 180,000 expectation.
- The unemployment rate fell sharply to 4.6% while the U6 unemployment rate ticked down to 9.3%, the lowest since 2008.



Source: Bloomberg



FOMC Minutes Reinforce December Rate Move

November FOMC Minutes (Released 11/23/16):

- "Members generally agreed that the case for an increase in policy rate had continued to strengthen."
- "Participants saw recent information as indicating that labor market conditions had improved further and considered the firming in inflation and inflation compensation to be positive developments, consistent with continued progress toward the Committee's 2 percent inflation objective."
- "Most participants expressed a view that it could well become appropriate to raise the target range for federal funds rate relatively soon..."
- "Some participants noted that recent Committee communications were consistent with an increase in the target range for federal funds rate in the near term or argued that to preserve credibility, such an increase should occur at the next meeting."

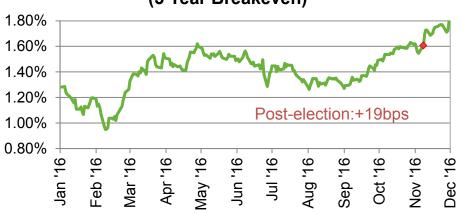
	Indicator	Reading at Nov. meeting	Latest Reading
Economic Growth	GDP (QoQ)	2.9%	3.2%
	Unemployment rate	5.0%	4.6%
Labor Market	Nonfarm payrolls (6 month average)	176k	205k
	Initial jobless claims (4 week average)	253k	252k
	PCE	1.2%	1.4%
	Core PCE	1.7%	1.7%
Inflation	CPI	1.5%	1.6%
Inflation Measures	Core CPI	2.2%	2.1%
	Average hourly earnings	2.6%	2.5%
	Inflation expectations for next 5-10 years	2.4%	2.6%

Source: Federal Reserve and Bloomberg, as of 12/02/16



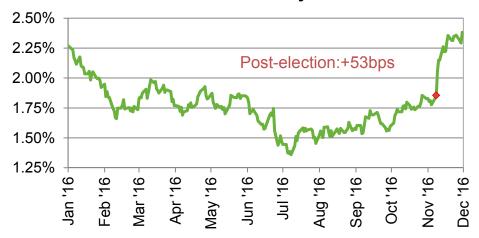
Post-Election Market Reaction

Inflation Expectations (5 Year Breakeven)



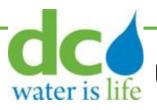
- Infrastructure spending proposed and potential trade tariffs are expected to be inflationary and likely to boost economic growth in the short-term
- Increase in inflation could prompt the Federal Reserve to increase the pace of rate increases.

10 Year U.S. Treasury Yield



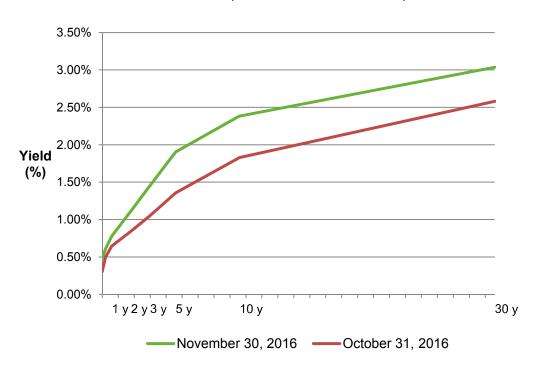
- Long-term yields soared due to higher inflation expectations, as investors demand a higher rate for fixed-income.
- Increased government spending with lower tax revenue is expected to increase the budget deficit, and to be funded through a larger issuance of Treasuries.

Source: Bloomberg



U.S Treasury Yields

U.S. Treasury Yield Curve November 30, 2016 vs. October 31, 2016



	11/30/2016	10/31/2016	<u>Change</u>
3 month	0.48%	0.30%	0.18%
6 month	0.61%	0.50%	0.11%
1 year	0.78%	0.64%	0.14%
2 year	1.12%	0.84%	0.28%
3 year	1.46%	1.05%	0.41%
5 year	1.90%	1.36%	0.54%
10 year	2.38%	1.83%	0.55%
30 year	3.04%	2.58%	0.46%

Source: Bloomberg



Disclosure

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ATTACHMENT 2

FINANCE & BUDGET COMMITTEE APPROVAL OF 2017 A&B SERIES SENIOR LIEN REVENUE BONDS FINANCING DOCUMENTS

ACTION ITEM A: Approval of documents authorizing the issuance of the 2017A & B Series Senior Lien Revenue Bonds:

- 1. Board Resolution
- 2. Preliminary Offering Statement
- 3. Supplemental Indenture
- 4. Bond Purchase Agreement

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-___ 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 Senior Lien Revenue Bonds, Series 2017B (the "Series 2017B Bonds" and, together with the Series 2017A Bonds, the "Series 2017A/B Bonds") to (a) finance certain Costs of the System; (b) fund a Series 2017B Debt Service Reserve Requirement, (as defined herein), if determined necessary; and (c) pay certain costs of issuance;

(iii) to designate the Series 2017A/B Bonds as Senior Debt for purposes of the Indenture; and (iv) to secure the Series 2017A/B Bonds by a pledge of Net Revenues on a parity with the pledge of Net Revenues that secures other Senior Debt, including, without limitation, other Senior Debt that the Authority may issue from time to time in the future; and

WHEREAS, the CEO and General Manager, the Chief Financial Officer, the Chief Engineer and the General Counsel of the Authority have informed the Board that their offices have established "due diligence" procedures for reviewing the documents authorized by this Resolution with the Authority's bond counsel, disclosure counsel, financial advisors, underwriters, underwriters' counsel and other consultants and advisors, with a view to ensuring the accuracy of disclosure; and

WHEREAS, the Finance and Budget Committee met on December 14, 2016, to review the issuance of the Series 2017A/B Bonds and has recommended approval of this Resolution by the Board;

NOW, THEREFORE, BE IT RESOLVED, that:

Section 1. <u>Definitions and Interpretations</u>. Unless otherwise defined herein and unless the context indicates otherwise, the terms used herein and defined in the Indenture (including the Twenty-Second Supplemental Indenture as hereby approved) shall have the meanings assigned to them therein. In addition, the following terms used as defined terms in this Resolution shall have the meaning assigned to them in this Section:

"Authorized Officials" means the Chairman and Vice Chairman of the Board and the CEO and General Manager, Chief Financial Officer, Controller, Budget Director, Finance Director and Rates and Revenue Director of the Authority, provided that any official other than the Chairman shall be designated by the Chairman as his designee for the purpose of executing and delivering any document authorized hereunder.

"Bond Purchase Agreement" means the Bond Purchase Agreement between the Authority and the Series 2017A/B Original Purchasers, dated as of the same date as the Certificate of Award.

"Certificate of Award" means the certificate of an Authorized Official awarding the Series 2017A/B Bonds to the Series 2017A/B Original Purchasers and specifying terms of the Series 2017A/B Bonds, as provided for in Section 4 of this Resolution.

"Continuing Disclosure Agreement" means the Continuing Disclosure Agreement executed by the Authority and the Trustee, dated as of the same date as the 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.

Any reference to the Authority or the Board, or to their members or officers, or to other public officers, boards, commissions, departments, institutions, agencies, bodies or entities, shall include those who or which succeed to their functions, duties or responsibilities by operation of law and also those who or which at the time may legally act in their place.

Section 2. <u>Authorization, Designation and Purposes of Series 2017A/B Bonds.</u> The Authority is authorized to issue, sell and deliver, as provided in this Resolution and the Certificate of Award, not to exceed (except as provided below) Three Hundred Fifty Million Dollars (\$350,000,000) aggregate principal amount of Series 2017A/B Bonds which aggregate

amount shall be allocated between the Series 2017A Bonds and the Series 2017B Bonds in the Certificate of Award as is determined by the Chief Financial Officer as presenting the then optimal financing structure for the Authority. The Series 2017A Bonds shall be designated "Public Utility Senior Lien Revenue Bonds, Series 2017A (Green Bonds)" and shall constitute Senior Debt for purposes of the Indenture, for the purpose of: (a) financing a portion of the costs of the Authority's DC Clean Rivers Project, (b) funding a Series 2017A Debt Service Reserve Requirement, if determined necessary in the Certificate of Award; and (c) paying issuance costs of the Series 2017A Bonds. The Series 2017B Bonds shall be designated "Public Utility Senior Lien Revenue Bonds, Series 2017B" and shall constitute Senior Debt for purposes of the Indenture, for the purpose of: (a) financing certain Costs of the System; (b) funding a Series 2017B Debt Service Reserve Requirement, if determined necessary in the Certificate of Award; and (c) paying issuance costs of the Series 2017B Bonds. For those purposes the proceeds from the sale of the Series 2017A/B Bonds shall be allocated and deposited, as provided in the Twenty-Second Supplemental Indenture. If and to the extent that any Series 2017A/B Bonds are issued for the purpose of funding a Series 2017A Debt Service Reserve Requirement and/or a Series 2017B Debt Service Reserve Requirement, then the aggregate principal amount of Series 2017A/B Bonds hereby authorized may exceed \$350,000,000 by the aggregate principal amount of the Series 2017A/B Bonds to be issued for that purpose. Any designation of bonds authorized above may be revised or clarified in the Certificate of Award

Section 3. Terms and Provisions Applicable to the Series 2017A/B Bonds.

- (a) Form, Transfer and Exchange. The Series 2017A/B Bonds: (i) shall initially be issued only in fully registered form and substantially in the forms attached as Exhibits to the Twenty-Second Supplemental Indenture; (ii) shall initially be issued only to a Depository for holding in a book entry system, and shall be registered in the name of the Depository or its nominee, as Holder, and immobilized in the custody of the Depository, and (iii) shall not be transferable or exchangeable except as provided in the Twenty-Second Supplemental Indenture.
- (b) <u>Denominations and Dates</u>. The Series 2017A/B Bonds shall be dated as of the date of issuance and delivery, but in no event later than December 31, 2017, and there shall be a single Series 2017A/B Bond representing each interest rate for each maturity of the Series 2017A/B Bonds bearing the same series or subseries designation.
- (c) <u>Interest Rates and Principal Maturities</u>. 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) <u>Redemption Provisions</u>. 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) <u>Places and Manner of Payment</u>. 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.
- (g) <u>Execution</u>. The Authorized Officials are, and each of them is, authorized and directed to execute the Series 2017A/B Bonds, and the Secretary of the Board is authorized and directed to affix the seal of the Authority to the Series 2017A/B Bonds and to deliver them to the Trustee for authentication in accordance with the Indenture.

Section 4. Sale of Series 2017A/B Bonds.

- (a) <u>General</u>. The Series 2017A/B Bonds shall be awarded and sold to the Series 2017A/B Original Purchasers in accordance with the Bond Purchase Agreement and the Certificate of Award, at a purchase price of not less than ninety-five percent (95%) of the aggregate of the products from multiplying the principal amount of each Series 2017A/B Bonds times the percentage of such principal amount at which such Series 2017A/B Bond shall be initially offered to the public, after subtracting from the aggregate of such products the premium payable for any municipal bond insurance policy applicable to the Series 2017A/B Bonds.
- (b) <u>Bond Purchase Agreement</u>. The Authorized Officials are, and each of them is, authorized and directed to execute and deliver the Bond Purchase Agreement between the Authority and the Series 2017A/B Original Purchasers, substantially in the form presented to this Authority, but with such changes not inconsistent with the Indenture and this Resolution and not

substantially adverse to the Authority as may be approved by the Authorized Official executing the same on behalf of the Authority. The approval of any such changes by such Authorized Official and the determination by such Authorized Official that no such change is substantially adverse to the Authority shall be conclusively evidenced by the execution of the Bond Purchase Agreement by such Authorized Official. The price for and terms of the Series 2017A/B Bonds and the sale thereof, all as provided in this Resolution, the Bond Purchase Agreement, the Certificate of Award, and the Twenty-Second Supplemental Indenture, are hereby approved and determined to be in the best interests of the Authority.

- Certificate of Award. Such sale and award shall be further evidenced by the Certificate of Award executed by an Authorized Official. The terms of the Series 2017A/B Bonds approved in the Certificate of Award shall be incorporated into the Twenty-Second Supplemental Indenture. The Certificate of Award, subject to the restrictions set forth herein, shall: (i) with respect to each series or subseries of the Series 2017A/B Bonds, specify the aggregate principal amount, the purchase price, the first Interest Payment Dates, the interest rate or rates, the principal retirement dates, the mandatory sinking fund requirements (if any), the redemption dates, and the redemption prices thereof; (ii) specify whether a municipal bond insurance policy, letter of credit, or other credit or liquidity facility shall be obtained with respect to the Series 2017A/B Bonds and, if so, from whom and on what terms; (iii) specify the amount, if any, of the Series 2017A Debt Service Reserve Requirement and the Series 2017B Debt Service Reserve Requirement and determine whether it shall be met entirely with (A) cash and Permitted Investments (as defined in the Indenture); (B) a Qualified Reserve Credit Facility (as defined in the Indenture); or (C) a specified combination of (A) and (B); and (iv) include any additional information that may be required or permitted to be stated therein by the terms of this Resolution and the Bond Purchase Agreement.
- 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) <u>Certificates</u>. 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) <u>Delivery of Bonds</u>. 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. <u>Allocation of Proceeds of the Series 2017A/B Bonds; Tax Covenants.</u>

- (a) <u>Allocation of Proceeds of the Series 2017A/B Bonds</u>. The proceeds from the sale of the Series 2017A/B Bonds shall be allocated, deposited and credited for the purposes approved in this Resolution and as specified in the Twenty-Second Supplemental Indenture.
- (b) <u>Tax Covenants</u>. The Board authorizes the Authorized Officials to approve the tax covenants, authorizations and agreements necessary to achieve and maintain the tax-exempt status of the Series 2017A/B Bonds.

Section 6. Twenty-Second Supplemental Indenture and Other Documents. The Authorized Officials are, and each of them is, authorized in connection with the issuance of the Series 2017A/B Bonds, to execute, acknowledge and deliver in the name of and on behalf of the Authority, the Twenty-Second Supplemental Indenture, substantially in the form thereof submitted to the Authority at or prior to this meeting, but with such changes therein as may be permitted by the Indenture and this Resolution and approved by the Authorized Officer executing the document on behalf of the Authority. The approval of those changes shall be conclusively evidenced by the execution of the document by an Authorized Official.

The Authorized Officials and any other member, officer or employee of the Authority are each authorized to execute and deliver, on behalf of the Authority, such other certificates, documents and instruments related to the Series 2017A/B Bonds as are necessary in connection with the transactions authorized in this Resolution, and to do all other things required of them or the Authority pursuant to the Indenture, the Twenty-Second Supplemental Indenture, the Bond Purchase Agreement and this Resolution.

No covenant, agreement or obligation contained herein shall be deemed to be a covenant, agreement or obligation of any present or future member of the Board or officer, employee or agent of the Authority in his or her individual capacity, and neither the members of the Board nor any officer of the Authority executing the Series 2017A/B Bonds shall be liable

personally thereon or be subject to any personal liability or accountability by reason of the issuance thereof. No member of the Board or officer, employee, agent or advisor of the Authority shall incur any personal liability with respect to any other action taken by him pursuant to this Resolution or the Indenture or any other document authorized by this Resolution, provided such member, officer, employee, agent or advisor acts in good faith.

Section 7. Official Statement; Continuing Disclosure. The Authorized Officials shall cause to be prepared and issued on behalf of the Authority, an official statement (the "Official Statement") relating to the original issuance of the Series 2017A/B Bonds. The Authorized Officials are, and each of them is, authorized to execute the Official Statement on behalf of the Authority, which shall be in substantially the form of the Official Statement submitted to the Authority at this meeting, with such changes as the Authorized Official who executes it may approve, the execution thereof on behalf of the Authority by an Authorized Official to be conclusive evidence of such authorization and approval (including approval of any such changes), and copies thereof are hereby authorized to be prepared and furnished to the Series 2017A/B Original Purchasers for distribution to prospective purchasers of the Series 2017A/B Bonds and other interested persons. The preliminary Official Statement, shall be "deemed substantially final" by the 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.

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 Series 2017A/B Bonds, shall) take such actions as may be necessary and appropriate, including seeking mandamus or specific performance by court order, to cause the Authority to comply with its obligations under this paragraph. The Authorized Officials are, and each of them is, hereby authorized and directed to execute and deliver the Continuing Disclosure Agreement in substantially the form submitted to the Authority at or prior to this meeting with such changes therein as may be approved by the officer executing the Continuing Disclosure Agreement. The approval of those changes shall be conclusively evidenced by the execution of the Continuing Disclosure Agreement by an Authorized Official.

Section 8. <u>General</u>. The appropriate officers and employees of the Authority will do all things necessary and proper to implement and carry out the orders and agreements set forth or approved in this Resolution for the proper fulfillment of the purposes thereof. The Authority shall furnish to the Series 2017A/B Original Purchasers of the Series 2017A/B Bonds a true and certified transcript of all proceedings relating to the authorization and issuance of the Series 2017A/B Bonds along with other information as is necessary or proper with respect to the Series 2017A/B Bonds.

Section 9. Multiple Series. Notwithstanding anything herein to the contrary, each of the Series 2017A Bonds and the Series 2017B Bonds may be issued in one or more separate series or subseries, each bearing a distinctive designation, provided that the Series 2017A/B Bonds of all series in the aggregate, must satisfy the requirements and comply with the restrictions of this Resolution and the Indenture. Separate series and subseries of Series 2017A/B Bonds may be issued at the same or different times and so may have different dates of issuance. The Series 2017A/B Bonds of each series and subseries shall be designated as provided in the applicable Certificate of Award. A separate Certificate of Award may be delivered for each series or subseries, and each reference in this Resolution to the Certificate of Award shall refer to each and all such Certificates of Award. A separate Supplemental Trust Indenture may be entered into for each series or subseries, and each reference in this Resolution to the Twenty-Second Supplemental Indenture shall refer to each and all such Supplemental Trust Indentures, but any Supplemental Trust Indenture subsequent to the Twenty-Second Supplemental Indenture shall bear a different designation. A separate Bond Purchase Agreement and Continuing Disclosure Agreement may be entered into for each series or subseries, and each reference in this Resolution to the Bond Purchase Agreement or to the Continuing Disclosure Agreement shall refer to each and all such

Bond Purchase Agreements or Continuing Disclosure Agreements, respectively. A separate Official Statement may be prepared for each series or subseries, and each reference in this Resolution to the Official Statement shall refer to each and all such Official Statements.

Section 10. <u>Effective Date</u>. This Resolution shall take effect immediately.

Secretary to the Board of Directors	

PRELIMINARY OFFICIAL STATEMENT DATED JANUARY ___, 2017

NEW ISSUE - BOOK-ENTRY ONLY

RATINGS: Standard & Poor's: ___ Moody's: ___

See "RATINGS" herein

[GREEN BOND ASSESSMENT RATING (for Series 2017A):

In the opinion of Co-Bond Counsel, under existing law (i) assuming continuing compliance with certain covenants and the accuracy of certain representations, interest on the Series 2017A/B Bonds is excluded from gross income for federal income tax purposes and is not an item of tax preference for purposes of the federal alternative minimum tax imposed on individuals and corporations, and (ii) the Series 2017A/B Bonds and the interest thereon are exempt from District taxation, except estate, inheritance and gift taxes. Interest on the Series 2017A/B Bonds may be subject to certain federal taxes imposed only on certain corporations, including the corporate alternative minimum tax on a portion of that interest. For a more complete discussion of the tax aspects, see "TAX MATTERS" herein.

[DC Water Logo]

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\$[_____]*

DISTRICT OF COLUMBIA WATER AND SEWER AUTHORITY
Public Utility Senior Lien Revenue Bonds,
Series 2017A
(Green Bonds)

DISTRICT OF COLUMBIA WATER AND SEWER AUTHORITY
Public Utility Senior Lien Revenue Bonds,
Series 2017B

Dated: Date of Delivery

Due: As shown on inside cover

The Public Utility Senior Lien Revenue Bonds, Series 2017A (Green Bonds) (the "Series 2017A Bonds") and the Public Utility Senior Lien Revenue Bonds, Series 2017B (the "Series 2017B Bonds" and, together with the Series 2017A Bonds, the "Series 2017A/B Bonds") are being issued by the District of Columbia Water and Sewer Authority (the "Authority," also commonly referred to as "DC Water") pursuant to a Master Indenture of Trust, dated as of April 1, 1998 (the "Master Indenture"), by and between the Authority and Wells Fargo Bank, N.A., as trustee (the "Trustee"), as amended and supplemented from time to time, including as amended and supplemented by the Twenty-Second Supplemental Indenture of Trust, by and between the Authority and the Trustee, dated the date of issuance and delivery of the Series 2017A/B Bonds (the "Twenty-Second Supplemental Indenture" and, together with the Master Indenture, as previously amended and supplemented, the "Indenture"). The proceeds of the Series 2017A/B Bonds will be used to pay (i) a portion of the costs of the Authority's DC Clean Rivers Project (the "DC Clean Rivers Project") (the "Series 2017A Project"), (ii) a portion of the costs of certain other capital improvements to the System (the "Series 2017B Project"), and (iii) costs of issuing the Series 2017A/B Bonds. The Series 2017A/B Bonds will be secured by a pledge of Net Revenues that will be on a parity with the pledge of Net Revenues that secures any Outstanding Senior Debt and other Senior Debt the Authority may issue from time to time in the future, all as further described and defined herein. The Series 2017A/B Bonds will not be secured by a Debt Service Reserve Fund. See "SECURITY FOR THE SERIES 2017A/B BONDS."

The Series 2017A/B Bonds will be issued initially in denominations of \$5,000 or any integral multiple thereof and in fully registered form in the name of Cede & Co., as nominee of The Depository Trust Company ("DTC") under the book-entry only system maintained by DTC or its nominee. So long as Cede & Co. is the registered owner of the Series 2017A/B Bonds, the principal of and premium, if any, and interest on the Series 2017A/B Bonds will be payable by the Trustee to DTC, which will in turn remit such payments to its participants for subsequent disbursement to beneficial owners of the Series 2017A/B Bonds, as more fully described herein. See APPENDIX E – "DTC Book-Entry Only System."

Interest on the Series 2017A/B Bonds will be calculated on the basis of a 360-day year of twelve 30-day months, payable semi-annually on each April 1 and October 1, commencing April 1, 2017.

The Series 2017A/B Bonds are subject to redemption prior to maturity, as more fully described herein. See "THE SERIES 2017A/B BONDS – Redemption Provisions."

[The Series 2017A Project consists of a portion of the DC Clean Rivers Project. Based upon independent assessment of the DC Clean Rivers Project and of the Authority applying environmental, social and governance criteria, the Authority has designated the Series 2017A Project as a "Green Project" and has designated the Series 2017A Bonds as "Green Bonds." See "PLAN OF FINANCE."

[Clean Rivers Logo]

The Series 2017A/B Bonds shall be special, limited obligations of the Authority payable solely from the Net Revenues of the Authority. The Series 2017A/B Bonds shall be without recourse to the District of Columbia (the "District"). The Series 2017A/B Bonds shall not be general obligations of the District or of the Authority. The Series 2017A/B Bonds shall not be a pledge of or involve the faith and credit or the taxing power of the District, shall not constitute a debt of the District, the United States of America or any User Jurisdiction (as defined herein) or any agency or instrumentality of any User Jurisdiction, and neither the District, the United States, any User Jurisdiction nor any agency or instrumentality of any User Jurisdiction shall be liable thereon. The Series 2017A/B Bonds also shall not constitute the lending of the public credit for private undertakings as prohibited by the Home Rule Act (as defined herein). The Authority has no taxing power.

The Series 2017A/B Bonds are offered when, as and if issued by the Authority and received by the Underwriters (as hereinafter defined). Certain legal matters with respect to the issuance of the Series 2017A/B Bonds are subject to the approval of Squire Patton Boggs (US) LLP and Leftwich LLC, Co-Bond Counsel to the Authority. Squire Patton Boggs (US) LLP and Leftwich LLC also serve as Co-Disclosure Counsel to the Authority in connection with the preparation of this Official Statement. Certain legal matters will be passed upon for the Authority by its General Counsel and for the Underwriters by Orrick, Herrington & Sutcliffe LLP and McKenzie & Associates, Co-Underwriters' Counsel. It is expected that the Series 2017A/B Bonds will be available for delivery through the facilities of DTC in New York, New York on or about January ___, 2017.

GOLDMAN, SACHS & CO.

RAMIREZ & CO., INC.

BofA Merrill Lynch

Barclays

Loop Capital Markets

This cover page, including the inside cover page, contains certain information for quick reference only. It is not a summary of this Official Statement. Prospective purchasers must read the entire Official Statement to obtain the information essential to the making of an informed investment decision.

Dated: January ___, 2017

^{*} Preliminary; subject to change.

\$[______]* DISTRICT OF COLUMBIA WATER AND SEWER AUTHORITY Public Utility Senior Lien Revenue Bonds Series 2017A (Green Bonds)

Serial Bonds

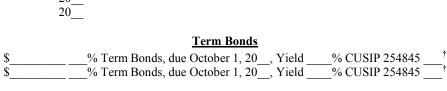
Year (Oct. 1)	Principal Amount	Interest Rate	Yield	CUSIP No.†
20 20 20 20 20	\$	%	%	

1 erm Bonds			
\$ _% Term Bonds, due October 1, 20_	_, Yield _	% CUSIP 254845 _	†

S[_____] DISTRICT OF COLUMBIA WATER AND SEWER AUTHORITY Public Utility Senior Lien Revenue Bonds Series 2017B

Serial Bonds

Year (Oct. 1)	Principal Amount	Interest Rate	Yield	CUSIP No.†
20	\$	%	%	
20				
20				
20				
20				
20				
20				
20				
20				
20				



^{*} Preliminary; subject to change.

CUSIP® is a registered trademark of the American Bankers Association. CUSIP numbers are provided by the CUSIP Global Services, operated by S&P Global Market Intelligence, a division of S&P Global Inc. This data is not intended to create a database and does not serve in any way as a substitute for CUSIP Global Services. CUSIP numbers have been assigned by an independent company not affiliated with the Authority and are included solely for the convenience of investors. Neither the Authority nor the Underwriters are responsible for the selection or uses of these CUSIP numbers, and no representation is made as to their correctness on the Series 2017A/B Bonds or as included herein. The CUSIP number for a specific maturity is subject to being changed after the issuance of the Series 2017A/B Bonds as a result of various subsequent actions including, but not limited to, a refunding in whole or in part or as a result of the procurement of secondary market portfolio insurance or other similar enhancement by investors that is applicable to all or a portion of certain maturities of the Series 2017A/B Bonds.

District of Columbia Water and Sewer Authority 5000 Overlook Avenue, S.W. Washington, D.C. 20032 (202) 787-2000

www.dcwater.com

Principal Board Members Jurisdiction

Matthew T. Brown, Chairman District of Columbia Ellen O. Boardman District of Columbia Rachna Butani District of Columbia Elisabeth Feldt Montgomery County Timothy L. Firestine Montgomery County Bradley Frome Prince George's County Nicholas A. Majett Prince George's County Obiora "Bo" Menkiti District of Columbia James W. Patteson Fairfax County Vacant District of Columbia District of Columbia Vacant

Alternate Board Members Jurisdiction

Shirley Branch Prince George's County Bonnie Kirkland Montgomery County David W. Lake Montgomery County Sarah Motsch Fairfax County Adam Ortiz Prince George's County Kendrick Curry District of Columbia Howard Gibbs District of Columbia Ana Recio Harvey District of Columbia District of Columbia Vacant District of Columbia Vacant

Authority Staff Title

District of Columbia

Co-Bond Counsel and

George S. Hawkins CEO and General Manager Mark T. Kim Chief Financial Officer Leonard R. Benson Chief Engineer General Counsel Henderson J. Brown, IV Biju George Chief Operating Officer Chief of Staff Mustaafa Dozier Assistant General Manager of Wastewater Treatment Aklile Tesfaye Assistant General Manager of Customer Care & Operations Charles Kiely Director of DC Clean Rivers Project Carlton Ray

Authority Consultants and Counsel

Vacant

Squire Patton Boggs (US) LLP and Leftwich LLC

Amawalk Consulting Group LLC

Amawalk Consulting Group LLC

Johnson, Mirmiran, and Thompson, Inc.

Public Financial Management, Inc. and G~Entry Principle, P.C.

Co-Financial Advisors

IMPORTANT NOTICES

This Official Statement is provided in connection with the issuance of the Series 2017A/B Bonds referred to herein and may not be reproduced or be used, in whole or in part, for any other purpose. The information contained in this Official Statement has been derived from information provided by the Authority and other sources which are believed to be reliable. Additional information, including financial information, concerning the Authority is available from the Authority's website. Any such information that is inconsistent with the information set forth in this Official Statement should be disregarded.

No dealer, broker, salesperson or other person has been authorized by the Authority or the Underwriters to give any information or to make any representations with respect to this offering, other than as contained in this Official Statement and, if given or made, such other information or representations must not be relied upon as having been authorized by the Authority or the Underwriters. This Official Statement does not constitute an offer to sell or the solicitation of an offer to buy, nor shall there be any sale of the Series 2017A/B Bonds by any person in any jurisdiction in which it is unlawful for such person to make such offer, solicitation or sale.

The Underwriters have provided the following sentence for inclusion in this Official Statement: The Underwriters have reviewed the information in this Official Statement in accordance with, and as part of, their respective responsibilities to investors under the federal securities laws as applied to the facts and circumstances of this transaction, but the Underwriters do not guarantee the accuracy or completeness of such information.

The Series 2017A/B Bonds have not been registered with the U.S. Securities and Exchange Commission under the Securities Act of 1933, as amended, in reliance upon exceptions contained in the Act. Neither the U.S. Securities and Exchange Commission nor any state securities commission has approved or disapproved of the Series 2017A/B Bonds or passed upon the accuracy or adequacy of this Official Statement. Any representation to the contrary is a criminal offense.

In connection with this offering, the underwriters may over allot or effect transactions which stabilize or maintain the market price of the Series 2017A/B Bonds at a level above that which might otherwise prevail in the open market; such stabilizing, if commenced, may be discontinued at any time.

This Official Statement is being provided to prospective purchasers either in bound printed form ("original bound format") or in electronic format on the following website: www.munios.com. This Official Statement may be relied upon only if it is in its original bound format or as printed in its entirety directly from such website.

CAUTIONARY STATEMENTS REGARDING FORWARD-LOOKING STATEMENTS IN THIS OFFICIAL STATEMENT

Some statements contained in this Official Statement reflect not historical facts but forecasts and "forward-looking statements." In this respect, the words "estimate," "project," "anticipate," expect," "intend," "believe," "plan," "budget," and similar expressions are intended to identify forward-looking statements. Projections, forecasts, assumptions, expressions of opinions, estimates and other forward-looking statements are not to be construed as representations of fact and are qualified in their entirety by the cautionary statements set forth in this Official Statement.

The achievement of results or other expectations contained in such forward-looking statements involve known and unknown risks, uncertainties and other factors that may cause actual results, performance or achievements described to be materially different from any future results, performance or achievements expressed or implied by such forward-looking statements. The Authority does not plan to issue any updates or revisions to those forward-looking statements if or when its expectations or events, conditions or circumstances on which such statements are based occur or do not occur.

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OFFICIAL STATEMENT

DISTRICT OF COLUMBIA WATER AND SEWER AUTHORITY
Public Utility Senior Lien Revenue Bonds, Series 2017B

INTRODUCTION

General

This Official Statement, including the cover page and the appendices hereto (the "Official Statement"), is provided in connection with the issuance by the District of Columbia Water and Sewer Authority (the "Authority," also commonly referred to as "DC Water") of its Public Utility Senior Lien Revenue Bonds, Series 2017A (Green Bonds), in the original principal amount of \$[______]* (the "Series 2017A Bonds") and its Public Utility Senior Lien Revenue Bonds, Series 2017B Bonds, in the original principal amount of \$[______]* (the "Series 2017B Bonds" and the Series 2017A Bonds, each a "Series" and, together, the "Series 2017A/B Bonds").

The Series 2017A/B Bonds are being issued pursuant to the Master Indenture of Trust, dated as of April 1, 1998 (the "Master Indenture"), as amended and supplemented to the date of delivery of the Series 2017A/B Bonds (the "Indenture"), including by the Twenty-Second Supplemental Indenture of Trust, to be dated the date of issuance and delivery of the Series 2017A/B Bonds (the "Twenty-Second Supplemental Indenture"), each by and between the Authority and Wells Fargo Bank, N.A., as trustee (the "Trustee").

The Finance and Budget Committee of the Board, at its December 14, 2016, meeting approved a recommendation that the Board formally adopt a resolution authorizing the issuance of the Series 2017A/B Bonds (the "Authorizing Resolution"). The Board adopted the Authorizing Resolution at its meeting on [January 5], 2017. The distribution of this Preliminary Official Statement neither obligates the Board to adopt the Authorizing Resolution or otherwise authorize the issuance of the Series 2017A/B Bonds, nor does it create a contractual obligation of the Authority to proceed with the issuance of the Series 2017A/B Bonds.

Capitalized terms used in this Official Statement and not otherwise defined herein shall have the meanings ascribed thereto in APPENDIX C – "Glossary and Summary of the Indenture."

District of Columbia Water and Sewer Authority

The Authority is an independent authority of the District of Columbia (the "District"), which was created in April 1996 and began operating on October 1, 1996, under and pursuant to an act of the Council of the District (the "Council"), which is entitled the "Water and Sewer Authority Establishment and Department of Public Works Reorganization Act of 1996" (D.C. Law 11-111) (D.C. Code §§ 34-2201.01 *et seq.*), as amended and supplemented (the "Act"), and an act of the U.S. Congress entitled the "District of Columbia Water and Sewer Authority Act of 1996" (Public Law 104-184) (the "Federal Act"). The Council was authorized to adopt the Act pursuant to the authority set forth in the District of Columbia Self-Government and Governmental Reorganization Act (P.L. 93-198; 87 Stat 777; D.C. Official Code, 2006 Repl., §§ 1-201 *et. seq.*), as amended (the "Home Rule Act"). See "THE AUTHORITY."

The Authority provides retail water and wastewater services to approximately 650,000 residents in the District and wholesale wastewater conveyance and treatment to approximately 1.6 million people in major suburban areas of Prince George's and Montgomery Counties in Maryland and Fairfax and Loudoun Counties in Virginia (collectively, the "User Jurisdictions"). Pursuant to the Act, the District authorized the Authority to use all of the property and assets of the water distribution system (the "Water System") and the wastewater collection, treatment and disposal system (the "Wastewater System" and, together with the Water System, the "System") formerly operated by the District, for as long as any revenue bonds of the Authority, including the Series 2017A/B Bonds, remain outstanding. In accordance with the Act, the District retains full legal title to and a complete equitable interest in the System. See "THE SYSTEM."

^{*} Preliminary; subject to change.

The Authority's service area consists of the District and certain areas of the User Jurisdictions and, therefore, certain demographic, economic and statistical information relating to the District and the User Jurisdictions may be relevant to prospective purchasers of the Series 2017A/B Bonds. The Authority makes no representation as to the accuracy or completeness of information derived from other sources.

Use of the Series 2017A/B Bond Proceeds

The proceeds of the Series 2017A/B Bonds will be used to pay (i) the costs of the Series 2017A Project (as hereinafter defined), (ii) the costs of the Series 2017B Project (as hereinafter defined), and (iii) costs of issuing the Series 2017A/B Bonds. See "PLAN OF FINANCE."

The proceeds of the Series 2017A Bonds will be used to pay a portion of the costs of the construction and development of tunnels associated with the DC Clean Rivers Project (as hereinafter defined) (the "Series 2017A Project"). For a description of the DC Clean Rivers Project, see "CAPITAL IMPROVEMENT PROGRAM – Categories of CIP Projects – Combined Sewer Overflow Projects." [Based on the results of an independent assessment of the Series 2017A Project's environmental, social, and governance characteristics, the Authority has designated the Series 2017A Project as a "Green Project" and the Series 2017A Bonds as "Green Bonds." The terms "Green Project" and "Green Bond" are neither defined in, nor related to the Indenture, and their use herein is for identification purposes only and is not intended to provide or imply to provide that a holder of the Series 2017A Bonds is entitled to any additional security other than as provided in the Indenture.]

The proceeds of the Series 2017A Bonds will be deposited in a segregated account of the Construction Fund established and maintained under the Indenture (the "2017A Construction Account") and used to pay costs of the Series 2017A Project. Such proceeds will be invested in Permitted Investments pursuant to the Indenture. [The Authority will report annually on the allocation of such proceeds to the Green Project and on certain environmental and social outcomes of the Green Project.]

A portion of the proceeds of the Series 2017B Bonds will be deposited in a segregated account of the Construction Fund established and maintained under the Indenture (the "2017B Construction Account") and used to pay costs of certain capital improvements to the System (the "Series 2017B Project"). Such proceeds will be invested in Permitted Investments pursuant to the Indenture.

Security and Source of Payment

Under the Indenture, the Authority may issue "Senior Debt" and "Subordinate Debt" from time to time. The Series 2017A/B Bonds will constitute Senior Debt under the Indenture. The Series 2017A/B Bonds will be secured by a senior pledge of Net Revenues that is on a parity with the pledge of Net Revenues that secures any Outstanding Senior Debt and other Senior Debt the Authority may issue from time to time in the future, without preference, priority or distinction of any Senior Debt over any other Senior Debt. Under the Indenture, the Authority may also issue "Subordinate Debt" which is secured by a pledge of Net Revenues subordinate to the Series 2017A/B Bonds and other Senior Debt. Prior to the issuance of the Series 2017A/B Bonds, \$[______] aggregate principal amount of Subordinate Debt will be outstanding. See "OUTSTANDING INDEBTEDNESS." The Series 2017A/B Bonds will be payable solely from Net Revenues after the funding of certain Funds and Accounts established under the Indenture. The principal sources of Net Revenues are the payments received by the Authority pursuant to its rates and charges imposed for the use of and the services furnished by the System, as described in the Indenture. See "RATES AND CHARGES."

The Series 2017A/B Bonds will not be secured by a Debt Service Reserve Fund.

The Series 2017A/B Bonds shall be special and limited obligations of the Authority. The Series 2017A/B Bonds shall be without recourse to the District. The Series 2017A/B Bonds shall not be general obligations of the District or of the Authority. The Series 2017A/B Bonds shall not be a pledge of or involve the faith and credit or the taxing power of the District, shall not constitute a debt of the District, the United States of America or any User Jurisdiction or any agency or instrumentality of any User Jurisdiction, and neither the District, the United States, any User Jurisdiction, nor any agency or instrumentality of any User Jurisdiction shall be liable thereon. The Series 2017A/B Bonds also shall not constitute the lending of the public credit for private undertakings as prohibited by the Home Rule Act of the District. The Authority has no taxing power.

Rate Covenant and Financial Forecast

The Master Indenture includes a rate covenant as described below. Rates, fees and charges are established by the Authority and are not subject to regulatory approval, nor are they subject to other regulations under current law. In general, and as more fully described herein, the Rate Covenant provides that the Authority covenants to fix, charge, revise and collect rates, fees and other charges for the use of and the services furnished by the System sufficient in each Fiscal Year so that:

- (i) Revenues collected by the Authority in such Fiscal Year will be sufficient to pay at least the actual Operating Expenses and required deposits and payments; and
- (ii) Net Revenues shall be sufficient in each Fiscal Year to be at least equal to the sum of (a) an amount equal to one hundred and twenty percent (120%) of the Annual Debt Service on Senior Debt; and (b) one hundred percent (100%) of the Annual Debt Service on Subordinate Debt.

See "SECURITY FOR THE SERIES 2017A/B BONDS – Rate Covenant." Financial information, including projections and projected debt service coverages are included in "FINANCIAL OPERATIONS – Projected Financial Operations" herein.

Capital Improvement Program

The Authority utilizes an annually adopted ten-year Capital Improvement Program (the "Capital Improvement Program" or the "CIP") to plan and manage the capital investments necessary to fulfill its service missions, comply with regulatory requirements and preserve and upgrade its water and wastewater systems. The Authority updates the CIP annually in conjunction with its budget process, based on detailed project review by engineering staff, external engineering consultants retained by the Authority, operations staff and senior management. The Authority intends to finance the costs of the CIP from a number of sources, including proceeds of the Series 2017A/B Bonds, future bonds and other forms of indebtedness, grants, certain operating revenues and wholesale customer contributions. As more fully described herein, the Authority estimates the cost of the current ten-year CIP at \$3.8 billion on a cash disbursement basis. The Board approved the CIP on December 1, 2016. See "CAPITAL IMPROVEMENT PROGRAM."

Miscellaneous

This Official Statement contains brief descriptions of the Series 2017A/B Bonds, the Authority, the System, the Capital Improvement Program, the Indenture and certain provisions of the Act. Such descriptions and the summaries of and references to all documents, statutes, reports and other instruments referred to herein do not purport to be comprehensive or definitive, and each such document, statute, report or instrument is qualified in its entirety by reference to each such document, statute, report or instrument, copies of which are available from the Authority. All references to the Series 2017A/B Bonds are qualified in their entirety by reference to the definitive forms thereof and the information with respect thereto contained in the Indenture. Insofar as any statements are made in this Official Statement involving matters of opinion, regardless of whether expressly so stated, they are intended merely as such and not as representations of fact.

The information in this Official Statement is subject to change without notice, and neither the delivery of this Official Statement, nor any sale made hereunder shall under any circumstances create an implication that there has been no change in the affairs of the Authority since the date hereof. This Official Statement is not to be construed as a contract or agreement between the Authority or the Underwriters and the purchasers or owners of any of the Series 2017A/B Bonds.

Inquiries regarding information about the Authority and the financial matters contained in this Official Statement may be directed to the Chief Financial Officer of the Authority at (202) 787-2000.

THE SERIES 2017A/B BONDS

General

The Series 2017A/B Bonds will be dated their date of delivery and will bear interest at the rates set forth on the inside cover page of this Official Statement. Interest on the Series 2017A/B Bonds will be calculated on the basis of a 360-day year of twelve 30-day months, payable semi-annually on each April 1 and October 1, commencing April 1, 2017 (each, an "Interest Payment Date"), and will mature on the dates and in the principal amounts as set forth on the inside cover page of this Official Statement.

Book-Entry Only System

The Series 2017A/B Bonds will be issued in fully registered form and, when issued, will be held by DTC or its nominee, as securities depository with respect to the Series 2017A/B Bonds. Individual purchases of interests in the Series 2017A/B Bonds will be made in book-entry form only, in the principal amount of \$5,000 or any integral multiple thereof. Individual purchasers will not receive physical delivery of bond certificates. So long as Cede & Co. is the registered owner of the Series 2017A/B Bonds as nominee of DTC, references herein to the holders or registered owners of the Series 2017A/B Bonds will mean Cede & Co. and will not mean the beneficial owners ("Beneficial Owners") of the Series 2017A/B Bonds. Beneficial interests in the Series 2017A/B Bonds may be held through DTC directly as a participant or indirectly through organizations that are participants in such system. See APPENDIX E – "DTC Book-Entry Only System."

As long as the Series 2017A/B Bonds are held by DTC or its nominee, interest will be paid to Cede & Co., as nominee of DTC, in same-day funds on each Interest Payment Date. If the book-entry only system is discontinued, bond certificates will be delivered as described in the Indenture, and Beneficial Owners (as defined herein) will become registered owners of the Series 2017A/B Bonds (the "Bondholders"). If the book-entry only system is discontinued, interest on the Series 2017A/B Bonds shall be payable on each Interest Payment Date by check or draft mailed to the registered owner at the address as it appears on the 15th day of the month preceding an Interest Payment Date on the registration books kept by the Trustee.

Neither the Authority, the Trustee nor the Underwriters will have any responsibility or obligation to the Participants, DTC or the persons for whom they act with respect to (i) the accuracy of any records maintained by DTC or by any Direct or Indirect Participant of DTC, (ii) payments or the providing of notice to Direct Participants, the Indirect Participants or the beneficial owners, (iii) the selection by DTC or by any Direct or Indirect Participant of any beneficial owner to receive payment in the event of a partial redemption of the Series 2017A/B Bonds or (iv) any other action taken by DTC or its partnership nominee as owner of the Series 2017A/B Bonds. For more information on DTC and the bookentry only system, see APPENDIX E – "DTC Book-Entry Only System."

Redemption Provisions

Optional Redemption*

The Series 2017A Bonds maturing on or after October 1, 20__, are subject to optional redemption prior to maturity on or after October 1, 20__, from any source, in whole or in part on any date, in such order of maturities as shall be determined by the Authority (and by lot within a maturity), at a redemption price of 100% of the principal amount thereof, together with accrued interest, if any, to the redemption date.

The Series 2017B Bonds maturing on or after October 1, 20__, are subject to optional redemption prior to maturity on or after October 1, 20__, from any source, in whole or in part on any date, in such order of maturities as shall be determined by the Authority (and by lot within a maturity), at a redemption price of 100% of the principal amount thereof, together with accrued interest, if any, to the redemption date.

Mandatory Redemption*

The Series 2017A Bonds maturing on October 1 in the years 20__ (the "Series 2017A Term Bonds"), are subject to mandatory sinking fund redemption in part (in accordance with the procedures described below in " – Selection of the Series 2017A/B Bonds to be Redeemed"), prior to maturity on October 1, in the years set forth below, at a redemption price equal to the principal amount of the Series 2017A Bonds called for redemption plus interest accrued to the redemption date.

^{*} Preliminary; subject to change.

Series 2017A Term Bonds

Year	Amount
20	
20	
20†	
† Final Maturity	

The Series 2017B Bonds maturing on October 1 in the years 20__ (the "Series 2017B 20__ Term Bonds"), are subject to mandatory sinking fund redemption in part (in accordance with the procedures described below in " — Selection of the Series 2017A/B Bonds to be Redeemed"), prior to maturity on October 1, in the years set forth below, at a redemption price equal to the principal amount of the Series 2017B Bonds called for redemption plus interest accrued to the redemption date.

Series 2017B 20__ Term Bonds

Year	Amount
20	
20	
20	
20	
20†	
† Final Maturity	

The Series 2017B Bonds maturing on October 1 in the years 20__ (the "Series 2017B 20__ Term Bonds" and, together with the Series 2017B 20__ Term Bonds, the "Series 2017B Term Bonds"), are subject to mandatory sinking fund redemption in part (in accordance with the procedures described below in " – Selection of the Series 2017A/B Bonds to be Redeemed"), prior to maturity on October 1, in the years set forth below, at a redemption price equal to the principal amount of the Series 2017B Bonds called for redemption plus interest accrued to the redemption date.

Series 2017B 20 Term Bonds

Year	Amount
20	
20	
20†	
† Final Maturity	

The principal amount of the Series 2017A/B Bonds required to be redeemed on any redemption date pursuant to the operation of mandatory sinking fund redemption provisions will be reduced, at the option of the Authority, by the principal amount of any Series 2017A/B Bond scheduled for redemption on such redemption date or dates, that, at least 45 days prior to the mandatory sinking fund redemption date, (i) has been acquired by the Authority and delivered to the Trustee for cancellation, (ii) has been acquired and canceled by the Trustee, at the direction of the Authority, at a price not exceeding the principal amount of such Series 2017A/B Bond plus accrued interest to the date of acquisition thereof, or (iii) has been redeemed pursuant to the optional redemption provisions and not previously credited to a scheduled mandatory redemption. Upon such purchase of such Series 2017A/B Bonds, the Trustee shall then credit an amount equal to the principal of such Series 2017A/B Bonds so purchased towards the sinking fund installments for the Series 2017A/B Bonds of such maturity in such order as may be determined by the Authority in a certificate of an Authorized Official, which will direct the reduction of a ratable portion of each annual mandatory sinking fund installment requirement in accordance with the procedures set forth under " – Selection of the Series 2017A/B Bonds to be Redeemed" below.

Selection of the Series 2017A/B Bonds to be Redeemed

The particular maturities of the Series 2017A/B Bonds to be redeemed at the option of the Authority will be determined by the Authority in its sole discretion.

If less than all of a Series 2017A/B Bond of a maturity is called for prior redemption and if the Series 2017A/B Bonds are registered in book-entry only form and DTC or a successor securities depository is the sole registered owner of such Series 2017A/B Bonds, the particular Series 2017A/B Bonds or portions thereof to be redeemed shall be selected by DTC in accordance with DTC procedures, or, if the book-entry only system is discontinued, by the Trustee by lot in such manner as the Trustee in its discretion may determine. In either case, (i) the portion of any Series 2017A/B Bond to be redeemed shall be in the principal amount of \$5,000 or integral multiples thereof and (ii) in selecting Series 2017A/B Bonds for redemption, each Series 2017A/B Bond shall be considered as representing that number of the Series 2017A/B Bonds that is obtained by dividing the principal amount of such Series 2017A/B Bond by \$5,000.

Notice of Redemption

The Authority shall not be responsible for mailing a notice of redemption to anyone other than DTC or another qualified securities depository or its nominee unless no qualified securities depository is the registered owner of the Series 2017A/B Bonds. If no qualified securities depository is the registered owner of the Series 2017A/B Bonds. See "THE SERIES 2017A/B BONDS – Book-Entry Only System."

The Trustee shall send notice of the call for redemption, identifying the Series 2017A/B Bonds or portions thereof to be redeemed, not fewer than 20 days prior to the redemption date or such shorter period as may be acceptable to DTC while the Series 2017A/B Bonds are in book-entry form and registered to DTC (i) by registered or certified mail or overnight express delivery, to the holder of each Series 2017A/B Bond to be redeemed at the address as it appears on the registration books kept by the Trustee, (ii) by registered or certified mail or overnight express delivery, to all organizations registered as securities depositories with the SEC and (iii) to each nationally recognized municipal securities information repository designated as such by the SEC. Failure to give any notice specified in (i) above, or any defect therein, shall not affect the validity of any proceedings for the redemption of any Series 2017A/B Bond with respect to which no such failure or defect has occurred. Failure to give any notice specified in (ii) above, or any defect therein, shall not affect the validity of any proceedings for the redemption of any Series 2017A/B Bond with respect to which the notice specified in (i) above is correctly given. If the notices of redemption are sent before there is sufficient money on deposit in the applicable fund or account to pay the full redemption price of the Series 2017A/B Bonds shall specify that the redemption is conditional upon there being on deposit in the applicable fund or account on the redemption date sufficient money to pay the full redemption price of the Series 2017A/B Bonds to be redeemed.

Any notice of redemption shall be mailed by first-class mail, postage prepaid. Notice of redemption also shall be given by Electronic Means to a Depository. A certificate of the Trustee shall conclusively establish the mailing of any such notice for all purposes.

PLAN OF FINANCE

A portion of the proceeds of the Series 2017A Bonds will be used to pay the costs of the Series 2017A Project. For a description of the DC Clean Rivers Project (of which the Series 2017A Project is a portion) in this Official Statement, see "CAPITAL IMPROVEMENT PROGRAM – Categories of CIP Projects – Combined Sewer Overflow Projects." Such proceeds will be deposited in the 2017A Construction Account. The proceeds therein will be invested in Permitted Investments pursuant to the Indenture. As shown below in "SOURCES AND USES OF FUNDS", the remainder of the proceeds of the Series 2017A Bonds will be used to pay costs of issuing the Series 2017A Bonds.

A portion of the proceeds of the Series 2017B Bonds will be used to pay the costs of the Series 2017B Project. See "CAPITAL IMPROVEMENT PROGRAM." Such proceeds will be deposited in the 2017B Construction Account. The proceeds therein will be invested in Permitted Investments pursuant to the Indenture. As shown below in "SOURCES AND USES OF FUNDS", the remainder of the proceeds of the Series 2017B Bonds will be used to pay costs of issuing the Series 2017B Bonds.

SOURCES AND USES OF FUNDS*

The proceeds of the Series 2017A/B Bonds are expected to be applied as follows:

9
9
9
9

SECURITY FOR THE SERIES 2017A/B BONDS

Pledge of the Master Indenture

General

Upon adoption of the Authorizing Resolution, the Series 2017A/B Bonds will be authorized and when issued will be done so in accordance with the statutes of the District and the United States, and will constitute valid and legally binding special and limited obligations of the Authority.

The Series 2017A/B Bonds will constitute Senior Debt under the Indenture, payable solely from the Net Revenues of the System. The Series 2017A/B Bonds are payable and secured on a parity with the Outstanding Senior Debt and all other Senior Debt hereafter issued or incurred by the Authority pursuant to the Indenture. The Authority expects to issue additional Senior Debt and Subordinate Debt in the future. For a listing of the Authority's Outstanding Senior Debt and Subordinate Debt, see "OUTSTANDING INDEBTEDNESS."

The Master Indenture defines "Senior Debt" as Bonds and Other System Indebtedness, and "Bonds" as bonds, notes or other obligations issued pursuant to the Master Indenture, but not including Other System Indebtedness and Subordinate Debt. "Other System Indebtedness" means any indebtedness issued or incurred in connection with the System that the Authority is required, or has elected, to treat as payable on a parity basis with the Bonds with respect to the pledge of Net Revenues. "Subordinate Debt" means bonds, notes or other obligations issued in connection with the System that are expected to be paid from and have pledged to their payment Net Revenues on a subordinate lien basis after the pledge of Net Revenues to Senior Debt.

The Indenture pledges to the payment of the principal of and premium, if any, and interest on all Senior Debt and Subordinate Debt (at their respective levels of priority of security) that may from time to time be outstanding: (i) all right, title and interest of the Authority in and to the Net Revenues; (ii) all moneys or securities in any of the funds or Accounts established under the Indenture (other than the Operating Fund, and all Accounts in the Construction Fund other than the Construction Account, except to the extent a specific Account or subaccount therein relates, and is pledged, solely to specific series of Bonds or Subordinate Debt); and (iii) all rights and privileges of every kind and nature appurtenant to, all proceeds of, and all right, title and claim which the Authority now or may hereafter acquire in the aforesaid property, subject only to the provisions of the Indenture and the Act relating to the use and application thereof. Furthermore, the Indenture provides for specific Accounts in the Debt Service Reserve Fund to be pledged solely to the Senior Debt to which they relate and specific Accounts in the Subordinate Debt Service Reserve Fund to be pledged solely to the Subordinate Debt to which they relate.

No Account in the Debt Service Reserve Fund will be established for the Series 2017A/B Bonds.

^{*} Preliminary; subject to change.

Direct Payment Bonds and the Effect of Sequestration on Direct Payments

The Direct Payments on the Series 2010A Bonds (as described herein) do <u>not</u> constitute Revenues under the Indenture and so are not part of the pledged Net Revenues, but the Twelfth Supplemental Indenture provides that, upon receipt of any Direct Payment, the Authority or the Trustee shall cause it to be deposited (i) in the appropriate subaccounts in the Interest Account in the Bond Fund if such Direct Payment relates to Bonds or Other System Indebtedness, and (ii) in the appropriate subaccount in the Subordinate Interest Account in the Subordinate Bond Fund if such Direct Payment relates to Subordinate Debt, and shall cause it to be applied solely to the purposes to which the Indenture permits funds in such subaccount, account and fund to be applied.

On October, 26, 2010, the Twelfth Supplemental Indenture amended the Master Indenture to provide that, for purposes of determining the Authority's compliance with the Rate Covenant (but not for the purposes of determining compliance with the Indenture's restrictions on the Authority's issuance of additional Senior Debt or additional Subordinate Debt), the amount of any Direct Payment received by the Authority or the Trustee in any Fiscal Year shall be credited against (i) Annual Debt Service on Senior Debt in such Fiscal Year if such Direct Payment is related to Senior Debt or (ii) Annual Debt Service on Subordinate Debt in such Fiscal Year if such Direct Payment is related to Subordinate Debt. This amendment became effective upon the execution of the Twelfth Supplemental Indenture.

On November 20, 2014, the Seventeenth Supplemental Indenture amended the Master Indenture to provide that, for the purposes of computing Annual Debt Service on any Direct Payment BABs or Other System Indebtedness as to which Direct Payments are expected to be made (whether previously issued or proposed to be issued by the Authority) in connection with any proposed issuance of additional Bonds or Other System Indebtedness, the amount of any Direct Payment expected to be received by the Authority or the Trustee in the then current or any future Fiscal Year shall be credited against the Annual Debt Service on such Direct Payment BABs. This amendment became effective upon the issuance of the Authority's Series 2014C Bonds, in connection with which the Authority obtained the required consent of a majority (specifically, 50.5%) of the Holders of the Outstanding Bonds.

The Series 2010A Bonds are Build America Bonds, a form of "direct payment bonds." An amount equal to thirty-five percent (35%) of the Authority's semiannual interest payments on the Series 2010A Bonds is to be paid to the Authority by the federal government in the form of Direct Payments. It is possible that the Direct Payments could be reduced or discontinued or that the timing of their receipt could be changed. For example, the Direct Payments expected to be received by the Authority with respect to the Series 2010A Bonds will be adversely affected by implementation of certain provisions of the Budget Control Act of 2011 (the "Budget Control Act"), which was signed into law by the President on August 2, 2011. As a result of the failure of the Joint Select Committee on Deficit Reduction to reach an agreement on the deficit reduction actions as required by the Budget Control Act, sequestration – automatic spending cuts to federal spending in designated agencies and programs – was triggered. Sequestration resulted in cuts in federal programs to states and localities, including payments to issuers of direct payment bonds such as the Series 2010A Bonds.

On February 2, 2015, the President signed an executive order (the "Sequestration Order") reducing the spending authority in accounts subject to sequestration in accordance with the Report of the Office of Management and Budget ("OMB") to the Congress for Fiscal Year 2016. According to the OMB report for Fiscal Year 2016, interest subsidy payments to issuers of direct payment bonds processed on or after October 1, 2015, through and including September 30, 2016, will be reduced by 6.8%, unless intervening Congressional action changes the reduction percentage.

The Sequestration Order does not affect interest subsidy payments for future years, but under the Budget Control Act there may be additional sequester orders for future fiscal years through and including fiscal year 2024. Any such additional sequester order signed by the President may or may not establish a different reduction value -e.g., the fiscal year 2015 reduction was 7.3%.

The largest Direct Payment the Authority currently expects to collect in any future year is \$5,710,149; 6.8% of that amount is approximately \$388,290. The Authority cannot predict by what percentage, if any, cuts may be made to interest subsidy payments in the future. The projected financial operations of the Authority, as presented herein (see "FINANCIAL OPERATIONS – Projected Financial Operations"), assume that Direct Payments will be 32% of the interest payments on Series 2010A Bonds in each year starting in Fiscal Year 2017. The projected debt service shown in "DEBT SERVICE REQUIREMENTS – Outstanding Senior and Subordinate Debt" reflects the known subsidy reduction of 6.8% for Fiscal Year 2016, and assumes Direct Payments equal to 32% of the interest payments on Series 2010A Bonds in each year starting in Fiscal Year 2017. The Authority is obligated to make all payments of principal of and interest on the Series 2010A Bonds whether or not such Direct Payments are received.

Limited Remedies of Holders of Subordinate Debt

The Indenture prohibits the acceleration of Subordinate Debt if any Senior Debt (including Bonds) is outstanding. The Indenture confers upon the holders of not less than 25% of the aggregate principal amount of

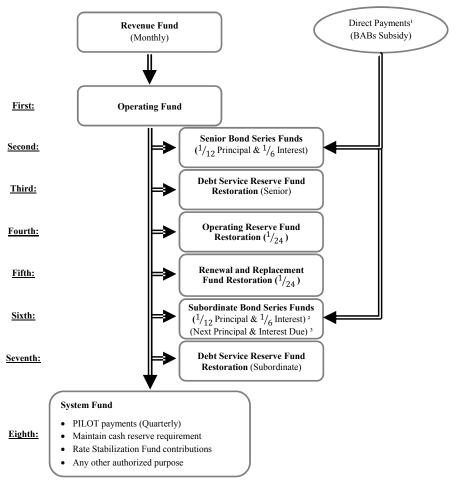
Outstanding Bonds (which includes Senior Debt only, not Subordinate Debt) the right to direct the Trustee to protect and enforce their rights by mandamus or other suit, action or proceeding, and confers upon the holders of a majority of the aggregate principal amount of Outstanding Bonds the right to direct the method and place of conducting all proceedings to be taken in connection with the enforcement of the terms and conditions of the Indenture or any other proceedings under the Indenture, in accordance with the provisions of law and the Indenture. The Indenture does <u>not</u> confer those rights upon any specified percentage of the holders of Subordinate Debt.

Flow of Funds

The Authority deposits all revenues, as received, in the Revenue Fund. The chart below depicts a simplified flow of Revenues required by the Indenture after being deposited into the Revenue Fund. This chart is for illustrative purposes only, is in no way comprehensive or definitive, and must be read in conjunction with the entire Official Statement.

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Indenture Revenue Flow of Funds



¹ The Twelfth Supplemental Indenture amended the above-described deposit requirements in the Master Indenture by providing that, upon receipt of any Direct Payment, the Authority or the Trustee shall cause it to be deposited (i) in the appropriate subaccounts in the Interest Account in the Bond Fund if such Direct Payment relates to Bonds or Other System Indebtedness, and (ii) in the appropriate subaccount in the Subordinate Interest Account in the Subordinate Bond Fund if such Direct Payment relates to Subordinate Debt, and shall cause it to be applied solely to the purposes to which the Indenture permits funds in such subaccount, account and fund to be applied.

²For fixed rate Subordinate Debt

³For variable rate Subordinate Debt

Pursuant to the Indenture, all Revenues received by the Authority shall be deposited in the Revenue Fund to be held by the Authority; provided, however, that upon an Event of Default, the Authority will transfer all amounts in all Authority-held funds to the Trustee, and the Trustee shall hold such moneys in trust for the benefit of the holders of Indebtedness.

Each month, the Authority shall transfer from the Revenue Fund to the Operating Fund an amount sufficient to pay Operating Expenses during such month. Thereafter, Net Revenues shall be disbursed on the last Business Day of each month in the following order (as noted above, the term "Series of Bonds" refers to Senior Debt):

- i. To the subaccounts in the Interest Account established for each Series of Bonds the amounts, if any, set forth in the applicable Supplemental Indentures with respect to each Series of Bonds, and an amount equal to 1/6 of the interest due on each Series of Bonds to pay interest required to be paid on any interest payment date related to such Series of Bonds.
- ii. On a parity with (i) above, to the subaccounts in the Principal Account established for each Series of Bonds and Sinking Fund Account in the Bond Fund the amounts, if any, set forth in the applicable Supplemental Indentures with respect to each Series of Bonds and an amount equal to 1/12 of the principal due on each Series of Bonds.
- iii. To the applicable Account in the Debt Service Reserve Fund with respect to each Series of Bonds the amounts, if any, necessary to restore the amount on deposit therein to the related Series Debt Service Reserve Requirement. For a description of the requirements for and the uses of the Debt Service Reserve Fund, see "Certain Reserve Funds Debt Service Reserve Fund and Subordinate Debt Service Reserve Fund" below.
- iv. To the Operating Reserve Fund the amounts, if any, necessary to restore the amounts on deposit therein to the Operating Reserve Requirement, which requirement shall be funded within 24 months of any withdrawal and replenished from time to time by depositing 1/24 of the Operating Reserve Requirement on the last Business Day of each month after such withdrawal, if necessary. For a description of the requirements for and the uses of the Operating Reserve Fund, see "Certain Reserve Funds Operating Reserve Fund" below.
- v. To the Renewal and Replacement Reserve Fund, to the extent that there has been a withdrawal from such fund, the Authority shall deposit Net Revenues to the fund, in the amounts necessary to make the amounts on deposit therein equal to the Renewal and Replacement Reserve Requirement. Such withdrawn amounts shall be funded within 24 months by depositing in such fund 1/24 of the Renewal and Replacement Reserve Requirement on the last Business Day of each month after such withdrawal. For a description of the uses of the Renewal and Replacement Reserve Fund, see "Certain Reserve Funds Renewal and Replacement Reserve Fund" below.
- vi. To the Subordinate Bond Fund, the amount equal to the deposits to such funds and Accounts required by the related Supplemental Indentures or other documents evidencing such debt. Generally, an amount equal to 1/6 of the interest and 1/12 of the principal next due on any fixed rate Subordinate Debt shall be deposited each month, and generally an amount equal to interest and principal next due on any variable rate Subordinate Debt shall be deposited prior to any date on which such interest and principal is due.
- vii. To the applicable Account, if any, in the Subordinate Debt Service Reserve Fund with respect to each Subordinate Debt issue the amounts, if any, necessary to restore the amount on deposit therein to the related Subordinate Debt Reserve Requirement or to reimburse the provider of any Qualified Reserve Credit Facility for amounts drawn thereunder and to pay related costs.
- viii. To the System Fund, any moneys remaining in the Revenue Fund, after all deposits and transfers required by (i) through (vii) above have been made. Moneys in the System Fund may be used for any authorized purpose. On the following dates, moneys on deposit in the System Fund shall be used to make the following payments:
 - (a) on each May 15, and quarterly thereafter, to the District to make the payment in lieu of taxes (the "PILOT") required by the District Memorandum of Understanding relating to the PILOT dated January 29, 1998, as amended;

- (b) on each September 1, an amount retained by the Authority in the System Fund necessary to satisfy the Cash Reserve Requirement (\$125.5 million as of the date of this Official Statement); and
- (c) on each September 30, to the Rate Stabilization Fund, the amount that the Board determines based on an analysis of the Authority's financial performance conducted by the CEO and General Manager (the "CEO and General Manger") and reported to the Board for approval not later than its regularly scheduled meeting in July of each Fiscal Year. For a description of the uses of the Rate Stabilization Fund, see "Certain Reserve Funds Rate Stabilization Fund" below.

The Twelfth Supplemental Indenture amended the above-described deposit requirements in the Master Indenture by providing that, upon receipt of any Direct Payment, the Authority or the Trustee shall cause it to be deposited (i) in the appropriate subaccounts in the Interest Account in the Bond Fund if such Direct Payment relates to Bonds or Other System Indebtedness, and (ii) in the appropriate subaccount in the Subordinate Interest Account in the Subordinate Bond Fund if such Direct Payment relates to Subordinate Debt, and shall cause it to be applied solely to the purposes to which the Indenture permits funds in such subaccount, account and fund to be applied. See " – Pledge of Master Indenture – Direct Payment Bonds and Effect of Sequestration on Direct Payments" above.

For a more extensive discussion of the terms and provisions of the Indenture including the security for the Series 2017A/B Bonds, the funds and Accounts established by the Indenture and the purposes to which moneys in such funds and Accounts may be applied, see APPENDIX C – "Glossary and Summary of the Indenture."

Certain Reserve Funds

Debt Service Reserve Fund and Subordinate Debt Service Reserve Fund. The Indenture creates a Debt Service Reserve Fund and a Subordinate Debt Service Reserve Fund, each to be held by the Trustee. The Indenture permits, but does not require, the Authority to specify a debt service reserve requirement for each issuance of Senior Debt or Subordinate Debt and to make provision for the means by which any such reserve requirements will be met. The Authority will not specify a debt service reserve requirement for the Series 2017A/B Bonds.

Operating Reserve Fund. The Master Indenture creates an Operating Reserve Fund in which the Authority must maintain a balance equal to at least 60 days of operating and maintenance expenses of the prior year. Money in the Operating Reserve Fund shall be used to pay, to the extent necessary, Operating Expenses of the Authority. In addition, to the extent that amount on deposit in the Bond Fund is insufficient to make the required interest and principal payments on Senior Debt, money in the Operating Reserve Fund shall be used prior to any withdrawal from the Debt Service Reserve Fund to satisfy any such deficiencies. The Board has adopted a policy of funding operating reserves to a level in excess of that required by the Master Indenture. See " – Discretionary Reserves" below. As of September 30, 2016, the balance in the Operating Reserve Fund was \$49.1 million, which represents 60 days of operating and maintenance expenses.

Renewal and Replacement Reserve Fund. The Master Indenture creates a Renewal and Replacement Reserve Fund to be held by the Authority to provide funding for unforeseen or emergency needs. Money in the Renewal and Replacement Reserve Fund may be used to pay for any capital expenditures related to the System. In addition, to the extent that the amounts on deposit in the Bond Fund and the Operating Reserve Fund are insufficient to make the required interest and principal payments on Senior Debt, money in the Renewal and Replacement Reserve Fund shall be used prior to any withdrawal from the Debt Service Reserve Fund to satisfy any such deficiencies. The Master Indenture allows this requirement to be met if an amount equal to 2% of original plant in service cost, or some other amount as approved by the Board, is held by the Authority. The Board has adopted a policy requiring the Authority to maintain a balance of at least \$35 million in the Renewal and Replacement Reserve Fund. As of September 30, 2016, the balance in the Renewal and Replacement Reserve Fund was \$49.1 million.

Rate Stabilization Fund. The Master Indenture creates a Rate Stabilization Fund to be held by the Authority, the moneys in which may be transferred by the Authority to the Revenue Fund at any time. The Board has adopted a policy allowing moneys to be transferred to the Rate Stabilization Fund from the System Fund annually based on an analysis of the Authority's financial performance conducted by the CEO and General Manager and reported to the Board for approval during the fourth quarter of each Fiscal Year, and at other times at the direction of the Board. The Authority withdrew \$6.5 million from the Rate Stabilization Fund in 2014. For Fiscal Year 2015, the Authority made a net deposit of \$10 million in the Rate Stabilization Fund, consisting of a \$7.5 million withdrawal and a \$17.5 million deposit. For Fiscal Year 2016, the Authority made a deposit of \$19 million in the RSF. The Authority may withdraw additional funds in future years to reduce rate increase that might otherwise be required; however, the Authority does not currently have plans to withdraw additional funds in Fiscal Years 2017-2020. [Confirm?] See "FINANCIAL OPERATIONS – Reserve Funds – Rate Stabilization Fund." The Rate Stabilization Fund has no minimum balance

requirements. As of September 30, 2016, the balance in the Rate Stabilization Fund was \$51.5 million. See also "FINANCIAL OPERATIONS – Projected Financial Operations."

Discretionary Reserves. The Board has adopted a policy of funding operating reserves at a level in excess of the 60-day operating and maintenance reserve required by the Master Indenture. To comply with the Board's policy, the Authority is required to have cash reserves equal to 120 days of budgeted operating and maintenance costs calculated on an average daily balance basis, with the objective of maintaining at least \$125.5 million in operating reserves. For purposes of calculating this requirement, the balances in the Operating Reserve Fund and the Renewal and Replacement Reserve Fund are included. For Fiscal Year 2016, the operating reserves requirement is \$125.5 million. As of September 30, 2016, the Authority had an operating reserve cash balance of \$215.1 million which exceeded the Board's policy requirement.

In Fiscal Year 2013, Amawalk independently evaluated the adequacy of the Authority's reserves and concluded that the current Board policy provides for an appropriate level of reserves.

Rate Covenant

Master Indenture Covenant. The Master Indenture includes a rate covenant (the "Rate Covenant") as described below. Rates, fees and charges are established by the Authority and are not subject to regulatory approval, nor are they subject to other regulations under current law. (For a description of the pledge of the District not to limit or alter rights vested in the Authority to fulfill agreements made with holders of its bonds, see "COVENANT BY THE DISTRICT OF COLUMBIA.") The Authority has never failed to satisfy the Rate Covenant, which provides that the Authority shall fix, charge, revise and collect rates, fees and other charges for the use of and the services furnished by the System sufficient in each Fiscal Year so that:

- i. Revenues collected by the Authority in such Fiscal Year will be sufficient to pay at least: (a) the actual Operating Expenses; (b) Annual Debt Service on Senior Debt; (c) any amount necessary to be deposited in any Account in the Debt Service Reserve Fund relating to a Series of Bonds to restore the amount on deposit therein to the Series Debt Service Reserve Requirement; (d) the amount required to pay Annual Debt Service on the Subordinate Debt (including any reserves in connection therewith and the restoration thereof); (e) any amount necessary to be deposited in the Operating Reserve Fund and the Renewal and Replacement Reserve Fund to maintain the required balances therein; and (f) any amount necessary to make any PILOT payments in such Fiscal Year; and
- ii. Net Revenues shall be sufficient in each Fiscal Year to be at least equal to the sum of (a) an amount equal to one hundred and twenty percent (120%) of the Annual Debt Service on Senior Debt; and (b) one hundred percent (100%) of the Annual Debt Service on Subordinate Debt.

If at the end of any Fiscal Year the Authority is not in compliance with the Rate Covenant, or if the Authority fails for three consecutive months to make the deposits required under the Indenture to the Interest Account and the Principal Account (or the Sinking Fund Account, as applicable) or there is a deficiency in a Series Debt Service Reserve Account for longer than three consecutive months, the Authority shall immediately request a Qualified Independent Consultant to submit a written report and recommendations with respect to increases in the Authority's rates, fees and other charges and improvements in the operations of and the services rendered by the System and the Authority's accounting and billing procedures necessary to bring the Authority into compliance with the Rate Covenant. The report and recommendations shall be filed with the Trustee and the Authority within 120 days from the date of discovery of noncompliance with the Rate Covenant. The Authority shall promptly revise its rates, fees and charges, and alter its operations and services to conform with the report and recommendations of the Qualified Independent Consultant to the extent permitted by law.

Deposit and Crediting of Direct Payments. The Twelfth Supplemental Indenture amended the Master Indenture to provide that, for purposes of determining the Authority's compliance with the Rate Covenant (but not for the purposes of determining compliance with the Indenture's restrictions on the Authority's issuance of additional Senior Debt or additional Subordinate Debt), the amount of any Direct Payment received by the Authority or the Trustee in any Fiscal Year shall be credited against (i) Annual Debt Service on Senior Debt in such Fiscal Year if such Direct Payment related to Senior Debt or (ii) Annual Debt Service on Subordinate Debt in such Fiscal Year if such Direct Payment related to Subordinate Debt. This amendment became effective upon the execution of the Twelfth Supplemental Indenture. See "SECURITY FOR THE SERIES 2017A/B BONDS – Direct Payment Bonds and the Effect of Sequestration on Direct Payments."

Additional Board Policy. In addition to the Rate Covenant described above, in 1997, the Board adopted a financial policy of fixing, charging, revising and collecting rates, fees and other charges for the use of and the services

furnished by the System sufficient in each Fiscal Year so that Net Revenues shall be at least equal to one hundred and forty percent (140%) of the Annual Debt Service on Senior Debt in each such Fiscal Year. See "FINANCIAL OPERATIONS – Financial Policies." To date, the Authority consistently has met or exceeded this policy goal. There can be no assurance, however, that the Board will not change this financial policy or that the Authority will continue to meet this policy goal.

Additional Senior Debt

The Indenture provides that the Authority may issue additional Senior Debt and Other System Indebtedness, including Bonds, to pay Costs of the System only upon satisfaction of certain requirements, including, among other things, receipt by the Trustee of the following:

- evidence that upon issuance of such Bonds, each Series Debt Service Reserve Account within the Debt Service Reserve Fund will contain the applicable Series Debt Service Reserve Requirement; and
- iv. either: (a) a certificate of the Authorized Representative of the Authority stating that, based on the Authority's financial records, the Authority would have been able to meet the Rate Covenant taking into account (1) the maximum Annual Debt Service on the proposed additional Series of Bonds, and (2) the rates, fees and other charges which are in effect at the time of the delivery of the proposed additional Series of Bonds; or (b) a written statement of a Qualified Independent Consultant, which projects Operating Expenses, Revenues and Net Revenues for five full Fiscal Years following the date of issuance of such proposed additional Series of Bonds, which projection does not include the actual debt service for any Indebtedness to be refunded, and which demonstrates that, on the basis of such projection, the Authority can comply with the Rate Covenant.

If any Bonds are issued to refund any Indebtedness, the Trustee must receive the following:

- evidence that the Authority has made provision as required by the Indenture for the payment or redemption of all Indebtedness to be refunded; and
- ii. either: (a) a written determination by the Authorized Representative of the Authority that the Annual Debt Service requirements for each Fiscal Year in which there will be Outstanding Indebtedness not to be refunded will not increase more than 5% over what the Annual Debt Service requirements for such Fiscal Year would have been on all Senior Debt immediately prior to the issuance of such Bonds, and that the final maturity of Indebtedness being refunded has not been extended; or (b) a certificate of the Authority stating that, based on the Authority's financial records, the Authority would have been able to meet the Rate Covenant, taking into account (1) the maximum Annual Debt Service on the proposed additional Series of Bonds, and (2) the rates, fees and other charges which are in effect at the time of the delivery of the proposed additional Series of Bonds; or (c) a written statement of a Qualified Independent Consultant, that projects Operating Expenses, Revenues and Net Revenues for five full Fiscal Years following the date of issuance of such proposed additional Series of Bonds, which projection does not include the actual debt service for any Indebtedness to be refunded, and that demonstrates that, on the basis of such projection, the Authority can comply with the Rate Covenant.

The Authority may incur or refinance Other System Indebtedness provided that: (i) the documents relating to the Other System Indebtedness acknowledge that such debt constitutes Other System Indebtedness under the Master Indenture and is subject to the applicable terms and conditions thereof, and specify the amounts and due dates of Annual Debt Service with respect to the Other System Indebtedness; (ii) the conditions of the Master Indenture regarding the issuance of Bonds have been met as if the Other System Indebtedness was an additional Series of Bonds; (iii) the Trustee receives written notice of the issuance of the Other System Indebtedness and the material terms and conditions thereof, and the Trustee shall register the holder as owner thereof as such on its books and records; and (iv) the Trustee receives an Opinion of Counsel that the documents creating the Other System Indebtedness have been duly authorized, executed and delivered on behalf of the Authority and constitute valid, binding and enforceable obligations. In connection with the incurrence of any Other System Indebtedness, the Trustee shall enter into an intercreditor arrangement with the holder of such Other System Indebtedness, the terms of which shall be determined at the time of incurrence of such Other System Indebtedness.

The Authority has modified the Master Indenture to include provisions regarding the crediting of Direct Payments for the purposes of computing Annual Debt Service on any Direct Payment BABs or Other System Indebtedness as to which Direct Payments are expected to be made in connection with any proposed issuance of additional Bonds or Other System Indebtedness. See "SECURITY FOR THE SERIES 2017A/B BONDS – Direct Payment Bonds and the Effect of Sequestration on Direct Payments."

Additional Subordinate Debt

Under the Indenture, the Authority may at any time issue Subordinate Debt and pledge Net Revenues thereto so long as rates, fees and charges are in effect or scheduled to go into effect to meet the Rate Covenant immediately after the issuance of such Subordinate Debt. The Authority has modified the Master Indenture to include provisions regarding the crediting of Direct Payments for the purposes of computing Annual Debt Service on any Direct Payment BABs or other Indebtedness as to which Direct Payments are expected to be made in connection with any proposed issuance of additional Bonds, Subordinate Debt or Other System Indebtedness. See "SECURITY FOR THE SERIES 2017A/B BONDS – Direct Payment Bonds and the Effect of Sequestration on Direct Payments."

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DEBT SERVICE REQUIREMENTS

Outstanding Senior and Subordinate Debt

The following tables set forth the annual principal and interest requirements for (i) Outstanding Senior Debt, (ii) Outstanding Subordinate Debt and (iii) the Series 2017A/B Bonds, as well as annual and aggregate totals.

Fiscal Year Ending Outstanding September 30 ¹ Outstanding Senior Debt Debt Debt Control Subordinate Relating to Series Principal			Series 2017A Bonds		Series 2017B Bonds				T . 15 .	
	Interest	Total	Principal	Interest	Total	Total Senior Debt ¹¹	Total Senior and Subordinate Debt			
2016	\$ 52,121,700	\$ 113,574,560		\$ \$	\$				\$ 105,996,167	\$
2017	52,331,650	114,972,448	(5,220,707)						114,414,703	
2018	52,592,800	116,598,152	(5,220,707)						116,040,407	
2019	52,960,475	118,203,589	(5,220,707)						122,300,844	
2020	47,917,125	126,753,244	(5,220,707)						126,158,799	
2021	47,914,250	131,998,764	(5,161,933)						131,463,094	
2022	47,914,125	131,922,667	(5,099,176)						131,449,753	
2023	47,918,725	131,850,213	(5,033,083)						131,443,393	
2024	32,659,750	147,038,828	(4,963,430)						146,701,660	
2025	32,663,475	146,933,241	(4,878,673)						146,680,830	
2026	32,663,225	146,846,824	(4,791,835)						146,681,252	
2027	32,663,175	146,746,551	(4,702,827)						146,669,986	
2028	32,662,225	146,652,275	(4,611,477)						146,667,060	
2029	24,549,275	154,552,896	(4,426,435)						154,397,724	
2030	24,549,275	154,338,331	(4,232,061)						154,375,283	
2031	24,549,275	153,989,960	(4,034,152)						154,228,570	
2032	24,549,275	153,906,268	(3,830,589)						154,347,941	
2033	24,549,275	153,676,242	(3,618,456)						154,330,548	
2034	24,549,275	155,160,126	(3,399,962)						156,029,127	
2035	24,549,275	154,914,850	(3,174,929)						156,012,283	
2036	56,629,275	120,864,008	(2,944,242)						154,271,065	
2037	56,734,875	108,636,424	(2,705,427)						142,384,360	
2038	56,827,625	107,225,474	(2,459,985)						141,312,089	
2039	57,007,575	106,477,765	(2,207,298)						140,999,467	
2040	16,849,000	146,359,325	(1,948,692)						144,410,633	
2041	16,849,000	137,886,520	(971,165)						136,915,355	
2042	16,849,000	139,580,089	(741,097)						138,838,993	
2042	16,849,000	139,447,634	(502,723)						138,944,911	
2043	16,849,000	139,309,815	(255,779)						139,054,036	
	16,849,000	67,432,941	(255,779)						67,432,941	
2045	16,849,000	40,074,675	-						40,074,675	
2046			-							
2047	16,849,000	40,072,775	-						40,072,775	
2048	16,849,000	40,075,313	-						40,075,313	
2049	16,849,000	11,875,123	-						11,875,123	
2050	16,849,000	11,873,750	-						11,873,750	
2051 - 2104 ⁹	16,849,000	-	-						-	
2105	44,918,000	-	-						-	
2106	44,917,758	-	-						-	
2107	44,918,480	-	-						-	
2108	44,917,986	-	-						-	
2109	44,918,053	-	-						-	
2110	44,918,215	-	-						-	
2111	44,917,860	-	-						-	
2112	44,918,233	-	-						-	
2113	44,918,340	-	-						-	
2114	44,918,040	-	-						-	
Total ¹⁰	\$2,508,392,940	\$ 4,157,821,659	\$ (106,900,114)						\$ 4,284,924,911	

¹ Amounts due October 1 are shown as debt service for the preceding Fiscal Year ending September 30 (since the amounts actually are required to be set aside in such Fiscal Year). For example, debt service payments due October 1, 2017, are shown in the Fiscal Year ending September 30, 2017.

² Outstanding Subordinate Debt is calculated excluding the impact of the direct payment of the federal BABs subsidy related to the Series 2010A Bonds.

³ The Authority redeemed the Series 2012B-2 Bonds on December 2, 2015. For the period between October 1, 2015 and December 2, 2015 the all-inclusive rate was assumed to be 1.00%. The Series 2012B-2 Bonds had a variable rate based on SIFMA plus a spread to that benchmark of 58 bps.

⁴ The Authority currently has \$29.2 million of Commercial Paper outstanding. Debt service is based on a hypothetical amortization of the full outstanding amount at 20 years with an assumed interest rate of 3.25%.

⁵ Includes the Authority's Debt Service requirements for Government Notes associated with Jennings Randolph.

⁶ Series 2014B Bonds are weekly-reset variable rate bonds payable through a Liquidity Facility provided by TD Bank, N.A. For calculation of the projected debt service requirement, the all-inclusive rate was assumed to be 1.00% in 2016, 2% in 2017 and 3.25% thereafter. The debt is assumed to amortize in FY 2041 - FY 2050.

⁷ The Authority currently has \$50.0 million of Extendable Maturity Commercial Paper outstanding. Debt service is based on a hypothetical amortization of 30 years with an assumed interest rate of 3.25%.

⁸ Amounts shown for FY 2051 - FY 2104 are annual totals for each fiscal year and do not represent the cumulative total.

⁹ Amounts represent cumulative totals for all fiscal years shown. Totals from consolidated rows are included.

^{10 [}Reserved]

¹¹ The Authority currently has \$50 million of Extendable Maturity Commercial Paper outstanding.

List of Outstanding Indebtedness

A table summarizing the Authority's existing indebtedness as of September 30, 2016, is set forth below. For a summary of the annual debt service payments for the Authority's existing indebtedness, see "FINANCIAL OPERATIONS - Debt Service."

Outstanding Indebtedness

(\$ in thousands)

	Original Principal Amount	Interest Rates	Final Maturity	Amount tstanding ¹
Senior Debt	 			
Series 1998 Bonds	\$ 266,120	5.50-6.00%	2028	\$ 156,605
Series 2009A Bonds	300,000	3.00-5.50	2039	8,040
Series 2014A Bonds	350,000	4.814	2114	350,000
Total Senior Debt				\$ 514,645
Subordinate Debt				
Series 2008A Bonds	\$ 290,375	5.00%	2034	\$ 13,600
Series 2010A Bonds	300,000	$4.07-5.52^2$	2044	300,000
Series 2012A Bonds	177,430	3.00-5.00	2037	158,740
Series 2012C Bonds	163,215	4.00-5.00	2033	163,215
Series 2013A Bonds	300,000	4.75-5.00	2048	300,000
Series 2014B Bonds	100,000	VR^3	2050	100,000
Series 2014C Bonds	377,700	3.00-5.00	2044	377,110
Series 2015A Bonds	100,000	2.00-5.00	2045	100,000
Series 2015B Bonds	250,000	5.00-5.25	2044	250,000
Series 2016A Bonds	389,110	5.00-5.25	2039	389,110
Series 2016B Bonds	25,000	3.43	2046	25,000
Government Notes				
Jennings Randolph Reservoir Debt	\$ 18,269	3.25%	2041	\$ 12,841
Commercial Paper Notes ("CP Notes") ⁴				
Series C CP Notes (taxable)	\$ $29,200^5$	VR	2020^{6}	\$ 29,200
Extendable Municipal Commercial Paper Notes ("EMCP Notes")	_		0	
Series A EMCP Notes	\$ $50,000^7$	VR	N/A ⁸	\$ 50,000
Total Subordinate Debt				\$ 2,268,861
Total				\$ 2,783,461

Amounts outstanding do not reflect any amortization of accrued principal.

Source: Authority records.

Taking into account the Direct Payment subsidy, the Series 2010A Bonds had an all-in-true interest cost of 3.6%. With respect to the effect of sequestration on the receipt by the Authority of Direct Payments on its Series 2010A Bonds, see "SECURITY FOR THE SERIES 2016A BONDS - Direct Payments and the Effect of Sequestration on Direct Payments."

The Series 2014B Bonds are weekly-reset variable rate bonds supported by a Liquidity Facility provided by TD Bank, N.A. Maximum amount authorized for the CP Notes (Series B CP Notes and Series C CP Notes) is \$150 million; the CP Notes are supported by a Letter of Credit provided by Landesbank Hesse-Thüringen Girozentrale; the Series A CP Notes are not currently authorized for issuance.

Maximum amount authorized to be outstanding at any one time for the Series C CP Notes is \$50 million.

Final maturity of the CP Notes reflects expiration of current credit facility.

Maximum amount authorized to be outstanding at any one time for the Series A EMCP Notes is \$100 million.

The initial issuance of Series A EMCP Notes was sold in two \$25 million tranches maturing on February 4, 2016 and February 29, 2016, respectively; however, the maturity date of such Series A EMCP Notes may be extended, at the option of the Authority, to August 26, 2016 (such date being 270 days from their initial issuance); provided, further, that the Authority may remarket and resell such Series A EMCP Notes, and upon such resale the Series A EMCP Notes will mature on such date or dates as provided in the terms of the remarketing and

Outstanding Senior Debt

As indicated above, as of September 30, 2016, the Authority had Senior Debt outstanding in the aggregate principal amount of \$514,645,000 consisting of its Public Utility Senior Lien Revenue Bonds, Series 1998 (the "Series 1998 Senior Bonds"), its Public Utility Senior Lien Revenue Bonds, Series 2009A (the "Series 2009A Senior Bonds"), and its Public Utility Senior Lien Revenue Bonds, Series 2014A (Federally Taxable) (Green Bonds) (the "Series 2014A Senior Bonds"). The Authority expects to issue additional Senior Debt in the future to finance capital improvements to the System. See "CAPITAL IMPROVEMENT PROGRAM." Upon the issuance of the Series 2017A/B Bonds, the amount of Outstanding Senior Debt will be \$[______].

Outstanding Subordinate Debt

The Subordinate Debt summarized above consists of the following categories of outstanding debt: (i) Subordinate bonds; (ii) Government Notes; and (iii) Commercial Paper Notes. As of September 30, 2016, the Authority had Subordinate Debt outstanding in the aggregate principal amount of \$2,268,816,000. Upon the issuance of the Series 2017A/B Bonds, the amount of Outstanding Subordinate Debt will remain unchanged.

Subordinate Bonds. As of September 30, 2016, the Authority had Subordinate bonds outstanding in the aggregate principal amount of \$2,176,775,000 consisting of its Public Utility Subordinate Lien Revenue Bonds of various series as described above in Outstanding Indebtedness. The Authority expects to issue additional Subordinate bonds in the future to finance capital improvements to the System. See "CAPITAL IMPROVEMENT PROGRAM."

Government Notes. The Authority is responsible for debt service on notes payable to the federal government for the construction of the Jennings Randolph Reservoir. Previous obligations of the Authority regarding the Little Seneca Reservoir have been paid in full. As of September 30, 2016, the Authority had \$12,181,000 of Government Notes outstanding. Upon the issuance of the Series 2017A/B Bonds, the amount of outstanding Government Notes will be remain unchanged.

Commercial Paper Notes. The Authority has established a commercial paper program to provide interim financing for Costs of the System. The Board has authorized the three series of notes to be issued under the commercial paper program in the aggregate principal amounts as follows: (i) the tax-exempt Series A CP Notes in an aggregate principal amount not to exceed \$0 (the Authority is reserving the right to authorize an additional amount of Series A CP Notes in the future, but currently the Series A CP Notes are not enhanced by a liquidity facility), (ii) the tax-exempt Series B CP Notes in an aggregate principal amount not to exceed \$100 million, and (iii) the taxable Series C CP Notes in an aggregate principal amount not to exceed \$50 million (collectively, the "Commercial Paper Notes"), each as Subordinate Debt. See "OUTSTANDING INDEBTEDNESS – Outstanding Senior Debt." To provide liquidity and credit support for the Commercial Paper Notes, the Authority obtained irrevocable, direct-pay letters of credit (the "Letters of Credit") issued by Landesbank Hessen-Thüringen Girozentrale, New York Branch (the "Bank") which currently expire on May 15, 2020. In connection with the Bank's issuance of the Letters of Credit, the Authority and the Bank entered into a Reimbursement Agreement for each series of CP Notes, each dated as of May 1, 2015, each as amended (collectively, the "Reimbursement Agreements") that obligates the Authority to pay Bank Obligations and Reimbursement Obligations (both as defined in each Reimbursement Agreement) to the Bank. The Bank Obligations, the Reimbursement Obligations and Fee Obligations are Subordinate Debt under the Indenture. The amount of the Commercial Paper Notes outstanding as of September 30, 2016, was \$29,000,000. Upon the issuance of the Series 2017A/B Bonds, the amount of outstanding Commercial Paper Notes will remain unchanged.

Extendable Municipal Commercial Paper Notes. The Authority has established an extendable municipal commercial program to provide an additional source of interim financing for Costs of the System. The EMCP Notes are not supported by a credit facility or credit enhancement, but instead are solely supported by a subordinate pledge of Net Revenues on a parity with the pledge of Net Revenues that secures Outstanding Subordinate Debt and any other Subordinate Debt that the Authority may issue in the future. The Board has authorized one series of EMCP Notes not to exceed \$100 million outstanding at any one time. As of September 30, 2016, the amount of outstanding EMCP Notes was \$50,000,000.

Environmental Impact Bonds. In September 2016 the Authority issued \$25,000,000 of tax-exempt Public Utility Subordinate Lien Revenue Bonds, Series 2016B (Environmental Impact Bonds) (the "Series 2016B Bonds"). The Series 2016B Bonds are multimodal variable rate bonds, initially issued bearing a 3.43% fixed rate through the mandatory tender date, April 1, 2021. The Series 2016B Bonds are the Authority's first environmental impact bonds to finance Green Infrastructure (GI). The Series 2016B Bonds are designated as environmental impact bonds and, as such, include provisions for the possibility of an outcome payment by the Authority to the original purchasers of the Series 2016B Bonds, and for the possibility of a risk share payment by such original purchasers to the Authority depending upon the results achieved by the GI project financed with the proceeds of the Series 2016B Bonds. The potential

obligation of the Authority to pay the outcome payment is an unsecured obligation. The net proceeds of the issuance will be used for construction of GI for the Rock Creek Project A (RC-A). The GI practices are designed to mimic natural processes to absorb and slow surges of stormwater during periods of heavy rainfall, reducing the incidence and volume of combined sewer overflows (CSOs) that pollute the District's waterways

Interest Rate Exchange Agreements and Guaranteed Investment Contracts

The Authority has not previously entered into any interest rate exchange agreements or any guaranteed investment contracts.

THE AUTHORITY

General

The Authority is a corporate body and an independent authority created pursuant to the Act that has a separate legal existence within the District government. It was created in 1996 to expedite the repair, replacement, rehabilitation, modernization and extension of existing water distribution and sewage collection, treatment and disposal systems, and the financing, on a self-sustaining basis, of capital and operation expenses relating thereto. The Authority began operations on October 1, 1996, and in June 2010, adopted a new logo and rebranded itself as "DC Water." Prior to creation of the Authority, the District, through its Department of Public Works, Water and Sewer Utility Administration ("WASUA"), owned, operated and maintained the System. In accordance with the Act, the District authorized the Authority to use all of the property and assets of the System and transferred to the Authority any liabilities of the District that were directly attributable to the System. The District has retained full legal title to, and a complete equitable interest in, the System. In accordance with the Act, however, the System must remain under the control of the Authority for as long as any Authority revenue bonds remain outstanding.

The Authority currently provides retail water and wastewater services to approximately 650,000 residents of the District of Columbia and wholesale wastewater conveyance and treatment to approximately 1.6 million residents of Prince George's and Montgomery Counties in Maryland and Fairfax and Loudoun Counties in Virginia. In addition, the Authority annually serves approximately 17.8 million visitors to the area and approximately 700,000 workers in the District. In addition to providing services to the White House, the U.S. Congress and the Supreme Court, the Authority also counts among its customers a number of international organizations, including the International Monetary Fund and numerous diplomatic embassies. The Authority also provides services to a number of nationally recognized cultural and educational institutions, including the John F. Kennedy Center for the Performing Arts, and Georgetown, Howard, American, Catholic and George Washington Universities.

The Authority operates the largest advanced wastewater treatment facility in the United States and is in compliance with all requisite permits. Since its creation as an independent authority of the District, the Authority has become a leader in the water and wastewater industry. The Board has provided stable leadership and a focus on establishing long-term policies and planning, particularly financial stability. Under its leadership, the Authority has adopted and implemented financial and rate-setting policies that have enhanced financial performance. The Authority's unrestricted cash, cash equivalents and investment balances have increased from \$20.5 million as of September 30, 1997, to \$[] million as of September 30, 2016. The Authority's operating revenues have increased, from \$221.5 million in Fiscal Year 1997 to \$[] million in Fiscal Year 2016.

The Authority's accomplishments have been recognized by several industry associations and publications (only awards for 2015 and 2016 indicated below):

- American County and City Magazine: 100 Best Fleets in North America (2015).
- Engineering News Record: Mid-Atlantic Best Project in the Water/Environment Category for the McMillan Stormwater Storage Project (2015).
- Global Water Intelligence: Distinction, Water Deal of the Year (2015).
- Government Finance Officers Association: Certificate of Achievement for Excellence in Financial Reporting Program (2015).
- Government Finance Officers Association: Distinguished Budget Presentation Award Program (2015).

- Government Fleet. DC Water fleet named a Notable Leading Fleet (2015).
- National Association of Clean Water Agencies: Gold Peak Performance Award for 100% compliance with NPDES requirements (2015).
- American Academy of Environmental Engineers and Scientists: Grand Prize, Research, "Closing in on Energy Neutrality at a Water Resource Recovery Facility: Modifying Contact Stabilization for 21st Century Drivers." Engineer in Charge: Sudhir Murthy, Ph.D., P.E., BCEE (2016).
- American Academy of Environmental Engineers and Scientists: 2016 Kappe Lecturer-Sudhir Murthy, Ph.D., P.E., BCEE (2016).
- Government Finance Officers Association: Award for Excellence in Government Finance (2016).
- Government Finance Officers Association: Certificate of Achievement for Excellence in Financial Reporting Program (2016).
- Government Finance Officers Association: Distinguished Budget Presentation Award Program (2016).
- *SmartCEO*: Healthiest Employer Award (2016).
- National Association of Clean Water Agencies: Utility of the Future Award (2016)
- The Bond Buyer: Non-Traditional Deal of the Year (2016)

Purposes and Powers

The Act requires the Authority to establish, fix and revise fees, rates or other charges for the use of, or services furnished, rendered or made available by the System, owned, leased or utilized by the Authority at least in an amount sufficient, together with other revenues available to the Authority, if any, to pay its costs, the principal of and interest on and other requirements pertaining to its bonds, and to make transfers to the District of amounts equal to the debt service payments on the District General Obligation Bonds, which financed WASUA capital projects, as such debt service and transfers become due and payable. All such General Obligation Bonds are now retired.

Pursuant to the Home Rule Act, the Council delegated to the Authority, under the Act, its power to issue revenue bonds, including the Series 2017A/B Bonds, for the purpose of financing "water and sewer facilities" (as such term is defined in the Home Rule Act). Pursuant to the Home Rule Act and the Act, the Authority is required to submit its annual operating budget to the District for its review and recommendations; however, the District has no power to change the annual budget of the Authority. After receiving the Authority's budget, the District then submits its annual operating budget, of which the Authority's budget is a part, to the United States Congress for approval. See "FINANCIAL OPERATIONS – Annual Budget."

Board of Directors

The Authority is governed by a Board of Directors consisting of 11 principal and 11 alternate members, each appointed for a staggered four-year term. Six principal members (appointed by the Mayor of the District with the advice and consent of the Council) represent the District and five principal members (appointed by the Mayor on the recommendations of the User Jurisdictions) represent the User Jurisdictions, two each from Prince George's and Montgomery Counties in Maryland, and one from Fairfax County, Virginia. The powers of the Authority are vested in and exercised by the Board at meetings duly called and held where a quorum of at least six members is present. All Board members participate in decisions directly affecting the management of joint-use facilities which are those facilities used by all three jurisdictions. Only the six members appointed to represent the District participate in those matters that affect District ratepayers and in setting rates, fees and charges for various services that affect only District residents. The Board meets monthly and operates through various standing and ad-hoc committees. The committees include Environmental Quality and Sewerage Services, Water Quality and Water Services, Finance and Budget, Human Resources and Labor Relations, Audit, Strategic Planning, Governance, and District of Columbia Retail Water and Sewer Rates. The current principal members of the Board are listed below:

Principal Board Members	Appointing Authority	Term Start Date*	Term Expiration		
Matthew T. Brown, Chairman	District of Columbia	January 2015	September 2019		
Ellen O. Boardman	District of Columbia	July 2013	September 2016**		
Rachna Butani	District of Columbia	July 2012	September 2018		
Elisabeth Feldt	Montgomery County	June 2015	May 2019		
Timothy L. Firestine	Montgomery County	February 2007	May 2020		
Bradley Frome	Prince George's County	June 2015	September 2018		
Nicholas A. Majett	Prince George's County	June 2014	September 2018		
Obiora "Bo" Menkiti	District of Columbia	July 2013	September 2016**		
James W. Patteson	Fairfax County	September 2015	September 2019		
Vacant	District of Columbia	_	-		
Vacant	District of Columbia				

^{*} Term start date indicates start of the Board member's initial term as a principal member.

Source: Authority records.

The following are short biographies of the principal members of the Board.

Matthew T. Brown (Chairman) (District of Columbia)

Mr. Brown was appointed as a principal member and chairman of the Board in 2015. Mr. Brown is the Director of the Office of Budget and Finance of the District. Prior to his current position, Mr. Brown served as the Deputy Director for Resource Allocation for the District's Department of Transportation, in addition to a variety of other public sector management and budget positions for several large municipal governmental entities. Mr. Brown also has significant private sector experience as a result of his tenure with Public Financial Management, Inc. Mr. Brown holds a B.A. in Political Science from Texas Wesleyan University, and an M.P.A. in Budget and Public Finance from The George Washington University.

Ellen O. Boardman (District of Columbia)

Ms. Boardman was appointed as a principal member to the Board in 2013. Ms. Boardman is a partner at O'Donoghue & O'Donoghue LLP. Prior to joining O'Donoghue & O'Donoghue LLP, in 1986, Ms. Boardman served as an attorney for the National Labor Relations Board. Ms. Boardman is a member of the District of Columbia and Maryland bar associations, numerous federal district and appellate courts, and the U.S. Supreme Court. Ms. Boardman is a fellow of the College of Labor and Employment Lawyers, and is listed as a Washington, D.C. Super Lawyer.

Rachna Butani (District of Columbia)

Ms. Butani was appointed as a principal member to the Board in July 2012. Ms. Butani serves as Director at HRGM Corporation. Ms. Butani has been with HRGM since 2001. Previously, Ms. Butani served as an Associate for Wachovia Securities, and as a consultant for Deloitte & Touche, LLP. Ms. Butani holds an MBA from The Wharton School, University of Pennsylvania, with a major in Real Estate and Management, and a Bachelor of Science in Business Administration from Georgetown University. Ms. Butani serves as a Board member for the Professional Women in Construction and holds a Virginia Class A Contractor's License.

Elisabeth Feldt (Montgomery County)

Ms. Feldt was appointed as a principal member to the Board in June 2015. Ms. Feldt is currently the Associate Deputy Administrator of the United States Environmental Protection Agency. Prior to her current position, Ms. Feldt served as the Deputy Assistant Administrator in the Office of Solid Waste and Emergency Response of the United States Environmental Protection Agency, and held a variety of other positions dealing with environmental management. Ms. Feldt holds a B.S. in engineering from George Washington University.

Timothy L. Firestine (Montgomery County)

Mr. Firestine was appointed as a principal member to the Board in February 2007. Mr. Firestine serves as the Chief Administrative Officer for Montgomery County. Prior to his current position, Mr. Firestine was Chief Financial Officer for Montgomery County and held other positions in public sector financial management. Mr. Firestine holds a B.A. in Political Science from Albright College and an M.P.A. from the University of Pittsburgh.

^{**} Member serves until renominated and appointed or a successor is appointed.

Bradley Frome (Prince George's County)

Mr. Frome was appointed as principal member to the Board in June 2015. Mr. Frome is currently the Assistant Deputy Chief Administrative Officer for the Economic Development and Public Infrastructure Team within the Administration of County Executive Rushern L. Baker, III. Mr. Frome was appointed to this position in early 2014. Mr. Frome previously served as the Deputy Chief of Staff for County Executive Baker from 2010-2014. Mr. Frome began his work in the public sector for the Maryland House of Delegates as a Legislative Director for four years and served six years as the Chief of Staff to a Council Member for Prince George's County.

Mr. Frome graduated cum laude from the University of Maryland in College Park with a Bachelor of Science Degree in Government and Politics and attended George Washington University Law School.

Nicholas A. Majett (Prince George's County)

Mr. Majett was appointed as a principal member of the Board in June 2014. Mr. Majett previously served the District government in several capacities for over 29 years. In 1985, Mr. Majett joined the D.C. Office of the Attorney General and served as an Assistant Attorney General for approximately 19 years. During his tenure as an Assistant Attorney General, Mr. Majett regularly handled regulatory, real estate, tax and civil cases and prosecuted tax and government fraud cases. From 1990 until 1991 Mr. Majett served as the Chief of Assessment Services for the Office of Tax and Revenue and then returned to the Office of Attorney General.

In 2006, Mr. Majett became the Deputy Director of the Department of Consumer and Regulatory Affairs ("DCRA") and served until he was appointed as Director on December 18, 2010, and subsequently unanimously confirmed by the Council of the District. As Director of DCRA, Mr. Majett was responsible for overall management and oversight of the District's regulatory agency that ensures the health, safety and economic welfare of District residents through licensing, inspection, compliance, and enforcement programs.

Mr. Majett earned both his Bachelor of Science and Law Degrees from Howard University before becoming a member of the District of Columbia Bar Association. In 2005, he was elected to the District of Columbia Bar Association's District of Columbia Affairs Section Steering Committee where he currently serves as a member. He is also a member of the Board of Directors for the Washington, DC Economic Partnership, a member of the DC Streetcar Task Force, and former Board Member of Joseph's House, non-profit organization in the District.

Obiora "Bo" Menkiti (District of Columbia)

Mr. Menkiti was appointed as a principal member to the Board in 2013. Mr. Menkiti is the founder and CEO of The Menkiti Group, a values-based real estate services company. Mr. Menkiti is also the CEO and founding partner of Keller Williams Capital Properties, a residential real estate brokerage firm. Prior to forming The Menkiti Group and Keller Williams Capital Properties, Mr. Menkiti served as the Chief Operating Officer of College Summit, a national non-profit organization dedicated to increasing the college enrollment rate of low-income students. Mr. Menkiti also serves on the board of City First Bank, Greater Capital Area Association of Realtors, Dance Place, and is the chair of the Public Policy Committee for the Washington, DC Association of Realtors. Mr. Menkiti is a graduate of Harvard University.

James W. Patteson (Fairfax County)

Mr. Patteson was appointed as a principal member to the Board in 2015. Mr. Patteson is the Director of the Fairfax County Department of Public Works and Environmental Services ("DPWES"). Prior to serving as director of DPWES, Mr. Patteson served as the Director of DPWES' Land Development Services. Mr. Patteson began his career with Fairfax County in 1985, and has worked in a variety of agencies, including the Department of Housing and Community Development, Office of the County Executive, Facilities Management, and various DPWES departments. Mr. Patteson earned his B.S. in Civil and Environmental Engineering from Virginia Polytechnic and State University, and a Master's in Public Administration from George Mason University.

Organizational Structure

The Authority's day-to-day operations are managed by the CEO and General Manager, who is appointed by the Board. The CEO and General Manager is supported by the Assistant General Managers for Blue Plains, Consumer Services, and Support Services; the Chief Financial Officer; and the Chief Engineer. The Assistant General Manager for Blue Plains oversees the departments of Wastewater Treatment Services and Maintenance Services. The Assistant General Manager for Consumer Services oversees the departments of Customer Service, Sewer Services, Water Services and Water/Sewer Pump Maintenance. The Assistant General Manager for Support Services oversees the departments of Human Capital Management, Labor Relations, Facilities and Security, Procurement, Fleet Management, and Safety and Occupational Management. The Chief Financial Officer oversees the departments of Finance,

Accounting and Budget. The Chief Engineer oversees the Capital Improvement Program as well as the departments of Engineering and Technical Services, Permit Operations, and DC Clean Rivers. Also reporting to the CEO and General Manager are the offices of the General Counsel, Information Technology and External Affairs.

Senior Management

The Authority has in place a senior and mid-level management team with a broad range of private and public sector utility experience. Over half of the Authority's mid-level management team has been with the Authority since 1996, and some have been with the organization for more than 20 years. The following are short biographies of key members of the Authority's senior management.

George S. Hawkins, CEO and General Manager

Mr. Hawkins was appointed CEO and General Manager in September 2009. Prior to joining the Authority, Mr. Hawkins served as the Director of the District Department of the Environment. Prior to coming to the District, Mr. Hawkins served as Executive Director of New Jersey Future, a non-profit organization promoting smart growth, and Executive Director of the Stony Brook-Millstone Watershed Association. He also has held senior posts with the U.S. Environmental Protection Agency. Mr. Hawkins has served as the Chair of the Green Building Advisory Council, a member of the Mayor's Green Collar Jobs Advisory Committee and a Board member of the Authority. Since 1999, Mr. Hawkins has taught Environmental Law and Policy for the Princeton Environment Institute at Princeton University. He began his career practicing law for the Boston firm of Ropes & Gray, and is a member of the Bar in Massachusetts and the District of Columbia. Mr. Hawkins holds an A.B. from Princeton University and a J.D. from Harvard Law School.

Mark T. Kim, Chief Financial Officer

Mr. Kim was appointed Chief Financial Officer in March 2013. Prior to joining the Authority, Mr. Kim served as Deputy Comptroller for Economic Development and Assistant Comptroller for Public Finance for the City of New York, and as an investment banker at several global financial institutions. Over his career, Mr. Kim has raised in excess of \$50 billion in the capital markets. Currently, he sits on the Environmental Financial Advisory Board of the U.S. Environmental Protection Agency ("EPA") and the Committee on Governmental Debt Management of the Government Finance Officers Association. Effective October 1, 2015, Mr. Kim began his term as a member of the Board of Directors of the Municipal Securities Rulemaking Board. Mr. Kim is a member of the Bars of the State of New York and the District of Columbia. Mr. Kim holds a B.A. from Northwestern University; a J.D. from Cornell Law School; and a Ph.D. in public policy from Harvard University.

Biju George, Chief Operating Officer

Mr. George was appointed Chief Operating Officer in February 2015. Mr. George is responsible for the performance management of all operations of the Authority. He participates in the implementation of the Authority's strategic plan and works with the Chief Financial Officer in overseeing the development of operating budgets and operating policies. Mr. George represents the Authority at Board of Directors' meetings, congressional meetings and meetings with the general public as needed. He also assists the General Manager in developing and implementing the Authority's business plans.

Mr. George joined the Authority from Greater Cincinnati Water Works, Metropolitan Sewer District and Stormwater Utility, where he was the Deputy Director of Water and Sewers and also served as the drinking water utility's interim executive director from 2011 to 2013. Mr. George has more than 27 years of diversified technical and management experience. He is recognized as a leader in treatment technology and science, and is both published writer and a frequent speaker, and the past Assistant Superintendent of the 240 MGD Mill Creek Plant.

Mr. George is the 2014 recipient of the Innovator of the Year Award from the U.S. Environmental Protection Agency. Mr. George has a bachelor's degree in mechanical engineering from the PDA College of Engineering at Gulbarga University. He is a licensed professional engineer in Ohio.

Leonard R. Benson, Chief Engineer

Mr. Benson was appointed Chief Engineer in August 2010, after serving as Acting Chief Engineer and Deputy General Manager since May 2008. Mr. Benson transferred to the Authority as Director of Engineering and Technical Services from its predecessor agency when the Authority was created in 1996. Mr. Benson began his career as a Project Manager for the District of Columbia's Department of Highways and Traffic in 1968 and later transferred to the Department of Sanitary Engineering, and successor agencies including the Department of Environmental Services and the Department of Public Works. Mr. Benson holds a B.S. in Civil Engineering from the University of Maryland.

Henderson J. Brown, IV, General Counsel

Henderson Brown rejoined the Authority as General Counsel in March 2016 after originally serving the Authority in the same capacity from 1998-2004. During his first tenure with the Authority, Mr. Brown established the legal office and refined the Authority's legal practices and protocols. As General Counsel, Mr. Brown manages and coordinates all legal matters on behalf of the General Manager, the Board of Directors and all departments of the Authority. Following his initial tenure with the Authority, Mr. Brown served as Associate General Counsel for Tyson Foods, Inc. and was the principal and owner of Employment Solutions, LLC, a firm that handles civil rights cases and provides human resources consulting for businesses, federal agencies and local Maryland municipal entities. Mr. Brown holds a Juris Doctorate from the Georgetown University Law Center and a Bachelor's degree from Amherst College in Massachusetts. He is admitted to the bar in Maryland, the District of Columbia, the United States Fourth District Court for Maryland and the United States Courts of Appeals (Fourth and District of Columbia Circuits).

Mustaafa Dozier, Chief of Staff

Mr. Dozier assumed the position of Chief of Staff in August 2015. Mr. Dozier initially joined the Authority in 2011 as the Labor Relations Manager. Prior to joining the Authority, Mr. Dozier served as the Employment and Labor Relations Advisor to the District's Department of Public Works. Mr. Dozier holds a B.A. from Alabama State University and a J.D. from the Howard University School of Law.

Charles Kiely, Assistant General Manager of Consumer Care & Operations

Mr. Kiely joined the Authority as Director of Customer Services Department in November 2002. Prior to joining the Authority, Mr. Kiely was Executive Vice President of Customer Services for Commonwealth Electric, Cambridge Electric and Commonwealth Gas Companies serving 78 communities in eastern and central Massachusetts. He was later appointed Vice President of Customer Care for NSTAR, formed after the BEC Energy and Commonwealth Energy merger, creating the largest investor-owned gas and electric utility in Massachusetts. Mr. Kiely received a B.S. in Management from the University of Massachusetts and an M.B.A. from Bentley College.

Carlton Ray, Director, DC Clean Rivers Project

Mr. Ray joined the Authority in July 2009, and is responsible for the planning, design, construction and implementation of the DC Clean Rivers Project. The 20-year, \$2.4 billion project is designed to capture nearly all combined sewer overflows (CSOs) to the Potomac and Anacostia Rivers and to the Rock Creek during periods of wet weather through a system of deep underground tunnels. Previously, Mr. Ray managed the capital program for the City of Indianapolis, including successfully developing and managing a similar CSO abatement program. Mr. Ray has over 30 years' experience in water and wastewater engineering and holds a B.S. in Civil Engineering from Auburn University.

Aklile Tesfaye, Assistant General Manager, Blue Plains

Mr. Tesfaye joined the Authority in 1994. Mr. Tesfaye formerly served as the Director of Wastewater Treatment Operations for the Authority. Mr. Tesfaye is a licensed engineer with the American Academy of Environmental Engineers, and holds several other professional certifications. Mr. Tesfaye received a B.S. in Civil Engineering from the University of Rourke (India; now known as Indian Institute of Technology), an M.S. in Civil Engineering from Tampore University of Technology (Finland) and an M.S. in Environmental Engineering from the University of Maryland (College Park).

Authority's Relationship to District

Section 424A of the Home Rule Act (D.C. Official Code Section 1-204.25) sets forth the powers and responsibilities of the District's Chief Financial Officer (the "District CFO"). The "District of Columbia Water and Sewer Authority Independence Preservation Act," P.L. 110-273, enacted by the Congress on July 15, 2008, amended the Home Rule Act to make clear that (i) the authority of the District CFO to hire, supervise and remove certain financial management employees does not apply to personnel of the Authority and (ii) the financial management, personnel and procurement functions and responsibilities of the Authority shall be established exclusively pursuant to the rules and regulations adopted by the Board. The Act provides that, except as provided in the Act, the District will not limit or alter rights vested in the Authority to fulfill agreements made with holders of Authority bonds, or in any way impair the rights and remedies of the holders of Authority bonds. See "COVENANT BY THE DISTRICT OF COLUMBIA."

The Authority is presently operating under, and is in compliance with, the following Memoranda of Understanding (each, a "Memorandum of Understanding" or "MOU") with the District.

- A January 29, 1998, Memorandum of Understanding provides that the Authority will pay the District a PILOT for government services it receives from the District (the "1998 PILOT MOU"). This MOU provides that, beginning in Fiscal Year 1999, the annual PILOT will be based on the amount due from the Authority to the District for the previous Fiscal Year plus a percentage increase in an amount equivalent to the Authority's System-wide rate increase for the current Fiscal Year. On September 4, 2014, the District and the Authority entered into a new Memorandum of Understanding (the "2014 PILOT MOU") amending the 1998 PILOT MOU. According to the terms of the 2014 PILOT MOU, the Authority shall make a PILOT payment to the District in the amount of \$15,337,410.00 in Fiscal Year 2015 for the services provided by the District to the Authority. In Fiscal Years 2016 to 2024, the Authority shall increase the amount of the PILOT payment by two percent per annum based on the amount of the prior year's annual PILOT payment. In addition, the Authority shall deduct the annual fire protection service fee for services provided by the Authority to the District from the annual PILOT payment. The 2014 PILOT MOU shall remain in effect until September 30, 2024. If the parties have not executed a new amendment to the 1998 PILOT MOU before September 30, 2024, the terms of the 2014 PILOT MOU shall remain in force until a new amendment has been executed.
- As of September 30, 2014, the Authority had set aside \$30,044,338.00 (the "set-aside amount") in reserves pending resolution of negotiations with the District over the PILOT. Upon the execution of the 2014 PILOT MOU, the District and the Authority agreed to split the set-aside amount with \$15,022,169.00 going to each of the District and the Authority. The portion of the set-aside amount delivered to the District is payment-in-full of any outstanding amounts due and claimed for services rendered by the District prior to the date of the 2014 PILOT MOU.
- A September 12, 2003, Memorandum of Understanding provides that the Authority will make quarterly payments to the District for its public right of way occupancy permit fee (the "2003 ROW MOU"). Under the terms of this MOU, the Authority was obligated to pay the District an annual fee of \$5.1 million through September 30, 2013, the expiration date of the MOU. On October 2, 2014, the parties entered in a new Memorandum of Understanding (the "2014 ROW MOU") amending the expiration date of the 2003 ROW MOU to September 30, 2024. As with the 2014 PILOT MOU, if the parties have not executed a new ROW MOU before September 30, 2024, the terms of the 2014 ROW MOU shall remain in force until a new amendment has been executed.
- A July 25, 2008, Memorandum of Understanding between the District Department of the Environment (DDOE) and the Authority establishes the basis for the billing and collection of a stormwater fee by the Authority on behalf of DDOE, and the transfer of those fees on a pass-through basis to DDOE. This MOU extends for one-year periods at the option of the Parties. See "THE SYSTEM The Wastewater System District Stormwater Permit and Management Program" and "CUSTOMER BASE, RATES AND CHARGES Components of Retail Rates and Charges."
- A May 3, 2013, Memorandum of Understanding between the District of Columbia Fire and Emergency Medical Services Department ("FEMS") and the Authority memorializes the ongoing commitment between the two agencies to share information about public fire hydrant inspections and upgrades. The Authority is required to inspect all public fire hydrants once per year in accordance with National Fire Protection Association ("NFPA") guidelines, and FEMS may, as time permits, also conduct a second inspection of fire hydrants in coordination with the Authority. The Authority is responsible for identifying and installing new hydrants as part of its ongoing capital program, developing manuals and protocols for hydrant inspection and inspection data management, and ensuring that the required preventative maintenance is performed on each hydrant as required by the manufacturer. The Authority is required to flow test all hydrants every six years, and those hydrants that have been upgraded as part of the capital program will be tested upon being placed in service to ensure proper pressure and operation. Furthermore, the Authority has committed to providing water supply personnel on scene to FEMS when requested for two-alarm or greater fires. The Authority annually bills the District to recover the Authority's costs for these fire hydrant protection services activities.
- A September 11, 2014, Memorandum of Understanding provides the terms by which the District and the Authority will cooperate in the execution of the Northeast Boundary Neighborhood Protective Project (the "2014 Bloomingdale MOU"). This MOU established the value of incremental capital expenditures totaling \$58,579,499.00 incurred by the Authority at the request of the District in order to mitigate overland flooding and sewer backups in the Bloomingdale and LeDroit Park neighborhoods in Northwest Washington, D.C. The District has entered into agreement with the Authority for the amounts spent pursuant to the 2014 Bloomingdale MOU in ten equal annual installments, commencing January 2016.

Employees and Labor Relations

The total number of authorized positions for the Authority for Fiscal Year 2017 is 1,260. As of September 30, 2016, the Authority had 1,121 full-time equivalent employees, of whom approximately 719 were represented by five unions:

- American Federation of Government Employees ("AFGE") consisting of Locals 631, 872 and 2553, representing 467 employees;
- American Federation of State, County and Municipal Employees ("AFSCME"), Local 2091, representing 290 employees; and,
- National Association of Government Employees ("NAGE"), representing 17 employees.

The Authority and the unions operate under a single Master Agreement on Compensation which expired on September 30, 2015. The parties commenced bargaining for a successor agreement on April 11, 2016. Negoations are ongoing with an estimated completion date of spring 2017.

There are five separate working conditions agreements with the unions. The Authority has reached agreement with four of the five unions for successor agreements on working conditions. The Authority anticipates commending negotiation of a successor agreement for the fifth contract (with AFGE Local 2553) in January.

The percentage of current employees eligible to retire within the next ten years (based on age and years of service) is shown in the table below:

Percentage of Current Employees Eligible to Retire Within the Next Ten Years

(based on age and years of service)

	12/31/2016	12/31/2020	12/31/2025
Employees	9.9%	19.6%	30.4%
Directors and Executives	18.2%	27.3%	54.6%

Source: Authority records.

The percentage of current Authority employees eligible to retire in five years is slightly higher than the median five-year retirement eligibility for combined water and wastewater utilities, which is 22% (as reported by the 2010 American Water Works Association/Water Environment Federation Qualserve Survey), and is within the range experienced by other large municipal water and wastewater utilities. To prepare for future retirements, since 2006, the Authority has had in place a comprehensive succession planning program for senior executives and a knowledge capture program for operational elements of the organization. In addition to identifying tacit knowledge use in operational activities, the knowledge capture program is identifying needed competencies to improve the replacement process, as well as improving the efficiency of the studied processes.

Retirement/Pension Plan

The Authority employees hired before October 1, 1987, participate in the U.S. Civil Service Retirement System (the "CSRS"). The employees and the Authority each annually contribute 7% of the employee's base pay to the CSRS. The Authority employees who retire under the CSRS receive retiree medical and life insurance benefits under the Federal Employees' Health Benefits Program and the Federal Employees' Group Life Insurance Program at no cost to the Authority. The Authority has no other post-employment benefits liability relating to medical or life insurance benefits under the CSRS programs.

With a few exceptions, all of the employees hired after September 30, 1987, participate in the U.S. Social Security System and the Authority's Defined Contribution Plan. Under the Authority's Defined Contribution Plan, the Authority annually contributes 7% of base pay plus an additional 5% of base pay earning above the Social Security Wage Base. Employees do not contribute to this plan and are 100% vested in the plan after three years of continuous service. The Authority has no other post-employment benefits liability relating to medical or life insurance benefits under the Defined Contribution Plan. The Authority employees hired after September 30, 1987, do not receive any retiree medical or life insurance benefits.

Starting in January 2000, employees who were hired after September 30, 1987, participate in a 457(b) Deferred Compensation plan administered by the Authority. The Authority makes a matching contribution of 100% of the amount that the employee defers to the 457(b) Deferred Compensation Plan; up to a maximum contribution of 5% of base pay for eligible employees. There is no waiting period before an employee can elect to become a participant of this plan and employees are 100% vested in their contributions.

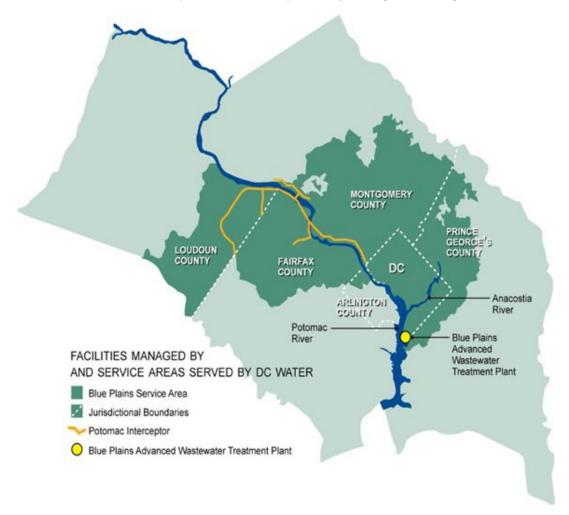
The Authority has no unfunded pension liability or other post-employment benefits liability under any of the plans described above.

Risk Management and Insurance

The Authority has developed a comprehensive risk management and insurance program which is annually reviewed and periodically bid by management and their independent insurance advisors through qualified brokers and direct insurance writers. The most recent risk management, insurance assessment and bid process was completed in July 2013. The Authority's insurance policies (including liability insurance and workers' compensation, property, equipment, crime, fiduciary, public officials' and employment practices liability) were renewed in July 2015. Since the passage of the Terrorism Risk Insurance Act of 2002 ("TRIA"), terrorism coverage is included under all insurance policies.

THE SYSTEM

The Authority provides retail water distribution to the District and wastewater treatment, collection and disposal services to the District and certain neighboring counties in Maryland and Virginia. The following section describes the Water and Wastewater Systems of the Authority, including a description of the Aqueduct.



The Wastewater System

History and Description of Blue Plains Advanced Wastewater Treatment Plant

The Authority operates the Blue Plains Advanced Wastewater Treatment Plant ("Blue Plains"), the largest advanced wastewater treatment facility in the United States. The original wastewater treatment facility at the site of Blue Plains was built in 1938. The original facility provided only primary treatment for up to 130 million gallons per day ("mgd"). Subsequently, there have been several expansions and upgrades. Since 1983, Blue Plains has provided advanced treatment, which includes nutrient removal, filtration and dechlorination. The most recent expansion of Blue Plains was completed in 1997, which increased the plant's capacity to 370 mgd.

Service Area

The Blue Plains service area includes the District (retail service), parts of Fairfax and Loudoun Counties, the Town of Vienna in Virginia, parts of Prince George's and Montgomery Counties in Maryland, Washington Dulles International Airport and various U.S. Government agencies located in Virginia and Maryland (wholesale service). The population of the Blue Plains service area totals approximately 2.2 million, consisting of more than 640,000 residents of the District and 1.6 million residents of the surrounding jurisdictions. In addition, the Authority annually serves approximately 17.8 million visitors to the area and approximately 700,000 workers in the District.

Wholesale Customer Agreements

Intermunicipal Agreements – In 1985, the District signed the Blue Plains Intermunicipal Agreement of 1985 (the "1985 IMA") with Fairfax County in Virginia, Montgomery and Prince George's Counties in Maryland and the Washington Suburban Sanitary Commission (the "WSSC") in order to address wastewater treatment, biosolids management and cost allocation rights, obligations and objectives with respect to Blue Plains. A significant portion of the wastewater collection and all of the wastewater treatment and related biosolids management required by the 1985 IMA was provided by the District at Blue Plains until 1996, when the District created the Authority as an independent authority with regional responsibilities to provide those services through the operation and management of Blue Plains and associated facilities. The District, however, retained and continues to hold title to the real property, appurtenances and fixtures of Blue Plains.

The 1985 IMA was replaced in 2012 by a new Intermunicipal Agreement (the "2012 IMA"), which was negotiated, approved and executed by each of the signatories to the 1985 IMA, in addition to the Authority. The 2012 IMA incorporates provisions and establishes terms relating to: facility location; current and long-range infrastructure planning and development; allocation of wastewater treatment capacity of Blue Plains and associated facilities and related peak flows for the collection system; funding and allocation of the capital costs of wastewater treatment, biosolids management and O&M costs; responsibilities with respect to pretreatment and operational requirements; the process of making future wastewater capacity planning decisions, including load allocations; mechanisms for coordination among the parties; and long-term management of the wastewater treatment and disposal process. Under those terms, the cost of operations and maintenance of Blue Plains are shared among the 2012 IMA signatories on an actual basis, whereas the costs of the capital program of Blue Plains are shared among the 2012 IMA signatories commensurate with their respective capacity allocations, with 45.8% of Blue Plains flow capacity allocated to the District and the remainder to the WSSC (on behalf of Montgomery and Prince George's Counties) and Fairfax County. The 2012 IMA also establishes the Authority's right to require the User Jurisdictions to off-load flows to other wastewater treatment plants as necessary to provide the Authority capacity as needed to serve the District's portion of the service area.

Potomac Interceptor Agreements – Since October 1963, the District has entered into separate, limited allocation agreements with several entities that were tributaries to the Potomac Interceptor sewer as provided by statute. Certain of those agreements remain in effect and include users that did not participate in the IMA as signatories, but are allocated flow capacity under the 2012 IMA in accordance with the original individual agreements they entered into with the District prior to the 1985 IMA. Those entities include the Department of Transportation/Federal Aviation Administration on behalf of Washington Dulles International Airport, the Department of the Navy, the National Park Service, and the Town of Vienna, Virginia, which together account for less than 1% of Blue Plains allocated flow capacity. These Potomac Interceptor agreements provide for the pro-rata recovery, through the District, of the Authority's costs of constructing, operating and maintaining the Potomac Interceptor sewer and certain major interceptor sewers within the Blue Plains service territory. A separate Potomac Interceptor agreement was executed after the 1985 IMA with the Loudoun County Sanitation Authority and is described below.

Loudoun County Sanitation Authority Agreement – In November 1998, the Authority and the District executed an agreement with the Loudoun County Sanitation Authority ("LCSA") allocating the right to limited Potomac Interceptor flow capacity to the LCSA, including the treatment and disposal of the associated wastewater at Blue Plains. Consistent with that agreement, the 2012 IMA allocates commensurate Blue Plains flow capacity to the LCSA, although it is also not a signatory to the IMA. The agreement requires LCSA to pay for its share of the Potomac Interceptor and Blue Plains operating and capital costs, following the IMA methodology (i.e., based upon metered flows for operating costs and a pro rata capacity allocation for capital costs).

Wastewater Collection

The wastewater collection system consists of approximately 1,800 miles of sanitary, stormwater and combined sewers, 125,000 building sewer laterals, 22 flow-metering stations, nine off-site wastewater pumping stations and 16 stormwater pumping stations. The Authority has completed detailed assessments and a large number of improvements to many of the pumping stations. See "THE SYSTEM – Wastewater Regulation and Permits" below.

Sanitary Sewer System

A sanitary sewer system serves two-thirds of the District's land area. The system includes 600 miles of interceptor and sewer collection pipes with eight sanitary pumping stations. The typical operation is a gravity flow system with a few pumping stations to pump across higher grades in the District. A series of recent upgrades to the Authority's sanitary sewer system have made the system compliant with new code standards and regulations, and increased the efficiency and effectiveness of several of the system's pump stations.

Combined Sewer Overflow Wastewater System

Approximately one-third of the District's land area is served by a combined sewer overflow ("CSO") wastewater system that combines both stormwater and wastewater in a single conveyance system. Combined sewer systems are common among older cities throughout the United States. The District's combined sewer system conveys only sanitary flow to Blue Plains during dry weather. During and immediately following periods of heavy rainfall, however, the combined sanitary and stormwater flows frequently exceed the capacity of the combined sewer system and a combination of stormwater and untreated wastewater is discharged through one or more of the 53 existing CSO outfalls authorized in the Authority's NPDES Permit. See "THE SYSTEM - Wastewater Regulation and Permits – NPDES Permit" below.

Biosolids Disposal

In the second quarter of Fiscal Year 2015, the Authority fully implemented its new Blue Plains biosolids processing facilities featuring thermal hydrolysis and anaerobic digestion. Operation of these facilities resulted in a reduction in biosolids production from 1200 tons per day (60 truckloads) to approximately 500 tons per day (25 truckloads). Currently these biosolids are considered Class B (as defined by EPA) and are applied directly to farmland at various sites in Virginia and Maryland, with disposal in landfills being utilized as an alternate method if weather conditions do not allow land application. In the fourth quarter of Fiscal Year 2015, the EPA upgraded the status of the biosolids produced at Blue Plains as Class A (as defined by EPA). Such an upgrade will provide the Authority with greater flexibility in its efforts to recycle biosolids produced at Blue Plains. See "CAPITAL IMPROVEMENT PROGRAM – Categories of CIP Projects – Wastewater Treatment Projects."

Wastewater Regulation and Permits

NPDES Permit. Blue Plains is authorized to discharge treated effluent to the Potomac River through two outfalls (Outfalls 001 and 002) pursuant to an NPDES permit (the "NPDES Permit") that was reissued to the Authority by the U.S. Environmental Protection Agency. The NPDES Permit became effective on September 30, 2010, and expired on September 30, 2015, though the permit automatically remains in effect until a new permit is issued. Discharges through Outfall 002, which consist of sanitary flow and some combined sewer flow from the CSO system during and following rainfall events, receive complete treatment. Combined sewer flows that exceed Blue Plains' capacity to provide complete treatment receive partial treatment and are discharged through Outfall 001. The NPDES Permit also authorizes discharges to the Anacostia River, the Potomac River and Rock Creek from the combined sewer system through a total of 53 CSO outfalls and four emergency relief outfalls.

The NPDES Permit requires that discharges from the CSO outfalls not exceed those limits necessary to comply with applicable water quality standards under the Clean Water Act, 33 U.S.C. § 1251 et seq. (the "Clean Water Act"). The Authority was the first agency to meet the voluntary nutrient reduction goal of the 1987 Chesapeake Bay Agreement. See " – *The Chesapeake Bay Agreements*" below. The NPDES Permit also requires the development and implementation of a Nine Minimum Controls program (the "NMC Program"), consisting of proper operation and maintenance of the existing collection and treatment system to minimize untreated discharges from the CSO outfalls, as well as the implementation of a CSO Long-Term Control Plan (the "DC Clean Rivers Project")* designed to control CSO discharges to prevent them from causing or contributing to violations of applicable water quality standards.

The DC Clean Rivers Project continues on schedule. The current FY 2016 - FY2025 CIP includes approximately \$1.6 billion for the costs of the DC Clean Rivers Project and combined sewer projects. See "CAPITAL IMPROVEMENT PROGRAM – Categories of CIP Projects – Combined Sewer Overflow Projects." Implementation of the DC Clean Rivers Project is required by a consent decree (the "2005 LTCP Consent Decree") dated March 25, 2005, among the Authority, the District, and the United States. The Authority successfully renegotiated the terms of the 2005 LTCP Consent Decree to allow the Authority to incorporate certain green infrastructure ("GI") in the DC Clean Rivers Project and remain in compliance with the 2005 LTCP Consent Decree. With the modifications to the 2005 LTCP Consent Decree, the DC Clean Rivers Project will create 17 miles of tunnels with a combined storage capacity of 187

^{*} Note that in prior Official Statements of the Authority the DC Clean Rivers Project was referred to as the "CSO LTCP".

million gallons, five new tunnels, a dewatering pumping station, several diversion structures and sewers to collect CSO overflows, and green infrastructure to control selected CSOs. Effective May 1, 2009, the Authority implemented a rate structure that more equitably allocates the costs of the DC Clean Rivers Project to retail customers based on the impervious surface area on customers' properties. See "CUSTOMER BASE, RATES AND CHARGES – Rate-Setting Authority – Components of Retail Rates and Charges – Clean Rivers Impervious Area Charge."

Industrial Pretreatment Program. As with most large wastewater systems, the Authority, under the provisions of the Clean Water Act, operates an industrial pretreatment program to control the discharge into the wastewater system of industrial wastewater containing certain toxins or prohibited pollutants. The Authority regulates 50 "significant industrial users" as defined by EPA regulations. Fourteen of these users are located within the District; the remaining users are located in the User Jurisdictions.

Wastewater Consent Decree and Stipulated Agreement and Orders. Upon its creation, the Authority assumed responsibility for compliance with various legal actions taken against the District related to operation of, and discharges from, Blue Plains, specifically including a judicial Consent Decree issued in 1995 (the "1995 Consent Decree") and a subsequent Stipulated Agreement and Order (the "1996 Stipulated Agreement and Order"). The Authority is presently in compliance with all of the requirements under each of the 1995 Consent Decree and the 1996 Stipulated Agreement and Order. The EPA Region III has acknowledged satisfaction of these requirements, although the 1995 Consent Decree remains in effect.

The Chesapeake Bay Agreements. In 1987, the Mayor of the District and the Governors of the Commonwealths of Virginia and Pennsylvania and the State of Maryland entered into the 1987 Chesapeake Bay Agreement, committing each jurisdiction to, and subsequently achieving, a 40% reduction of nutrients such as nitrogen and phosphorus reaching the main stem of the Chesapeake Bay by the year 2000. In 2000, the parties entered into Chesapeake 2000, a comprehensive agreement to guide further efforts to improve the water quality in the Chesapeake Bay through 2010. Unlike many municipal wastewater treatment facilities that discharge into the Chesapeake Bay, the Authority has historically removed phosphorus and nitrogen and is currently meeting the reduction goal. As a supplemental environmental project in settlement of liability for stipulated penalties under the 1995 Consent Decree, the Authority installed a pilot program to test a nitrogen reduction process on one-half of its wastewater, which demonstrated a greater than 40% nitrogen reduction in completely treated effluent. As a result, in 2000, the Authority began operation of full plant scale biological nutrient removal.

The NPDES Permit required the Authority to comply with a new total nitrogen discharge limit by January 1, 2015. The new total nitrogen discharge limit matches the 2010 goal of the Chesapeake 2000 Agreement. The Authority negotiated with EPA Region III to define the scope and schedule of capital improvements necessary to implement this modification and as a result developed the Blue Plains Enhanced Nitrogen Removal Facilities program ("ENRF"), which is designed to improve treatment processes to achieve advanced treatment with nitrification and denitrification facilities. The ENRF was completed and began treating the full Blue Plains plant flow in October, 2014. As a result of the successful completion and placement in service of the ENRF, the Authority satisfied its obligation under the NPDES Permit to reduce nitrogen discharge from Blue Plains by January 1, 2015. See "CAPITAL IMPROVEMENT PROGRAM – Categories of CIP Projects – Wastewater Treatment Projects."

Air Quality Issues. In March 2008, the Authority submitted an application to the District of Columbia Department of Environment for a Title V air quality operating permit pursuant to Chapter 3 of Title 20 of the District of Columbia Municipal Regulations (referred to as a Chapter 3 Operating Permit). As of the date of this Official Statement, the Authority's application was still pending.

Future Matters. In addition to continued compliance with its current permits and regulations described above, in the future, the Authority's wastewater discharges may become subject to additional requirements based on new federal or local requirements. As the EPA promulgates additional regulations, the Authority may be required to modify operations and/or construct facilities beyond those contemplated in the CIP. The Authority will continually monitor such proposed regulations and will advocate, as necessary, on behalf of the Authority and its rate payers.

A specific example of the foregoing is that, on November 23, 2015, the Authority filed a declaratory action in the United States District Court for the District of Columbia against the EPA, seeking to correct alleged technical errors in a recent regulatory action related to the Total Maximum Daily Load (TMDL) for E. coli. Specifically, the Authority is seeking to correct the daily allocations in the TMDL to account for the variability in flows and loads that occur at Blue Plains. The TMDL as approved does not account for this normal day-to-day variability and, if enforced against DC Water, could result in significant additions to the current CIP for Blue Plains. DC Water cannot predict the likelihood of its prevailing in this lawsuit or estimate the total cost of additional required upgrades if it does not prevail. As of December 2016, this dispute is still ongoing and may require several years to be definitely resolved.

The Water System

The Washington Aqueduct

Established in 1852, the Washington Aqueduct Division of the U.S. Army Corps of Engineers (the "USACE") provides water to the District and parts of Virginia. The USACE owns and operates the Washington Aqueduct (the "Aqueduct"), including its two water treatment plants, raw water conduits, reservoirs, pumping stations and treated water transmission lines.

The Aqueduct facilities supply treated water to distribution systems of the Authority, Arlington County, Fairfax County Water Authority ("FCWA") (collectively, the "Aqueduct Customers"), the federal government, and other parts of northern Virginia. As of January 3, 2014, FCWA assumed ownership and operation of the water distribution system previously owned and operated by the City of Falls Church. The Authority is responsible for managing the treated Water System that serves the District and several other governmental customers outside the District. The Authority purchases approximately 73% of the finished water produced by the Aqueduct, and Arlington County and the FCWA purchase the remainder. The Authority's share of the water purchased from the Aqueduct in the last ten Fiscal Years is set forth in the following table. For a discussion regarding the reduction in consumption and customer demand, see "CUSTOMER BASE, RATES AND CHARGES – Customer Demand."

Historical Water Demand

Fiscal Year ended September 30	Annual Deliveries to System (MG)	Average Day (MGD)	Max Day (MGD)
2006	41,541	113.8	161.6
2007	41,687	114.2	156.5
2008	40,755	111.7	150.5
2009	39,998	109.6	150.4
2010	38,589	105.7	146.9
2011	37,556	102.9	143.7
2012	36,930	100.9	142.9
2013	34,714	95.1	129.7
2014	34,708	95.1	123.7
2015	38.146	104.5	148.4
2016	<u>.</u>		

Source: Authority's CAFR.

The Aqueduct draws water from the Potomac River, which is the predominant source of water in the District and the User Jurisdictions. As a result of the Potomac River's importance for maintaining adequate water supply, the Interstate Commission on the Potomac River Basin ("ICPRB") and the Metropolitan Washington Council of Governments ("COG"), have maintained a drought plan since 1978, through which the Potomac River's water supply is supplemented by a 23.5 billion gallon reserve that is stored at three separate off-river reservoirs. Due to the maintenance of this strategic reserve, the ICPRB has been able to effectively manage drought conditions and effectively allocate water resources during drought events.

The federal Safe Drinking Water Act Amendments of 1996 authorized the Secretary of the Army with the consent of the Authority, the City of Falls Church and Arlington County to either establish a non-federal public or private utility to receive title to operate, maintain and manage the Aqueduct or to allow the USACE to remain as owner and operator with the Authority, the City of Falls Church and Arlington County having some input into strategic operations, direction, operations and capital improvement of the Aqueduct. In May 1998, the Authority, the City of Falls Church, Arlington County and the USACE executed a Memorandum of Understanding that the USACE would continue to own and operate the Aqueduct facilities. In December 2013, the Authority, FCWA, Arlington County and the USACE executed a revised Memorandum of Understanding to include the FCWA as the successor in interest to the City of Falls Church.

The Aqueduct has developed a capital improvement program, including improvements to the Dalecarlia and McMillan Water Treatment Plants (each a "WTP"), raw water conduits, pumping stations and reservoirs. The proposed lifetime budget for the Authority's share of the costs of Aqueduct capital improvements totals approximately

\$296 million. The Authority estimates in the CIP that the cost of the Washington Aqueduct Project will be \$109 million. See "CAPITAL IMPROVEMENT PROGRAM – Categories of CIP Projects – Washington Aqueduct Projects."

Water Sales Agreement

Pursuant to a Water Sales Agreement, dated as of July 31, 1997, by and between the Authority and the USACE (the "Water Sales Agreement"), the USACE sells and furnishes to the Authority all of the finished water that the Authority requires for the operation of the Water System to the extent that the USACE has water and facilities available at the Aqueduct. In accordance with the Water Sales Agreement, the Authority is obligated to make monthly payments into an escrow account to be used by the USACE to cover the Authority's pro rata share, based on its consumption of water, of the costs of the operation and capital improvement of the Aqueduct. The Authority currently contributes approximately 73% of capital and operating expenditures of the Aqueduct. The Water Sales Agreement will remain in effect until September 30, 2023, unless earlier terminated in accordance with its terms. Thereafter, the Water Sales Agreement may continue until terminated by either party giving the other party not less than six months' prior written notice.

Water Supply

The Aqueduct obtains its water supply from two Potomac River intakes at Great Falls and Little Falls. Two other regional water suppliers, FCWA and WSSC, also obtain for processing at their drinking water treatment facilities water from the same area of the Potomac River. Water for the Authority is withdrawn at the Great Falls intake and flows by gravity through two nine-mile conduits and is then pumped to the Dalecarlia Reservoir. Water also may be withdrawn from the Little Falls intake and pumped to the Dalecarlia Reservoir. The Dalecarlia Reservoir acts as a presedimentation basin for water drawn into the Dalecarlia WTP and for water diverted to the Georgetown Reservoir for subsequent treatment at the McMillan WTP.

In 1978, the United States, the District, the State of Maryland, the Commonwealth of Virginia and the FCWA entered into a Low Flow Allocation Agreement to provide a basis for allocation of resources during severe drought conditions and outline procedures to be followed in such circumstances. Water supply reservoirs developed on Little Seneca Creek and the north branch of the Potomac River are designed to augment the natural flow of the Potomac River during low flow conditions and ensure that the Washington metropolitan area will have sufficient water for years to come.

Raw Water Supply Agreements

A series of agreements ensures the continuous adequate supply of water to the Aqueduct's and the Authority's customers. The following are the Authority's raw water supply agreements:

The Savage Reservoir Maintenance and Operation Cost Sharing Agreement was executed in June 1982. Pursuant to the laws of the State of Maryland, the Upper Potomac River District contracted with the District, WSSC, FCWA and Allegheny County, Maryland, to share the operation, maintenance, repair and replacement costs of the Savage Reservoir project located in western Maryland. This agreement provides for releases from Savage Reservoir that mix with, and thereby reduce, the acidic nature of the Jennings Randolph Lake waters. The Savage Reservoir cost-sharing agreement was incorporated by reference into the Water Supply Coordination Agreement described below.

The Little Seneca Lake Cost Sharing Agreement was executed in July 1982 by and among the District, WSSC and FCWA to construct a dam and reservoir to provide an adequate supply of potable water continuing into the current century. This agreement calls for WSSC to finance, construct, operate and maintain Little Seneca Lake. The Authority's share of the project and operating and maintenance costs under the agreement is 40%. The Little Seneca Lake Cost Sharing Agreement was incorporated by reference into the Water Supply Coordination Agreement described below.

The Water Supply Coordination Agreement was executed in July 1982 by and among WSSC, FCWA and the Aqueduct to provide for the coordinated operation of its water supply sources and cooperative regional management of the water supply system and the cost-sharing arrangement for any water supply projects for the Washington metropolitan area, if and when they are needed.

The Novation and Future Water Supply Storage Agreement was executed in July 1982, by and among the United States, the Maryland Potomac Water Authority, WSSC, FCWA and the District, to provide for initial water supply storage in the Jennings Randolph Lake reservoir of approximately two billion gallons. The Novation and Future Water Supply Storage Agreement increases the amount of water supply storage to 13.4 billion gallons, or 32% of the

reservoir's total storage. Of the remaining reservoir storage 40% is designated for water quality and 28% for flood control.

Water Treatment and Storage

The Authority receives finished water from the Dalecarlia and McMillan WTPs. The original Dalecarlia WTP was completed in 1928, and underwent major expansion and improvements in 1964. The McMillan WTP was constructed in 1985 on the site of the original 1905 plant. The design capacity of the Dalecarlia and McMillan WTPs was based on population growth and water use projections that are greater than have been realized to date. The total treatment capacity of the plants of 370 mgd currently exceeds the day-to-day demands and peak requirements of their respective service areas.

Finished water from the Dalecarlia WTP is pumped by the Dalecarlia Pumping Station to the following reservoirs which serve various pressure zones within the District: Brentwood, Foxhall, Van Ness and Fort Reno Reservoir No. 1 and No. 2. Finished water from the McMillan WTP is pumped by the Authority's Bryant Street Pumping station to District customers. Brentwood and Reno No. 1 reservoirs, which can store up to 143.5 MG of finished water, are the Authority's facilities. The other three reservoirs are owned and operated by the Aqueduct and can store up to 125 MG of finished water. Flexibility in the distribution system is provided so that each of the two water pumping stations can pump to other reservoirs in the distribution system as circumstances dictate.

Sold vs. Pumped Ratio

The Authority regularly monitors the ratio of water billed to customers (sold water) versus water it purchases from the Aqueduct (pumped water). Unlike many other water utilities, the Authority does not adjust this ratio for water used in normal system activities, such as firefighting and system maintenance, including flushing of water mains and hydrant testing.

The sold versus pumped ratio decreased from 73% in 2014 to 70% in 2015, partly due to one-time non-recurring billing adjustments made for certain Federal government accounts. Water sales figures are derived from the operating budget of the Authority and may not be consistent with the audited financial statements for each year. The cost of unbilled water is not substantial relative to total annual expenses of the Authority.

Water System Regulation and Permits

Drinking Water Quality

The water operations of the Aqueduct and the Authority are subject to the requirements of the federal Safe Drinking Water Act of 1974, 42 U.S.C. § 300f et. seq., as amended in 1986 and 1996 by Congress. The 1986 amendments to the Safe Drinking Water Act extended the regulatory agenda of the EPA to include, among other things, the development of drinking water standards for 90 contaminants.

The Aqueduct and the Authority are in substantial compliance with all physical, chemical, radiological and bacteriological standards established by the regulations currently in effect under the Safe Drinking Water Act and are studying the potential impacts of proposed rules as well as those still under development by the EPA. As the EPA promulgates additional regulations, there is a potential that the Aqueduct or the Authority will be required to modify operations and/or construct facilities beyond those contemplated by the CIP. The Aqueduct and the Authority management believe, however, that planned capital projects should address all current regulatory requirements.

NPDES Permit and Water Treatment System Sediments

Until April 2003, during high flow periods, the Aqueduct discharged into the Potomac River the river sediments that are removed during the treatment process. The NPDES Permit issued in March 2003 included discharge limitations on sediments. The Aqueduct entered into a Federal Facilities Compliance Agreement ("FFCA") with EPA Region III, which provides a legally mandated plan and an enforceable compliance schedule for achieving the effluent discharge limitations in the NPDES Permit. The Aqueduct evaluated various options for residuals collection, conveyance, processing and disposal and selected a process which dewaters the residuals on site and transports them offsite for disposal. Construction on this project commenced in Fiscal Year 2008, was completed and placed into service on November 22, 2012. The Authority's share of the total cost of this project was \$98.6 million. See "CAPITAL IMPROVEMENT PROGRAM – Categories of CIP Projects – Washington Aqueduct Projects."

Lead Levels [CHECK WITH OGC REGARDING SETTLEMENTS?]

Pursuant to the Safe Drinking Water Act, the Lead and Copper Rule promulgated in 1991 by the EPA (the "Lead and Copper Rule") establishes maximum contaminant level goals and action levels for lead and copper. Large water suppliers, such as the Authority, are required to perform periodic monitoring and optimize corrosion control of water so as to minimize leaching of lead and copper contaminants into drinking water. If more than 10% of the tap water samples contain lead above the "action level" of 15 micrograms per liter, the water supplier is required to perform public education and to optimize the corrosion control treatment. If, after optimal corrosion control treatment has been implemented, the lead level in water at the tap continues to exceed the action level, the supplier must annually replace 7% of existing lead service lines that it owns. Alternatively, the water supplier may demonstrate through testing that individual lead service lines that it owns do not have lead levels above the action level (called "sampling in lieu of replacement"). The supplier may perform a combination of these two actions to attain the 7% annual replacement level. In the District, property owners own the lead service lines.

In August 2002, the Authority reported to EPA Region III that results for the sampling period from July 2001 to June 2002 demonstrated lead levels in excess of the threshold for action established by the Lead and Copper Rule. Elevated lead levels were believed to be linked to changes in the Aqueduct's water treatment methods. In November 2000, the Aqueduct had switched from free chlorine to chloramines disinfection to reduce the concentration of disinfection byproducts under the federal Disinfectant Byproducts Rule. Elevated lead levels began appearing within a year of the chlorine/chloramines switchover.

In February 2004, EPA Region III commenced an audit of the Authority's compliance with the Lead and Copper Rule and found noncompliance with regard to sampling, monitoring, public notification and reporting requirements. In an Administrative Order dated June 17, 2004, as supplemented on January 14, 2005, and amended on June 8, 2005 (collectively, the "Administrative Order"), EPA Region III and the Authority agreed to remedies for the issues identified by the compliance audit. The Authority and the Aqueduct undertook appropriate measures to implement corrosion control treatment. Lead levels have consistently been below the action level since 2005 and the Authority is no longer subject to the Administrative Order from EPA Region III.

Pursuant to a Consent Agreement and Final Order ("CAFO") executed on May 2, 2007, the Authority agreed to pay a civil penalty in the amount of \$10,000 to EPA Region III for certain alleged reporting violations of the Lead and Copper Rule. The CAFO resolved all of the civil claims in connection with these allegations. EPA Region III and the DOJ also conducted an investigation to determine whether any criminal violations occurred in connection with the Annual Report on Lead Service Replacement Program the Authority filed with EPA Region III in October 2003 and the two different methods the Authority used to test lead levels. In October 2008, EPA Region III and the DOJ informed the Authority that it would take no adverse action against the Authority, thereby resolving all criminal claims against the Authority in connection with this matter.

In addition to the measures undertaken by the Authority pursuant to the Administrative Order, in 2004 the Authority commenced a voluntary lead service replacement program, even though not legally required to do so under the Lead and Copper Rule. In order to reduce adverse impacts and costs to ratepayers, lead service replacement construction work was performed in conjunction with sewer laterals, small valves and water main repair work, and the replacement of broken or defective hydrants. However, this resulted in a large number of partial lead service replacements because many property owners declined to replace the lead service line on their private property. In 2008, in response to research indicating that partial lead service replacements are not effective in reducing lead levels, the Authority discontinued its accelerated replacement program. In September 2009, the Board approved modifications of the Authority's lead service replacement policy to encourage full service line replacements and to manage costs. Under the modified policy, public lead service lines (between the main and the property line) will continue to be replaced with copper pipes in conjunction with: (i) the Authority's water main replacement projects when the Authority must replace the water service pipe to connect to a new water main, and (ii) when the customer replaces the private portion of lead service lines and requests that the Authority replace the public portion of the lead service line.

A study authored by Marc Edwards, PhD, an engineer at the Virginia Polytechnic Institute and State University, and Dana Best, MD, a physician at the Children's National Medical Center, published in the March 1, 2009, issue of *Environmental Science and Technology*, found that the number of toddlers and infants with high blood-lead concentrations more than doubled in certain District neighborhoods that experienced rising lead concentrations in 2001 (the "Edwards Study"). These findings contradicted a report published by the Centers for Disease Control and Prevention (the "CDC") on March 30, 2004 (the "2004 CDC Report"), which found that lead might have contributed a small increase in blood lead levels and claimed that no children with dangerously high blood lead levels were found in the District.

The Edwards Study prompted the U.S. House of Representative's Committee on Science and Technology to open an investigation into the 2004 CDC Report. The Majority Staff of the Subcommittee on Investigations and

Oversight of the Committee on Science and Technology issued a report on May 20, 2010, releasing its findings. The Subcommittee's primary findings include, among others, that (i) the CDC knowingly used flawed data in drafting the 2004 CDC Report, leading to "scientifically indefensible" claims being included in the 2004 CDC Report, and (ii) the CDC failed to publicize later research showing that the harm was more serious than the 2004 CDC Report suggested. In May and June 2010, the CDC issued two notices to the readers of its digest, *Morbidity and Mortality Weekly Report*, admitting that the 2004 CDC Report was misleading and that it "should not be used to make conclusions about the contribution of water lead to blood levels in DC, to predict what might occur in other situations where lead levels in drinking water are high, or to determine safe levels of lead in drinking water." In December 2010, the CDC published a study of the District's water supply conducted from 1998 to 2006, which concluded that children living in the District were exposed to high levels of lead despite an attempt to prevent the water from being contaminated by partial lead service replacements. The 2010 CDC Study confirms information the Authority received in previous years which led the Authority in 2008 to discontinue the partial lead service line replacements. Partial line replacements can cause agitation that temporarily releases lead into the home, which can cause a temporary spike in lead levels. As described above, the Authority modified its lead service line replacement program in 2009 and continues its efforts to address lead in drinking water by: (i) monitoring household lead levels to ensure drinking water is in compliance with the EPA drinking water standards, (ii) conducting research on household plumbing characteristics, (iii) offering free lead testing, (iv) recommending full lead service replacements on public and private property, (v) providing free water filters and lead testing following a full or partial lead service line replacement, (vi) recommending that pregnant women and children under the age six should use filtered tap water for drinking and cooking until all sources of lead impacting water are removed, and (vii) participating in coordinated District interagency meetings and responses to lead in water issues.

The Authority estimates the cost of the lead service line replacement program in the CIP at \$13.6 million. Since inception of the line replacement program through September 30, 2016, the Authority expended \$[150.8] million on the lead service line replacement program. See "CAPITAL IMPROVEMENT PROGRAM – Categories of CIP Projects – Water Projects."

Protection of the Water System and Wastewater System

In 2000, the Authority developed and began implementing an extensive security program in conjunction with the District's Metropolitan Police Department and various federal agencies, including the Federal Bureau of Investigation and the Bureau of Alcohol, Tobacco and Firearms (the "2000 Security Program"). After the events of September 11, 2001, and in response to certain provisions of the Bioterrorism Act of 2002 and amendments to the Safe Drinking Water Act pertaining to security for community water systems, the Authority developed and implemented additional security measures beyond the 2000 Security Program.

The Aqueduct and each of the Aqueduct Customers has independent obligations under law to protect the community water systems they operate. Both the Authority and the Aqueduct completed studies of Water System vulnerability using the Sandia National Laboratories RAM-W methodology. The vulnerability reports were submitted to EPA Region III in March 2003 to fulfill the Bioterrorism Act requirement for a vulnerability assessment.

Blue Plains and the primary water and sewer distribution facilities it operates are fenced, gated and manned 24 hours a day by security officers. Major security technology video surveillance, intrusion alarm monitoring, and access control management system upgrades are utilized, with significant security technology upgrades in progress at several facilities and properties. The secondary distribution facilities are monitored by vehicular security patrols as well as some security technologies. The Authority also employs cameras and other monitoring equipment at these facilities.

Access to facilities operated by the Aqueduct is also controlled and the Aqueduct has increased security at both staffed and remotely operated facilities. In conformance with the requirements of the Safe Drinking Water Act, the Aqueduct contracted with the Interstate Commission on the Potomac River Basin to develop a source water assessment and monitoring program. The program was implemented in 2002.

While the Aqueduct and the Authority have taken these actions to help ensure the security of the System, the Authority does not represent that any existing or additional safety and security measures will be adequate in the event that terrorist activities are directed against the System.

CAPITAL IMPROVEMENT PROGRAM

General

The Authority utilizes an annually adopted ten-year Capital Improvement Program to plan and manage the capital investments necessary to fulfill its service missions, comply with regulatory requirements and preserve and upgrade its Water and Wastewater Systems. The Authority updates the CIP annually in conjunction with its budget

process, based on detailed project review by engineering staff, external engineering consultants retained by the Authority and senior management.

The Authority evaluates and prioritizes capital projects based on specific criteria. These criteria are fundamental in developing a CIP based on demonstrated needs and are set forth in the following table and described below.

Capital Improvement Program Criteria

(\$ in thousands)

Fiscal Year	Mandates(a)	Health and Safety(b)	Board Policy(c)	Potential Failure(d)	High Profile Good Neighbor(e)	Good Engineering / High Payback(f)	Good Engineering / Lower Payback(g)	Total
FY 2017	\$243,565	\$ 7,195	\$ 28,221	\$ 28,664	\$ 5,413	\$ 133,394	\$ 60,547	\$ 506,998
FY 2018	174,430	8,742	28,375	30,790	6,683	84,523	53,763	387,306
FY 2019	124,062	8,609	35,933	52,702	4,420	99,932	69,186	394,843
FY 2020	153,863	15,374	26,815	61,809	88	126,079	43,179	427,208
FY 2021	178,331	7,148	24,580	21,522	43	105,695	41,223	378,542
FY 2022	118,340	1,158	29,807	29,680	154	102,558	54,027	335,725
FY 2023	100,877	3,109	33,884	40,478	323	93,125	49,571	321,367
FY 2024	75,001	301	36,540	32,851	2,212	98,581	69,981	315,467
FY 2025	68,394	363	39,864	30,639	391	101,125	61,811	302,588
FY 2026	147,050	291	34,911	33,040	-	99,391	66,895	381,579
Total	\$1,383,913	\$52,291	\$318,930	\$362,176	\$19,726	\$1,044,404	\$570,183	\$3,751,623
% of Total	36.9%	1.4%	8.5%	9.7%	0.5%	27.8%	15.2%	100%

^a Agreements, regulatory standards, court orders, issues and permits requirements, stipulated agreements, etc.

Source: Authority records.

Since its creation in 1996 through September 30, 2016, the Authority has expended approximately \$5.0 billion, on a cash disbursement basis, for capital improvement projects, including \$2.4 billion for projects at Blue Plains, \$762 million for Water System infrastructure projects, \$1.4 billion for the DC Clean Rivers Project and combined sewer projects, \$331 million for sanitary sewer projects and \$63 million for meter replacement/AMR projects.

The Authority estimates the cost of the Fiscal Year 2017 - 2026 CIP at \$3.8 billion on a cash disbursement basis, including approximately \$844.7 million for wastewater treatment projects at Blue Plains, \$1.3 billion for the DC Clean Rivers Project and combined sewer projects, \$639.4 million for Water System infrastructure projects, \$513.5 million for sanitary sewer projects, \$23.1 million for stormwater projects, \$85.5 million for no process facilities, \$154.4 million for capital equipment, \$112.2 million for Washington Aqueduct Division projects and \$38.7 million for meter replacement/AMR projects. The Board approved the CIP on December 8, 2016.

^b Projects required to address public safety.

^c Projects undertaken as a result of the Board's commitment to outside agencies.

^d Projects related to facilities in danger of failing or critical to meeting permit requirements.

^e Projects that address public concerns.

f Projects that are necessary to fulfill mission and upgrade facilities.

g Lower priority projects.

An overview of the CIP project categories and the sources of funding is set forth in the following table.

Fiscal Year 2016 - 2025 Capital Improvement Program Sources and Uses of Capital Funds Fiscal Years ended/ending September 30 (\$ in thousands)1

	Actual(s) ² 2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	Total
BEGINNING BALANCE	\$ 68,443,585	\$106,056,964	\$133,719,649	\$101,365,313	\$100,899,029	\$101,510,325	\$102,108,062	\$101,434,755	\$113,038,004	\$143,505,715	\$191,889,857	\$106,056,964
SOURCES OF FUNDS:												
Proceeds from Rev. Bonds	404,453,241	300,000,000	154,938,000	179,847,000	201,383,000	168,636,000	114,772,000	100,000,000	100,000,000	100,000,000	100,000,000	1,519,576,000
Proceeds from CP/EMCP/Treasury	50,000,000	-	-	-	-	-	-	-	-	-	-	50,000,000
Notes/Digesters Financing Option												
Proceeds from CP/EMCP/Treasury	(112,000,000)	-	-	-	-	-	-	-	-	-	-	(112,000,000)
Notes Pay-off												
System Availability Fee (SAF)	-	-	1,925,000	3,850,000	5,775,000	7,700,000	7,700,000	7,700,000	7,700,000	7,700,000	7,700,000	57,750,000
Transfer from Operations (Pay-Go)	71,759,031	100,632,950	93,588,904	105,166,148	116,314,840	124,914,120	132,878,376	140,634,582	149,828,044	159,843,475	171,420,687	1,295,222,125
EPA Grants /FEMA Grants/DC	25,305,550	25,013,236	23,092,760	25,438,333	25,242,083	20,882,667	20,882,667	20,882,667	20,882,667	20,882,667	20,882,667	224,082,414
Reimbursement												
CSO Grants	14,023,419	-	-	-	-	-	-	-	-	-	-	14,023,419
Wholesale Customer Capital	140,156,077	107,732,000	80,043,000	79,176,000	77,594,000	54,899,000	57,384,000	62,504,000	66,275,000	61,296,000	66,243,000	713,146,000
Contributions												
Interest Income	925,127	1,282,500	1,365,000	899,235	1,510,373	2,107,950	1,434,650	1,250,000	1,250,000	1,250,000	1,250,000	13,599,708
Total Sources	\$594,622,445	\$534,660,686	\$354,952,664	\$394,376,716	\$427,819,296	\$379,139,737	\$335,051,693	\$332,971,249	\$345,935,711	\$350,972,142	\$367,496,354	\$3,823,376,247
USES OF FUNDS:												
Water Projects	\$ 78,335,000	\$ 58,819,000	\$ 51,738,000	\$ 64,149,000	\$ 57,102,000	\$ 48,534,000	\$ 54,658,000	\$ 65,512,000	\$ 83,744,000	\$ 78,217,000	\$ 76,915,000	\$ 639,388,000
Blue Plains Projects	163,369,000	123,789,000	98,423,000	91,341,000	95,985,000	62,266,000	68,605,000	71,882,000	70,049,000	79,836,000	82,530,000	844,706,000
Sanitary Sewer Projects	47,380,000	38,302,000	39,294,000	52,999,000	57,741,000	54,704,000	59,479,000	54,447,000	53,235,000	52,753,000	50,563,000	513,517,000
Combined Sewer	13,790,000	13,087,000	13,762,000	12,182,000	18,277,000	11,109,000	10,108,000	12,513,000	13,281,000	7,039,000	6,468,000	117,826,000
Combined Sewer LTCP	221,532,000	171,300,000	116,713,000	115,974,000	148,210,000	175,492,000	115,822,000	95,920,000	73,621,000	63,527,000	145,743,000	1,222,322,000
(Clean River Project)												
Stormwater Projects	2,185,000	1,706,000	2,682,000	4,053,000	1,196,000	1,946,000	5,736,000	1,233,000	1,789,000	1,649,000	1,064,000	23,054,000
Non Process Facilities	5,200,000	34,150,000	20,030,000	17,555,000	10,306,000	1,800,000	1,605,000	40,000	-	-	-	85,486,000
Washington Aqueduct Division	7,153,066	10,896,000	11,768,000	10,547,000	11,840,000	13,911,000	10,932,000	11,041,000	10,969,000	10,787,000	9,516,000	112,207,000
Projects												
Capital Equipment	13,139,000	28,151,000	23,586,000	23,425,000	26,551,000	8,780,000	8,780,000	8,780,000	8,780,000	8,780,000	8,780,000	154,393,000
Meter Replacement / AMR / CIS	4,926,000	26,798,000	9,311,000	2,618,000	-	-	-	-	-	-	-	38,727,000
Total Uses	\$557,009,066	\$506,998,000	\$387,307,000	\$394,843,000	\$427,208,000	\$378,542,000	\$335,725,000	\$321,368,000	\$315,468,000	\$302,588,000	\$381,579,000	\$3,751,626,000
SOURCES MINUS USES	\$ 37,613,379	\$ 27,662,686	\$(32,354,336)	\$ (466,284)	\$ 611,296	\$ 597,737	\$ (673,307)	\$ 11,603,249	\$ 30,467,711	\$ 48,384,142	\$(14,082,646)	\$ 71,750,247
ENDING BALANCE	\$106,056,964	\$133,719,649	\$101,365,313	\$100,899,029	\$101,510,325	\$102,108,062	\$101,434,755	\$113,038,004	\$143,505,715	\$191,889,857	\$177,807,211	\$177,807,211

¹Total may not add due to rounding ² Preliminary results, unaudited

Categories of CIP Projects

Wastewater Treatment Projects. Capital projects in the wastewater treatment service area are required to rehabilitate, upgrade or provide new facilities at Blue Plains to ensure that it can reliably meet its NPDES Permit requirements and produce a consistent, high-quality dewatered solids product for land application. The Authority has undertaken several major capital improvement projects to rehabilitate, replace or add new processes and capacity at Blue Plains in recent years, including: (i) a new facility has been placed in service in 2015 to comply with NPDES requirements to reduce nitrogen in the plant effluent; (ii) recently completed facilities to digest solids after thermal hydrolysis treatment, reducing the volume by 50% (reducing hauling and recycling costs) and resulting in production of Class A biosolids, which can be applied to land without any pathogen-related restrictions at the site and also can be bagged and marketed to the public for application to lawns and gardens, thereby increasing beneficial reuse options. The recent upgrades relating to the digestion process include a combined heat and power facility to utilize digester gas produced by the process to generate electricity (up to 30% of plant needs) along with steam for the thermal hydrolysis and digestion process, and a belt filter press facility to dewater the Class A product; (iii) a facility upgrade to improve secondary treatment performance for more efficient overall nitrogen removal capability; (iv) construction of a new facility to treat high nitrogen load dewatering recycles; (v) initiating the design phase for projects to upgrade a raw wastewater pump station, the filtration and disinfection facility and the gravity thickener complex; and (vi) a major design-build project continues to build, by 2018, a tunnel dewatering pump station and enhanced clarification facilities to pump out and treat flows captured through the Authority's ongoing combined sewer overflow projects.

The projected ten-year disbursements for wastewater treatment projects are approximately \$844 million, which includes approximately \$655 million in disbursements for liquid, plantwide and solids processing projects such as major improvements to filtration, and pumping facilities and \$189 million for the ENRF program projects such as the Tunnel Dewatering Pump Station and Enhanced Clarification Facility.

Sanitary Sewer Projects. The CIP includes approximately \$513 million in projected disbursements for sanitary sewer projects including the rehabilitation of six sanitary sewer pumping stations – Potomac, Main & O, Swirl Facility, East Side, and 3rd & Constitution Avenue, as well as sewer condition assessments that cover 60 miles of the system per year through year 2026. Rehabilitation of the District's major assets including the Potomac Interceptor, B Street/New Jersey Avenue Trunk Sewer, Northeast Boundary Trunk Sewer, Anacostia Force Main and portions of the other 35 major sewers are also included. Creekbed sewers and sewers under buildings will largely be rehabilitated as part of these projects. The program to rehabilitate other small and large diameter sewers including replacement and lining of laterals, and replacement of manholes, is an ongoing project of the Authority.

In 2009, the Authority completed a Sewer System Facilities Plan (the "Sewer System Facilities Plan"). The Sewer System Facilities Plan is currently projected to be updated in March 2016. The Sewer System Facilities Plan represents the culmination of an initiative involving sewer inspection and condition assessment, development of a sewer GIS database, hydraulic monitoring and modeling to assess system capacity and the development of prioritized activities for system improvement.

Combined Sewer Overflow Projects. The CIP includes \$1.3 billion for the DC Clean Rivers Project and combined sewer projects. The DC Clean Rivers Project is designed to control combined sewer overflow discharges to prevent them from causing or contributing to violations of applicable water quality standards. See "THE SYSTEM – Wastewater Regulation and Permits – NPDES Permit." Through the DC Clean Rivers Project, the Authority will construct combined sewage storage/conveyance tunnels that are designed to intercept and store water until Blue Plains can receive and treat the combined sewage. The DC Clean Rivers Project includes a variety of capital improvement projects throughout the System including three large tunnel systems which will accommodate the storage of combined sewer overflows ("CSOs") from storm events until they can be conveyed to Blue Plains for treatment. Approximately one-third of the System is served by a combined sewer system, in which both sanitary sewage and storm water flow through the same pipes. When the collection system reaches capacity, typically during periods of heavy rainfall, the system is designed to overflow the excess diluted sewage or CSOs.

The DC Clean Rivers Project also includes the Authority's GI initiative. See "THE SYSTEM – Wastewater Regulation and Permits." The GI initiative is cost-neutral (as compared to the Authority's tunnel options) and will reduce the size of the tunnels required to serve the Rock Creek and Potomac River by implementing new environmental technologies on a significant scale. GI technologies capture, infiltrate, treat and reuse polluted storm water runoff before it enters the sewer system. Examples of GI technologies include rain gardens, porous pavements, bioswells, green roofs, infiltration planters, trees and tree boxes, and rainwater harvesting for non-potable uses such as landscape irrigation.

In September 2016 the Authority issued \$25,000,000 of tax-exempt Public Utility Subordinate Lien Revenue Bonds, Series 2016B (Environmental Impact Bonds) (the "Series 2016B Bonds"). The Series 2016B Bonds are the Authority's first environmental impact bonds to finance GI. The Series 2016B Bonds are designated as

environmental impact bonds and, as such, include provisions for the possibility of an outcome payment by the Authority to the original purchasers of the Series 2016B Bonds, and for the possibility of a risk share payment by such original purchasers to the Authority depending upon the results achieved by the GI project financed with the proceeds of the Series 2016B Bonds. The potential obligation of the Authority to pay the outcome payment is an unsecured obligation. The net proceeds of the issuance will be used for construction of GI for the Rock Creek Project A (RC-A). The GI practices are designed to mimic natural processes to absorb and slow surges of stormwater during periods of heavy rainfall, reducing the incidence and volume of combined sewer overflows (CSOs) that pollute the District's waterways

When completed, the DC Clean Rivers Project will reduce the combined sewer overflows by at least 96% (exceeding the EPA standard of 85%), reducing pollution to the Potomac, Anacostia and Rock Creek waterways, improving water quality, and reducing locally generated debris from the combined sewer system and local waterways. The Authority expects to implement the DC Clean Rivers Project, which commenced in March 2005, over a 25-year period*, at a total estimated cost (including funds spent prior to Fiscal Year 2016) of \$2.6 billion.

Stormwater Projects. The projected disbursements for the stormwater service area in the CIP are approximately \$23 million and include extensions to the system and relief of certain sewers as well as rehabilitation or replacement of deteriorated storm sewers. Also included in the budget is the rehabilitation of the stormwater pumping stations (16) operated and maintained by the District.

Non-Process Facilities Projects. As of FY 2016, non-process facilities projects were reallocated from Wastewater Treatment, Combined Sewer Overflow, Sewer, and Water to the new service area. These are projects that improve DC Water's operations but do not per-se represent a core process area within DC Water's scope of activities. The CIP includes approximately \$85 million in projected disbursements for this new service area.

Washington Aqueduct Projects. The Washington Aqueduct provides wholesale water treatment services to the Authority and other Aqueduct Customers. See "THE SYSTEM – The Water System – The Washington Aqueduct." Under federal legislation enacted and a memorandum of understanding executed in 1997, the Aqueduct Customers have a role in the oversight of the Aqueduct's operations and its capital improvement program. The Aqueduct successfully designed, constructed and implemented a new orthophosphate corrosion control system at its water treatment plants in 2005 that meets the optimal corrosion control requirements of the Lead and Copper Rule. As a result, periodic sampling by the Authority shows that lead levels are below the action level, which supported the decision of the Authority to significantly modify its lead pipe replacement program. The CIP includes approximately \$305 million for Aqueduct projects. See "THE SYSTEM – The Water System – Water System Regulation and Permits – NPDES Permit and Water Treatment System Sediments."

Water System Projects. Projects in the water service area are designed to maintain an adequate and reliable potable water supply to customers and to provide required fire protection for the District. Categories of projects include the rehabilitation and replacement of water mains, water service connections, storage facilities, and pumping stations. The Authority has completed several critical improvements to the Water System, including cross connection removal, and major pumping station and storage facility rehabilitation.

The CIP includes approximately \$639 million in projected disbursements for Water System projects, including new system storage facilities, large diameter water main rehabilitation, 1% renewal of small diameter water mains (including ancillary items, like fire hydrants, valves and service connections) DDOT-related water main projects, and continued funding for the water lead program. See "THE SYSTEM – The Water System – Water System Regulation and Permits – Lead Levels,"

Capital Equipment Projects. The CIP includes approximately \$154 million for major information technology projects, vehicle fleet upgrades and maintenance of large equipment projects at Blue Plains and the major water and sewer pumping stations.

Meter Replacement Projects. The CIP includes approximately \$38 million for ongoing meter replacements and continued AMR system improvements and upgrades to the AMR equipment. This planned upgrade is part of the Authority's preventative maintenance program for the advanced meter infrastructure, which collect approximately 260,000 meter readings per day and is an essential asset to the Authority's billing process. The upgrades allow the Authority to move to the current version of AMI software and replace aging meters and meter data communication equipment.

^{*} The 25-year completion period is the result of successful negotiations between the Authority and EPA regarding the date by which the Authority must comply with the 2005 LTCP Consent Decree. Notably, however, the CIP contemplates that the DC Clean Rivers Project will be implemented over a 20-year period. Despite this difference in the term of the DC Clean Rivers Project, the cost estimates for the DC Clean Rivers Project in the CIP remain accurate.

CIP Financing Sources

The Authority expects to finance the CIP from the sources summarized below.

Revenue Bonds/Commercial Paper Notes. The Authority expects to finance approximately \$1.52 billion, or 39.7% of the CIP financing sources, with new long-term debt. The Authority has used, and expects to use in the future, its Commercial Paper Notes and EMCP Notes to fund capital needs on an interim basis, followed by issuance of long-term revenue bonds (or other forms of indebtedness, as appropriate) to retire outstanding Commercial Paper Notes and EMCP Notes and provide permanent financing for CIP costs. As approved by the Board, the total amount of Commercial Paper Notes outstanding at any time cannot exceed \$150 million. As of the date of this Official Statement, \$29.2 million of the Series C CP Notes were outstanding. In addition, the Authority anticipates using proceeds from the EMCP Notes as an additional CIP financing source. As approved by the Board, the total amount of Series A EMCP Notes outstanding at any one time cannot exceed \$100 million. As of the date of this Official Statement, \$50 million of the Series A EMCP Notes were outstanding.

Wholesale Customer Contributions. Under the terms of the 2012 IMA, the Authority's wholesale customers share the cost of operating, maintaining and making capital improvements at Blue Plains. A separate agreement with the Loudoun County Sanitation Authority ("LCSA") allows the Authority to recoup capital and operating costs from the LCSA on the same basis as provided for in the 2012 IMA. Contribution levels are governed by the agreements that provide for the pro-rata reimbursement for capital improvements based on the capacity allocated to each wholesale customer. The Authority expects to finance approximately \$713 million, or 18.7% of the CIP financing sources, with capital funding from wholesale customers. As of the date of this Official Statement, all wholesale customers were current on their capital contributions payments.

Federal and Other Grants. The Authority receives annual grants under the Clean Water Act and Safe Drinking Water Act for a variety of projects at Blue Plains and for the Water System. In addition, the Authority has received a special Congressional appropriation for improvements to the combined sewer system. The Authority expects to be reimbursed by the District for certain capital investments. The Authority expects to finance approximately \$224 million, or 5.49% of the CIP financing sources, with federal grants. Pursuant to the Safe Drinking Water Act and the Clean Water Act, the federal government makes annual appropriations for projects to improve drinking water supplies and wastewater treatment. Unlike most public water or wastewater utilities, the Authority receives appropriations in the form of grants and not as loans pursuant to a State Revolving Fund program. Under the terms of these grants, payments to the Authority are made on a reimbursable basis, with unclaimed appropriations remaining available to be obligated in subsequent years.

Under the Wet Weather Water Quality Act of 2000 that codified the EPA's 1994 National CSO Policy, the U.S. Congress authorized grant funding for the DC Clean Rivers Project. These appropriations require a 50% match from the Authority. As of September 30, 2016, the Authority had received \$14 million in grant funding for the DC Clean Rivers Project.

Pay-As-You-Go Financing. Revenues in excess of those required to meet operating and maintenance expenses, to make debt service payments and to fund reserves can be used, at the discretion of the Authority, to fund a portion of the CIP. The projected financial operations of the Authority assume that such amounts are used as a source of funds for the CIP. In addition, the Authority has established a separate line item in its operating budget beginning in Fiscal Year 2015 to provide funds for additional cash-financed capital construction, the defeasance of debt, or other uses at the discretion of the Authority. The projected financial operations of the Authority assume that the amounts in this line item are also used a source of funds for the CIP. The Authority expects to finance approximately \$1.3 billion, or 33.9%, of the CIP financing sources with pay-as-you-go funds.

The Board has also adopted a policy that authorizes any funds in excess of the operations and maintenance reserve and any other significant one-time cash infusions to be used to finance the CIP or to pay off higher cost debt. The projected financial operations of the Authority assume that no funds are currently available from these potential sources at the time of this Official Statement.

Interest Income on Bond Proceeds. Subject to Federal tax law requirements relating to use of the proceeds of tax-exempt bonds, the Authority uses interest earned on the proceeds of its bonds as a source of funds for the CIP. This interest income is treated as non-operating revenue of the Authority that is available to pay debt service, if needed. The use of this income for capital funding purposes represents another source of pay-as-you-go capital. The Authority estimates that \$14.4 million in interest income will be available to finance the CIP.

System Availability Fee. The Authority has implemented a new System Availability Fee ("SAF"), intended to be a one-time fee, assessed to a property owner of any premises, building or structure to recover the cost of system capacity servicing all metered water service and sanitary sewer connections renovation or redevelopment projects that

require an upsized meter size connection to the water and sewer system in the District. For a renovation or redevelopment project on a property that already has DC Water meters and accounts, credits will be applied for the older meters being removed from the system. Such fees are common in the industry and among utilities in the region. The Fee is based on meter size and was implemented on April 1, 2016. The Authority currently estimates to finance about \$57.8 million, or 1.5% of the CIP financing sources from SAF.

Cost Estimates

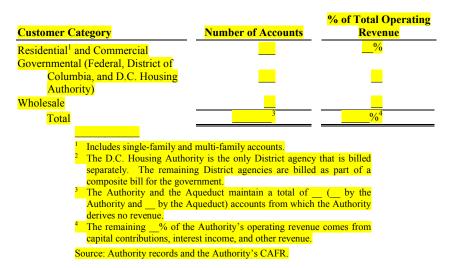
Although actual bid prices for recent construction projects, on average, have been slightly below the engineering cost estimates for such projects, the costs shown in the CIP reflect the Authority's practice of increasing construction cost estimates by 3% annually to the midpoint of construction. There are no assurances that the actual rate of inflation in construction costs will not increase significantly above the assumed rate of inflation or that such increases will not have an adverse impact on the financial operations of the Authority.

An additional consideration regarding the construction cost estimates is the value of change orders relative to the total cost of construction work performed. The cost of construction-related change orders executed by the Authority for contracts undertaken during the five-year period from Fiscal Year 2012 through Fiscal Year 2016 was \$[_] million, or [_]% of the total original value of the contracts of \$[_] million for this period. The relatively low value of change orders compared to the total construction costs incurred is an indication that project designs are thorough and that projects are being effectively managed during construction.

CUSTOMER BASE, RATES AND CHARGES

Customer Categories and Accounts

As of September 30, 2016, the System had [] active, metered water and wastewater accounts ([] of which are accounts of the Authority and [_] of which are accounts of the Aqueduct). Except for wholesale accounts, the majority of accounts receive both water and wastewater service. The Authority's customer accounts are divided into four categories: residential, commercial, governmental and wholesale. The number of accounts in each of the categories is as follows:



Customer Base

The Authority's customer and revenue base is diverse, consisting of a wide variety of residential, commercial and governmental customers, as well as wholesale wastewater customers. For the three year period from Fiscal Year 2014 through Fiscal Year 2016, the residential, commercial and multifamily customer revenue represented about [__]% of total operating revenue.

This group includes a variety of commercial uses, including nationally recognized universities and regional hospitals, commercial office space with tenants that are national associations, lobbying firms, major law firms and large

hotels. The following table reflects the Authority's ten largest commercial customer accounts in Fiscal Year 2016, which in aggregate represented [_]% of total operating revenues.

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Ten Largest Commercial Customers (2016)

Customer	Revenue	% of Total Operating Revenues
Howard University	\$2,662,949	0.6%
George Washington University	2,609,611	0.6
Georgetown University	<mark>2,605,884</mark>	<mark>0.5</mark>
William C. Smith & Co.	<mark>2,277,833</mark>	<mark>0.5</mark>
Washington Hospital Center	1,671,855	<mark>0.4</mark>
Horning Brothers	1,347,287	0.3
American University	1,125,050	<mark>0.2</mark>
Amtrak	984,336	<mark>0.2</mark>
Georgetown University Hospital	<mark>955,353</mark>	<mark>0.2</mark>
Metropolitan Washington Airports	<mark>807,803</mark>	<mark>0.2</mark>
Total Total	\$17,047,961	3.6 <mark>%</mark>

Source: Authority records.

The Authority serves many facilities of the federal government as well as the District of Columbia. In Fiscal Year 2016, government revenue represented approximately [__]% of total operating revenues. The following table reflects the Authority's ten largest government customers in Fiscal Year 2016, which in aggregate represented [_]% of total operating revenues.

Ten Largest Government Customers (2016)

Customer	Revenue	% of Total Operating Revenues
U.S. General Services Administration	\$7,598,077	1.6%
D.C. Housing Authority	<mark>6,308,902</mark>	1.3
U.S. Congress	4,019,627	<mark>0.8</mark>
Department of Defense (VA)	<mark>3,275,936</mark>	<mark>0.7</mark>
Smithsonian Institution	<mark>2,810,786</mark>	<mark>0.6</mark>
D.C. Board of Education	<mark>2,391,393</mark>	<mark>0.5</mark>
Bolling Air Force Base	1,928,617	<mark>0.4</mark>
Federal Naval Research Lab	1,542,370	<mark>0.3</mark>
National Park Service	1,363,657	<mark>0.3</mark>
D.C. Recreation and Parks	1,216,398	<u>0.3</u>
Total	\$32,455,763	<mark>6.8%</mark>

Source: Authority records.

Customer Demand

The following table shows the average percentage of annual water consumption by customer category for the period from Fiscal Year 2012 through Fiscal Year 2016. The results illustrate the diversification of the Authority's customer base.

Average Annual Consumption By Customer Category Fiscal Years 2012 – 2016

(millions of Ccf)

	Average Annual	Percent of Total
Residential Single-Family	7.56	21.37%
Residential Multi-Family	7.76	21.95
Commercial	13.09	37.03
Federal Government	4.99	14.13
D. C. Municipal Government	0.84	2.38
D. C. Housing Authority	0.77	2.19
D.C. Water	0.22	0.63
Special Accounts ¹	0.11	0.31
Total Consumption	35.35	100.00%

¹ See "THE SYSTEM – Customer Base Rates and Charges – Special Accounts." Source: Authority Records

The following table shows historical consumption for the Authority's customer categories for Fiscal Years 2012 through 2016, and projected consumption for Fiscal Years 2017 through 2021. The Authority's implementation of the AMR program, which included the replacement and repair of meters, significantly reduced estimated meter readings and improved the reporting of actual consumption.

Historical and Projected Annual Consumption by Major Customer Category

Fiscal Years ended/ending September 30

(Millions of Ccf) ¹

								Projected		
	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
	0.22	0.25	7 .00	7.61	a .ca	7.46	7.20	7.21	7.24	7.16
Residential Single-Family	8.32	8.27	7.88	7.64	7.57	7.46	7.38	7.31	7.24	7.16
Residential Multi-Family	7.99	7.83	7.57	7.46	7.44	7.27	7.20	7.13	7.06	6.99
Commercial	13.16	13.44	13.26	13.16	13.23	13.16	13.02	12.89	12.76	12.64
Federal Government	5.91	6.00	6.07	5.38	3.71	4.53	4.49	4.45	4.40	4.36
D. C. Municipal Government	1.26	1.32	1.20	0.46	0.85	0.73	0.72	0.72	0.71	0.70
D. C. Housing Authority	0.94	0.91	0.78	0.76	0.78	0.78	0.77	0.76	0.76	0.75
DC Water	0.33	0.34	0.34	0.11	0.18	0.24	0.24	0.24	0.24	0.23
Exempt	0.41	0.44	0.15	0.13	0.11	0.07	0.07	0.07	0.07	0.07
Total Consumption	38.32	38.54	37.24	35.11	33.86	34.24	33.90	33.56	33.22	32.89

Total water consumption in FY2016 - 2019 reflects the assumption of a 1% annual decline.
Totals may not add due to rounding.

Some fluctuation in consumption can occur in a given year due to variations in weather conditions and other factors such as billing adjustments. In Fiscal Year 2012, consumption declined as compared to Fiscal Year 2011 at a rate of 3.4%. Consumption declined in Fiscal Year 2013 and Fiscal Year 2014 by 5.7% and 3.6%, respectively. About 70% of the total decline in Fiscal Years 2013 and 2014 was attributable to reductions in use by the federal government due to federal initiatives to reduce water use, billing adjustments and other factors. In Fiscal Year 2015, total consumption increased by 5.0% with nearly all of that increase attributable to the federal government. In Fiscal Year 2016, total consumption decreased by 1.7%. See "– Rate-Setting Authority" for additional information.

The Authority anticipates that consumption will total [] million Ccf in Fiscal Year 2017, representing [an increase] [a decrease] of []% from the prior year. The Authority assumes that long-term total water consumption will decline at the rate of [_]% per year beginning in Fiscal Year 2016, recognizing that weather conditions and other factors may affect water demand in a given year. The expectation that future sales will decline is consistent with recent trends in the Washington, D.C. region as well as the projected sales in other large cities in the northeast United States.

There is some risk that consumption could be lower than anticipated during the Projection Period. The risk is mitigated to some extent in that revenues from the federal government are determined in advance and then subject to a true-up after the year is completed. For example, the significant reduction in actual federal consumption in Fiscal Year 2014 (compared to the budgeted consumption that was billed for Fiscal Year 2014) is reflected in the reconciliation credit to the federal government shown for Fiscal Year 2017. In addition, the consumption risk is mitigated to a significant extent by retail revenue that is not consumption-related: customer receipts from the meter charge, the Water

System Replacement Fee and the Clean Rivers Impervious Areas Charge ("CRIAC"), are unaffected by changes in the quantity of customer water use. Consumption-based retail water and sewer revenues within the District are estimated to comprise about 53.1% of total revenues (excluding PILOT/ROW fees) in Fiscal Years 2017 through 2021. The Authority evaluates its water consumption projections annually in connection with its budget preparations and more frequently if the need arises.

Rate-Setting Authority

Retail Rates, Fees and Charges

The Board establishes the Authority's rates, fees and charges. Only the six Board members representing the District vote on setting retail water and wastewater rates and fees for the retail customers who are customers within the District. No approvals from federal or local officials are required in order to set rates.

The Authority has adopted several changes to its existing retail rate structure, which went into effect in Fiscal Year 2016. These changes were designed to better align the Authority's revenues and expenditures by establishing customer class-based volumetric water rates based upon peaking factors, to create a more progressive rate structure for its residential customers by establishing lifeline water rates that discount core consumption and to fund the Authority's water main replacement program by establishing the monthly, fixed Water System Replacement Fee (the "Water System Replacement Fee"). The Board approved the new retail rate structure and Fiscal Year 2016 rates, fees and charges on February 5, 2015. For a chart incorporating the changes to the Authority's rates, fees and charges, see "CUSTOMER BASE, RATES AND CHARGES – Components of Retail Rates and Charges."

Historically, the Authority has adopted its budgets and its retail rates and charges on an annual basis. The budget process is expected to remain the same during the Projection Period: budgeted revenues, operating expenses and CIP expenditures will be adopted annually by the Board. Beginning with Fiscal Year 2017, the Authority will set retail rates and charges for a two-year period – i.e., in calendar year 2016 the Board is adopted (i) rates and charges to be effective October 1, 2016 (Fiscal Year 2017) and (ii) rates and charges to be effective October 1, 2017 (Fiscal Year 2018). Similarly, in calendar year 2018 the Board is expected to adopt (i) rates and charges to be effective October 1, 2018 (Fiscal Year 2019) and (ii) rates and charges to be effective October 1, 2019 (Fiscal Year 2020). The retail rates and charges are expected to change in each year. See " – Historical and Projected Water and Wastewater Retail Rates." As is currently the case, if in any year the Authority determines that revenues are materially less than expectations and/or debt service or operating expenses are materially higher than budgeted, the Authority has the ability to adjust its retail rates and charges during the fiscal year. Historically, there has been no need for the Authority to make such changes during a fiscal year.

The Authority receives annual grant funding under the Clean Water Act which requires the maintenance of wastewater charges sufficient to defray costs of operation, maintenance and replacement and surcharges for industrial discharges into the System's sewers levied in conformity with formulas set forth in the Clean Water Act and regulations thereunder. Retail revenues, including payments from the federal government, are expected to constitute approximately 81.8% of the Authority's total annual revenues during Fiscal Year 2017 through Fiscal Year 2021 (excluding PILOT/ROW fees).

Federal Government Charges

The Authority's forecasted water and wastewater charges for the federal government are prepared and included in the federal budget 18 months in advance of the commencement of the Authority's Fiscal Year based on the prevailing consumption estimates, projected retail rate increases as included in the current ten-year financial plan and adjustments for prior year true-ups. The federal government budgets for and pays its bills quarterly directly from the U.S. Treasury based on the estimates provided by the Authority in advance. Under the current billing process, any differences between the projected and the actual charges are netted against a future year's billing. Federal government revenues are expected to constitute approximately 6.5% of the Authority's total annual revenues during Fiscal Year 2017 through Fiscal Year 2021 (excluding PILOT/ROW fees).

Water consumption billed to Federal accounts in recent years has shown significant year to year fluctuation and an overall reduction compared to prior years. The Authority has adjusted its future forecasts for federal revenue primarily due to four factors:

i. An executive order signed by the President created a requirement for federal agencies to reduce potable water and landscaping use water by 2% annually through conservation measures until 2020; Authority conversations and investigations with federal property managers show that significant progress is being made toward this goal through plumbing fixture replacement.

- ii. In the District, the Telework Enhancement Act (the "Telework Act") has resulted in a significant shift to employees working from home, reducing water used at the workplace, and, pursuant to the Telework Act, GSA has strategically reduce the number of buildings it owns and operates in the District in favor of placing employees in shared rental spaces. In the latter case, the water reduction observed in federal buildings is partially made up in the commercial customer billing of DC Water.
- iii. There have been significant adjustments made to federal bills as a result of property sales and transfers between the federal and District governments.
- iv. The Authority accelerated a testing and calibration program on large capacity meters installed at federal properties and observed that some of the meters had degraded and were measuring less water than was actually being consumed. Where possible, the Authority is retroactively billing for the difference in consumption.

Wholesale Customer Charges

The Authority provides wholesale wastewater treatment services to User Jurisdictions at Blue Plains. Each wholesale customer's share of operating costs at Blue Plains is recovered in accordance with the Blue Plains Intermunicipal Agreement of 1985, the 2012 IMA, the Potomac Interceptor Agreements and the Loudoun County Sanitation Authority Agreement (as discussed in more detail in "THE SYSTEM – The Wastewater System"), and is based on actual costs of operating and maintaining the plant and the collection facilities, prorated to each User Jurisdiction based on its respective actual share of wastewater flows. A User Jurisdiction's share of capital costs is based on its share of capacity allocations in the plant. Both operating and capital payments are made on a quarterly basis. Wholesale customer revenues are expected to constitute approximately 12.6% of the Authority's total annual revenues during Fiscal Year 2017 through Fiscal Year 2021 (excluding PILOT/ROW fees).

Wholesale customers are billed based on the adopted budget for that Fiscal Year. Capital-related charges are billed quarterly with payments due on the 15th day of the second month following the end of the quarter. The operating and maintenance-related charges are billed annually by mid-October and payments are due each November, February, May and August. Following each Fiscal Year, the Authority prepares a reconciliation that determines the actual costs and each wholesale customer's appropriate share of such costs. Adjustments are then billed or credited to the wholesale customers in the first quarter of the subsequent Fiscal Year.

Components of Retail Rates and Charges

Water and Wastewater Charges

The Authority recovers the costs of operations, maintenance and debt service through retail rates and fees, wholesale customer charges and other miscellaneous non-operating income such as interest earnings. The primary retail rates and fees are as follows:

- i. Water and Wastewater Consumption Rates. These rates are based on metered water usage and are stated in terms of hundred cubic feet ("Ccf"). Through Fiscal Year 2015, each of the Authority's three customer classes (i.e., Residential; Multi-Family; and Non-Residential) were charged the same consumption rates. The Authority retained Raftelis Financial Consultants, Inc. ("RFC") to analyze the allocation of costs between the water and wastewater rates, as well as the peak demand factors of its various customer classes, and to prepare the Fiscal Year 2015 Cost of Service Study ("2015 COS Study"). Based on the results of the 2015 COS Study, the Authority's management recommended a restructuring of its rates, charges and fees to the Board. On February 5, 2015, the Board approved a resolution adopting this new rate structure which became effective October 1, 2015, for Fiscal Year 2016. It is currently expected that water and wastewater consumption rates will increase by 5.0% in Fiscal Years 2017 and 2018.
- ii. <u>Customer Metering Fee.</u> The Authority assesses a metering fee to recover costs associated with installing, operating and maintaining meters and the AMR system. The metering fee is charged as a separate line item on retail customer bills and varies by meter size. The metering fee in Fiscal Year 2016 remains unchanged from the prior year. The metering fee is expected to remain unchanged in Fiscal Years 2017 and 2018.
- iii. Water System Replacement Fee. The Authority modified its rate structure and implemented the new meter-based Water System Replacement Fee in Fiscal Year 2016 order to recover the cost of the

1% renewal and replacement program for water service lines. The metering fee is expected to remain unchanged in Fiscal Years 2017 and 2018. It is anticipated that the Water System Replacement Fee will generate \$39.7 million per year from Fiscal Years 2017 through 2021.

Clean Rivers Impervious Area Charge

The Water and Sewer Authority Equitable Ratemaking Amendment Act of 2008 (the "2008 Amendment Act"), enacted by the Council in 2008, amended the Act to authorize the Authority's CEO and General Manager to restrict combined sewer flow into the District from Maryland and Virginia and to require the Authority to, among other things, offer financial assistance programs to mitigate the impact of any increases in retail water and sewer rates on low-income residents of the District, including a low-impact design incentive program. The 2008 Amendment Act also amended the District of Columbia Public Works Act of 1954 to broaden the bases for the determination of sanitary sewer service charges to include impervious surface area and to provide for an appeal process for the assessment of an impervious surface fee.

In Fiscal Year 2009, the Authority approved the development and implementation of the CRIAC to recover the costs of the DC Clean Rivers Project, mandated by the EPA Region III pursuant to the 2005 LTCP Consent Decree. The DC Clean Rivers Project will be implemented over a 25-year period at a total cost of \$2.6 billion. See "THE SYSTEM – Wastewater Regulation and Permits – NPDES Permit." For an explanation of the different term contemplated for the DC Clean Rivers Project in the CIP and under the 2005 LTCP Consent Decree, see "CAPITAL IMPROVEMENT PLAN – Categories of CIP Projects – Combined Sewer Overflow Projects." Prior to the implementation of the CRIAC, the DC Clean Rivers Project cost was bundled in the wastewater rate based on the amount of water used.

The CRIAC is based on the amount of impervious area on a property, rather than on the amount of water consumption, which is a more equitable method of recovering the DC Clean Rivers Project costs. It allows the Authority to expand its customer base by charging all properties that generate stormwater, including those that do not use water (e.g., some parking lots). An impervious area is a man-made surface that cannot be easily penetrated by water, such as a rooftop, a paved driveway, a patio, a swimming pool or a parking lot that impedes the percolation of water into the subsoil and plant growth. The Authority maintains a database in which it classifies each parcel located within the District as pervious or impervious. This database and the classifications therein provide the basis for the District's billing of the CRIAC.

All residential customers are charged Equivalent Residential Units ("ERUs") based upon six tiers that reflect the amount of impervious surface area on each residential lot. The tiers and the number of accounts within each tier are shown as of September 30, 2016 in the following table.

	Size of Impervious Area	Equivalent Residential	No. of Properties
Tiers	(square feet)	<u>Unit</u>	(as of January 2016)
Tier 1	100 - 600	0.6	18,520
Tier 2	700 - 2,000	1.0	<mark>77,737</mark>
Tier 3	2,100- 3,000	<mark>2.4</mark>	<mark>5,827</mark>
Tier 4	3,100- 7,000	<mark>3.8</mark>	<mark>2,588</mark>
Tier 5	7,100- 11,000	<mark>8.6</mark>	<mark>132</mark>
Tier 6	11,100 and more	13.5	<mark>52</mark>

Source: Authority records.

The CRIAC is applied to all lots, parcels, properties and private streets throughout the District that are greater than 100 square feet, except for District or federally owned rights-of-way. The CRIAC is added to the customer's metered service bill and billed monthly unless the property is impervious only and has no other metered water or wastewater service. The CRIAC will be reviewed regularly and adjusted as appropriate by the Board. Effective October, 1, 2016 (i.e., for Fiscal Year 2017), the Authority's CRIAC rate is \$22.24 per ERU. The CRIAC Rate is expected to increase to \$25.18 per ERU for Fiscal Year 2018, effective October 1, 2017, and to \$[____] for Fiscal Year 2019, effective October 1, 2018.

On January 23, 2009, the Mayor of the District signed the Water and Sewer Authority Equitable Ratemaking Act of 2008, which states that DC Water will establish, together with the District Department of Environment ("DDOE"), an incentive program to institute certain eligible best management practices that reduce the amount of stormwater runoff generated from a property. On April 4, 2013, the Board approved a resolution that authorized staff to advertise the CRIAC Incentive Program for public comment and the rulemaking process. The proposed program is a three year pilot credit program for CRIAC that will provide a 4% maximum incentive credit (the

actual credit amount is to be calculated based upon the DDOE formula proposed on October 5, 2012), with a not-to-exceed annual budgeted allowance of \$500,000. The public hearing that was held on May 8, 2013, was the formal process for obtaining public input, and a final decision was reached on July 3, 2013. The not-to-exceed annual budgeted allowance of \$500,000 in credits is taken into consideration in the projection of revenues from the CRIAC.

PILOT/Right of Way Occupancy Fee

These fees recover the cost of the PILOT and Right of Way fees (collectively, "PILOT/ROW Fee"), which are charges levied by the District for payments in lieu of taxes and occupancy or use of public spaces or rights of way including that used by the Authority for its underground infrastructure. The Authority passes the PILOT/ROW Fee through to retail customers based on metered water consumption as a separate line item on the bills. Effective October 1, 2016 (i.e., for Fiscal Year 2017), the Authority's PILOT/ROW Fee was \$0.65 per Ccf. The PILOT/ROW Fee is expected to increase to \$[0.67] per Ccf effective October 1, 2017 (Fiscal Year 2018) and to \$[___] per Ccf effective October 1, 2018 (Fiscal Year 2019).

Stormwater Fee

The Authority's retail water and wastewater bills also include a stormwater fee levied on behalf of the District government. The stormwater fee is charged as a separate line item on retail customer bills. Although the Authority no longer administers the program, it will continue to be reimbursed by the District for any stormwater-related expenditure. The DDOE has rate-setting authority for stormwater services provided by the District and the Authority expects to work collaboratively with the DDOE to set future rates. See "THE AUTHORITY – Relationship with the District." Effective October 1, 2016 (i.e., for Fiscal Year 2017), the stormwater fee charged to retail customers was \$2.67 per ERU. The stormwater fee is expected to remain the same for Fiscal Years 2018 and 2019.

Historical and Projected Water and Wastewater Retail Rates

The Board has raised retail water and wastewater rates regularly since 1996, in line with its policy of implementing rate increases in a gradual and predictable manner. In Fiscal Year 2015, the Authority's retail rates were \$3.88 per Ccf for water and \$4.74 per Ccf for wastewater. Effective October 1, 2015 (i.e., for Fiscal Year 2016), the Authority modified the water rate structure and adjusted its rates as follows:

- The water rate decreased by \$0.80 per Ccf for residential lifeline usage (0-4 per Ccf);
- The water rate decreased by \$0.01 per Ccf to \$3.87 for residential use > 4 Ccf;
- The water rate decreased by \$0.43 per Ccf to \$3.45 per Ccf for Multi-family consumption;
- The water rate increased by \$0.11 per Ccf to \$3.99 per Ccf for Non-Residential use; and
- The wastewater rates for all customers increased by \$0.70 per Ccf to \$5.44 per Ccf.

Federal government customers in Virginia pay the Arlington County retail rate, which, as of May 1, 2015, was \$3.07 per Ccf for water. Federal government customers in Maryland pay according to the WSSC rates, which include a fixed charge and a consumption-based charge that increases with higher levels of usage.

Since 2000, the Board has adopted a series of ten-year financial plans that include annual, gradual rate increases. The latest of these was a retail rate increase for water and wastewater charges averaging 5.0% for Fiscal Year 2017. For Fiscal Years 2018 through 2021, the Authority's financial plan projects retail water and wastewater rate increases of an average of 5.0% per year.

The Authority's financial forecast includes an anticipated increase in the CRIAC from \$22.24 per ERU in Fiscal Year 2017 to \$25.18 per ERU in Fiscal Year 2018. Further increases in the CRIAC are expected in Fiscal Years 2019 through 2021.

The following tables set forth historical water and wastewater rates and the CRIAC of the Authority and the projected water consumption and sewer usage rates of the Authority for Fiscal Years 2017 through 2021. The revenue resulting from the CRIAC reduces the amount of revenue that must be raised through wastewater charges, resulting in a lower wastewater rate.

Historic Water and Wastewater Retail Rates (\$ per Ccf)

Fiscal Year	Water Consumption Rate	Sewer Usage Rate	Combined Rate	Percent Increase	CRIAC Rate (Per ERU)	Meter Charge (Per 5/8" Meter)
Historical						
2007	2.03	3.06	5.09	5.0%		2.01
2008	2.14	3.23	5.37	5.5%		2.01
2009^{1}	2.30	3.47	5.77	7.5%		2.01
2009^2	2.30	3.31	5.61	4.5%	1.24	2.01
2010	2.51	3.61	6.12	9.0%	2.20	2.01
2011	3.10	3.79	6.89	12.5%	3.45	3.86
2012	3.24	3.96	7.20	4.5%	6.64	3.86
2013	3.42	4.18	7.60	5.5%	9.57	3.86
2014	3.61	4.41	8.02	5.5%	11.85	3.86
2015	3.88	4.74	8.62	7.5%	16.75	3.86
2016				<mark>%</mark>		

The Sewer Rate for FY 2009 reflects the rate in effect at the beginning of the year before the CRIAC was implemented on May 1,

Projected Water and Wastewater Retail Rates (\$ per Ccf)^{1,2}

Fiscal Year	Water Consumption Rate	Sewer Usage Rate	Combined Rate	Percent Increase ³
2017				
Residential - 0-4 Ccf	3.23	5.71	8.94	
Residential - >4 Ccf	4.06	5.71	9.77	5.0%
Multi-Family	3.62	5.71	9.33	
Non-Residential	4.19	5.71	9.90	
2018				
Residential - 0-4 Ccf	3.39	6.00	9.39	
Residential - >4 Ccf	4.26	6.00	10.26	5.0%
Multi-Family	3.80	6.00	9.80	2.070
Non-Residential	4.40	6.00	10.40	
2019				
Residential - 0-4 Ccf	3.56	6.30	9.86	
Residential - >4 Ccf	4.47	6.30	10.77	5.0%
Multi-Family	3.99	6.30	10.29	
Non-Residential	4.62	6.30	10.92	
2020				
Residential - 0-4 Ccf	3.74	6.62	10.36	
Residential - >4 Ccf	4.69	6.62	11.31	5.0%
Multi-Family	4.19	6.62	10.81	
Non-Residential	4.85	6.62	11.47	

Reflects the rates in effect in the latter part of the year after the CRIAC was implemented

 $^{^{1}}$ Rates for Fiscal Years 2017 through 2020 are projected and subject to change. 2 The CRIAC, Water System Replacement Fee and Meter Charge are not shown above. The projected CRIAC for a customer with 1 ERU is \$22.24 per ERU in Fiscal Years 2017 and \$25.18 per ERU in Fiscal Year 2018 per month; the CRIAC is expected to increase each year in FY

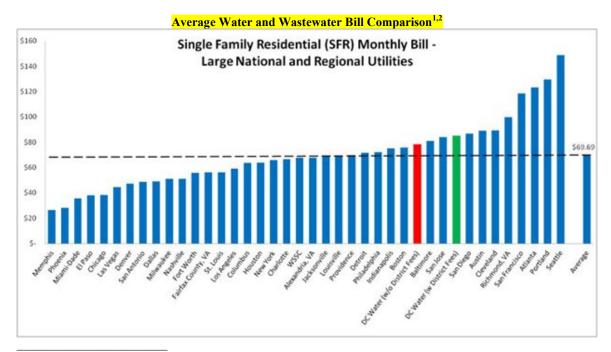
2018 through FY 2020. The meter-based Water System Replacement Fee became effective October 1, 2015. The Water System Replacement Fee and Meter Charge for FY 2016-2020 for a customer with a 5/8 inch meter is \$6.30 and \$3.86 per month, respectively. The Fee and the Charge will increase with the increasing size of a customer meter. Water System Replacement Fees and Meter Charges are generally determined by the size of the customer's meter - e.g., a larger meter requires a customer to pay higher charges and fees - however, certain residential customers who are served by meters in excess of 1" will be charged as if their meters were 1" in size.

³ Percent increase reflects the overall average increase for all customers; the increases for individual customers will vary by customer class and

consumption.

Retail Rate Comparison

The Authority's retail rates are comparable to those of other utilities in the metropolitan Washington, D.C., region and other similar utilities in the eastern United States. The following chart compares the Authority's combined water, wastewater and impervious area residential charges to these utilities. The table reflects the Authority's Fiscal Year 2017 rate and fee charges, while other utilities rates are as of January 2017. The Authority's Fiscal Year 2017 rate and fee charges are shown both with and without the pass-through of the District's PILOT/ROW Fee in the amount of \$0.65 per Ccf, and the DDOE residential stormwater rate of \$2.67 per ERU per month.



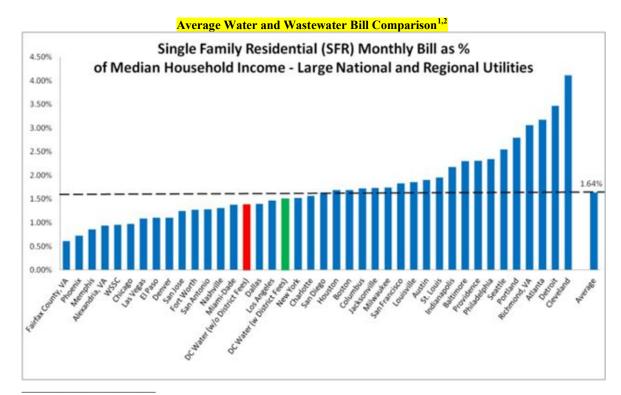
Source: Amawalk

The median income in the District is competitive with the median income in many other jurisdictions. The following chart illustrates the Authority's charges for a single family residential customer as a percentage of median income compared to similar data for other water and wastewater utilities.

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Assumes average residential consumption of 6.20 Ccf, or 4,638 gallons, per month. Ccf = hundred cubic feet, or 748 gallons.

Reflects rates and fees in place as of January 1, 2017. The Authority's rate includes the PILOT/ROW fee totaling \$0.65 per Ccf (effective) October 1, 2016) and the DDOE residential stormwater rate of \$2.67 per ERU per month.



Assumes average residential consumption of 6.20 Ccf, or 4,638 gallons, per month. Ccf = hundred cubic feet, or 748 gallons.

² Reflects rates and fees in place as of January 1, 2017. The Authority's rate includes the PILOT/ROW fee totaling \$0.65 per Ccf (effective October 1, 2016) and the DDOE residential stormwater rate of \$2.67 per ERU per month.

Source: Amawalk

Collections

The Authority has implemented policies and business practices intended to optimize the collection of customer billings. Measures are taken including cross checks with property records to ensure that all users of the Authority's system are being billed. With the implementation of automated meter reading (AMR), the Authority can access customer usage data at any time and can alert customers to apparent leaks promptly. In September 2013, the Authority achieved the lowest 90-day receivable balance in the Authority's history at \$4.9 million. From July 2009 until present, the Authority's 90-day receivable balance has ranged from \$4.9 to \$6.5 million, even with multiple rate increases that doubled the typical residential bill, resulting in a receivable balance as a percentage of operating revenues that now approaches just 1%. This is the result of a comprehensive strategy that integrates several consumer services functions along with an aggressive customer contact process that addresses collections issues early when outstanding balances are within the range of customers' ability to pay, improves lien processing for delinquent accounts, and enhances coordination efforts with other District agencies.

The Authority's collection program includes: (i) assessing customers a 10% late fee if their bill is not paid on day 31 after the date of billing and sending customers a friendly reminder notice; (ii) placing a call to the customer using an automatic notification call program on day 34; (iii) sending the customer notice of intent to disconnect service on day 39 (which, in accordance with District laws and regulations gives customer 15 days to pay the delinquent bill and maintain service); (iv) mailing to the owner of the property an intent to place a lien on the property on day 65 (which gives the owner 10 additional days to pay the bill before a lien is placed on their property) and imposing an additional 1% penalty per month on all delinquent balances after 60 days; (v) placing a call to the customer on day 67 to inform him/her of the Authority's intent to place a lien on the property if the delinquent bill is not paid; (vi) placing a lien on the property on day 80. The lien becomes a part of the public record and appears on the owner's credit report and adversely affects their FICO score. The Authority will remove a lien only if the account balance is paid in full, and/or if the lien was placed in error. Once paid, the lien is removed and reflected as "satisfied" on the credit report but the customer's FICO score is not changed unless the customer contacts the credit bureau. The Authority's liens are continuous, which entitles the Authority to collect the current outstanding balance owed by a customer regardless of the balance at the time the lien was placed.

The Authority utilizes collection analysts who make calls to owners of delinquent accounts with a focus on the top 250 delinquent accounts. The Authority also takes legal action to have delinquent multi-family apartment building owners placed in receivership. This may result in the Authority receiving a percentage of the tenants' rent that is collected by a court-appointed receiver before the owner can collect any rent. The account stays in receivership until paid in full.

After all efforts to collect have been exhausted, and as a last resort, the Authority will disconnect service for non-payment and not restore it until the delinquent bill is paid. The Automated Meter Reading System (AMR) allows the Authority to know if water is being used after service has been disconnected due to non-payment. If this occurs, the meter will be removed and service will not be restored until the delinquent amount, plus any applicable fees, are paid in full.

The following table shows that the cumulative retail (including commercial) customer balances that were delinquent more than 90 days declined by approximately 50% between Fiscal Years 2007 and 2016. There is one government delinquency to report, which is related to DC Government/Municipal property. The delinquent balance as of September 30, 2016 was \$[] million.

Retail Customer Cumulative Delinquent Balances(\$ in millions)

As of September 30,	Amount ¹	Percent of Operating Revenue
2007	7.1	2.3
2008	6.1	1.8
2009	4.9	1.4
2010	5.1	1.4
2011	5.5	1.4
2012	5.5	1.3
2013	4.9	1.1
2014	5.3	1.0
2015	6.5	1.0
<mark>2016</mark>		

¹ Amounts shown are as of the end of each Fiscal Year for amounts delinquent more than 90 days and do not include previously disputed amounts for Howard University (now resolved) and the Soldiers' Home discussed below.

Source: Authority records.

Special Accounts

The Authority has historically provided some U.S. Soldiers and Airmen's Home ("Soldiers' Home") accounts with free water service in exchange for the use of certain parcels of Soldiers' Home property to maintain a reservoir that provides water to the District. The Authority contends that the Soldiers' Home is required to pay for sewer service and impervious area fees, as well as water services for certain accounts. The parties have been in negotiation in an effort to resolve the issues surrounding this historically exempt account. There are no other exempt accounts and the Authority does not anticipate the addition of any new exempted accounts.

Customer Assistance Programs

The Authority sponsors two programs to assist low income customers in paying their water bills: Customer Assistance Program ("CAP") and Serving People by Lending A Supporting Hand ("S.P.L.A.S.H."). The Authority implemented the CAP in 2001 providing a discount of up to 4 Ccf per month of water service for single family residential homeowners that meet income eligibility guidelines. In Fiscal Year 2004, the Authority expanded the CAP to include tenants who meet the financial eligibility requirements and whose primary residence is separately metered by the Authority. In January 2009, the Authority further expanded the CAP to provide a discount of 4 Ccf per month of sewer services to eligible customers. Effective October 1, 2010, the Board expanded the CAP discount to include the first 4 Ccf of PILOT/ROW fees. Effective October 1, 2015, the Board expanded the CAP discount to include the new Water System Replacement Fee, which went into effect starting in Fiscal Year 2016. In Fiscal Year 2011, 6,025 customers received a discount on their bills totaling \$1,380,207. In Fiscal Year 2012, 5,648 customers received a discount on their bills totaling \$1,330,511. In Fiscal Year 2013, 5,206 customers received a discount on their bills totaling \$1,200,835. In Fiscal Year 2014, the Authority provided assistance totaling \$1,129,776 to 4,583 customers. In Fiscal Year 2015, a total of 4,498 customers received a discount on their bills totaling \$1.2 million. The projected revenues of the Authority take

Through the S.P.L.A.S.H. program, the Authority offers assistance to families in need so that they can receive critical water services. S.P.L.A.S.H. is funded solely by contributions from the community, customers and from DC Water employees. The Authority has redesigned its water and sewer bills to make it easier for its customers to make contributions to S.P.L.A.S.H. The Authority pays all administrative costs of this program, which is administered directly by the Greater Washington Urban League (GWUL). All contributions are deposited in a bank account from which the (GWUL) makes payments on behalf of eligible customers. Every dollar received by the Authority is distributed to eligible customers. In Fiscal Year 2011, the Authority provided assistance to 294 customers totaling \$95,039. In Fiscal Year 2012, the Authority provided assistance to over 354 customers totaling \$105,502. In Fiscal Year 2013, the Authority provided assistance to 359 customers totaling \$121,084, and in Fiscal Year 2014, the Authority provided assistance to approximately 309 customers totaling \$100,851. In Fiscal Year 2015 the Authority provided assistance to approximately 351 customers in the amount of \$115,684. In Fiscal Year 2016, the Authority provided assistance to customers totaling \$100,851.

Customer Service Operations

The Department of Customer Services reports to the Assistant General Manager of Consumer Service and is responsible for meter installations, meter reading, meter testing, billing and collections. The Authority continuously evaluates its customer service offerings to ensure that customers receive the best possible service.

FINANCIAL OPERATIONS

Historical Financial Operations

The Authority derives its revenues primarily from retail customer payments for water and wastewater treatment services, which account for 81.8% of total revenues, and wholesale customer payments for wastewater treatment services, which account for 12.6% of total revenues (excluding PILOT/ROW fees for Fiscal Years 2017 through 2021). The Authority's operating revenues have steadily increased since its creation, due largely to rate and fee increases approved by the Board which are discussed in more detail in the section entitled "RATES AND CHARGES – Historical and Projected Water and Wastewater Retail Rates."

The Authority is committed to optimizing the cost of service it offers and as a result places emphasis on managing its expenses. The Authority's Budget Department closely monitors spending to ensure compliance with approved operating and capital budgets. This includes preparation of daily and monthly management reports for each operating unit and financial system controls that prevent overspending. In addition, the Authority provides detailed monthly reports on cash and investments, revenues, operating budget and capital spending to the Board's Finance and Budget Committee and quarterly updates on the CIP status to the Board's Environmental Quality and Sewerage Services and Water Quality and Water Services Committees. The average annual rate of increase in total expenses on a cash basis, excluding PILOT/ROW expenses, for Fiscal Years 2012 through 2016 was 4.7%. In each such year, actual expenses of the Authority were less than the budgeted amount.

The following table presents historical revenues, expenses and changes in net position using information contained in the audited financial statements for Fiscal Years 2012 through 2016. The Authority's complete financial statements for the Fiscal Years ended September 30, 2016, and 2015, are attached hereto as APPENDIX B.

Historical Revenues, Expenses and Change in Net Position

(\$ in thousands)

	Fiscal Year Ended September 30							
	2012	2013	2014	2015	<mark>2016</mark>			
Operating revenues								
Residential, commercial and multi-family customers	\$256,846	\$ 275,337	\$ 295,209	\$335,711				
Federal government	48,381	45,187	39,001	54,274				
District government and DC Housing Authority	24,713	21,677	28,852	32,948				
Charges for wholesale wastewater treatment	94,549	87,178	96,845	112,522				
Other	16,077	9,700	13,917	14,460				
Total Operating Revenues	440,566	439,079	473,824	549,915				
Operating expenses								
Personnel services	97,784	103,908	108,467	115,233				
Contractual services	64,939	68,417	68,172	66,241				
Chemicals, supplies and small equipment	28,815	28,987	31,748	32,935				
Utilities and rent	26,786	26,098	29,939	30,848				
Depreciation and amortization	74,342	77,330	77,833	83,857				
Water purchases	28,389	27,223	28,407	29,109				
Payment in lieu of taxes and right of way fee	21,982	21,982	11,458	20,437				
Total operating expenses	343,037	353,945	356,024	378,660				
Operating income	97,529	85,134	117,800	171,255				
Nonoperating revenue (expenses)								
Interest income	749	1,144	977	1,316				
Interest expense and fiscal charges	(74,001)	(63,905)	(69,288)	(61,409)				
Total nonoperating revenue (expenses)	(73,252)	(62,761)	(68,311)	(60,093)				
Change in net position before Federal grants								
and contributions	24,277	22,373	49,489	111,162				
Contributions of capital from Federal government	58,957	58,310	94,690	67,965				
Change in net position	83,234	80,683	144,179	179,127				
Net position, beginning of year	\$1,042,719	\$1,125,953	\$ 1,206,636	\$1,350,815				
Net position, end of year	\$1,125,953	\$1,206,636	\$ 1,350,815	\$1,529,942	-			

Source: Authority Records

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Historical Debt Service Coverage

The Authority has exceeded the Rate Covenant requirement of 1.20x Senior Debt service coverage set forth in the Indenture and the Authority's policy goal of 1.40x Senior Debt service coverage in each of the last five Fiscal Years, as shown in the following table. Debt service for Fiscal Year 2013 differs from the coverage as presented in the 2013 Comprehensive Annual Financial Report due to the exclusion of transfers to District of Columbia PILOT Fund (in the table below) in calculating Net Revenues Available for Debt Service.

Historical Debt Service Coverage¹

(\$ in thousands)

	Fiscal Year ended September 30						
	2012	2013	2014	2015	2016		
Revenues:							
Retail	\$295,247	\$328,361	\$351,148	\$382,012			
Wholesale	75,240	75,009	70,763	81,230			
Other Non-Operating	47,136	51,088	56,082	75,354			
(Contributions to/Transfers from Rate Stabilization Fund)	(11,250)	(1,000)	6,500	(10,000)			
Total Revenues (A)	\$406,373	\$453,458	\$484,493	\$528,596			
Operating Expenses (B)	248,622	252,329	281,918	273,486			
Revenues Less Operating Expenses (C=A-B)	\$157,751	\$201,129	\$202,575	\$255,110			
Debt Service:							
Senior Debt Service (D)	\$41,918	\$41,904	\$42,041	\$55,746			
Subordinate Debt Service (E)	57,354	65,796	78,124	84,925			
Total Outstanding and Projected Debt Service (F=D+E)	\$99,272	\$107,700	\$120,165	\$140,671			
Calculation of Net Revenues Available for Senior Debt Service:							
Revenues Less Operating Expenses (C)	\$157,751	\$201,129	\$202,575	\$255,110			
Prior Year Federal Billing Reconciliation	(1,000)	(5,105)	(6,000)	(5,053)			
(Refund to)/Payment from wholesale customers	(5,661)	(5,800)	(10,069)	(2,483)			
(Additions to)/Transfers from DC PILOT Fund	(\$4,468)	(\$7,900)	(7,676)	-			
Customer Rebate		(\$3,298)	(5,100)	-			
Net Revenues Available for Senior Debt Service (G)	\$146,622	\$179,026	\$173,730	\$247,574			
Senior Debt Service Coverage (G/D)	3.50x	4.27x	4.13x	4.44x			
Calculation of Subordinate Debt Service Coverage:							
Net Revenue Available for Senior Debt Service	\$146,622	\$179,026	\$173,730	\$247,574			
Less Senior Debt Service (D)	(41,918)	(41,904)	(42,041)	(55,746)			
Net Revenues Available for Subordinate Debt Service (G-D)	\$104,704	\$137,122	\$ 131,689	\$191,828			
Subordinate Debt Service Coverage ((G-D)/E)	1.83x	2.08x	1.69x	2.26x			
Combined Debt Service Coverage (G/F)	1.48x	1.66x	1.45x	1.76x			

Prepared in accordance with the Indenture, which closely corresponds to cash basis accounting. Debt service on the Series 2010A Bonds (which is included in Subordinate Debt Service above) reflects the Direct Payments the Authority receives from the U.S. Treasury. The Authority has agreed to deposit the Direct Payments related to the Series 2010A Bonds directly into the Series 2010A Interest Account of the Subordinate Lien Bond Fund to pay interest when due on the Series 2010A Bonds. With respect to the effect of Sequestration on the receipt by the Authority of Direct Payments on its Series 2010A Bonds, see "SECURITY FOR THE SERIES 2017A/B BONDS – Direct Payment Bonds and the Effect of Sequestration on Direct Payments."

Source: Authority's CAFR.

Annual Budget

Annual Budget Process

The Authority's budgetary process is based on an integrated approach that links its operating and capital requirements to its ten-year financial plan. Preparation of the Authority's budget begins with the preparation of the ten-year financial plan in the spring of each year. The Authority's operating budgets and the CIP are developed based on the financial parameters laid out in the financial plan and in Board policy. Management presents its proposed operating budgets, the CIP and ten-year financial plan to the Board's Environmental Quality and Sewerage Services, Water Quality and Water Services, and Finance and Budget Committees for their review, with final action by the full Board typically scheduled for January of each year. Upon final approval by the Board, the Authority's budget is forwarded to the District for inclusion in its submission to the President as described below.

Under the Act and the Federal Act, the Authority is required to prepare and annually submit to the Mayor of the District for inclusion in the annual budget of the District estimates of the expenditures and appropriations necessary for the operation of the Authority for each Fiscal Year. All such estimates are required to be forwarded by the Mayor to the Council for its action without revision, but subject to the Mayor's recommendations. The Council may comment or make recommendations concerning such annual estimates but has no authority to revise such estimates. Such annual estimates constitute a part of the annual budget of the District required to be submitted by the Mayor to the President of the United States for transmission by the President to the U.S. Congress. In accordance with the District's Home Rule Act, except as noted below, no amount may be obligated or expended by any officer or employee of the District, including the Authority, unless such amount has been approved by act of Congress and then only according to such act. Pursuant to the Federal Act, the limitation described in the preceding sentence is not applicable to expenditures by the Authority for any of the following purposes: (i) any amount obligated or expended from the proceeds of any amount obligated or expended to secure any revenue bonds of the Authority; or (iv) any amount obligated or expended for repair, maintenance, or capital improvement to the System facilities financed by any revenue bonds of the Authority. In addition, pursuant to Public Law 105-33 (D.C. Code Section 1-204.45a(b)), if the Authority has excess revenues, such excess revenues may be obligated or expended for capital projects.

The Approved Fiscal Year 2017 Budget

The Board adopted the Fiscal Year 2017 operating budget (the "Fiscal Year 2017 Budget") on December 3, 2015.

The Fiscal Year 2017 Budget for net operating expenditures totals \$513.9 million, which is \$8,7 million or 1.7% lower than the Approved Fiscal Year 2016 Budget, primarily due to debt service savings and operational efficiencies.

In Fiscal Year 2016 and subsequent years, the Authority anticipates that the difference between actual and budgeted operating expenses will be less than in previous years due to budget planning that focuses on having actual expenses more closely aligned with budgeted expenses. Simultaneously, the Authority has established a separate line item in its operating budget beginning in Fiscal Year 2015 to provide funds for additional cash-financed capital construction, the defeasance of debt, or other uses at the discretion of the Authority. The amounts in this line item could alternatively be used by the Authority to help address potential shortfalls in cash receipts or increases in expenses, should the need arise. In addition, the Authority has the ability to adjust its rates, as necessary, to provide the required revenues in each year.

Projected Financial Operations

The following table was prepared by Amawalk in its capacity as the financial feasibility consultant to the Authority, and it shows (i) the actual cash flows, cash reserves and debt service coverage for Fiscal Year 2016 and (ii) projected cash flows, cash reserves and debt service coverage for Fiscal Years 2017 through 2021. The projected revenues reflect the increases in rates and charges adopted by the Authority for Fiscal Year 2017 and for Fiscal Year 2018 and the anticipated increases in rates and charges for Fiscal Years 2019 through 2021.

The projected financial results for Fiscal Years 2017 through 2021 incorporate assumptions as of November 2016. The projected debt service requirements assumed that the Authority would issue additional long-term debt in Fiscal Year 2017 and be required to make debt service payments on such debt in Fiscal Year 2017. The first payment of debt service for the Series 2017A/B Bonds is expected to be made in Fiscal Year 2017, which is expected to result in lower actual debt service payments in Fiscal Year 2016 compared to what is shown in the projected cash flows.

Including the issuance of the Series 2017A/B Bonds, the Authority anticipates issuing approximately \$1.0 billion of new money bonds from Fiscal Year 2017 through and including Fiscal Year 2021. It is assumed that bonds will be issued as Senior Debt in Fiscal Years 2017 and 2020 and as Subordinate Debt in Fiscal Years 2018, 2019 and 2021 will be issued as Subordinate Debt. It is further assumed that the future bonds will have a fixed interest rate of 6.5% in Fiscal Year 2018 and subsequent years. Debt service on the anticipated future bonds is calculated on the basis of a 35-year term with level principal and interest payments. There are no deposits to the debt service reserve fund assumed for the Series 2017A/B Bonds, and any anticipated future bonds; the Authority may decide to make contributions to the debt service reserve fund in the future at its discretion.

The Authority has the option to issue future bonds as either Senior Debt or Subordinate Debt. The combined debt service coverage would remain the same if the Authority were to elect to issue Senior Debt in lieu of Subordinate Debt or vice versa in a given year. Decisions regarding the issuance of future debt as Senior Debt will be made by the Authority at the time of debt issuance.

For more information in respect of Amawalk's analysis, see "FINANCIAL FEASIBILITY OPINION LETTER."

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Analysis of Actual and Projected Financial Results Fiscal Years ended/ending September 30 (\$ in thousands)¹ Actual 2016 Projected 2018 2020 2021 Revenues and Payment Obligations Retail Revenues 1 Wholesale Revenues Other Non-Operating Revenues Transfer from RSF (Contributions to RSF) Total Revenues Prior Year Federal Billing Reconciliation Transfer to DC PILOT Fund Transfer to DC ROW Fund (Refund to)/Payment from IMA Net Revenues (A) Operating Expenses (B) Net Revenues Available for Debt Service (C=A-B) Total Senior Debt Service (D) ^{2,3} Total Subordinate Debt Service (E) ^{2,3,4,5} Total Outstanding & Projected Debt Service (F=D+E) **Debt Service Coverage** Calculation of Net Revenues Available for Senior Debt Service Senior Debt Service Coverage (C/D) Calculation of Subordinate Debt Service Coverage Net Revenue Available for Senior Debt Service (C) Less Senior Debt Service (D) Net Revenue Available for Subordinate Debt Service (C-D) Subordinate Debt Service Coverage [(C-D)/E] Combined Debt Service Coverage (C/F) Subordinated Payment Obligations Payment In Lieu of Taxes/Right of Way Fee (G) Defeasance/Cash Financed Capital Construction (H) 6 Revenues Less Disbursements (I=A-B-F-G-H) Reserve Balances Beginning Cash Reserve Balance (J) Cash Reserve Balance Breakdown Beginning Undesignated Reserve Balance Additions to/(Transfers from) Undesignated Reserve Annual Balance from Operations Prior Year Federal Billing Reconciliation (Refund to)/Payment from IMA Transfer to DC PILOT Fund Transfer to DC ROW Fund Pay-Go Capital Financing (Transfers to)/Transfers from 60-Day Reserve Ending Undesignated Reserve Balance Beginning 60-Day Operating Reserve Balance Additions to/(Transfers from) 60-Day Reserve 60-Day Operating Reserve Balance Beginning Renewal & Replacement Balance Additions to/(Transfers from) Renewal & Replacement Reserve Renewal & Replacement Balance Ending Balance Cash Reserve Stormwater Receipts - DC Water Share (K) Cash Reserve Requirement Per Board Policy [Maximum of (B-K)*(120/365) or \$125.5 Million] 7 Beginning Rate Stabilization Fund Balance Transfers from Operations (Additions to Rate Stabilization Fund) Additions to Operations/(Transfers from) Rate Stabilization Rate Stabilization Fund Balance

¹ Includes retail revenue from water and wastewater charges as well as the Clean River Impervious Area Charge.

- ² Debt service is shown on a cash basis, and may differ from the CAFR.
- ³ Anticipated future bonds in 2018, and 2019 are currently assumed to be issued on a subordinate lien basis. Anticipated future bonds in 2017 are currently assumed to be issued on a senior lien basis. The Authority may decide in the future to issue bonds on a senior or subordinate basis. Debt service for anticipated future bonds in Fiscal Year 2017 is calculated based on an assumed annual interest rate of 5.75%, a term of 35 years and level debt service. Debt service for anticipated future bonds starting in Fiscal Year 2018 are calculated based on an assumed annual interest rate of 6.5%, a term of 35 years and level debt service.
- ⁴ The Total Subordinated Debt Service is net of the Direct Payments the Authority expects to receive from the United States Treasury equal to 32% of the interest payable on the Series 2010A Bonds. It reflects the reduction in Direct Payments due to expected effects of sequestration.
- ⁵ Reflects the interest cost of \$0.730 million in FY 2016 and \$0.725 million per year in FY 2017 through FY 2020 (based on \$29.2 million of Series C CP Notes outstanding in FY 2016, and \$29.0 million of Series C CP Notes outstanding each other year at 2.5% annual interest in FY 2016 through FY 2020). In addition, also reflects the interest costs of \$1.183 million per year in FY 2016 through FY 2020 (based on the assumption of \$47.3 million of Series A EMCP outstanding each year at 2.5%).
- ⁶ Beginning in FY 2016, DC Water includes funds in its annual budget that are intended to be used to defease outstanding debt or pay for construction on a cash basis. These funds are separate from the Pay-Go Capital Financing amounts referenced under Reserve Funds above and are presently assumed to be added to the Pay-Go amounts and deposited in total as a source of funds for the CIP. Alternatively, these funds could be used to cover unexpected declines in revenues or increases in expenses. The Authority reserves the right to modify the amount of the funds and the usage of funds during each year.
- ⁷ Board financial policy requires the maintenance of a cash equivalent to 120 days of operating costs less District stormwater revenues, but not less than a cash balance of \$125.5 million.

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System Revenues

The Authority collects revenues from retail and wholesale customers as well as other sources that include fees paid by developers and interest earnings on available funds. Authority revenues also include transfers from the Rate Stabilization Fund. The following table shows historical revenues of the Authority for Fiscal Year 2016, and the projected revenues for Fiscal Years 2017 through 2021.

Historical and Projected Revenue on a Cash Basis

Fiscal Years ended/ending September 30 (\$ in thousands) 1,2

	Actual			Projected		
	2014	2015	2016	2017	2018	2019
Retail Revenue	004.470	005 004	040 404	004.004	074.000	000 407
Residential, Commercial, Multi-Family	221,172	235,691	248,481	261,964	274,883	288,437
D. C. Municipal Government	5,913	6,301	6,644	7,005	7,351	7,714
Federal Government	42,097 7,368		44,250	34,159 7,216	35,847	37,617
D. C. Housing Authority Groundwater ³	1	6,491	6,844	,	7,572	7,946
	0	5	5	5	5	5
Metering Fee	11,207	10,776	10,776	10,776	10,776	10,776
Water System Replacement Fee 4	0	0	40,000	40,000	40,000	40,000
CRIAC	63,391	81,853	95,137	106,427	112,866	120,122
Total Retail Revenue	351,148	384,024	452,137	467,552	489,299	512,617
Wholeale Revenue						
Loudoun County & Potomac Interceptor	6,941	7,713	6,846	7,052	7,263	7,481
WSSC	50,873	59,239	50,284	51,792	53,346	54,947
Fairfax County	12,949	14,413	12,211	,	12,955	13,344
Total Wholesale Revenue	70,763	81,365	69,342	71,422	73,565	75,772
Total Wholesale Revenue	70,700	01,000	00,042	7 1,722	70,000	10,112
Other Revenues						
District Stormwater Revenues	930	1,000	1,000	1,000	1,000	1,000
Transfer from Rate Stabilization Fund	6,500	7,500	0	10,000	0	2,700
Miscellaneous Revenues	30,773	47,382	25,109	23,609	23,609	22,609
Aqueduct Debt Service Revenue from Falls Church						
and Arlington	201	193	193	193	193	193
Interest Income	560	631	1,680	3,247	5,246	8,971
D.C. Right of Way Occupancy Fee/PILOT	23,618	20,547	20,744	21,057	21,376	21,702
Total Other Revenue	62,582	77,254	48,726	59,106	51,424	57,175
Total Operating Cash Receipts	484,492	542,643	570,205	598,080	614,288	645,564
Less: Contributions to Rate Stabilization Fund	0	0	(4,500)	0	(8,000)	0
Total Operating Cash Receipts with RSF	101.155	5 40.045		5 00.000	222.22	0.45.50
Transfers	484,492	542,643	565,705	598,080	606,288	645,564

¹ All figures are presented on a cash receipt basis.

² Fiscal Year 2015 - 2019 projections are based on the Authority's financial plan.

³ Groundwater revenue refers to receipts from customers that pump groundwater into the sewer system.

⁴ A meter-based Water System Replacement Fee to recover the cost of the 1% renewal and replacement program for water service lines will be implemented in Fiscal Year 2016.

An overview of the revenue components on a cash basis is provided below.

Retail Water and Wastewater Revenues

Retail revenues comprise the vast majority of all System revenues. In Fiscal Year 2012 through Fiscal Year 2016, retail revenues accounted for approximately 76.5% of total revenue (excluding PILOT/ROW fees and the effects of withdrawals from the Rate Stabilization Fund), wholesale customer payments represented about 16.2% of total revenues, with the remaining 7.3% coming from a variety of sources, such as interest income, penalties and fines, and fees from service installations. Retail revenues are derived primarily from water and wastewater service charges of the Authority that are based on water consumption as described earlier in this Official Statement. Other sources of retail revenue include the customer metering fee, CRIAC, and Water System Replacement Fee. See "CUSTOMER BASE, RATES AND CHARGES – Components of Retail Rates and Charges."

The Authority has projected that revenues from retail customers, excluding PILOT/ROW fees, will be \$462.9 million in Fiscal Year 2017, or 80.6% of the Authority's total revenues (excluding PILOT/ROW fees). This amount includes approximately \$102.0 million from the CRIAC and \$39.7 million from the Water System Replacement Fee. Without the effects of the CRIAC and the Water System Replacement Fee, the Fiscal Year 2017 projected revenue expected to be \$321.1 million, or 0.4%, lower than the Fiscal Year 2016 revenues from retail customers. The projected slight decrease in retail revenue anticipate that the customer metering fee will be unchanged from the current fee schedule and that consumption will be lower in Fiscal Year 2017 compared to Fiscal Year 2016. Cash Receipts for the first two months of Fiscal Year 2017 (through November 30, 2016) excluding PILOT/ROW fees, were about the 2.4% higher than the Budgeted Receipts for this period. As of the date of this Official Statement, it is not possible to predict whether full-year cash receipts will be higher, lower or the same as the Budgeted Receipts.

Revenues from retail customers are projected to be \$489.9 million in Fiscal Year 2018. This amount includes approximately \$115.6 million from the CRIAC and \$39.7 million from the Water System Replacement Fee and excludes PILOT/ROW fees. Without the effects of the CRIAC and the Water System Replacement Fee, the Fiscal Year 2018 projected revenue represents an increase of \$13.5 million or 4.2% compared to the projected Fiscal Year 2017 revenues.

Revenues from retail customers are projected to be \$517.4 million in Fiscal Year 2019. This amount includes approximately \$130.5 million from the CRIAC and \$39.7 million from the Water System Replacement Fee and excludes PILOT/ROW fees. Without the effects of the CRIAC and the Water System Replacement Fee, the Fiscal Year 2019 projected revenue represents an increase of \$12.5 million or 3.7% compared to the projected Fiscal Year 2018 revenues.

Retail revenues in Fiscal Years 2020 and 2021 are anticipated to increase in each year reflecting both the effects of projected rate increases as well as the expectation that water demand will decrease by 1% annually.

Clean Rivers Impervious Area Charge Revenues

The revenues from the CRIAC were \$86.0 million in Fiscal Year 2015 and \$98.8 million in Fiscal Year 2016. Based on increases in the CRIAC in each year, revenues are expected to increase to \$102.0 million in Fiscal Year 2017 and to \$115.6 million in Fiscal Year 2018. The revenues from the CRIAC in Fiscal Years 2019 through 2021 are expected to increase further reflecting the effects of projected rate increases.

The Authority is evaluating a CRIAC credit program that will provide discounts for properties that install facilities and utilize practices that retain stormwater or divert stormwater away from the wastewater system, such as rain gardens and green roofs. The potential program policies and credits have not been approved at this time. The Authority has budgeted \$500,000 per year starting in Fiscal Year 2013 for the value of the credit program. The effects of this credit were considered by the Authority in developing its projection of annual revenues.

Water System Replacement Fee

The revenues from Water System Replacement Fee were \$30.3 million in Fiscal Year 2016 and are expected to increase to \$39.7 starting in Fiscal Year 2017 through Fiscal Year 2021.

Stormwater Revenues

In Fiscal Years 2017 through 2021, the Authority anticipates that it will collect \$1 million in stormwater fees from its retail accounts to cover its share of District stormwater expenditures. The District Council has stormwater rate-setting authority for stormwater services provided by the District. The Authority will work collaboratively with the District Council to set future rates. The projected revenue from stormwater fees that are payable to the District are based on the current stormwater rate. For more information regarding the stormwater fee, see "CUSTOMER BASE, RATES AND CHARGES – Components of Retail Rates and Charges – Stormwater Fee."

Wholesale Revenues

The Authority's wholesale revenues for wastewater operations are stable and reflect modest increases in the cost of service and changes in the volumes of wastewater flow from suburban customers. In Fiscal Year 2016, the Authority received \$79.8 million in revenue from its wholesale customers pursuant to the IMA, which represented a \$1.4 million decline compared to Fiscal Year 2015. Revenues from wholesale customers are expected to increase to \$81.5 million in Fiscal Year 2017 and to decrease to \$76.0 million in Fiscal Year 2018. The revenue decline of about \$5.4 million in 2018 is primarily due to changes in allocation methodology including the removal of excess contingency funding in Authority-wide budget, and incorporation of a 3-year average of actuals for wholesale estimated billing, and adjustment of existing estimated wholesale billing.

The revenues from the wholesale customers in Fiscal Years 2019 through 2021 are projected to increase reflecting the effects of projected rate increases as well as the expectation that water demand will decrease by 1% annually.

Loan Repayment from Arlington County and Falls Church

The Authority provided a loan to the Aqueduct to finance certain improvements at the Aqueduct. This loan is repaid to the Authority by Arlington County, Virginia, and Falls Church, Virginia, as Aqueduct Customers, in the form of a credit that is issued to the Authority on the monthly water bills generated by the Aqueduct. The amount of the credit is determined by the Aqueduct in accordance with the Water Sales Agreement, and the annual amount is expected to be \$193,246 from Fiscal Year 2017 through Fiscal Year 2021.

Interest Income on Reserve Funds

Interest income is earned on the available funds of the Authority and a portion of the interest earnings may be used to pay operating and maintenance expenses or capital costs of the Authority.

Interest earnings will fluctuate from year to year based on changes in cash flow, fund balances and market conditions affecting interest rates and other investment terms. The Authority has projected interest \$1.8 million in Fiscal Year 2017, \$2.5 million in Fiscal Year 2018, \$5.3 million in Fiscal Year 2019, \$7.4 million in Fiscal Year 2020 and \$12.5 million in Fiscal Year 2021, including interest earned from the bond reserves. The assumed annual interest earnings rates for the funds are 1.00% in Fiscal Year 2017, 2.00% in Fiscal Year 2018 and 2019, 3.0% in Fiscal Year 2020 and 5.0% in Fiscal Year 2021. Projected fund balances and interest rate assumptions are reviewed annually as part of the Authority's budget process. The available interest earnings for secure investments are very low in today's financial markets. The Authority's assumed interest earnings reflect these conditions. Recognizing the low earnings rates, the current interest rates on borrowed funds, including commercial paper interest, are also very low compared to historical experience. This helps reduce interest costs (and resulting revenue requirements) of the Authority. The Authority assumes for forecasting purposes that interest earnings rates will increase over time while simultaneously assuming that borrowing rates for future Authority debt will be higher than the assumed rates for Fiscal Year 2017.

Miscellaneous Revenue

The Authority realizes revenue from several sources classified as miscellaneous, such as charges for late payments by customers, service installation charges, service line repairs, engineering reviews, the sale of manuals, the District fire protection fee, and fees charged to commercial waste haulers. Miscellaneous revenues in Fiscal Year 2016 were \$33.7 million. Revenues from these sources are expected to decrease to \$27.0 million in Fiscal Year 2017 and then decrease to \$26.0 million in Fiscal Year 2018. Miscellaneous revenues are expected to total \$27.8 million per year in Fiscal Years 2019, \$29.8 million in Fiscal Year 2020, and \$31.7 million in Fiscal Year 2021.

These amounts also include payments for various development-related services provided by the Authority and charges to the District for fire protection services. The Authority's annual investments (operating and capital) in fire protection assets and services increased significantly following the execution of the Memorandum of Understanding

between the Authority and the District of Columbia Fire and EMS Department (FEMS) on October 25, 2007. The fees charged by the Authority are intended to recover the costs incurred by the Authority related to fire protection services provided by the water system including, but not limited to, the ability to deliver water for firefighting as well as maintaining and upgrading fire hydrants. The Authority's investments will continue in future years but at a pace that is much lower than the peak years of Fiscal Year 2008 and Fiscal Year 2009. The projected miscellaneous revenues assume that the District will make such payments in each year or that a combination of payments and credits against Authority payments to the District will result in the Authority receiving the full amounts expected from the District.

PILOT/ROW Fee

The total combined revenues from the PILOT/ROW Fee are assumed in the financial forecast to total \$21.1 million in Fiscal Year 2017, and increase to \$22.4 million in Fiscal Year 2021. The Authority and the District have negotiated new MOUs for both the PILOT and the ROW (See "THE AUTHORITY – Relationship to District").

System Expenditures

Operating Expenses

The following table presents the historical Operating and Maintenance ("O&M") expenses of the Authority for Fiscal Year 2016, and the projected O&M expenses for Fiscal Years 2017 through 2021 on a cash disbursement basis.

The projected expenses for Fiscal Year 2017 reflect the current adopted budget of the Authority which represents a 0.3% increase over the expenses for Fiscal Year 2016, excluding the PILOT/ROW payments to the District. The anticipated expenses for Fiscal Year 2018 reflect an annual decrease of 0.2% over the projected expenses for Fiscal Year 2017, excluding the PILOT/ROW payments to the District. The Personnel Services amounts shown in operating and maintenance costs table are net of amounts charged to capital projects.

Historical and Projected Operation and Maintenance Costs on a Cash Disbursement Basis

Fiscal Years ended/ending September 30

(\$ in thousands)^{1,2}

	Actual			Projected		
	2014	2015	2016	2017	2018	2019
Personnel Services	104,448	118,278	121,041	124,672	128,412	132,265
Contractual Services	77,851	76,944	79,243	81,620	84,069	89,591
Water Purchases	28,072	28,831	30,740	31,662	32,612	33,590
Chemical & Supplies	37,265	36,187	35,951	37,030	38,140	39,285
Utilities & Rent	33,591	30,416	35,018	36,069	37,151	38,265
Small Equipment	692	1,028	1,465	1,509	1,554	1,601
Total O&M Expenses	281,918	291,684	303,458	312,562	321,939	334,597
PILOT & D.C. Occupancy ROW Fee	12,414	20,437	20,744	21,057	21,376	21,702
Total Expenses	294,332	312,121	324,202	333,619	343,315	356,298

¹ All figures are presented on a cash disbursement basis.

² Fiscal Year 2015 - 2019 cost projections are based on the Authority's financial plan.

The following table provides a comparison of the budgeted versus actual costs from Fiscal Year 2014 to Fiscal Year 2016 on an accrual basis. As illustrated below, the Authority has historically under-spent its annual budget (including O&M expenses).

Budget to Actual Expense Comparison

Fiscal Years ended September 30 (\$ in thousands)¹

		2014			2015			2016	
Catanami	Approved	Actual Cost	Variance	Approved Budget	Actual Cost	Variance	Approved	Actual Cost	Variance
Category	Budget						Budget	Cost	variance
Personnel Services	\$119,765	\$125,756	\$(5,991)	\$135,544	\$133,935	\$ 1,609			
Contractual Services	76,044	68,172	7,872	76,944	66,241	10,703			
Water Purchases	27,991	28,407	(416)	28,831	29,109	(278)			
Chemical & Supplies	30,909	30,718	191	36,186	30,306	5,880			
Utilities & Rent	30,715	29,939	776	30,416	30,848	(432)			
Small Equipment	993	317	676	1,028	531	497			
Debt Service	130,120	127,068	3,052	160,264	134,845	25,419			
PILOT/ ROW Fee	25,181	11,458	13,723	26,687	20,437	6,250			
Total budgetary				·	·		·		·
basis expenditures	\$ 441,718	\$ 421,835	\$19,883	\$515,958	\$446,252	\$69,706			

All figures are presented on an accrual basis.

Source: Authority Records

Several factors affecting future expenses are described herein. The Authority has undertaken long-term initiatives to optimize the cost of service. Management's forecast of operations and maintenance expenses reflects continued emphasis on managing such expenses. Examples of historical and ongoing initiatives are outlined in the description of the major categories of expense. Management continually monitors expenditures and reports the results monthly to the Board's Finance and Budget Committee. The Authority also has the option, in any given year, to defer certain expenses in order to stay within its budget and conform to Board policy requirements.

Labor-Related Expenses

Personnel costs are directly affected by staffing levels, salaries and wages, fringe benefits including retirement contributions, overtime expenditures and other factors.

Certain individuals at the Authority are responsible for planning and implementing the CIP. The salaries, wages and fringe benefits of such personnel are charged to capital projects and are paid for through the sources of funds for the CIP. In Fiscal Year 2017, the costs of such personnel are budgeted at \$21.9 million.

Salaries and Fringe Benefits. The Authority provides its employees with a comprehensive fringe benefit package, including coverage for health insurance, group term life insurance, dental care, vision care, disability coverage and retirement plans. The fringe benefit component of total labor costs has increased at a greater rate than salaries and wages in recent years, primarily due to the increasing cost of health care coverage. Fringe benefits are budgeted to be approximately [] % of salaries in Fiscal Year 2017.

While employed by the Authority, employees contribute to a retirement fund and the Authority contributes a proportional match. Once an employee retires, the Authority has no further financial obligations relating to those employees. Some retired employees may be eligible to receive a federal pension. In addition, the federal government also may assume the employer portion of the healthcare coverage for eligible employees. The Authority is and expects to continue to remain current with its benefit payments.

See "THE AUTHORITY – Employees and Labor Relations" herein for further information regarding the Authority's labor force and the status of collective bargaining agreements.

Overtime Expenses. The Authority uses overtime work by its employees to address unplanned repairs and service needs (e.g., to repair water main breaks that occur outside of normal business hours) as well as to provide resources to offset unfilled positions and to reduce the need for contractual labor. Overtime expenses in Fiscal Year 2016, including an allowance for fringe benefits, totaled \[\] million, or about \[\] % of total personnel services costs.

Total Personnel Expenses. The Authority's personnel costs on a cash basis increased at an annual average of 5.7% per year from Fiscal Year 2012 through Fiscal Year 2016. Budgeted personnel expenses for Fiscal Year 2017 are \$122.8 million, a 1.4% increase over Fiscal Year 2016. In Fiscal Year 2018, personnel expenses are expected to increase 4.3% from the prior year. Beginning in Fiscal Year 2019, personnel expenses are projected to

increase at an average annual rate of 3.0%. The projected rate of increase is supported by the Authority's demonstrated ability to reduce staffing levels and overtime costs through improvements in its facilities and business practices, as well as the expectation that new employees in the upcoming years will have lower salaries and benefits compared to the employees who will retire during that same period.

Non-Labor Operating Expenses

There are four major categories of non-labor related operating expenses: contractual services (which includes the processing and disposal of biosolids), water purchases, chemicals and supplies, and utilities and rent (which includes electricity needed to operate the Authority facilities).

A brief overview of the four major categories of non-labor expenses is provided below.

Contractual Services. Contractual services include the outside services necessary for the Authority to operate and maintain facilities, including the hauling of biosolids from the Blue Plains treatment facility to the disposal location, building maintenance and repair, the maintenance of certain machinery, equipment and vehicles, and other contractual or professional services.

The actual costs for contractual services in Fiscal Year 2016 were \$78.1 million. The budgeted amounts for contractual services in Fiscal Year 2017, Fiscal Year 2018, and Fiscal Year 2019 are \$82.8 million, \$79.4 million, and 84.7 million, respectively. Contractual services expenses are assumed to increase at the average annual rate of 3.0% for Fiscal Years 2020 through 2021.

Also included within contractual services is the Authority's purchase of annual insurance policies. The policies cover property, equipment, workers compensation, umbrella and excess liability, crime and fidelity, public officials' liability, and fiduciary liability.

Water Purchases. The Authority purchases all of its treated drinking water from the Aqueduct on the basis of a 1997 agreement between the Authority and the Corps of Engineers, the operator of the Aqueduct. Under the terms of the agreement and based on its usage in relation to the other Aqueduct Customers, the Authority pays an average of approximately 73% of the Aqueduct's operating costs. The Authority's share of Aqueduct capital costs is reflected in the Authority's CIP.

The actual costs for water purchases in Fiscal Year 2016 were \$26.6 million. The budgeted amount for water purchases in Fiscal Year 2017 and 2018 is \$29.3 million and \$30.2 million, respectively. An average annual increase in water supply costs is assumed at approximately 3.0% in Fiscal Years 2019 through 2021

Chemicals and Supplies. The chemicals and supplies component of the Authority's operating and maintenance expenses includes, but is not limited to, office, laboratory, custodial and maintenance supplies, automotive supplies, uniforms, and chemicals. Chemicals are the largest portion of this component. The Authority has implemented an improved polymer management program for use at Blue Plains in cooperation with the University of Delaware. A method for "fingerprinting" polymer has been developed to make sure it is effective before it is used.

The actual expenses for chemicals and supplies in Fiscal Year 2016 were \$37.2 million. The budgeted amount for chemicals and supplies in Fiscal Year 2017 and 2018 is \$34.7 million and \$30.7 million, respectively. The average annual increase of costs for chemicals and supplies is assumed at 3.0% in Fiscal Year 2019 through 2021.

Utilities and Rent. The Authority is a major user of energy, primarily for the operation of the Blue Plains Wastewater Treatment Facilities. Approximately 83% of the expenses associated with utilities and rent are attributable to the cost of power. The combined heat and power project is projected to provide about a third of the plant's energy needs. See "CAPITAL IMPROVEMENT PROGRAM – Categories of CIP Projects – Wastewater Treatment Projects." The Authority has taken a proactive approach to the procurement of power and its pricing. In Fiscal Year 2005, the Authority entered into a full service electricity contract to purchase power from Amerada Hess in the deregulated environment, which expired on September 30, 2014. The Authority has entered into a replacement agreement with ConEdison Solutions, which went into effect on October 1, 2014. As part of its power purchasing strategy under deregulation, the Authority has entered into a successor five-year contract for generation that allows it to lock in blocks of power at a fixed price when futures pricing meets budget targets. To the extent that the Authority has power needs that exceed the locked in fixed price blocks, the price of the additional power would be established each day at market rates with direct pass-through of all costs. This contract includes an enhanced process for block power purchases that gives the Authority access to the wholesale market. The Authority's Department of Finance, Accounting and Budget monitors the energy market on a continuous basis.

Reserve Funds

The Authority maintains various reserve funds as previously described herein. See "SECURITY FOR THE SERIES 2017A/B BONDS – Certain Reserve Funds – Discretionary Reserves; – Operating Reserve Fund; – Rate Stabilization Fund; and – Renewal and Replacement Reserve Fund."

Financial Policies

The Authority has developed a ten-year financial plan to ensure compliance with certain Indenture requirements and the Board's financial policies. This plan is updated annually, taking into account revisions to the Capital Improvement Program, current and prior year financial performance and other changes. The Board adopted a series of financial policies in 1997 that the Authority utilizes to develop its ten-year financial plan, operating budgets and rate proposals. The policies summarized below reflect revisions adopted by the Board and effective October 1, 2015.

Capital Financing Policy

In order to secure the lowest practical cost of capital to finance the Authority's long-term capital program, the Authority will aim to achieve the following goals:

- i. Maintain Senior Debt service coverage of 1.40x.*
- ii. Maintain cash reserves equivalent to 120 days of budgeted operations and maintenance costs calculated on an average daily balance basis with the objective of maintaining at least \$125.5 million in operating reserves. The annual reserve amount will be formally approved by the Board as part of its annual approval of the operating and capital budgets. The operating reserve requirement will be evaluated every five years by the Authority's independent rate consultant in conjunction with the Indenture-required system assessment. At a minimum include in the operating reserve any reserve requirements contained in the Indenture, excluding any debt service reserve funds and the rate stabilization fund.
- iii. Utilize operating cash in excess of the Board's reserve requirement and any other significant onetime cash infusions for capital financing or for repayment of higher cost debt.
- iv. Whenever possible, use the least costly type of financing for capital projects, based on a careful evaluation of the Authority's capital and operating requirements and financial position for each year.
- v. Attempt to match the period of debt repayment, in total, with the lives of the assets financed by any such debt.
- vi. Finance its capital equipment needs (e.g., computer equipment and systems; minor utility equipment such as pumps, motors, etc.) and certain taxable costs of the Aqueduct with operating cash or short-term financing instruments with the same or shorter average lives as the related assets.

Rate-Setting Policies

The Authority's rate-setting policies are based on the following principles:

- i. Rates and fees will be based on the actual cost to deliver each service.
- ii. Current rates must be sufficient to cover current costs and to meet all bond covenants.
- iii. The Authority will achieve a positive net income and cash flow each year.
- iv. Rates will be based on an annually updated ten-year financial plan (both operating and capital).

^{*}This policy goal exceeds the Rate Covenant requirement of 1.20x as provided in the Indenture.

- Rate increases will be implemented in a gradual and predictable manner, avoiding large one-time rate increases.
- vi. Contributions to and usage of the Rate Stabilization Fund as needed to avoid "rate shock." Each year, after reviewing financing improvements from cash and any other non-recurring financing uses of excess operating cash, the annual Rate Stabilization Fund deposit, if any, is determined.

Debt Policy

At its October 1, 2015 meeting, the Board adopted a revised debt policy. This policy provides detailed guidelines that the Authority's management applies to the Authority's current and future debt portfolio. The goals of this policy are to ensure compliance with all laws, legal agreements, contracts and adopted policies related to debt issuance and management; to promote cooperation and coordination with all stakeholders in the financing and delivery of services; to promote sound financial management to maximize and best utilize future debt capacity; and to ensure that the duties and responsibilities of those charged with the implementation of the Debt Policy are clearly conveyed and understood.

Cash Management and Investment Policies

In May 2014, the Board amended its comprehensive Statement of Investment Policy. The statement outlines broad investment policies to include delegation of certain authority to the CEO and General Manager, investment objectives, collateralization of deposits, selection of financial institutions, protection of funds, permitted investments, limits on maturities, investment of bond proceeds and investment reporting.

The Office of Treasury and Debt produces daily and monthly internal reports on all cash management and investment activities, with significant peer oversight within the Chief Financial Officer's office, monthly reports to the CEO and General Manager and quarterly reports to the Board's Finance and Budget Committee that enables them to monitor compliance with Board policies.

Extendable Municipal Commercial Paper Policy

At its October 1, 2015 meeting, the Board adopted a formal policy relating to the Authority's EMCP Notes. The goal of this policy is to ensure that the Authority is able to pay (either from its own funds, the proceeds of a new issuance of Series A Notes, or a new issue of bonds or Commercial Paper Notes) the principal of and interest on any outstanding EMCP Notes on the original maturity date or extended maturity date thereof, as the case may be.

ENGINEERING FEASIBILITY REPORT

The Authority retained Johnson, Mirmiran & Thompson, Inc. ("JMT") to prepare an Independent Consulting Engineering Assessment Report dated July 9, 2013, a copy of which is available on the Authority's website at www.dcwater.com. Pursuant to the Indenture requirement for an inspection of the System at least once every five years, an Independent Consulting Engineering Assessment Report reviews the Authority's progress in implementing capital projects and its plans to initiate additional capital improvements. The Report evaluates the adequacy of the Authority's CIP to maintain its water and wastewater infrastructure and to continue providing reliable service of a high quality to its customers. The Independent Consulting Engineering Assessment Report has not been updated since the date of its issuance.

The Independent Consulting Engineering Assessment Report presents findings and conclusions based upon information provided by the Authority or others which is summarized or referred to therein. Set forth below are JMT's principal findings and conclusions. The Independent Consulting Engineering Assessment Report should be read in its entirety for a complete understanding of the assumptions, considerations, estimates and calculations upon which these conclusions are based.

- The Authority has continued implementing its vision and strategic plan, focusing on increasing the
 operational efficiency of the Water and Wastewater Systems and providing satisfactory service to its
 customers.
- The Authority staff, including both management and key operations and maintenance personnel, is well qualified, effectively organized and sufficient to meet overall staffing needs.
- The existing Water and Wastewater Systems are effectively maintained and operated.

- The Authority has developed and continues to implement thorough capital programs for ensuring the integrity of the Water and Wastewater Systems.
- Through appropriate management, operational practices, technology, staffing, tools and equipment and selective outsourcing, the Authority has developed capital, operations and maintenance programs that should ensure the continued effective operation of the systems for the foreseeable future. The systems should continue to provide high levels of service with minimal disruption.
- The Authority's wastewater and drinking water facilities are in material compliance with all applicable permits and regulations and continue to provide uninterrupted service to its wholesale and retail customers. Such compliance is anticipated to continue through the foreseeable future.
- Substantial progress has been made by the Authority in improving the operating condition of existing
 facilities. The CIP is structured to provide a systematic program to replace and rehabilitate aging
 infrastructure on a priority basis.
- Implementation of the Authority's CIP is intended to address identified system needs and priorities and is within budget.

FINANCIAL FEASIBILITY OPINION LETTER

The Authority retained Amawalk Consulting Group LLC as its financial feasibility consultant, in which capacity Amawalk prepared the Financial Feasibility Opinion Letter dated [_______], 2017, which is attached hereto as APPENDIX A. Amawalk provides financial and management consulting services to water and wastewater utilities, local governments and other organizations. Examples of the consulting services offered by the firm include: cost of service and rate studies; financial modeling; feasibility studies to support the issuance of debt; competitive assessments, including benchmarking and implementation of best practices; analyses supporting the consolidation of services; and the formation/start-up of public authorities including transition planning.

The conclusions set forth in the Financial Feasibility Opinion Letter reflect Amawalk's analysis of the Authority's anticipated financial results for Fiscal Years 2017 to 2021. Amawalk has assisted the Authority in preparing certain portions of this Official Statement relating to historical and projected financial performance of the Authority. The Financial Feasibility Opinion Letter has not been updated to reflect any changes occurring after the date of the Financial Feasibility Opinion Letter.

The Financial Feasibility Opinion Letter presents findings and conclusions based upon the analysis of financial statements and reports prepared by or for the Authority and other information provided by the Authority or others which is summarized or referred to therein, including conclusions, assumptions, considerations and recommendations regarding the operation of the System, the necessary improvements and betterments thereto and the steps that should be taken to assure adequate reliable bulk power supply at reasonable cost. Set forth below are Amawalk's principal conclusions. The Financial Feasibility Opinion Letter and this Official Statement should be read in its entirety for a complete understanding of the assumptions, considerations, estimates and calculations upon which these conclusions are based.

Amawalk concluded that the Authority has the ability to effectively execute its mission, operate its System to provide uninterrupted service, maintain regulatory compliance, and finance and implement its CIP within the parameters set forth in the Indenture and the applicable Board policies. In addition, Amawalk makes the following observations:

- The Authority's financial forecast is viable, consistent with industry standards, and its projections are
 expected to meet the Board's debt service coverage and reserve requirements and targets.
- Revenues of the Authority (including projected revenue increases resulting from anticipated future rate increases to be implemented by the Authority) in the Reporting Period will be sufficient to pay: (i) the actual Operating Expenses; (ii) Annual Debt Service on Senior Debt; (iii) any amount necessary to be deposited in any Account in the Debt Service Reserve Fund relating to a Series of Bonds to restore the amount on deposit therein to the Series Debt Service Reserve Requirement; (iv) the amount required to pay Annual Debt Service on the Subordinate Debt (including any reserves in connection therewith and the restoration thereof); (v) any amount necessary to be deposited in the Operating Reserve Fund and the Renewal and Replacement Reserve Fund to maintain the required balances therein; and (vi) any amount necessary to make any payments in lieu of taxes in such Fiscal Years.

Sufficient funds are projected to be on deposit in each of the required reserve funds during the Reporting Period.

- Pursuant to Board policy, the Authority maintains a financial policy of fixing, charging, revising and collecting rates, fees and other charges for the use of and the services furnished by the System sufficient in each Fiscal Year so that Net Revenues shall be at least equal to one hundred and forty percent (140%) of the Annual Debt Service on Senior Debt in each such Fiscal Year. Revenues of the Authority (including projected revenue increases resulting from anticipated future rate increases to be implemented by the Authority) in such Fiscal Years will be sufficient to achieve the more stringent financial policy established by the Authority. There can be no assurance that the Board will not change this additional financial policy.
- Pursuant to Board policy, the Authority maintains operating reserves that are greater than \$125.5 million or 120 days of budgeted operation and maintenance expenses. The Authority's actual cash on hand has exceeded the levels required by Board policy in recent years. Amawalk reviewed the operating reserve policies of the Authority and concluded that the current Board policy provides for an appropriate level of reserves. There can be no assurance that the Board will not change this additional financial policy.
- The water and wastewater rates, fees and charges of the Authority, including projected increases for Fiscal Years 2018 through 2021, are reasonable and compare favorably to the rates and charges of other major cities.

In the analysis of the forecast of future operations summarized in this Official Statement, Amawalk has reviewed certain assumptions with respect to conditions, events and circumstances which may occur in the future. These assumptions are reasonable and attainable as of the date of the Financial Feasibility Opinion Letter, although actual results may differ from those forecast as influenced by the conditions, events and circumstances which actually occur.

TAX MATTERS

General

In the opinion of Squire Patton Boggs (US) LLP and Leftwich LLC, Co-Bond Counsel, under existing law: (i) interest on the Series 2017A/B Bonds is excluded from gross income for federal income tax purposes under Section 103 of the Internal Revenue Code of 1986, as amended (the "Code"), and is not an item of tax preference for purposes of the federal alternative minimum tax imposed on individuals and corporations; and (ii) the Series 2017A/B Bonds and the interest thereon are exempt from District taxation, except estate, inheritance and gift taxes. Co-Bond Counsel expresses no opinion as to any other tax consequences regarding the Series 2017A/B Bonds.

The opinion on tax matters will be based on and will assume the accuracy of certain representations and certifications, and continuing compliance with certain covenants, of the Authority contained in the transcript of proceedings and that are intended to evidence and assure the foregoing, including that the Series 2017A/B Bonds are and will remain obligations the interest on which is excluded from gross income for federal income tax purposes. Co-Bond Counsel will not independently verify the accuracy of the Authority's certifications and representations or the continuing compliance with the Authority's covenants.

The opinion of Co-Bond Counsel is based on current legal authority and covers certain matters not directly addressed by such authority. It represents Co-Bond Counsel's legal judgment as to exclusion of interest on the Series 2017A/B Bonds from gross income for federal income tax purposes but is not a guaranty of that conclusion. The opinion is not binding on the Internal Revenue Service ("IRS") or any court. Co-Bond Counsel expresses no opinion about (i) the effect of future changes in the Code and the applicable regulations under the Code or (ii) the interpretation and the enforcement of the Code or those regulations by the IRS.

The Code prescribes a number of qualifications and conditions for the interest on state and local government obligations to be and to remain excluded from gross income for federal income tax purposes, some of which require future or continued compliance after issuance of the obligations. Noncompliance with these requirements by the Authority may cause loss of such status and result in the interest on the Series 2017A/B Bonds being included in gross income for federal income tax purposes retroactively to the date of issuance of the Series 2017A/B Bonds. The Authority has covenanted to take the actions required of it for the interest on the Series 2017A/B Bonds to be and to remain excluded from gross income for federal income tax purposes, and not to take any actions that would adversely affect that exclusion. After the date of issuance of the Series 2017A/B Bonds, Co-Bond Counsel will not undertake to

determine (or to so inform any person) whether any actions taken or not taken, or any events occurring or not occurring, or any other matters coming to Co-Bond Counsel's attention, may adversely affect the exclusion from gross income for federal income tax purposes of interest on the Series 2017A/B Bonds or the market value of the Series 2017A/B Bonds.

A portion of the interest on the Series 2017A/B Bonds earned by certain corporations may be subject to a federal corporate alternative minimum tax. In addition, interest on the Series 2017A/B Bonds may be subject to a federal branch profits tax imposed on certain foreign corporations doing business in the United States and to a federal tax imposed on excess net passive income of certain S corporations. Under the Code, the exclusion of interest from gross income for federal income tax purposes may have certain adverse federal income tax consequences on items of income, deduction or credit for certain taxpayers, including financial institutions, certain insurance companies, recipients of Social Security and Railroad Retirement benefits, those that are deemed to incur or continue indebtedness to acquire or carry tax-exempt obligations, and individuals otherwise eligible for the earned income tax credit. The applicability and extent of these and other tax consequences will depend upon the particular tax status or other tax items of the owner of the Series 2017A/B Bonds. Co-Bond Counsel will express no opinion regarding those consequences.

Payments of interest on tax-exempt obligations, including the Series 2017A/B Bonds, are generally subject to IRS Form 1099-INT information reporting requirements. If a Bond owner is subject to backup withholding under those requirements, then payments of interest will also be subject to backup withholding. Those requirements do not affect the exclusion of such interest from gross income for federal income tax purposes.

Co-Bond Counsel's engagement with respect to the Series 2017A/B Bonds ends with the issuance of the Series 2017A/B Bonds, and, unless separately engaged, Co-Bond Counsel is not obligated to defend the Authority or the owners of the Series 2017A/B Bonds regarding the tax status of interest thereon in the event of an audit examination by the IRS. The IRS has a program to audit tax-exempt obligations to determine whether the interest thereon is includible in gross income for federal income tax purposes. If the IRS does audit the Series 2017A/B Bonds, under current IRS procedures, the IRS will treat the Authority as the taxpayer and the beneficial owners of the Series 2017A/B Bonds will have only limited rights, if any, to obtain and participate in judicial review of such audit. Any action of the IRS, including but not limited to selection of the Series 2017A/B Bonds for audit, or the course or result of such audit, or an audit of other obligations presenting similar tax issues, may affect the market value of the Series 2017A/B Bonds.

Prospective purchasers of the Series 2017A/B Bonds upon their original issuance at prices other than the respective prices indicated on the inside cover of this Official Statement, and prospective purchasers of the Series 2017A/B Bonds at other than their original issuance, should consult their own tax advisers regarding other tax considerations such as the consequences of market discount, as to all of which Co-Bond Counsel expresses no opinion.

Risk of Future Legislative Changes and/or Court Decisions

Legislation affecting tax-exempt obligations is regularly considered by the U.S. Congress. Court proceedings may also be filed, the outcome of which could modify the tax treatment of obligations such as the Series 2017A/B Bonds. There can be no assurance that legislation enacted or proposed, or actions by a court, after the date of issuance of the Series 2017A/B Bonds will not have an adverse effect on the tax status of interest on the Series 2017A/B Bonds or the market value or marketability of the Series 2017A/B Bonds. These adverse effects could result, for example, from changes to federal or state income tax rates, changes in the structure of federal or state income taxes (including replacement with another type of tax), or repeal (or reduction in the benefit) of the exclusion of interest on the Series 2017A/B Bonds from gross income for federal or state income tax purposes for all or certain taxpayers.

For example, recent presidential and legislative proposals would eliminate, reduce or otherwise alter the tax benefits currently provided to certain owners of state and local government bonds, including proposals that would result in additional federal income tax on taxpayers that own tax-exempt obligations if their incomes exceed certain thresholds. Investors in the Series 2017A/B Bonds should be aware that any such future legislative actions (including federal income tax reform) may retroactively change the treatment of all or a portion of the interest on the Series 2017A/B Bonds for federal income tax purposes for all or certain taxpayers. In such event, the market value of the Series 2017A/B Bonds may be adversely affected and the ability of holders to sell their Bonds in the secondary market may be reduced.

Investors should consult their own financial and tax advisers to analyze the importance of these risks.

Original Issue Discount and Original Issue Premium

Certain of the Bonds ("Discount Bonds") as indicated on the cover of this Official Statement may be offered and sold to the public at an original issue discount ("OID"). OID is the excess of the stated redemption price at maturity over the "issue price" of a Discount Bond. The issue price of a Discount Bond is the initial offering price to the

public (other than to bond houses, brokers or similar persons acting in the capacity of underwriters or wholesalers) at which a substantial amount of the Discount Bonds of the same maturity is sold pursuant to that offering. For federal income tax purposes, OID accrues to the owner of a Discount Bond over the period to maturity based on the constant yield method, compounded semiannually (or over a shorter permitted compounding interval selected by the owner). The portion of OID that accrues during the period of ownership of a Discount Bond (i) is interest excluded from the owner's gross income for federal income tax purposes to the same extent, and subject to the same considerations discussed above, as other interest on the Bonds, and (ii) is added to the owner's tax basis for purposes of determining gain or loss on the maturity, redemption, prior sale or other disposition of that Discount Bond. The amount of OID that accrues each year to a corporate owner of a Discount Bond is taken into account in computing the University's liability for federal alternative minimum tax. A purchaser of a Discount Bond in the initial public offering at the price for that Discount Bond stated on the cover of this Official Statement who holds that Discount Bond to maturity will realize no gain or loss upon the retirement of that Discount Bond.

Certain of the Bonds ("Premium Bonds") as indicated on the cover of this Official Statement may be offered and sold to the public at a price in excess of their stated redemption price at maturity (the principal amount). That excess constitutes bond premium. For federal income tax purposes, bond premium is amortized over the period to maturity of a Premium Bond, based on the yield to maturity of that Premium Bond (or, in the case of a Premium Bond callable prior to its stated maturity, the amortization period and yield may be required to be determined on the basis of an earlier call date that results in the lowest yield on that Premium Bond), compounded semiannually. No portion of that bond premium is deductible by the owner of a Premium Bond. For purposes of determining the owner's gain or loss on the sale, redemption (including redemption at maturity) or other disposition of a Premium Bond, the owner's tax basis in the Premium Bond is reduced by the amount of bond premium that is amortized during the period of ownership. As a result, an owner may realize taxable gain for federal income tax purposes from the sale or other disposition of a Premium Bond for an amount equal to or less than the amount paid by the owner for that Premium Bond. A purchaser of a Premium Bond in the initial public offering at the price for that Premium Bond stated on the cover of this Official Statement who holds that Premium Bond to maturity (or, in the case of a callable Premium Bond, to its earlier call date that results in the lowest yield on that Premium Bond) will realize no gain or loss upon the retirement of that Premium Bond.

Owners of Discount and Premium Bonds should consult their own tax advisers as to the determination for federal income tax purposes of the amount of OID or bond premium properly accruable or amortizable in any period with respect to the Discount or Premium Bonds and as to other federal tax consequences and the treatment of OID and bond premium for purposes of state and local taxes on, or based on, income.

COVENANT BY THE DISTRICT OF COLUMBIA

Under the Act, the District pledges to the Authority and any holders of the bonds that, except as provided under the Act, the District will not limit or alter rights vested in the Authority to fulfill agreements made with holders of the bonds, or in any way impair the rights and remedies of the holders of the bonds until the bonds, together with interest thereon, with interest on any unpaid installments of interest and all costs and expenses in connection with any action or proceedings by or on behalf of the holders of the bonds, are fully met and discharged.

LITIGATION

There is not now pending or, to the best of the Authority's knowledge, threatened any litigation restraining or enjoining the issuance or delivery of the Series 2017A/B Bonds or questioning or affecting the validity of the Series 2017A/B Bonds, the proceedings and authority under which they are to be issued, nor is the creation, organization, or existence of the Authority being contested. Nor is there any litigation pending or, to the best of the Authority's knowledge, threatened which (i) in any manner questions the right of the Authority to operate the System or its right to conduct its activities in accordance with the provisions of the Act and of the Indenture or (ii) if determined adversely to the Authority, would have a material adverse impact on the financial condition of the Authority.

The Authority is subject to a variety of suits and proceedings arising out of its ordinary course of operations, some of which may be adjudicated adversely to the Authority. Any such litigation is of a routine nature which does not affect the right of the Authority to conduct its business or the validity of its obligations.

LEGAL MATTERS

Certain legal matters relating to the issuance of the Series 2017A/B Bonds are subject to the approving opinions of Squire Patton Boggs (US) LLP and Leftwich LLC, Co-Bond Counsel, which will be furnished upon delivery

of the Series 2017A/B Bonds, substantially in the form set forth as APPENDIX F. Squire Patton Boggs (US) LLP and Leftwich LLC also serve as Co-Disclosure Counsel to the Authority in connection with the preparation of this Official Statement. Certain legal matters will be passed upon for the Authority by its General Counsel, and for the Underwriters by their co-counsel, Orrick, Herrington & Sutcliffe LLP and McKenzie & Associates.

INDEPENDENT AUDITORS

The financial statements of the Authority for fiscal years 2015 and 2016 included in this Official Statement have been audited by KPMG LLP ("KPMG"). KPMG has not been engaged to perform and has not performed, since the date of its report included herein, any procedures on the financial statements addressed in that report. KPMG also has not performed any procedures relating to this Official Statement.

THE TRUSTEE

The Authority has appointed Wells Fargo Bank, N.A., a national banking association organized under the laws of the United States, to serve as Trustee. The Trustee is to carry out those duties assignable to it under the Master Indenture. Except for the contents of this section, the Trustee has not reviewed or participated in the preparation of this Official Statement and assumes no responsibility for the nature, contents, accuracy or completeness of the information set forth in this Official Statement or for the recitals contained in the Indenture or the Series 2017A/B Bonds, or for the validity, sufficiency, or legal effect of any of such documents.

Furthermore, the Trustee has no oversight responsibility, and is not accountable, for the use or application of the proceeds of such Series 2017A/B Bonds by the Authority. The Trustee has not evaluated the risks, benefits, or propriety of any investment in the Series 2017A/B Bonds and makes no representation, and has reached no conclusions, regarding the value or condition of any assets or revenues pledged or assigned as security for the Series 2017A/B Bonds, the technical or financial feasibility of the Project, or the investment quality of the Series 2017A/B Bonds, about all of which the Trustee expresses no opinion and expressly disclaims the expertise to evaluate.

RATINGS

Standard & Poor's ("S&P"), a division of The McGraw-Hill Companies, Inc., and Moody's Investors Service, Inc. ("Moody's"), have assigned long-term municipal bond ratings of "__," and "___" respectively, to the Series 2017A/B Bonds. A securities rating is not a recommendation to buy, sell or hold the Series 2017A/B Bonds and may be subject to revision or withdrawal at any time. A rating reflects only the view of the rating agency giving such rating. An explanation of the significance of the ratings may be obtained from: S&P at 55 Water Street, New York, New York 10041; and from Moody's at 7 World Trade Center, New York, New York 10007. There is no assurance that a rating will apply for any given period of time, or that a rating will not be revised or withdrawn. A revision or withdrawal of a rating may have an effect on the market price of or the market for the Series 2017A/B Bonds.

CONTINUING DISCLOSURE

In accordance with the requirements of the Rule promulgated by the SEC, the Authority will enter into the Continuing Disclosure Agreement dated the date of delivery of the Series 2017A/B Bonds, which will constitute a written undertaking for the benefit of the Owners of the Series 2017A/B Bonds, solely to assist the Underwriters in complying with subsection (b)(5) of the Rule. Pursuant to the Continuing Disclosure Agreement, the Authority has covenanted to provide certain financial information on an annual basis and to provide notice of certain enumerated events. See APPENDIX D – "Form of the Continuing Disclosure Agreement" for detailed provisions of the Continuing Disclosure Agreement.

FINANCIAL ADVISORS

Public Financial Management, Inc. and G-Entry Principle, PC, together, have served as co-financial advisors (the "Co-Financial Advisors") to the Authority with respect to the issuance of the Series 2017A/B Bonds.

UNDERWRITING

Goldman, Sachs and Co., on behalf of itself and as representative (the "Representative") of the underwriters identified on the front cover of this Official Statement (collectively, the "Underwriters") has agreed to purchase from the Authority the Series 2017A/B Bonds at an aggregate purchase price equal to \$ (which amount constitutes the aggregate principal amount of the Series 2017A/B Bonds of \$, plus original issue premium of \$, less the Underwriters' discount of \$).
The Bond Purchase Agreement by and among the Authority and the Representative, on behalf of itself and as representative of the Underwriters dated, 2017 (the "Series 2017A/B Bond Purchase Agreement"), provides that the Underwriters will purchase all of the Series 2017A/B Bonds, if any are purchased, and the obligation to make such purchases is subject to certain terms and conditions set forth in the Series 2017A/B Bond Purchase Agreement, the approval of certain legal matters by counsel and certain other conditions.
The Series 2017A/B Bonds may be offered and sold to certain dealers (including dealers depositing the Series 2017A/B Bonds into investment trusts) at prices lower than the public offering prices and such public offering

In the ordinary course of their various business activities, the Underwriters and their respective affiliates may make or hold a broad array of investments and actively trade debt and equity securities (or related derivative securities) and financial instruments (which may include bank loans and/or credit default swaps) for their own account and for the accounts of their customers and may at any time hold long and short positions in such securities and instruments. Such investment and securities activities may involve securities and instruments of the Authority.

prices may be changed from time to time by the Underwriters.

LEGALITY FOR INVESTMENT

The Act provides that the bonds of the Authority are legal instruments in which public officers and public bodies of the District, insurance companies, insurance company associations and other persons carrying on an insurance business, banks, bankers, banking institutions, including savings and loan associations, building and loan associations, trust companies, savings banks, savings associations, investment companies and other persons carrying on a banking business, administrators, guardians, executors, trustees and other fiduciaries and other persons authorized to invest in bonds or in other obligations of the District, may legally invest funds, including capital, in their control.

The bonds are also, by the Act, securities which legally may be deposited with, and received by, public officers and public bodies of the District or any agency of the District for any purpose for which the deposit of bonds or other obligations of the District is authorized by law.

RELATIONSHIP OF PARTIES

In addition to representing the Authority as Co-Bond Counsel and Co-Disclosure Counsel, Squire Patton Boggs (US) LLP from time to time represents the Authority in other matters, including environmental, regulatory and personnel matters. From time to time, Squire Patton Boggs (US) LLP also represents one or more members of the underwriting group as its or their counsel in municipal bond transactions and other matters, but not in any matters related to the Authority.

In addition to representing the Authority as Co-Bond Counsel and Co-Disclosure Counsel, Leftwich LLC from time to time represents the Authority in other matters, including personal injury and personnel matters.

^{*}Preliminary; subject to change.

MISCELLANEOUS

All estimates, assumptions, statistical information and other statements contained herein, while taken from sources considered reliable, are not guaranteed. To the extent that any statements herein include matters of opinion, or estimates of future expenses and income, whether or not expressly so stated, they are intended merely as such and not as representations of fact.

The agreement of the Authority with the holders of the Series 2017A/B Bonds is fully set forth in the Indenture. Neither any advertisement of the Series 2017A/B Bonds nor this Official Statement is to be construed as constituting an agreement with the purchasers of the Series 2017A/B Bonds.

The information contained herein should not be construed as representing all conditions affecting the Authority or the Series 2017A/B Bonds. The foregoing statements relating to the Act, the Federal Act, the Indenture and other documents are summaries of certain provisions thereof, and in all respects are subject to and qualified in their entirety by express reference to the provisions of such documents in their complete forms.

The attached Appendices A through F are integral parts of this Official Statement and should be read in their entirety, together with all of the foregoing statements.

DISTRICT OF COLUMBIA WATER AND SEWER AUTHORITY

By:_
Mark T. Kim
Chief Financial Officer

APPENDIX A

FINANCIAL FEASIBILITY OPINION LETTER OF AMAWALK CONSULTING GROUP LLC DATED [______], 2017

Finance and Budget Committee - 4. Action Items

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APPENDIX B

AUDITED FINANCIAL STATEMENTS OF THE AUTHORITY FOR THE YEARS ENDED SEPTEMBER 30, 2016, AND 2015

Finance and Budget Committee - 4. Action Items

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APPENDIX C GLOSSARY AND SUMMARY OF THE INDENTURE

Finance and Budget Committee - 4. Action Items

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APPENDIX D FORM OF CONTINUING DISCLOSURE AGREEMENT

Finance and Budget Committee - 4. Action Items

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FORM OF CONTINUING DISCLOSURE AGREEMENT

This Continuing Disclosure Agreement (the "Disclosure Agreement") is executed and delivered by the District of Columbia Water and Sewer Authority (the "Issuer") in connection with the issuance of its Public Utility Senior Lien Revenue Bonds, Series 2017A (the "Series 2017A Bonds") and its Public Utility Senior Lien Revenue Bonds, Series 2017B (the "Series 2017B Bonds" and, together with the Series 2017A Bonds, the "Series 2017A/B Bonds"). The Series 2017A/B Bonds are being issued pursuant to the Master Indenture of Trust, dated as of April 1, 1998 (the "Master Indenture"), as amended and supplemented to the date of delivery of the Series 2017A/B Bonds (the "Indenture"), including by the Twenty-Second Supplemental Indenture of Trust, to be dated the date of issuance and delivery of the Series 2017A/B Bonds (the "Twenty-Second Supplemental Indenture"), each by and between the Authority and Wells Fargo Bank, N.A., as trustee (the "Trustee"). The Issuer covenants and agrees as follows:

SECTION 1. <u>Purpose of the Disclosure Agreement</u>. This Disclosure Agreement is being executed and delivered by the Issuer for the benefit of the Holders and Beneficial Owners of the Series 2017A/B Bonds and in order to assist the Participating Underwriter in complying with Securities and Exchange Commission ("S.E.C.") Rule 15c2-12(b)(5).

SECTION 2. <u>Definitions</u>. In addition to the definitions set forth in the Indenture, which apply to any capitalized term used in this <u>Disclosure</u> Agreement unless otherwise defined in this Section, the following capitalized terms shall have the following meanings:

"Annual Report" shall mean any Annual Report provided by the Issuer pursuant to, and as described in, Sections 3 and 4 of this Disclosure Agreement.

"Beneficial Owner" shall mean any person who has or shares the power, directly or indirectly, to make investment decisions concerning ownership of any Bonds (including persons holding Bonds through nominees, depositories or other intermediaries).

"Dissemination Agent" shall mean the Issuer, or any successor Dissemination Agent designated in writing by the Issuer and which has filed with the Issuer a written acceptance of such designation.

"Holder" shall mean the person in whose name any Bond shall be registered.

"Listed Events" shall mean any of the events listed in Section 5(a) or (b) of this Disclosure Agreement.

"MSRB" shall mean the Municipal Securities Rulemaking Board or any other entity designated or authorized by the Securities and Exchange Commission to receive reports pursuant to the Rule. Until otherwise designated by the MSRB or the Securities and Exchange Commission, filings with the MSRB are to be made through the Electronic Municipal Market Access (EMMA) website of the MSRB, currently located at http://emma.msrb.org.

"Participating Underwriter" shall mean the original underwriter of the Series 2017A/B Bonds required to comply with the Rule in connection with offering of the Series 2017A/B Bonds.

"Rule" shall mean Rule 15c2-12(b)(5) adopted by the Securities and Exchange Commission under the Securities Exchange Act of 1934, as the same may be amended from time to time.

SECTION 3. Provision of Annual Reports.

- (a) The Issuer shall, or shall cause the Dissemination Agent to, not later than 240 days after the end of the Issuer's fiscal year (which shall be June 1 of each year, so long as the Issuer's fiscal year ends on September 30), commencing with the report for the fiscal year ending September 30, 2016 (which is due not later than June 1, 2017), provide to the MSRB an Annual Report which is consistent with the requirements of Section 4 of this Disclosure Agreement. The Annual Report may cross-reference other information as provided in Section 4 of this Disclosure Agreement; provided that the audited financial statements of the Issuer may be submitted separately from the balance of the Annual Report and later than the date required above for the filing of the Annual Report if they are not available by that date. If the Issuer's fiscal year changes, it shall give notice of such change in a filing with the MSRB. The Annual Report shall be submitted on a standard form in use by industry participants or other appropriate form and shall identify the Series 2017A/B Bonds by name and CUSIP number.
- (b) Not later than 15 business days prior to said date, the Issuer shall provide the Annual Report to the Dissemination Agent (if other than the Issuer). If the Issuer is unable to provide to the MSRB an Annual Report by the

date required in subsection (a), the Issuer shall, in a timely manner, send or cause to be sent to the MSRB a notice to that effect

(c) The Dissemination Agent shall (if the Dissemination Agent is other than the Issuer) file a report with the Issuer certifying that the Annual Report has been provided pursuant to this Disclosure Agreement, stating the date it was provided to the MSRB.

SECTION 4. <u>Content of Annual Reports</u>. The Issuer's Annual Report shall contain or include by reference the following:

- (a) the Issuer's comprehensive annual financial report (the "CAFR"), which includes audited financial statements prepared in accordance with generally accepted accounting principles in effect from time to time. If the Issuer's audited financial statements are not available by the time the Annual Report is required to be provided to the MSRB pursuant to Section 3(a), the Annual Report shall contain unaudited financial statements in a format similar to the financial statements contained in the final Official Statement, and the audited financial statements shall be provided to the MSRB in the same manner as the Annual Report when they become available; and
- (b) to the extent not included in the CAFR, material historical financial and operating data concerning the Issuer and the Revenues of the Issuer generally of the type found in the tables included in the Issuer's Official Statement dated October ___, 2015, relating to the Series 2017A/B Bonds (the "Official Statement") under the captions "THE SYSTEM," "CAPITAL IMPROVEMENT PROGRAM," "CUSTOMER BASE, RATES AND CHARGES" and "FINANCIAL OPERATIONS."

Any or all of the items listed above may be set forth in one or a set of documents or may be included by specific reference to other documents, including Official Statements of debt issues of the Issuer or related public entities, which have been made available to the public on the MSRB's website. The Issuer shall clearly identify each such other document so included by reference.

SECTION 5. Reporting of Significant Events.

- (a) The Issuer shall give, or cause to be given, notice of the occurrence of any of the following events with respect to the Series 2017A/B Bonds in a timely manner not later than ten business days after the occurrence of the event:
 - 1. Principal and interest payment delinquencies;
 - 2. Unscheduled draws on debt service reserves reflecting financial difficulties;
 - 3. Unscheduled draws on credit enhancements reflecting financial difficulties;
 - 4. Substitution of credit or liquidity providers, or their failure to perform;
 - 5. Adverse tax opinions or issuance by the Internal Revenue Service of proposed or final determination of taxability or of a Notice of Proposed Issue (IRS Form 5701 TEB);
 - 6. Tender offers;
 - Defeasances;
 - 8. Rating changes; or
 - 9. Bankruptcy, insolvency, receivership or similar event of the obligated person.

Note: for the purposes of the event identified in subparagraph (9), the event is considered to occur when any of the following occur: the appointment of a receiver, fiscal agent or similar officer for an obligated person in a proceeding under the U.S. Bankruptcy Code or in any other proceeding under state or federal law in which a court or governmental authority has assumed jurisdiction over substantially all of the assets or business of the obligated person, or if such jurisdiction has been assumed by leaving the existing governmental body and officials or officers in possession but subject to the supervision and orders of a court or governmental authority, or the entry of an order confirming a plan of reorganization, arrangement

or liquidation by a court or governmental authority having supervision or jurisdiction over substantially all of the assets or business of the obligated person.

- (b) The Issuer shall give, or cause to be given, notice of the occurrence of any of the following events with respect to the Series 2017A/B Bonds, if material, in a timely manner not later than ten business days after the occurrence of the event:
 - 1. Unless described in paragraph 5(a)(5), other material notices or determinations by the Internal Revenue Service with respect to the tax status of the Series 2017A/B Bonds or other material events affecting the tax status of the Series 2017A/B Bonds;
 - 2. Modifications to rights of Bond holders;
 - 3. Optional, unscheduled or contingent Bond calls;
 - 4. Release, substitution, or sale of property securing repayment of the Series 2017A/B Bonds;
 - 5. Non-payment related defaults;
 - 6. The consummation of a merger, consolidation, or acquisition involving an obligated person or the sale of all or substantially all of the assets of the obligated person, other than in the ordinary course of business, the entry into a definitive agreement to undertake such an action or the termination of a definitive agreement relating to any such actions, other than pursuant to its terms; or
 - 7. Appointment of a successor or additional trustee or the change of name of a trustee.
- (c) Whenever the Issuer obtains knowledge of the occurrence of a Listed Event described in Section 5(b), the Issuer shall determine if such event would be material under applicable federal securities laws.
- (d) If the Issuer learns of the occurrence of a Listed Event described in Section 5(a), or determines that knowledge of a Listed Event described in Section 5(b) would be material under applicable federal securities laws, the Issuer shall within ten business days of occurrence file a notice of such occurrence with the MSRB. Notwithstanding the foregoing, notice of the Listed Event described in subsections 5(a)(7) or 5(b)(3) need not be given under this subsection any earlier than the notice (if any) of the underlying event is given to Holders of affected Bonds pursuant to the Indenture.
- SECTION 6. <u>Format for Filings with MSRB</u>. Any report or filing with the MSRB pursuant to this Disclosure Agreement must be submitted in electronic format, accompanied by such identifying information as is prescribed by the MSRB.
- SECTION 7. <u>Termination of Reporting Obligation</u>. The Issuer's obligations under this Disclosure Agreement shall terminate upon the legal defeasance, prior redemption or payment in full of all of the Series 2017A/B Bonds. If such termination occurs prior to the final maturity of the Series 2017A/B Bonds, the Issuer shall give notice of such termination in a filing with the MSRB.
- SECTION 8. <u>Dissemination Agent</u>. The Issuer may, from time to time, appoint or engage a Dissemination Agent to assist it in carrying out its obligations under this Disclosure Agreement, and may discharge any such Dissemination Agent, with or without appointing a successor Dissemination Agent. The Dissemination Agent shall not be responsible in any manner for the content of any notice or report prepared by the Issuer pursuant to this Disclosure Agreement. The initial Dissemination Agent shall be the Issuer.
- SECTION 9. <u>Amendment; Waiver</u>. Notwithstanding any other provision of this Disclosure Agreement, the Issuer may amend this Disclosure Agreement, and any provision of this Disclosure Agreement may be waived, provided that the following conditions are satisfied:
- (a) If the amendment or waiver relates to the provisions of Sections 3(a), 4, 5(a) or 5(b), it may only be made in connection with a change in circumstances that arises from a change in legal requirements, change in law, or change in the identity, nature or status of an obligated person with respect to the Series 2017A/B Bonds, or the type of business conducted;

- (b) The undertaking, as amended or taking into account such waiver, would, in the opinion of nationally recognized bond counsel, have complied with the requirements of the Rule at the time of the original issuance of the Series 2017A/B Bonds, after taking into account any amendments or interpretations of the Rule, as well as any change in circumstances; and
- (c) The amendment or waiver does not, in the opinion of nationally recognized bond counsel, materially impair the interests of the Holders or Beneficial Owners of the Series 2017A/B Bonds.

In the event of any amendment or waiver of a provision of this Disclosure Agreement, the Issuer shall describe such amendment in the next Annual Report, and shall include, as applicable, a narrative explanation of the reason for the amendment or waiver and its impact on the type (or in the case of a change of accounting principles, on the presentation) of financial information or operating data being presented by the Issuer. In addition, if the amendment relates to the accounting principles to be followed in preparing financial statements, (i) notice of such change shall be given in a filing with the MSRB, and (ii) the Annual Report for the year in which the change is made should present a comparison (in narrative form and also, if feasible, in quantitative form) between the financial statements as prepared on the basis of the new accounting principles and those prepared on the basis of the former accounting principles.

Additional Information. Nothing in this Disclosure Agreement shall be deemed to prevent the Issuer from disseminating any other information, using the means of dissemination set forth in this Disclosure Agreement or any other means of communication, or including any other information in any Annual Report or notice required to be filed pursuant to this Disclosure Agreement, in addition to that which is required by this Disclosure Agreement. If the Issuer chooses to include any information in any Annual Report or notice in addition to that which is specifically required by this Disclosure Agreement, the Issuer shall have no obligation under this Disclosure Agreement to update such information or include it in any future Annual Report or notice of occurrence of a Listed Event or any other event required to be reported.

SECTION 11. <u>Default</u>. In the event of a failure of the Issuer to comply with any provision of this Disclosure Agreement, any Holder or Beneficial Owner of the Series 2017A/B Bonds may take such actions as may be necessary and appropriate, including seeking mandate or specific performance by court order, to cause the Issuer to comply with its obligations under this Disclosure Agreement, provided, that any such action may be instituted only in the District of Columbia. The sole remedy under this Disclosure Agreement in the event of any failure of the Issuer to comply with this Disclosure Agreement shall be an action to compel performance.

	<u>ciaries</u> . This Disclosure Agreement shall inure solely to the benefit of the pating Underwriter and Holders and Beneficial Owners from time to time of no rights in any other person or entity.
Date:, 2017	
	DISTRICT OF COLUMBIA WATER AND SEWER AUTHORITY
	By Mark T. Kim, Chief Financial Officer

Finance and Budget Committee - 4. Action Items

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APPENDIX E DTC BOOK-ENTRY ONLY SYSTEM

Finance and Budget Committee - 4. Action Items

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DTC BOOK-ENTRY ONLY SYSTEM

The description that follows of the procedures and record keeping with respect to beneficial ownership interests in the Series 2017A/B Bonds, payments of principal, premium, if any, and interest on the Series 2017A/B Bonds to DTC, its nominee, Participants, or Beneficial Owners, confirmation and transfer of beneficial ownership interests in the Series 2017A/B Bonds and other bond-related transactions by and between DTC, Participants and Beneficial Owners is based on information furnished by DTC. The Authority and the Underwriters take no responsibility for the accuracy thereof.

The Depository Trust Company, New York, New York ("DTC") will act as securities depository for the Series 2017A/B Bonds. The Series 2017A/B Bonds will be issued as fully registered securities registered in the name of Cede & Co. (DTC's partnership nominee) or such other name as may be requested by an authorized representative of DTC. One fully registered Series 2017A/B Bond will be issued for the Series 2017A/B Bonds of each series and maturity in the aggregate principal amount of such maturity, and will be deposited with DTC.

DTC, the world's largest securities depository, is a limited purpose trust company organized under the New York Banking Law, a "banking organization" within the meaning of the New York Banking Law, a member of the Federal Reserve System, a "clearing corporation" within the meaning of the New York Uniform Commercial Code, and a "clearing agency" registered pursuant to the provisions of Section 17A of the Securities Exchange Act of 1934, as amended. DTC holds and provides asset servicing for over 3.5 million issues of U.S. and non-U.S. equity issues, corporate and municipal debt issues, and money market instruments (from over 100 countries) that DTC's participants ("Direct Participants") deposit with DTC. DTC also facilitates the post-trade settlement among Direct Participants of sales and other securities transactions in deposited securities, through electronic computerized book-entry transfers and pledges between Direct Participants' accounts. This eliminates the need for physical movement of securities certificates. Direct Participants include both U.S. and non-U.S. securities brokers and dealers, banks, trust companies, clearing corporations, and certain other organizations. DTC is a wholly-owned subsidiary of The Depository Trust & Clearing Corporation ("DTCC"). DTCC is the holding company for DTC, National Securities Clearing Corporation and Fixed Income Clearing Corporation, all of which are registered clearing agencies. DTCC is owned by the users of its regulated subsidiaries. Access to the DTC system is also available to others such as both U.S. and non-U.S. securities brokers, and dealers, banks, trust companies, and clearing corporations that clear through or maintain a custodial relationship with a Direct Participant, either directly or indirectly ("Indirect Participants"). DTC has a Standard & Poor's rating of AA+. The DTC Rules applicable to its Participants are on file with the Securities and Exchange Commission. More information about DTC can be found at www.dtc.com</

Purchases of the Series 2017A/B Bonds under the DTC system must be made by or through Direct Participants, who will receive a credit for such Series 2017A/B Bonds on DTC's records. The ownership interest of each actual purchaser of each Series 2017A/B Bonds Bond (the "Beneficial Owner") is in turn to be recorded on the Direct and Indirect Participants' records. Beneficial Owners will not receive written confirmation from DTC of their purchase. Beneficial Owners are, however, expected to receive written confirmations providing details of the transaction, as well as periodic statements of their holdings, from the Direct or Indirect Participant through which the Beneficial Owner entered into the transaction. Transfers of ownership interests in the Series 2017A/B Bonds are to be accomplished by entries made on the books of Direct and Indirect Participants acting on behalf of Beneficial Owners. Beneficial Owners will not receive certificates representing their ownership interests in the Series 2017A/B Bonds, except in the event that use of the book-entry system for the Series 2017A/B Bonds is discontinued.

To facilitate subsequent transfers, all Series 2017A/B Bonds deposited by Direct Participants with DTC are registered in the name of DTC's partnership nominee, Cede& Co., or such other name as may be requested by an authorized representative of DTC. The deposit of the Series 2017A/B Bonds with DTC and their registration in the name of Cede & Co. or such other DTC nominee do not effect any change in beneficial ownership. DTC has no knowledge of the actual Beneficial Owners of the Series 2017A/B Bonds; DTC's records reflect only the identity of the Direct Participants to whose accounts such Series 2017A/B Bonds are credited, which may or may not be the Beneficial Owners. The Direct and Indirect Participants will remain responsible for keeping account of their holdings on behalf of their customers.

Conveyance of notices and other communications by DTC to Direct Participants, by Direct Participants to Indirect Participants, and by Direct Participants and Indirect Participants to Beneficial Owners will be governed by arrangements among them, subject to any statutory or regulatory requirements as may be in effect from time to time.

Redemption notices shall be sent to DTC. If less than all of the Series 2017A/B Bonds are being redeemed, DTC's practice is to determine by lot the amount of the interest of each Direct Participant in such issue to be redeemed.

THE TRUSTEE, AS LONG AS A BOOK-ENTRY ONLY SYSTEM IS USED FOR THE SERIES 2017A/B BONDS, WILL SEND ANY NOTICE OF REDEMPTION OR OTHER NOTICES ONLY TO DTC. ANY FAILURE OF DTC TO ADVISE ANY PARTICIPANT, OR OF ANY PARTICIPANT TO NOTIFY ANY BENEFICIAL OWNER OF ANY NOTICE AND OF ITS CONTENT OR EFFECT WILL NOT AFFECT THE VALIDITY OR SUFFICIENCY OF THE PROCEEDINGS RELATING TO THE REDEMPTION OF THE SERIES 2017A/B BONDS CALLED FOR REDEMPTION OR OF ANY OTHER ACTION PREMISED ON SUCH NOTICE.

Neither DTC nor Cede & Co. (nor any other DTC nominee) will consent or vote with respect to the Series 2017A/B Bonds unless authorized by a Direct Participant in accordance with DTC's MMI Procedures. Under its usual procedures, DTC mails an Omnibus Proxy to the Authority as soon as possible after the record date. The Omnibus Proxy assigns Cede & Co.'s consenting or voting rights to those Direct Participants to whose accounts the Series 2017A/B Bonds are credited on the record date (identified in a listing attached to the Omnibus Proxy).

Principal and interest payments on the Series 2017A/B Bonds will be made to Cede & Co., or such other nominee as may be requested by an authorized representative of DTC. DTC's practice is to credit Direct Participants' accounts upon DTC's receipt of funds and corresponding detail information from the Authority or the Trustee on the payable date in accordance with their respective holdings shown on DTC's records. Payments by Participants to Beneficial Owners will be governed by standing instructions and customary practices, as is the case with securities held for the accounts of customers in bearer form or registered in "street name," and will be the responsibility of such Participant and not of DTC, the Trustee, or the Authority, subject to any statutory or regulatory requirement as may be in effect from time to time. Payment of principal and interest to Cede & Co., or such other nominee as may be requested by an authorized representative of DTC, is the responsibility of the Authority or the Trustee, disbursement of such payments to Direct Participants shall be the responsibility of DTC, and disbursement of such payments to the Beneficial Owners shall be the responsibility of Direct and Indirect Participants.

DTC may discontinue providing its services as securities depository with respect to the Series 2017A/B Bonds at any time by giving reasonable notice to the Authority or the Trustee. Under such circumstances, in the event that a successor securities depository is not obtained, Series 2017A/B Bonds Bond certificates are required to be printed and delivered. The Authority may decide to discontinue use of the system of book-entry transfers through DTC (or a successor securities depository). In that event, Series 2017A/B Bonds Bond certificates will be printed and delivered.

So long as Cede & Co. is the registered owner of the Series 2017A/B Bonds, as partnership nominee for DTC, references herein to Bondholders or registered owners of the Series 2017A/B Bonds (other than under the caption "TAX MATTERS") shall mean Cede & Co. and shall not mean the Beneficial Owners of the Series 2017A/B Bonds.

When reference is made to any action which is required or permitted to be taken by the Beneficial Owners, such reference shall only relate to those permitted to act (by statute, regulation or otherwise) on behalf of such Beneficial Owners for such purposes.

NEITHER THE AUTHORITY NOR THE TRUSTEE WILL HAVE ANY RESPONSIBILITY OR OBLIGATION TO DTC PARTICIPANTS, TO INDIRECT PARTICIPANTS, OR TO ANY BENEFICIAL OWNER WITH RESPECT TO (I) THE ACCURACY OF ANY RECORDS MAINTAINED BY DTC, CEDE & CO., ANY DTC PARTICIPANT, OR ANY INDIRECT PARTICIPANT; (II) ANY NOTICE THAT IS PERMITTED OR REQUIRED TO BE GIVEN TO THE OWNERS OF THE SERIES 2017A/B BONDS; (III) THE SELECTION BY DTC OR ANY DTC PARTICIPANT OR INDIRECT PARTICIPANT OF ANY PERSON TO RECEIVE PAYMENT IN THE EVENT OF A PARTIAL REDEMPTION OF THE SERIES 2017A/B BONDS; (IV) THE PAYMENT BY DTC OR ANY DTC PARTICIPANT OR INDIRECT PARTICIPANT OF ANY AMOUNT WITH RESPECT TO THE PRINCIPAL OR REDEMPTION PREMIUM, IF ANY, OR INTEREST DUE WITH RESPECT TO THE SERIES 2017A/B BONDS; (V) ANY CONSENT GIVEN OR OTHER ACTION TAKEN BY DTC AS THE OWNER OF THE SERIES 2017A/B BONDS; OR (VI) ANY OTHER MATTER.

APPENDIX F PROPOSED FORM OF OPINION OF CO-BOND COUNSEL

Finance and Budget Committee - 4. Action Items

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SPB DRAFT: 12/8/16

TWENTY-SECOND SUPPLEMENTAL INDENTURE OF TRUST

between

DISTRICT OF COLUMBIA WATER AND SEWER AUTHORITY

and

WELLS FARGO BANK, N.A. AS TRUSTEE

Dated February ___, 2017

THIS TWENTY-SECOND SUPPLEMENTAL INDENTURE OF TRUST dated the day of February, 2017 (as defined in more detail below, the "Twenty-Second Supplemental Indenture"), by and between the District of Columbia Water and Sewer Authority (the "Authority"), an independent authority of the District of Columbia (the "District"), and Wells Fargo Bank, N.A., a national banking association, having a corporate trust office in Columbia, Maryland, as trustee (in such capacity, together with any successor in such capacity, herein called the "Trustee"), provides:

WHEREAS, the Authority and the Trustee (its predecessor in that capacity having been Norwest Bank, N.A.) entered into the Master Indenture of Trust, dated as of April 1, 1998 (the "Master Indenture" and, as previously supplemented and amended by the First Supplemental Indenture, the Second Supplemental Indenture, the Third Supplemental Indenture, the Fourth Supplemental Indenture, the Fifth Supplemental Indenture, the Sixth Supplemental Indenture, the Seventh Supplemental Indenture, the Eighth Supplemental Indenture, the Ninth Supplemental Indenture, the Tenth Supplemental Indenture, the Eleventh Supplemental Indenture, the Twelfth Supplemental Indenture, the Thirteenth Supplemental Indenture, the Fourteenth Supplemental Indenture, the Fifteenth Supplemental Indenture, the Sixteenth Supplemental Indenture, the Seventeenth Supplemental Indenture, the Eighteenth Supplemental Indenture, the Nineteenth Supplemental Indenture, the Twentieth Supplemental Indenture and the Twenty-First Supplemental Indenture, all as hereinafter defined, and as it may further be supplemented and amended in accordance with its terms, 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 defined in the Master Indenture); and

WHEREAS, pursuant to the First Supplemental Indenture of Trust, dated as of April 1, 1998 (the "First Supplemental Indenture"), between the Authority and the Trustee, the Authority issued its Public Utility Revenue Bonds, Series 1998 (the "Series 1998 Senior Lien Bonds") in the aggregate principal amount of \$266,120,000, to finance Costs of the System (as defined in the Master Indenture) and to refund then outstanding debt of the Authority; and

WHEREAS, the Master Indenture permits the Authority, for certain purposes and subject to certain conditions, to issue Other System Indebtedness (as defined therein) secured on a parity with the Series 1998 Senior Lien Bonds and referred to collectively with the Series 1998 Senior Lien Bonds as "Senior Debt," and also permits the Authority to issue Subordinate Debt (as defined therein), to which it has pledged to its payment Net Revenues, as a subordinate lien pledge after the pledge of Net Revenues to Senior Debt; and

WHEREAS, pursuant to the Second Supplemental Indenture of Trust, dated as of November 1, 2001 (the "Second Supplemental Indenture"), between the Authority and the Trustee, the Authority amended and supplemented the Master Indenture in accordance with its terms to clarify provisions thereof related to certain forms of Indebtedness (as defined in the Master Indenture, i.e., Senior Debt and Subordinate Debt) and thereby facilitate the issuance of such forms of Indebtedness; and

WHEREAS, pursuant to the Third Supplemental Indenture of Trust, dated as of November 1, 2001 (the "Third Supplemental Indenture"), between the Authority and the

Trustee, the Authority (i) issued its Commercial Paper Notes, Series A (the "2001 Series A Notes") to finance certain Costs of the System, and its Commercial Paper Notes, Series B (the "2001 Series B Notes" and, together with the 2001 Series A Notes, the "Series 2001 Notes") in the aggregate principal amount of \$50,000,000 to finance certain Costs of the System, (ii) designated the Series 2001 Notes as Subordinate Debt for purposes of the Indenture, and (iii) made provision for the securing of the Series 2001 Notes and of the Reimbursement Obligations to the Bank that provided the Letters of Credit (all as defined therein) that secure the Series 2001 Notes; and

WHEREAS, pursuant to the Fourth Supplemental Indenture of Trust, dated August 12, 2003 (the "Fourth Supplemental Indenture"), between the Authority and the Trustee, the Authority: (i) issued its Public Utility Subordinated Lien Revenue Bonds, Series 2003, dated August 12, 2003 (the "Series 2003 Subordinated Bonds"), in the aggregate principal amount of \$176,220,000 to finance certain Costs of the System and retire Series 2001 Notes, (ii) designated the Series 2003 Subordinated Bonds as Subordinate Debt for purposes of the Indenture, and (iii) secured the Series 2003 Subordinated Bonds by a pledge of Net Revenues subordinate to the pledge of Net Revenues that secures Senior Debt and on a parity with the pledge of Net Revenues that secures other Subordinate Debt, including, without limitation, other Subordinate Debt that the Authority may issue from time to time in the future; and

WHEREAS, pursuant to the Fifth Supplemental Indenture of Trust, dated August 3, 2004 (the "Fifth Supplemental Indenture"), between the Authority and the Trustee, the Authority: (i) issued its Public Utility Subordinated Lien Revenue Bonds, Series 2004, as Subseries 2004A-1, Subseries 2004A-2, Subseries 2004B-1 and Subseries B-2 (collectively, the "Series 2004 Subordinated Bonds") in the aggregate principal amount of \$295,000,000 to finance certain Costs of the System, (ii) designated the Series 2004 Subordinated Bonds as Subordinate Debt for purposes of the Indenture, and (iii) secured the Series 2004 Subordinated Bonds by a pledge of Net Revenues subordinate to the pledge of Net Revenues that secures Senior Debt and on a parity with the pledge of Net Revenues that secures the Series 2003 Subordinated Bonds and other Subordinate Debt, including, without limitation, other Subordinate Debt that the Authority may issue from time to time in the future; and

WHEREAS, pursuant to the Sixth Supplemental Indenture of Trust, dated June 6, 2007 (the "Sixth Supplemental Indenture"), between the Authority and the Trustee, the Authority: (i) issued its Public Utility Subordinated Lien Revenue Bonds, Series 2007A (the "Series 2007A Subordinated Bonds"), in the aggregate principal amount of \$218,715,000 to finance certain Costs of the System and retire Series 2001 Notes, (ii) designated the Series 2007A Subordinated Bonds as Subordinate Debt for purposes of the Indenture, and (iii) secured the Series 2007A Subordinated Bonds by a pledge of Net Revenues subordinate to the pledge of Net Revenues that secures Senior Debt and on a parity with the pledge of Net Revenues that secures the Series 2003 Subordinated Bonds, the Series 2004 Subordinated Bonds, the Series 2007B Subordinated Bonds and other Subordinate Debt, including, without limitation, other Subordinate Debt that the Authority may issue from time to time in the future; and

WHEREAS, pursuant to the Seventh Supplemental Indenture of Trust, dated June 6, 2007 (the "Seventh Supplemental Indenture"), between the Authority and the Trustee, the Authority: (i) issued its Public Utility Subordinated Lien Taxable Revenue Bonds, Series 2007B

(the "Series 2007B Subordinated Bonds"), in the aggregate principal amount of \$59,000,000 to finance certain Costs of the System, (ii) designated the Series 2007B Subordinated Bonds as Subordinate Debt for purposes of the Indenture, and (iii) secured the Series 2007B Subordinated Bonds by a pledge of Net Revenues subordinate to the pledge of Net Revenues that secures Senior Debt and on a parity with the pledge of Net Revenues that secures the Series 2003 Subordinated Bonds, the Series 2004 Subordinated Bonds, the Series 2007A Subordinated Bonds and other Subordinate Debt, including, without limitation, other Subordinate Debt that the Authority may issue from time to time in the future; and

WHEREAS, pursuant to the Eighth Supplemental Indenture of Trust, dated April 24, 2008 (the "Eighth Supplemental Indenture"), between the Authority and the Trustee, the Authority: (i) issued its Public Utility Subordinated Lien Revenue Refunding Bonds, Series 2008 (the "Series 2008 Subordinated Bonds"), in the aggregate principal amount of \$290,375,000 to (a) currently refund all of the outstanding Series 2004 Subordinated Bonds and a portion of the Series 2007B Subordinated Bonds, and (b) pay issuance costs of the Series 2008 Subordinated Bonds, (ii) designated the Series 2008 Subordinated Bonds as Subordinate Debt for purposes of the Indenture, and (iii) secured the Series 2008 Subordinated Bonds by a pledge of Net Revenues subordinate to the pledge of Net Revenues that secures Senior Debt and on a parity with the pledge of Net Revenues that secures the Series 2003 Subordinated Bonds, the Series 2004 Subordinated Bonds, the Series 2007B Subordinated Bonds, and other Subordinate Debt, including, without limitation, other Subordinate Debt that the Authority may issue from time to time in the future; and

WHEREAS, pursuant to the Ninth Supplemental Indenture of Trust, dated December 19, 2008 (the "Ninth Supplemental Indenture"), between the Authority and the Trustee, the Authority agreed to confer on the Holders of the Series 2003 Subordinated Bonds additional rights related to the Reserve Credit Facility (as defined therein) and to cure any ambiguity or omission in the Indenture regarding the obligations of the Authority as a consequence of a downgrade of the Reserve Policy related to the Series 2003 Subordinated Bonds, or in the event that the Reserve Policy were to cease to be in effect; and

WHEREAS, pursuant to the Tenth Supplemental Indenture of Trust, dated February 12, 2009 (the "Tenth Supplemental Indenture"), between the Authority and the Trustee, the Authority: (i) issued its Public Utility Senior Lien Revenue Bonds, Series 2009A (the "Series 2009A Senior Lien Bonds"), in the aggregate principal amount of \$300,000,000 to finance certain Costs of the System and retire Series 2001 Notes, (ii) designated the Series 2009A Senior Lien Bonds as Senior Debt for purposes of the Indenture, and (iii) secured the Series 2009A Senior Lien Bonds by a pledge of Net Revenues on a parity with the pledge of Net Revenues that secures the 1998 Senior Lien Bonds and other Senior Debt, including, without limitation, other Senior Debt that the Authority may issue from time to time in the future; and

WHEREAS, pursuant to the Eleventh Supplemental Indenture of Trust, dated June 2, 2010, as supplemented and amended by the First Amendment to Eleventh Supplemental Indenture of Trust, dated April 5, 2013, and by the Second Amendment to Eleventh Supplemental Indenture of Trust, dated May 18, 2015 (together, the "Eleventh Supplemental Indenture"), each between the Authority and the Trustee, the Authority: (i) authorized the

issuance of its (a) Commercial Paper Notes, Series A (the "2010 Series A Notes") in the aggregate principal amount of \$0 to finance certain Costs of the System, (b) Commercial Paper Notes, Series B (the "2010 Series B Notes") in the aggregate principal amount of \$100,000,000 to finance certain Costs of the System, and (c) Commercial Paper Notes, Series C (the "2010 Series C Notes" and, together with the 2010 Series A Notes and the 2010 Series B Note, the "Series 2010 Notes") in the aggregate principal amount of \$50,000,000 to finance certain Costs of the System, (ii) designated the Series 2010 Notes as Subordinate Debt for purposes of the Indenture, and (iii) made provision for the securing of the Series 2010 Notes and of the Authority's reimbursement obligations to the Bank (as defined in the Eleventh Supplemental Indenture) that provided the Substitute Letters of Credit (as defined in the Eleventh Supplemental Indenture) that secure the Series 2010 Notes; and

WHEREAS, pursuant to the Twelfth Supplemental Indenture of Trust, dated October 27, 2010 (the "Twelfth Supplemental Indenture"), between the Authority and the Trustee, the Authority (i) issued its Public Utility Subordinate Lien Revenue Bonds, Series 2010A (Federally Taxable – Issuer Subsidy – Build America Bonds) (the "Series 2010A Subordinated Bonds") in the aggregate principal amount of \$300,000,000 to finance certain Costs of the System and fund capitalized interest on a portion of the Series 2010A Subordinate Bonds, subject to specified limitations, (ii) designated the Series 2010A Subordinate Bonds as Subordinate Debt for purposes of the Indenture, (iii) secured the Series 2010A Subordinate Bonds by a pledge of Net Revenues subordinate to the pledge of Net Revenues that secures Senior Debt and on a parity with the pledge of Net Revenues that secures the Series 2013 Subordinated Bonds, the Series 2004 Subordinated Bonds, the Series 2007A Subordinated Bonds, the Series 2007B Subordinated Bonds, and other Subordinate Debt, including, without limitation, other Subordinate Debt that the Authority may issue from time to time in the future, and (iv) included provisions in the Indenture related to potential Direct Payments (as defined therein) received or expected to be received by the Authority, including certain provisions requiring the consent of the holders of a majority of Outstanding Bonds; and

WHEREAS, pursuant to the Thirteenth Supplemental Indenture of Trust, dated March 22, 2012 (the "Thirteenth Supplemental Indenture"), between the Authority and the Trustee, the Authority: (i)(a) issued its Public Utility Subordinate Lien Revenue Bonds, Series 2012A (the "Series 2012A Subordinate Bonds") in the aggregate principal of \$177,430,000 to finance certain Costs of the System and pay certain costs of issuance, (b) designated the Series 2012A Subordinate Bonds as Subordinate Debt for purposes of the Indenture, and (c) secured the Series 2012A Subordinate Bonds by a pledge of Net Revenues subordinate to the pledge of Net Revenues that secures Senior Debt and on a parity with the pledge of Net Revenues that secures the Series 2003 Subordinated Bonds, the Series 2004 Subordinated Bonds, the Series 2007A Subordinated Bonds, the Series 2010 Notes, the Series 2010A Subordinated Bonds, and other Subordinate Debt, including, without limitation, other Subordinate Debt that the Authority may issue from time to time in the future, (ii)(a) issued its Public Utility Subordinate Lien Multimodal Revenue Bonds, Series 2012B (the "Series 2012B Subordinate Bonds") in the aggregate principal amount of \$100,000,000 to finance certain Costs of the System, fund capitalized interest on a portion of the Series 2012B Subordinate Bonds subject to specified limitations, and pay certain costs of issuance. (b) designated the Series 2012B Subordinate Bonds as Subordinate Debt for purposes of the Indenture, and (c) secured the Series 2012B Subordinate Bonds by a pledge of Net Revenues subordinate to the pledge of Net Revenues that secures Senior Debt and on a parity with the pledge of Net Revenues that secures the Series 2003 Subordinated Bonds, the Series 2004 Subordinated Bonds, the Series 2007A Subordinated Bonds, the Series 2010 Notes, the Series 2010A Subordinated Bonds, and other Subordinate Debt, including, without limitation, other Subordinate Debt that the Authority may issue from time to time in the future, and (iii)(a) issued its Public Utility Subordinate Lien Revenue Refunding Bonds, Series 2012C (the "Series 2012C Subordinate Bonds") in the aggregate principal amount of \$163,215,000, and applied the proceeds thereof, together with any other funds of the Authority, to advance refund the Series 2003 Subordinated Bonds and caused them to be deemed paid and no longer Outstanding for purposes of the Indenture, and paid certain costs of issuance, (b) designated the Series 2012C Subordinate Bonds as Subordinate Debt for purposes of the Indenture, and (c) secured the Series 2012C Subordinate Bonds by a pledge of Net Revenues subordinate to the pledge of Net Revenues that secures Senior Debt and on a parity with the pledge of Net Revenues that secures the Series 2003 Subordinated Bonds, the Series 2004 Subordinated Bonds, the Series 2007A Subordinated Bonds, the Series 2010 Notes, the Series 2010A Subordinated Bonds, and other Subordinate Debt, including, without limitation, other Subordinate Debt that the Authority may issue from time to time in the future; and

WHEREAS, pursuant to the Fourteenth Supplemental Indenture of Trust, dated as of August 1, 2013 (the "Fourteenth Supplemental Indenture"), between the Authority and the Trustee, the Authority: (i) issued its Public Utility Subordinate Lien Revenue Bonds, Series 2013A in the aggregate principal amount of \$300,000,000 (the "Series 2013A Subordinate Bonds") to finance certain Costs of the System and pay certain costs of issuance, (ii) designated the Series 2013A Subordinate Bonds as Subordinate Debt for purposes of the Indenture, and (iii) secured the Series 2013A Subordinate Bonds by a pledge of Net Revenues subordinate to the pledge of Net Revenues that secures Senior Debt and on a parity with the pledge of Net Revenues that secures the Series 2004 Subordinated Bonds, the Series 2007A Subordinated Bonds, the Series 2010A Subordinated Bonds, the Series 2012B Subordinate Bonds, the Series 2012C Subordinate Bonds and other Subordinate Debt, including, without limitation, other Subordinate Debt that the Authority may issue from time to time in the future; and

WHEREAS, pursuant to the Fifteenth Supplemental Indenture of Trust, dated July 23, 2014 (the "Fifteenth Supplemental Indenture"), between the Authority and the Trustee, the Authority: (i) issued its Public Utility Senior Lien Revenue Bonds, Series 2014A (Federally Taxable) (Green Bonds) in the aggregate principal amount of \$350,000,000 (the "Series 2014A Senior Lien Bonds") to finance certain Costs of the System and pay certain costs of issuance, (ii) designated the Series 2014A Senior Lien Bonds as Senior Debt for purposes of the Indenture, and (iii) secured the Series 2014A Senior Lien Bonds by a pledge of Net Revenues on a parity with the pledge of Net Revenues that secures the Series 1998 Senior Lien Bonds, the Series 2009A Senior Lien Bonds, and other Senior Debt, including, without limitation, other Senior Debt that the Authority may issue from time to time in the future; and

WHEREAS, pursuant to the Sixteenth Supplemental Indenture of Trust, dated July 23, 2014 (the "Sixteenth Supplemental Indenture"), between the Authority and the Trustee, the Authority: (i) issued its Public Utility Subordinate Lien Multimodal Revenue Bonds, Series

2014B, in the aggregate principal amount of \$100,000,000 (the "Series 2014B Subordinate Bonds") to finance certain Costs of the System and pay certain costs of issuance, (ii) designated the Series 2014B Subordinate Bonds as Subordinate Debt for purposes of the Indenture, and (iii) secured the Series 2014B Subordinate Bonds by a pledge of Net Revenues subordinate to the pledge of Net Revenues that secures Senior Debt and on a parity with the pledge of Net Revenues that secures the Series 2004 Subordinated Bonds, the Series 2007A Subordinated Bonds, the Series 2010A Subordinated Bonds, the Series 2012B Subordinate Bonds, the Series 2012B Subordinate Bonds, the Series 2012C Subordinate Bonds, the Series 2013A Subordinate Bonds, and other Subordinate Debt, including, without limitation, other Subordinate Debt that the Authority may issue from time to time in the future; and

WHEREAS, pursuant to the Seventeenth Supplemental Indenture of Trust, dated November 20, 2014 (the "Seventeenth Supplemental Indenture"), between the Authority and the Trustee, the Authority: (i) issued its Public Utility Subordinate Lien Revenue Refunding Bonds, Series 2014C, in the aggregate principal amount of \$377,700,000 (the "Series 2014C Subordinate Bonds") to (a) advance refund all a portion of the Authority's outstanding Series 2007A Subordinated Bonds, the Series 2008A Subordinated Bonds, and the Series 2009A Senior Lien Bonds, and current refund all of the Authority's outstanding Subseries 2012B-1 of the Series 2012 Subordinate Bonds, and (b) pay issuance costs of the Series 2014C Subordinate Bonds, (ii) designated the Series 2014C Subordinate Bonds as Subordinate Debt for purposes of the Indenture, and (iii) secured the Series 2014C Subordinate Bonds by a pledge of Net Revenues subordinate to the pledge of Net Revenues that secures Senior Debt and on a parity with the pledge of Net Revenues that secures the Series 2004 Subordinated Bonds, the Series 2007A Subordinated Bonds, the Series 2008A Subordinated Bonds, the Series 2010 Notes, the Series 2010A Subordinated Bonds, the Series 2012A Subordinate Bonds, the Series 2012B Subordinate Bonds, the Series 2012C Subordinate Bonds, the Series 2013A Subordinate Bonds, Series 2014B Subordinate Bonds, and other Subordinate Debt, including, without limitation, other Subordinate Debt that the Authority may issue from time to time in the future; and

WHEREAS, pursuant to the Eighteenth Supplemental Indenture of Trust, dated October 15, 2015 (the "Eighteenth Supplemental Indenture"), between the Authority and the Trustee, the Authority: (i) issued its Public Utility Subordinate Lien Revenue Bonds, Series 2015A in the aggregate principal amount of \$100,000,000 (the "Series 2015A Subordinate Bonds") to (a) finance certain Costs of the System, and (b) pay issuance costs of the Series 2015A Subordinate Bonds, (ii) designated the Series 2015A Subordinate Bonds as Subordinate Debt for purposes of the Indenture, (iii) secured the Series 2015A Subordinate Bonds by a pledge of Net Revenues subordinate to the pledge of Net Revenues that secures Senior Debt and on a parity with the pledge of Net Revenues that secures the Series 2004 Subordinated Bonds, the Series 2007A Subordinated Bonds, the Series 2008A Subordinated Bonds, the Series 2010 Notes, the Series 2010A Subordinated Bonds, the Series 2012A Subordinate Bonds, the Series 2012B Subordinate Bonds, the Series 2012C Subordinate Bonds, the Series 2013A Subordinate Bonds, Series 2014B Subordinate Bonds, Series 2015B Senior Lien Bonds, and other Subordinate Debt, including, without limitation, other Subordinate Debt that the Authority may issue from time to time in the future, (iv) issued its Public Utility Subordinate Lien Revenue Bonds, Series 2015B in an aggregate principal amount of \$250,000,000 (the "Series 2015B **Subordinate Bonds**" and, together with the Series 2015A Subordinate Bonds, the "**Series 2015A/B Subordinate Bonds**") to (a) finance certain Costs of the System, and (b) pay issuance costs of the Series 2015B Subordinate Bonds, (v) designated the Series 2015B Subordinate Bonds as Subordinate Debt for purposes of the Indenture, and (vi) secured the Series 2015B Subordinate Bonds by a pledge of Net Revenues subordinate to the pledge of Net Revenues that secures Senior Debt and on a parity with the pledge of Net Revenues that secures the Series 2004 Subordinated Bonds, the Series 2007A Subordinated Bonds, the Series 2018A Subordinated Bonds, the Series 2010 Notes, the Series 2010A Subordinated Bonds, the Series 2012B Subordinate Bonds, the Series 2012C Subordinate Bonds, the Series 2013A Subordinate Bonds, Series 2014B Subordinate Bonds, Series 2015A Subordinate Bonds, and other Subordinate Debt, including, without limitation, other Subordinate Debt that the Authority may issue from time to time in the future; and

WHEREAS, pursuant to the Nineteenth Supplemental Indenture of Trust, dated December 1, 2015 (the "Nineteenth Supplemental Indenture") between the Trustee and the Authority, the Authority authorized (i) the issuance of its Extendable Municipal Commercial Paper Notes, Series A (the "Series A EMCP Notes") in the aggregate principal amount of not to exceed \$100,000,000 outstanding at any time to finance certain Costs of the System, (ii) designated the Series A EMCP Notes as Subordinate Debt for purposes of the Indenture, and (iii) secured the Series A EMCP Notes by a pledge of Net Revenues subordinate to the pledge of Net Revenues that secures Senior Debt and on a parity with the pledge of Net Revenues that secures the Series 2004 Subordinated Bonds, the Series 2007A Subordinated Bonds, the Series 2008A Subordinated Bonds, the Series 2010 Notes, the Series 2010A Subordinated Bonds, the Series 2012A Subordinate Bonds, the Series 2012B Subordinate Bonds, the Series 2012C Subordinate Bonds, the Series 2013A Subordinate Bonds, Series 2014B Subordinate Bonds, Series 2015A Subordinate Bonds, the Series 2015B Bonds, and other Subordinate Debt, including, without limitation, other Subordinate Debt that the Authority may issue from time to time in the future; and

WHEREAS, pursuant to the Twentieth Supplemental Indenture of Trust, dated February 24, 2016 (the "Twentieth Supplemental Indenture") between the Trustee and the Authority, the Authority (i) issued its Public Utility Subordinate Lien Revenue Refunding Bonds, Series 2016A in the aggregate principal amount of \$389,110,000 (the "Series 2016A Subordinate Bonds") to (a) refund all or a portion of the Authority's outstanding Series 2007A Subordinated Bonds, Series 2008A Subordinated Bonds, and Series 2009A Senior Lien Bonds (together, the "Refunded Bonds"), and (b) pay issuance costs of the Series 2016A Subordinate Bonds, (ii) designated the Series 2016A Subordinate Bonds as Subordinate Debt for purposes of the Indenture, and (iii) secured the Series 2016A Subordinate Bonds by a pledge of Net Revenues subordinate to the pledge of Net Revenues that secures Senior Debt and on a parity with the pledge of Net Revenues that secures the Series 2004 Subordinated Bonds, the Series 2007A Subordinated Bonds, the Series 2008A Subordinated Bonds, the Series 2010 Notes, the Series 2010A Subordinated Bonds, the Series 2012A Subordinate Bonds, the Series 2012B Subordinate Bonds, the Series 2012C Subordinate Bonds, the Series 2013A Subordinate Bonds, Series 2014B Subordinate Bonds, Series 2015A Subordinate Bonds, the Series 2015B Subordinate Bonds and other Subordinate Debt, including, without limitation, other Subordinate Debt that the Authority may issue from time to time in the future; and

WHEREAS, pursuant to the Twenty-First Supplemental Indenture of Trust, dated September 29, 2016 (the "Twenty-First Supplemental Indenture") between the Trustee and the Authority, the Authority (i) issued its Public Utility Subordinate Lien Revenue Bonds, Series 2016B (Environmental Impact Bonds) in the aggregate principal amount of \$25,000,000 (the "Series 2016B Subordinate Bonds") to (a) finance certain Costs of the System (specifically, a portion of the costs of the Authority's DC Clean Rivers Project); and (b) pay certain costs of issuance, (ii) designated the Series 2016B Subordinate Bonds as Subordinate Debt, as Variable Rate Indebtedness and as Tender Indebtedness for purposes of the Indenture, and (iii) secured the Series 2016B Subordinate Bonds by a pledge of Net Revenues subordinate to the pledge of Net Revenues that secures Senior Debt and on a parity with the pledge of Net Revenues that secures the Series 2004 Subordinated Bonds, the Series 2007A Subordinated Bonds, the Series 2008A Subordinated Bonds, the Series 2010 Notes, the Series 2010A Subordinated Bonds, the Series 2012A Subordinate Bonds, the Series 2012B Subordinate Bonds, the Series 2012C Subordinate Bonds, the Series 2013A Subordinate Bonds, Series 2014B Subordinate Bonds, Series 2015A Subordinate Bonds, the Series 2015B Subordinate Bonds, the Series 2016A Subordinate Bonds and other Subordinate Debt, including, without limitation, other Subordinate Debt that the Authority may issue from time to time in the future; and

WHEREAS, the Authority now intends to: (i)(a) issue Public Utility Senior Lien Revenue Bonds, Series 2017A in the aggregate principal amount of \$ 2017A Senior Lien Bonds") to (1) finance certain Costs of the System (specifically, a portion of the costs of the Authority's DC Clean Rivers Project), and (2) pay issuance costs of the Series 2017A Senior Lien Bonds, (b) designate the Series 2017A Senior Lien Bonds as Senior Debt for purposes of the Indenture, and (iii) secured the Series 2017A Senior Lien Bonds by a pledge of Net Revenues on a parity with the pledge of Net Revenues that secures the Series 1998 Senior Lien Bonds, the Series 2009A Senior Lien Bonds, the Series 2014A Senior Lien Bonds, and other Senior Debt, including, without limitation, other Senior Debt that the Authority may issue from time to time in the future, and (ii)(a) issue the Public Utility Senior Lien Revenue Bonds, Series 2017B in an aggregate principal amount of \$ (the "Series 2017B Senior Lien Bonds" and, together with the Series 2017A Senior Lien Bonds, the "Series 2017A/B Senior Lien Bonds") to (1) finance certain Costs of the System, and (2) pay issuance costs of the Series 2017B Senior Lien Bonds, (b) designate the Series 2017B Senior Lien Bonds as Senior Debt for purposes of the Indenture, and (iii) secured the Series 2017B Senior Lien Bonds by a pledge of Net Revenues on a parity with the pledge of Net Revenues that secures the Series 1998 Senior Lien Bonds, the Series 2009A Senior Lien Bonds, the Series 2014A Senior Lien Bonds, and other Senior Debt, including, without limitation, other Senior Debt that the Authority may issue from time to time in the future; and

NOW THEREFORE, in consideration of the premises and the mutual covenants and agreements hereinafter contained, the parties hereto agree, as follows:

ARTICLE I TWENTY-SECOND SUPPLEMENTAL INDENTURE

Section 101. Authorization of Twenty-Second Supplemental Indenture.

This Twenty-Second Supplemental Indenture is authorized and executed by the Authority and delivered to the Trustee pursuant to and in accordance with Articles III and X of the Master Indenture. All terms, covenants, conditions and agreements of the Indenture shall apply with full force and effect to the Series 2017A/B Senior Lien Bonds as Subordinate Debt and to the Holders thereof as Holders of Subordinate Debt, except as otherwise provided in this Twenty-Second Supplemental Indenture.

Section 102. Definitions.

Except as otherwise defined in this Twenty-Second Supplemental Indenture, capitalized words and terms defined in the Master Indenture as amended by the First Supplemental Indenture, the Second Supplemental Indenture, the Third Supplemental Indenture, the Fourth Supplemental Indenture, the Fifth Supplemental Indenture, the Sixth Supplemental Indenture, the Seventh Supplemental Indenture, the Tenth Supplemental Indenture, the Eleventh Supplemental Indenture, the Twelfth Supplemental Indenture, the Thirteenth Supplemental Indenture, the Fourteenth Supplemental Indenture, the Seventeenth Supplemental Indenture, the Sixteenth Supplemental Indenture, the Seventeenth Supplemental Indenture, the Supplemental Indenture, the Nineteenth Supplemental Indenture, the Twentieth Supplemental Indenture and the Twenty-First Supplemental Indenture are used in this Twenty-Second Supplemental Indenture with the meanings assigned to them therein. In addition, the following words as used in this Twenty-Second Supplemental Indenture have the following meanings unless the context or use clearly indicates another or different intent or meaning:

"Book-entry form" or "book-entry system" means a form or system under which the physical Series 2017A/B Senior Lien Bond certificates in fully registered form are issued only to a Depository or its nominee as Holder, with the certificated Series 2017A/B Senior Lien Bonds held by and "immobilized" in the custody of the Depository, and the book-entry system, maintained by and the responsibility of the Depository and not maintained by or the responsibility of the Authority or the Trustee, is the record that identifies, and records the transfer of the interests of, the owners of beneficial, book-entry interests in the Series 2017A/B Senior Lien Bonds.

"Depository" means any securities depository that is a clearing agency under federal law operating and maintaining, with its participants or otherwise, a book-entry system to record ownership of book-entry interests in Series 2017A/B Senior Lien Bonds, and to effect transfers of book-entry interests in Series 2017A/B Senior Lien Bonds, and includes and means initially The Depository Trust Company (a limited purpose trust company) ("DTC"), New York, New York.

"Twenty-Second Supplemental Indenture" means this Twenty-Second Supplemental Indenture of Trust, dated February ____, 2017, between the Authority and the Trustee, which

supplements and amends the Master Indenture, as previously supplemented and amended by the First Supplemental Indenture, the Second Supplemental Indenture, the Third Supplemental Indenture, the Fourth Supplemental Indenture, the Fifth Supplemental Indenture, the Sixth Supplemental Indenture, the Seventh Supplemental Indenture, the Eighth Supplemental Indenture, the Ninth Supplemental Indenture, the Tenth Supplemental Indenture, the Eleventh Supplemental Indenture, the Fourteenth Supplemental Indenture, the Fifteenth Supplemental Indenture, the Sixteenth Supplemental Indenture, the Seventeenth Supplemental Indenture, the Eighteenth Supplemental Indenture, the Nineteenth Supplemental Indenture, the Twentieth Supplemental Indenture and the Twenty-First Supplemental Indenture.

"Interest Payment Dates" for the Series 2017A/B Senior Lien Bonds means each April 1 and October 1 commencing April 1, 2017, and thereafter during the time the Series 2017A/B Senior Lien Bonds are outstanding.

"Series 2017A Construction Account" means the Series 2017A Construction Account established by this Twenty-Second Supplemental Indenture in the Construction Fund.

"Series 2017A Costs of Issuance Subaccount" means the Series 2017A Costs of Issuance Subaccount established by this Twenty-Second Supplemental Indenture in the Series 2017A Construction Account of the Construction Fund.

"Series 2017B Construction Account" means the Series 2017B Construction Account established by this Twenty-Second Supplemental Indenture in the Construction Fund.

"Series 2017B Costs of Issuance Subaccount" means the Series 2017B Costs of Issuance Subaccount established by this Twenty-Second Supplemental Indenture in the Series 2017B Construction Account of the Construction Fund.

"Series 2017A/B Rebate Fund" means the Series 2017A/B Rebate Fund established by this Twenty-Second Supplemental Indenture.

"Series 2017A/B Resolution"	means Resolution No,	, adopted by the Authority's
Board of Directors on	, authorizing the Series 201	7A/B Senior Lien Bonds.

"Series 2017A/B Senior Lien Bond Event of Default" means any of the events defined as such in Section 703 of this Twenty-Second Supplemental Indenture.

"Series 2017A/B Senior Lien Bondholder" or "holder of Series 2017A/B Senior Lien Bonds" means the registered owner of a Series 2017A/B Senior Lien Bond.

"Series 2017A/B Senior Lien Bonds Interest Subaccount" means the Series 2017A/B Senior Lien Bonds Interest Subaccount established by this Twenty-Second Supplemental Indenture in the Subordinate Interest Account in the Subordinate Bond Fund.

"Series 2017A/B Senior Lien Bonds Principal Subaccount" means the Series 2017A/B Senior Lien Bonds Principal Subaccount established by this Twenty-Second Supplemental Indenture in the Subordinate Principal Account in the Subordinate Bond Fund.

Section 103. Reference to Articles and Sections.

Unless otherwise indicated, all references herein to particular articles or sections are references to articles or sections of this Twenty-Second Supplemental Indenture.

ARTICLE II AUTHORIZATION, DETAILS AND FORM OF SERIES 2017A/B SENIOR LIEN BONDS

Section 201. Authorization of Series 2017A/B Senior Lien Bonds.

Pursuant to Article III of the Master Indenture and, specifically, Section 303 thereof, and the Series 2017A/B Resolution, the Authority is authorized to issue:

- (i) Series 2017A Senior Lien Bonds in the aggregate principal amount of \$______, for the purpose of (a) financing Costs of the System, and (b) paying issuance costs of the Series 2017A Senior Lien Bonds. The Series 2017A Senior Lien Bonds shall be issued as Senior Lien Debt pursuant to the Indenture; and
- (ii) Series 2017B Senior Lien Bonds in the aggregate principal amount of \$_______, for the purpose of (a) financing Costs of the System, and (b) paying issuance costs of the Series 2017B Senior Lien Bonds. The Series 2017B Senior Lien Bonds shall be issued as Senior Lien Debt pursuant to the Indenture.

Section 202. Details of Series 2017A/B Senior Lien Bonds.

The Series 2017A Senior Lien Bonds shall be designated "Public Utility Senior Lien Revenue Bonds, Series 2017A (Green Bonds)", shall be dated February ___, 2017, shall be issuable only as fully registered bonds in denominations of \$5,000 and multiples thereof, shall be numbered RA-1 upward and shall bear interest at rates, payable semiannually on the Interest Payment Dates, until their final payment or maturity, and shall mature on October 1 in years and amounts, as follows:

Due		
(Oct. 1)	Principal Amount	Interest Rate
2018		
<mark>2019</mark>		
<mark>2020</mark>		
<mark>2021</mark>		
<mark>2022</mark>		
<mark>2023</mark>		
<mark>2023</mark>		
<mark>2024</mark>		
<mark>2024</mark>		
<mark>2025</mark>		
<mark>2026</mark>		
<mark>2027</mark>		
<mark>2045</mark>		

2045

The Series 2017B Senior Lien Bonds shall be designated "Public Utility Senior Lien Revenue Bonds, Series 2017B", shall be dated February ___, 2017, shall be issuable only as fully registered bonds in denominations of \$5,000 and multiples thereof, shall be numbered RB-1 upward and shall bear interest at rates, payable semiannually on the Interest Payment Dates, until their final payment or maturity, and shall mature on October 1 in years and amounts, as follows:

Due		
(Oct. 1)	Principal Amount	Interest Rate
2028		
2029		
2030		
2031		
2032		
2033		
2034		
2035		
2036		
2037		
2040		
2044		

Each Series 2017A/B Senior Lien Bond shall bear interest: (a) from its date, if such Series 2017A/B Senior Lien Bond is authenticated prior to the first Interest Payment Date, or (b) otherwise from the Interest Payment Date that is, or immediately precedes, the date on which such Series 2017A/B Senior Lien Bond is authenticated; provided, however, that if at the time of authentication of any Series 2017A/B Senior Lien Bond payment of interest is in default, such Series 2017A/B Senior Lien Bond shall bear interest from the date to which interest has been paid. The interest payable on the Series 2017A/B Senior Lien Bonds will be computed on the basis of a 360-day year of twelve 30-day months.

Principal of and premium, if any, on the Series 2017A/B Senior Lien Bonds shall be payable to the registered owners thereof upon the surrender of the applicable Series 2017A/B Senior Lien Bonds at the designated office of the Trustee. Interest on the Series 2017A/B Senior Lien Bonds shall be payable by check or draft mailed to the registered owners at their addresses as they appear on the fifteenth day of the month preceding the Interest Payment Date on the registration books kept by the Trustee; provided, however, if the Series 2017A/B Senior Lien Bonds are registered in the name of a Depository or its nominee as registered owner or at the option of a registered owner of at least \$1,000,000 of Series 2017A/B Senior Lien Bonds, payment shall be made by wire transfer to an account within the United States pursuant to the wire instructions received by the Trustee with respect to each such payment from such registered owner. Principal, premium, if any, and interest shall be payable in lawful money of the United States of America.

Section 203. Form of Bonds.

The Series 2017A/B Senior Lien Bonds shall be in substantially the forms set forth in **Exhibits A-1 and A-2**, with such appropriate variations, omissions and insertions as are permitted or required by the Indenture.

Section 204. Depository Provisions.

The Series 2017A/B Senior Lien Bonds shall initially be issued to a Depository for holding in a book-entry system. Those Series 2017A/B Senior Lien Bonds shall be registered in the name of the Depository or its nominee, as registered owner, and immobilized in the custody of the Depository or the Trustee on behalf of the Depository; and shall not be transferable or exchangeable, except for transfer to another Depository or to another nominee of a Depository, without further action by the Authority.

If any Depository determines not to continue to act as a Depository for the Series 2017A/B Senior Lien Bonds for holding in a book-entry system or the Authority determines to remove the Series 2017A/B Senior Lien Bonds from a Depository, the Authority may attempt to have established a securities depository/book-entry system relationship with another qualified Depository. If the Authority does not or is unable to do so, the Authority, after making provision for notification of the owners of book-entry interests by appropriate notice to the then Depository and any other arrangements it deems necessary, shall permit withdrawal of the Series 2017A/B Senior Lien Bonds from the Depository, and shall execute and direct the Trustee to authenticate and deliver Series 2017A/B Senior Lien Bond certificates, in fully registered form, to the assigns of the Depository or its nominee (if such Series 2017A/B Senior Lien Bonds were held by a nominee), all at the cost and expense (including costs of printing or otherwise preparing and delivering replacement Series 2017A/B Senior Lien Bonds), if the event is not the result of Authority action or inaction, of those persons requesting that authentication and delivery. Series 2017A/B Senior Lien Bond certificates authenticated and delivered pursuant to this paragraph shall be in authorized denominations. In the event that Series 2017A/B Senior Lien Bonds shall cease to be in book-entry form, then the Authority or the Depository shall provide to the Trustee the name, address of record and taxpayer identification number of each registered holder thereof. The Trustee may rely on such information without any investigation.

If the Series 2017A/B Senior Lien Bonds are withdrawn from a Depository and printed bond certificates in fully registered form are or are to be authenticated and delivered pursuant to this Section, and if, in the opinion of Bond Counsel addressed to the Trustee, the delivery of coupon bonds payable to bearer would not result in the interest on any of the Series 2017A/B Senior Lien Bonds then outstanding becoming includable in gross income for federal income tax purposes, the Authority, without the consent of or notice to any of the holders of the Series 2017A/B Senior Lien Bonds, may authorize the exchange of Series 2017A/B Senior Lien Bond certificates in fully registered form or Series 2017A/B Senior Lien Bonds under a book-entry system for coupon bonds payable to bearer, in an aggregate principal amount not exceeding the then unmatured and unredeemed principal amount of the Series 2017A/B Senior Lien Bonds, bearing interest at the same rate and maturing on the same date, with coupons attached representing all unpaid interest due or to become due thereon. Such certificated Series 2017A/B

Senior Lien Bonds will be registrable, transferable and exchangeable as set forth in Section 204 and Section 205 of the Master Indenture.

So long as a Depository holds the Series 2017A/B Senior Lien Bonds in a book-entry system (i) it or its nominee shall be the registered owner of the Series 2017A/B Senior Lien Bonds, (ii) notwithstanding anything to the contrary in this Twenty-Second Supplemental Indenture, determinations of persons entitled to payment of principal, premium, if any, and interest, transfers of ownership and exchanges and receipt of notices shall be the responsibility of the Depository and shall be effected pursuant to rules and procedures established by such Depository, (iii) the Authority and the Trustee shall not be responsible or liable for maintaining, supervising or reviewing the records maintained by the Depository, its participants or persons acting through such participants, and (iv) references in this Twenty-Second Supplemental Indenture to registered owners of the Series 2017A/B Senior Lien Bonds shall mean such Depository or its nominee and shall not mean the beneficial owners of the Series 2017A/B Senior Lien Bonds.

Section 205. Delivery of Series 2017A/B Senior Lien Bonds.

The Trustee shall authenticate and deliver the Series 2017A/B Senior Lien Bonds when there have been filed with or delivered to it the following items:

- (i) An original executed counterpart of this Twenty-Second Supplemental Indenture;
- (ii) A certified copy of applicable resolution(s) of the Board of Directors of the Authority and related Certificate of Award: (a) authorizing the execution and delivery of the Twenty-Second Supplemental Indenture, and (b) authorizing the issuance, sale, award, execution and delivery of the Series 2017A/B Senior Lien Bonds.
- (iii) A certificate signed by an Authorized Representative of the Authority and dated the date of such issuance, to the effect that:
- (a) Either: (1) upon and immediately following such issuance, no Event of Default has occurred which has not been cured or waived, and no event or condition exists which, with the giving of notice or lapse of time or both, would become an Event of Default, or (2) if any such event or condition is happening or existing, specifying such event or condition, stating that the Authority will act with due diligence to correct such event or condition after the issuance of the Series 2017A/B Senior Lien Bonds, and describing in reasonable detail the actions to be taken by the Authority toward such correction; and
- (b) All required approvals, limitations, conditions and provisions precedent to the issuance of the Series 2017A/B Senior Lien Bonds have been obtained, observed, met and satisfied.
- (iv) An Opinion or Opinions of Counsel, subject to customary exceptions and qualifications, substantially to the effect that this Twenty-Second Supplemental Indenture has been duly authorized, executed and delivered to the Trustee, is a valid, binding and enforceable obligation of the Authority, and complies in all respects with the requirements of the Indenture.

- (v) An opinion or opinions of Bond Counsel, subject to customary exceptions and qualifications, substantially to the effect that the issuance of the Series 2017A/B Senior Lien Bonds has been duly authorized, that the Series 2017A/B Senior Lien Bonds are valid and binding limited obligations of the Authority, and that the interest on the Series 2017A/B Senior Lien Bonds is excludable from gross income for purposes of Federal income taxation.
- (vi) A certificate of an Authorized Representative of the Authority, stating that rates, fees and charges are in effect or scheduled to go into effect to meet the Rate Covenant immediately after the issuance of the Series 2017A/B Senior Lien Bonds.
- (vii) A request and authorization of the Authority, signed by an Authorized Representative of the Authority, to the Trustee to authenticate and deliver such Bonds to the purchaser upon payment to the Trustee in immediately available funds for the account of the Authority of a specified sum plus accrued interest to the date of delivery.

ARTICLE III REDEMPTION OF SERIES 2017A/B SENIOR LIEN BONDS

Section 301. Redemption Dates and Prices.

The Series 2017A/B Senior Lien Bonds may not be called for redemption by the Authority except as provided below:

(i) Optional Redemption. (a) The Series 2017A Senior Lien Bonds maturing on or after, are subject to redemption prior to maturity at the option of the Authority on or after, from any source, in whole or in part on any date, in such order of maturities as shall be determined by the Authority (and by lot within a maturity), as a redemption price of 100% of the principal amount thereof, together with accrued interest, it any, to the redemption date.
(b) The Series 2017B Senior Lien Bonds maturing on or after, are subject to redemption prior to maturity at the option of the Authority on and after, from any source, in whole or in part on any date, in such order of maturities as shall be determined by the Authority (and by lot within a maturity), at a redemption price of 100% of the principal amount thereof, together with accrued interest, if any, to the redemption date
(ii) <u>Mandatory Redemption</u> . (a) The Series 2017A Senior Lien Bonds bearing interest at a rate of%, and maturing on (the " Term Series 2017A Senior Lien Bonds"), are required to be redeemed prior to maturity on October 1 in years and amounts upon payment of 100% of the principal amount thereof plus interest accrued to the redemption date, as follows:
The Term Series 2017A Senior Lien Bonds are subject to mandatory sinking fund redemption on each October 1 as set forth below:

Amount

Year

	*Fina	l Maturity		
on be redeemed pri	(the " or to maturity on (Term Series 2 October 1 in years	interest at a rate of 2017A Senior Lien Bonds" and amounts upon paymer edemption date, as follows), are required to at of 100% of the
			Senior Lien Bonds are seach October 1 as set forth l	
		Year	Amount	
	*Fina	l Maturity		
Term Series 20 October 1 in ye	17B Senior Lien	Bonds"), are requupon payment of 1	aturing onired to be redeemed prio 00% of the principal amo	r to maturity on
			Lien Bonds are subject to ner 1 as set forth below:	nandatory
		<u>Year</u>	Amount	
	*Fina	ıl Maturity		
Series 2017B Se years and amount	enior Lien Bonds")	, are required to be of 100% of the pri	ng on (the redeemed prior to maturity ncipal amount thereof plus	y on October 1 in
			Lien Bonds are subject to ner 1 as set forth below:	nandatory
		Year	Amount	

*Final Maturity

The Trustee shall provide for a mandatory redemption of the Term Series 2017A/B Senior Lien Bonds in accordance with the schedules set forth above; provided, however, that on or before the 70th day next preceding any such mandatory redemption date, the Authority may:

- (i) deliver to the Trustee for cancellation Term Series 2017A/B Senior Lien Bonds of the maturity required to be redeemed on such mandatory redemption date in any aggregate principal amount desired; or
- (ii) instruct the Trustee in writing to apply a credit against the Authority's next mandatory redemption obligation for any such Term Series 2017A/B Senior Lien Bonds that previously have been redeemed (other than through mandatory redemption) and canceled but not theretofore applied as a credit against any mandatory redemption obligation.

Upon the occurrence of any of the events described in clauses (i) or (ii) of the preceding sentence, the Trustee shall credit against the Authority's mandatory redemption obligation on the next mandatory redemption date the amount of such Term Series 2017A/B Senior Lien Bonds so delivered or previously redeemed. Any principal amount of such Term Series 2017A/B Senior Lien Bonds in excess of the principal amount required to be redeemed on such mandatory redemption date shall be similarly credited in an amount equal to the principal of such Term Series 2017A/B Senior Lien Bonds so purchased towards the sinking fund installments for the Term Series 2017A/B Senior Lien Bonds of such maturity on a pro rata basis in accordance with a certificate of an Authorized Representative of the Authority, which will direct the reduction of a ratable portion of each annual mandatory sinking fund installment requirement in accordance with the procedures set forth below. Within seven days of receipt of such Term Series 2017A/B Senior Lien Bonds or instructions to apply as a credit, any amounts remaining in the Sinking Fund Account in excess of the amount required to fulfill the remaining required mandatory redemption obligation on the next mandatory redemption date shall be used in such manner as determined at the written direction of the Authority.

The particular maturities of the Series 2017A/B Senior Lien Bonds to be redeemed at the option of the Authority will be determined by the Authority in its sole discretion.

If fewer than all of the Series 2017A/B Senior Lien Bonds are called for redemption, they shall be called in such order of maturity as the Authority may determine and direct the Trustee in writing. If less than all of the Series 2017A/B Senior Lien Bonds of any maturity date is called for redemption, the Series 2017A/B Senior Lien Bonds to be redeemed shall be selected by the Depository pursuant to its rules and procedures or, if the book-entry system is discontinued, shall be selected by the Trustee by lot in such manner as the Trustee in its discretion may determine. The portion of any Series 2017A/B Senior Lien Bond to be redeemed shall be in the principal amount of \$5,000 or some integral multiple thereof. In selecting Series 2017A/B Senior Lien Bonds for redemption, each Series 2017A/B Senior Lien Bond shall be considered as representing that number of Bonds which is obtained by dividing the principal amount of such Series 2017A/B Senior Lien Bond by \$5,000. If a portion of a Series 2017A/B Senior Lien Bond shall be called for redemption, a new Series 2017A/B Senior Lien Bond in principal amount

equal to the unredeemed portion thereof shall be issued to the registered owner upon the surrender thereof.

Section 302. Notice of Redemption.

Notice of redemption of Series 2017A/B Senior Lien Bonds shall be given in the manner set forth in Section 402 of the Master Indenture, as though the Series 2017A/B Senior Lien Bonds constituted "Bonds" for purposes of that Section; provided, however, that notices of redemption of Series 2017A/B Senior Lien Bonds sent pursuant to Section 402 of the Master Indenture shall either (i) explicitly state that the proposed redemption is conditioned on there being on deposit in the applicable fund or account on the redemption date sufficient money to pay the full redemption price of the Series 2017A/B Senior Lien Bonds to be redeemed, or (ii) be sent only if sufficient money to pay the full redemption price of the Series 2017A/B Senior Lien Bonds to be redeemed is on deposit in the applicable fund or account. Notwithstanding the foregoing and the otherwise applicable requirement of Section 402 of the Master Indenture that the Trustee send notice of a call for redemption not fewer than 30 days prior to the redemption date, the Trustee may send any notice of redemption of Series 2017A/B Senior Lien Bonds not fewer than 20 days prior to the redemption date or such shorter period of time as may be acceptable to the Depository while the Series 2017A/B Senior Lien Bonds are in book-entry form and registered with a Depository, initially DTC.

ARTICLE IV APPLICATION OF PROCEEDS OF SERIES 2017A/B SENIOR LIEN BONDS

Section 401. Application of Proceeds of Series 2017A/B Senior Lien Bonds; Application of Related Amounts.

The net proceeds of the Series 2017A/B Senior Lien Bonds in the amount of
\$, which represents the par amount of the Series 2017A/B Senior Lien Bonds
, which represents the par amount of the Series 2017A/B Senior Lien Bonds (\$), minus the underwriters' discount (\$), and plus original issue premium (\$) by the Original Purchasers at the request and direction of the
premium (\$) by the Original Purchasers, at the request and direction of the
Authority shall be applied as follows:
(i) \$ from the net proceeds of the Series 2017A Senior Lier
Bonds shall be deposited in the Series 2017A Construction Account.
(ii) \$ from the net proceeds of the Series 2017B Senior Lier
Bonds shall be deposited in the Series 2017B Construction Account.
(iii) \$ from the net proceeds of the Series 2017A Senior Lien Bonds
shall be deposited in the Series 2017A Costs of Issuance Subaccount of the Series 2017A
Construction Account of the Construction Fund and used to pay costs of issuance of the Series
2017A Senior Lien Bonds.

(v) \$_____ from the net proceeds of the Series 2017B Senior Lien Bonds shall be deposited in the Series 2017B Costs of Issuance Subaccount of the Series 2017B Construction Account of the Construction Fund and used to pay costs of issuance of the Series 2017B Senior Lien Bonds.

ARTICLE V FUNDS AND ACCOUNTS

Section 501. Series 2017A Construction Account and Series 2017B Construction Account.

- (i) In the Construction Fund, there shall be established a Series 2017A Construction Account and, within that Account, a Series 2017A Costs of Issuance Subaccount. The portion of the proceeds of the Series 2017A Senior Lien Bonds specified in Section 401(iv) shall be deposited in the Series 2017A Costs of Issuance Subaccount and used to pay costs of issuance related to the Series 2017A Senior Lien Bonds. When all costs of issuance have been paid or moneys have been reserved to pay all remaining unpaid costs of issuance, the balance of any Series 2017A Senior Lien Bond proceeds remaining in excess of the amount to be reserved for payment of unpaid costs of issuance shall be deposited in the Subordinate Bond Fund to be used solely to pay principal of and interest on the Series 2017A Senior Lien Bonds, in either case to the extent approved by Bond Counsel.
- (ii) In the Construction Fund, there shall be established a Series 2017B Construction Account and, within that Account, a Series 2017B Costs of Issuance Subaccount. The portion of the proceeds of the Series 2017B Senior Lien Bonds specified in Section 401(v) shall be deposited in the Series 2017B Costs of Issuance Subaccount and used to pay costs of issuance related to the Series 2017B Senior Lien Bonds. When all costs of issuance have been paid or moneys have been reserved to pay all remaining unpaid costs of issuance, the balance of any Series 2017B Senior Lien Bond proceeds remaining in excess of the amount to be reserved for payment of unpaid costs of issuance shall be deposited in the Subordinate Bond Fund to be used solely to pay principal of and interest on the Series 2017B Senior Lien Bonds, in either case to the extent approved by Bond Counsel.

Section 502. Series 2017A/B Senior Lien Bonds Subaccounts in the Subordinate Interest Account and Subordinate Principal Account.

- (i) Within the Interest Account there shall be established a "Series 2017A/B Senior Lien Bonds Interest Subaccount." Within the Principal Account there shall be established a "Series 2017A/B Senior Lien Bonds Principal Subaccount."
- (ii) In accordance with Section 604(a)(1) of the Master Indenture, Net Revenues shall be deposited in the Series 2017A/B Senior Lien Bond Interest Subaccount on or prior to the last Business Day of each of the six months prior to any month in which an Interest Payment Date occurs, in an amount equal to one-sixth (1/6) of the interest due and payable on the Series 2017A/B Senior Lien Bonds on such Interest Payment Date.
- (iii) In accordance with Section 604(a)(2) of the Master Indenture, Net Revenues shall be deposited in the Series 2017A/B Senior Lien Bonds Principal Subaccount on or prior to the

last Business Day of each of the twelve months prior to any month in which principal of Series 2017A/B Senior Lien Bonds is payable on their stated maturity date or pursuant to mandatory redemption requirements, in an amount equal to one-twelfth (1/12) of the principal amount scheduled to be due and payable on the Series 2017A/B Senior Lien Bonds in such month.

Section 503. Series 2017A/B Rebate Fund. There is hereby established the Series 2017A/B Rebate Fund which shall be used in accordance with (i) Article VIII hereof, and (ii) the Authority's covenants in the Tax Compliance Certificate of the Issuer, executed by the Authority, dated as of February ____, 2017.

ARTICLE VI SECURITY FOR SERIES 2017A/B SENIOR LIEN BONDS

Section 601. Security for Series 2017A/B Senior Lien Bonds.

The Series 2017A/B Senior Lien Bonds shall be equally and ratably secured under the Master Indenture of Trust with any other Senior Debt issued pursuant to Article III of the Master Indenture of Trust, without preference, priority or distinction of any Senior Debt over any other Senior Debt, as provided in the Master Indenture of Trust, except with respect to any separate Account relating to a specific series of Senior Debt in the Debt Service Reserve Fund created pursuant to Section 606 of the Master Indenture.

Pursuant to the WASA Act (as defined in the Master Indenture), the Authority hereby includes in this Twenty-Second Supplemental Indenture the pledge of the District to the Authority and any holders of its bonds that, except as provided in the WASA Act, the District will not limit or alter rights vested in the Authority to fulfill agreements made with holders of the bonds, or in any way impair the rights and remedies of the holders of the bonds until the bonds, together with the interest thereon, with interest on any unpaid installments of interest, and all costs and expenses in connection with any action or proceedings by or on behalf of the holders of the bonds are fully met and discharged.

ARTICLE VII

TAX COVENANTS

Section 701. Tax Covenants – General.

- (i) The Authority covenants that it will use, and will restrict the use and investment of, the proceeds of the Series 2017A/B Senior Lien Bonds in such manner and to such extent as may be necessary so that (a) the Series 2017A/B Senior Lien Bonds will not constitute private activity bonds, arbitrage bonds or hedge bonds under Sections 141, 148 or 149 of the Code, or be treated other than as bonds to which Section 103(a) of the Code applies, and (b) the interest on the Series 2017A/B Senior Lien Bonds will not be treated as an item of tax preference under Section 57 of the Code.
- (ii) The Authority further covenants that (a) it will take or cause to be taken such actions that may be required of it for the interest on the Series 2017A/B Senior Lien Bonds to be

and remain excluded from gross income for federal income tax purposes, (b) it will not take or authorize to be taken any actions that would adversely affect that exclusion, and (c) it, or persons acting for it, will, among other acts of compliance, (1) apply the proceeds of the Series 2017A/B Senior Lien Bonds to the governmental purposes of the borrowing, (2) restrict the yield on investment property, (3) make timely and adequate payments to the federal government, including but not limited to the required payment of any Rebate Amounts under Section 148(f) of the Code, as further provided in Section 802 hereof, (4) maintain books and records and make calculations and reports, and (5) refrain from certain uses of those proceeds and, as applicable, of property financed with such proceeds, all in such manner and to the extent necessary to assure that exclusion of that interest under the Code.

The Authorized Representative of the Authority is hereby authorized (a) to make or effect any election, selection, designation, choice, consent, approval or waiver on behalf of the Authority with respect to the Series 2017A/B Senior Lien Bonds as the Authority is permitted to make or give under the federal income tax laws, including, without limitation, any of the elections provided for or available under Section 148 of the Code, for the purpose of assuring, enhancing or protecting favorable tax treatment or status of the Series 2017A/B Senior Lien Bonds or interest thereon or assisting compliance with requirements for that purpose, reducing the burden or expense of such compliance, reducing the rebate amount or payments of penalties, or making payments of special amounts in lieu of making computations to determine, or paying, excess earnings as rebate, or obviating those amounts or payments, as determined by the Authorized Representative of the Authority, which action shall be in writing and signed by the Authorized Representative of the Authority, (b) to take any and all other actions, make or obtain calculations, make payments, and make or give reports, covenants and certifications of and on behalf of the Authority, as may be appropriate to assure the exclusion of interest from gross income and the intended tax status of the Series 2017A/B Senior Lien Bonds, and (c) to give one or more appropriate certificates, for inclusion in the transcript of proceedings for the Series 2017A/B Senior Lien Bonds, setting forth the reasonable expectations of the Authority regarding the amount and use of all the proceeds of the Series 2017A/B Senior Lien Bonds, the facts, circumstances and estimates on which they are based, and other facts and circumstances relevant to the tax treatment of the interest on and the tax status of the Series 2017A/B Senior Lien Bonds.

Section 702. Calculation and Payment of Rebate.

(i) As used in this Section 802:

"Bond Year" means the annual period (or such shorter period from the date of issuance of the Series 2017A/B Senior Lien Bonds) provided for the computation of the Rebate Amount for the Series 2017A/B Senior Lien Bonds under Section 148(f) of the Code. The last day of a Bond Year shall be the close of business on the day preceding the anniversary of the issuance of the Series 2017A/B Senior Lien Bonds unless the Authority selects another date on which to end a Bond Year in the manner permitted by the Code, and notifies the Trustee in writing of such selection.

"Computation Date" means:

- (i) (a) the last day of each fifth Bond Year while the Series 2017A/B Senior Lien Bonds are outstanding, and (b) the date on which the last Series 2017A/B Senior Lien Bonds are retired, or
- (ii) such other date or dates elected by the Authority as may be permitted under the Code for computation of the Rebate Amount.

"Rebate Amount" means, as of any Computation Date, the amount then payable (or payable within 60 days of such date) to the United States pursuant to Section 148(f) of the Code and the applicable Treasury Regulations (final or temporary) thereunder.

- (ii) Promptly after each Computation Date, the Authority, or an independent public accounting firm or Bond Counsel engaged by or on behalf of the Authority, shall calculate the Rebate Amount, if any, as of that Computation Date.
- (iii) Within 60 days after each Computation Date, and at any other time directed by the Authorized Representative of the Authority, the Authority shall pay to the United States in accordance with Section 148(f), from any lawfully available funds, an amount equal to 90% (or such greater percentage not in excess of 100% as the Authorized Representative of the Authority may determine to pay) of the Rebate Amount determined from the Delivery Date to the end of such fifth Bond Year (but less any portion of the Rebate Amount previously paid to the United States pursuant to this Section). Within 60 days after the payment in full of all outstanding Series 2017A/B Senior Lien Bonds, the Authorized Representative of the Authority, on behalf of the Authority shall pay to the United States in accordance with Section 148(f), from any lawfully available funds, an amount equal to 100% of the Rebate Amount determined from the Delivery Date to the date of such payment in full of all outstanding Series 2017A/B Senior Lien Bonds (but less any portion of the Rebate Amount previously paid to the United States pursuant to this Section 802(c).
- (iv) The Authority shall keep or provide for the keeping of records of the computations made pursuant to this Section 802, payments made pursuant to this Section and all original source documents pertaining to the investment of gross proceeds and the expenditure of gross proceeds for at least six years after the maturity or retirement of the Series 2017A/B Senior Lien Bonds.
- (v) The Authority, in connection with investments of the proceeds of the Series 2017A/B Senior Lien Bonds in nonpurpose investments, will not pay or agree to pay to a party other than the United States any portion of the Rebate Amount with respect to the Series 2017A/B Senior Lien Bonds through a transaction or series of transactions that reduce the aggregate amount earned on all nonpurpose investments in which gross proceeds of the Series 2017A/B Senior Lien Bonds are invested or that result in a smaller profit or a larger loss than would have resulted in an arm's length transaction in which yield on the Series 2017A/B Senior Lien Bonds was not relevant to the Authority or the other party.

- (vi) If the Authority and the Trustee receive a written opinion of Bond Counsel that such action would not adversely affect the exclusion from gross income for federal income tax purposes of interest on the Series 2017A/B Senior Lien Bonds, the Authorized Representative of the Authority may, without the consent of or notice to any bondholders, adopt supplements to this Twenty-Second Supplemental Indenture to the extent necessary or desirable to modify, supplement or replace this Section 802 consistent with the other covenants of the Authority in this Twenty-Second Supplemental Indenture.
- (vii) If at any time the Authority receives a written opinion of Bond Counsel that failure to comply with this Section 802 or any part of this Section 802 would not adversely affect the exclusion of interest on the Series 2017A/B Senior Lien Bonds from gross income for federal income tax purposes, the Authority may discontinue compliance with this Section 802 or part of this Section 802 to the extent set forth in that opinion.

ARTICLE VIII MISCELLANEOUS

Section 801. Limitation of Rights.

With the exception of rights herein expressly conferred, nothing expressed or mentioned in or to be implied from this Twenty-Second Supplemental Indenture or the Series 2017A/B Senior Lien Bonds is intended or shall be construed to give to any person other than the parties hereto, the Series 2017A/B Senior Lien Bondholders any legal or equitable right, remedy or claim under or in respect to this Twenty-Second Supplemental Indenture or any covenants, conditions and agreements herein contained since this Twenty-Second Supplemental Indenture and all of the covenants, conditions and agreements hereof are intended to be and are for the sole and exclusive benefit of the parties hereto, the Series 2017A/B Senior Lien Bondholders as herein provided.

Section 802. Severability.

If any provision of this Twenty-Second Supplemental Indenture shall be held invalid by any court of competent jurisdiction, such holding shall not invalidate any other provision hereof, and this Twenty-Second Supplemental Indenture shall be construed and enforced as if such illegal provision had not been contained herein.

Section 803. Successors and Assigns.

This Twenty-Second Supplemental Indenture shall be binding upon, inure to the benefit of and be enforceable by the parties and their respective successors and assigns.

Section 804. Limitations on Liability.

No covenant, agreement or obligation contained herein shall be deemed to be a covenant, agreement or obligation of any present or future member of the Board of Directors of the Authority or officer, employee or agent of the Authority in his or her individual capacity, and neither the members of the Board of Directors of the Authority nor any officer of the Authority executing the Series 2017A/B Senior Lien Bonds shall be liable personally on the Series 2017A/B Senior Lien Bonds or be subject to any personal liability or accountability by reason of the issuance thereof. No member of the Board of Directors of the Authority or officer, employee, agent or advisor of the Authority shall incur any personal liability with respect to any other action taken by him or her pursuant to this Twenty-Second Supplemental Indenture or the Indenture or any other document authorized by the Indenture, provided such member, officer, employee, agent or advisor acts in good faith.

Section 805. Applicable Law.

This Twenty-Second Supplemental Indenture shall be governed by the applicable laws of the District of Columbia.

Section 806. Counterparts.

This Twenty-Second Supplemental Indenture may be executed in several counterparts, each of which shall be deemed an original and all of which together shall constitute but one and the same instrument.

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IN WITNESS WHEREOF, the Authority and the Trustee have caused this Twenty-Second Supplemental Indenture to be executed in their respective corporate names as of the date first above written.

DISTRICT OF COLUMBIA WATER AND SEWER AUTHORITY
By
Chief Financial Officer
WELLS FARGO BANK, N.A., AS TRUSTEE
By
Its

EXHIBIT A-1

SERIES 2017A BOND FORM

Unless this certificate is presented by an authorized representative of The Depository Trust Company, a New York corporation ("DTC"), to the Authority or its agent for registration of transfer, exchange, or payment, and any certificate is registered in the name of Cede & Co., or in such other name as is requested by an authorized representative of DTC (and any payment is made to Cede & Co. or to such other entity as is requested by an authorized representative of DTC), ANY TRANSFER, PLEDGE, OR OTHER USE HEREOF FOR VALUE OR OTHERWISE BY OR TO ANY PERSON IS WRONGFUL inasmuch as the registered owner hereof, Cede & Co., has an interest herein.

REGISTERED NO. RA-1		REGISTERED \$
	UNITED STATES OF AMERICA	
	DISTRICT OF COLUMBIA	

WATER AND SEWER AUTHORITY

PUBLIC UTILITY SENIOR LIEN REVENUE BOND, **SERIES 2017A** (Green Bonds)

INTEREST RATE	MATURITY DATE	DATED DATE	CUSIP
	CEDE 8 CO	February, 2017	·
REGISTERED OWNER: PRINCIPAL AMOUNT:	CEDE & CO.	DOLLADS	
PRINCIPAL AMOUNT:		DOLLARS	

The District of Columbia Water and Sewer Authority (the "Authority"), for value received, hereby promises to pay upon surrender hereof at the designated corporate trust office of Wells Fargo Bank, N.A., as trustee, or its successor in trust (the "Trustee"), under the Indenture, as hereinafter defined, solely from the sources and as hereinafter provided, to the registered owner hereof, or registered assigns or legal representative, the principal sum stated above on the maturity date stated above, subject to prior redemption as hereinafter provided, and to pay, solely from such sources, interest hereon semiannually on each April 1 and October 1, beginning April 1, 2017, at the annual rate stated above, calculated on the basis of a 360-day year of twelve 30day months. Interest is payable from the date of this Series 2017A Senior Lien Bond (unless payment of interest hereon is in default, in which case this Series 2017A Senior Lien Bond shall bear interest from the date to which interest has been paid). Interest is payable by check or draft mailed to the registered owner hereof at its address as it appears on the fifteenth day of the month preceding each interest payment date on registration books kept by the Trustee; provided, however, that if the Series 2017A Senior Lien Bonds, as hereinafter defined, are registered in the name of a securities depository or its nominee as registered owner or at the option of a registered owner of at least \$1,000,000 of Series 2017A Senior Lien Bonds, payment will be made by wire transfer to an account within the United States pursuant to the most recent wire instructions received by the Trustee from such registered owner. Principal, premium, if any, and interest are payable in lawful money of the United States of America. Capitalized terms which are not defined herein shall have the meanings set forth in the Indenture.

Notwithstanding any other provision hereof, this Series 2017A Senior Lien Bond is subject to book-entry form maintained by The Depository Trust Company ("DTC"), and the payment of principal, premium, if any, and interest, the providing of notices and other matters shall be made as described in the Authority's Blanket Letter of Representations to DTC.

This Series 2017A Senior Lien Bond is one of an issue of \$ Public Utility Senior Lien Revenue Bonds, Series 2017A (Green Bonds) (the "Series 2017A Senior Lien Bonds"), of like date and tenor, except as to number, denomination, rate of interest, privilege of redemption and maturity. The Series 2017A Senior Lien Bonds are being issued on the same day as the Authority's \$ Public Utility Senior Lien Revenue Bonds, Series 2017B (the "Series 2017B Senior Lien Bonds" and, together with the Series 2017A Senior Lien Bonds, the "Series 2017A/B Senior Lien Bonds"). The Series 2017A Senior Lien Bonds are issued under a Master Indenture of Trust, dated as of April 1, 1998, between the Authority and the Trustee (f.k.a. Norwest Bank, N.A.) (the "Master Indenture"), as amended and supplemented by the Twenty-Second Supplemental Indenture of Trust, dated as of February ___, 2017, between the Authority and the Trustee (the "Twenty-Second Supplemental Indenture"), and as previously amended and supplemented by the First Supplemental Indenture, the Second Supplemental Indenture, the Third Supplemental Indenture, the Fourth Supplemental Indenture, the Fifth Supplemental Indenture, the Sixth Supplemental Indenture, the Seventh Supplemental Indenture, the Eighth Supplemental Indenture, the Ninth Supplemental Indenture, the Tenth Supplemental Indenture, the Eleventh Supplemental Indenture, the Twelfth Supplemental Indenture, the Thirteenth Supplemental Indenture, the Fourteenth Supplemental Indenture, the Fifteenth Supplemental Indenture, the Sixteenth Supplemental Indenture, the Seventeenth Supplemental Indenture, the Eighteenth Supplemental Indenture, the Nineteenth Supplemental Indenture, the Twentieth Supplemental Indenture and the Twenty-First Supplemental Indenture, all as defined in the Twenty-Second Supplemental Indenture (the "Indenture"). The Series 2017A Senior Lien Bonds are secured under the Indenture as Senior Debt by a pledge of Net Revenues on a parity with the pledge that secures other Senior Debt and senior to the pledge that secures any Subordinate Debt. Reference is hereby made to the Indenture for a description of the provisions, among others, with respect to the nature and extent of the security, the rights, duties and obligations of the Authority and the Trustee, the rights of the holders of the Series 2017A Senior Lien Bonds and the terms upon which the Series 2017A Senior Lien Bonds are issued and secured.

The Series 2017A Senior Lien Bonds and the premium, if any, and the interest thereon are limited obligations of the Authority payable from Net Revenues of the System. The Series 2017A Senior Lien Bonds shall be without recourse to the District of Columbia (the "District"). The Series 2017A Senior Lien Bonds shall not be general obligations of the District, shall not be

a pledge of or involve the faith and credit or the taxing power of the District, shall not constitut a debt of the District, and shall not constitute lending of the public credit for privat undertakings.
The Series 2017A Bonds maturing on or after, are subject to redemption prior to maturity at the option of the Authority on or after, from any source, if whole or in part on any date, in such order of maturities as shall be determined by the Authority (and by lot within a maturity), at a redemption price of 100% of the principal amount thereof together with accrued interest, if any, to the redemption date.
The Term Series 2017A Senior Lien Bonds maturing on, and bearing interest at rates of and, respectively, are required to be redeemed prior to maturity on October 1 in years and amounts upon payment of 100% of the principal amount thereof plus interest accrued to the redemption date, as follows:
The Term Series 2017A Senior Lien Bonds maturing, and bearing interest at a rate of, are subject to mandatory sinking fund redemption on each October 1 as set forth below:
Year Amount

*Final Maturity

A-1-3

The Term Series 2017A Senior Lien Bonds maturing ______, and bearing interest at a rate of ______, are subject to mandatory sinking fund redemption on each October 1 as set forth below:

Year Amount

*Final Maturity

If fewer than all of the Series 2017A Senior Lien Bonds are called for redemption, they shall be called in such order of maturity as the Authority may determine and direct the Trustee in writing. If less than all of the Series 2017A Senior Lien Bonds of any maturity date are called for redemption, the Series 2017A Senior Lien Bonds to be redeemed shall be selected by DTC pursuant to its rules and procedures or, if the book-entry system is discontinued, shall be selected by the Trustee by lot in such manner as the Trustee in its discretion may determine. The portion of any Series 2017A Senior Lien Bond to be redeemed shall be in the principal amount of \$5,000 or some integral multiple thereof. In selecting Series 2017A Senior Lien Bonds for redemption, each Series 2017A Senior Lien Bond shall be considered as representing that number of Bonds which is obtained by dividing the principal amount of such Series 2017A Senior Lien Bond by \$5,000. If a portion of a Series 2017A Senior Lien Bond shall be called for redemption, a new Series 2017A Senior Lien Bond in principal amount equal to the unredeemed portion thereof shall be issued to the registered owner upon the surrender thereof.

If any of the Series 2017A Senior Lien Bonds or portions thereof are called for redemption, the Trustee shall send notice of the call for redemption, identifying the Series 2017A Senior Lien Bonds or portions thereof to be redeemed, not fewer than 30 nor more than 60 days prior to the redemption date, by facsimile, registered or certified mail or overnight express delivery, to the registered owner of each the Series 2017A Senior Lien Bond. Provided funds for their redemption are on deposit at the place of payment on the redemption date, all Series 2017A Senior Lien Bonds or portions thereof so called for redemption shall cease to bear interest on such date, shall no longer be secured by the Indenture and shall not be deemed to be Outstanding under the provisions of the Indenture. If a portion of the Series 2017A Senior Lien Bonds shall be called for redemption, a new Series 2017A Senior Lien Bond in principal amount equal to the unredeemed portion hereof will be issued to DTC or its nominee upon the surrender hereof, or if the book-entry system is discontinued, to the registered owners of the Series 2017A Senior Lien Bonds.

The registered owner of this Series 2017A Senior Lien Bond shall have no right to enforce the provisions of the Indenture or to institute action to enforce the covenants therein or to take any action with respect to any Event of Default under the Indenture or to institute, appear in or defend any suit or other proceedings with respect thereto, except as provided in the Indenture. Modifications or alterations of the Indenture, or of any supplement thereto, may be made only to the extent and in the circumstances permitted by the Indenture.

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No covenant, agreement or obligation contained herein shall be deemed to be a covenant, agreement or obligation of any present or future member of the Board of Directors of the Authority or officer, employee or agent of the Authority in his or her individual capacity, and neither the members of the Board of Directors of the Authority nor any officer of the Authority executing the Series 2017A Senior Lien Bonds shall be liable personally on the Series 2017A Senior Lien Bonds or be subject to any personal liability or accountability by reason of the issuance thereof. No member of the Board of Directors of the Authority or officer, employee, agent or advisor of the Authority shall incur any personal liability with respect to any other action taken by him or her pursuant to this Series 2017A Senior Lien Bond, the Twenty-Second Supplemental Indenture or the Indenture or any other document authorized by the Indenture, provided such member, officer, employee, agent or advisor acts in good faith.

The Series 2017A Senior Lien Bonds are issuable as registered bonds in denominations of \$5,000 and integral multiples thereof. Upon surrender for transfer or exchange of this Series 2017A Senior Lien Bond at the principal corporate trust office of the Trustee, together with an assignment duly executed by the registered owner or its duly authorized attorney or legal representative in such form as shall be satisfactory to the Trustee, the Authority shall execute, and the Trustee shall authenticate and deliver in exchange, a new Series 2017A Senior Lien Bond or Series 2017A Senior Lien Bonds in the manner and subject to the limitations and conditions provided in the Indenture, having an equal aggregate principal amount, in authorized denominations, of the same series, form and maturity, bearing interest at the same rate and registered in the name or names as requested by the then registered owner hereof or its duly authorized attorney or legal representative. Any such exchange shall be at the expense of the Authority, except that the Trustee may charge the person requesting such exchange the amount of any tax or other governmental charge required to be paid with respect thereto.

The Trustee shall treat the registered owner as the person exclusively entitled to payment of principal, premium, if any, and interest and the exercise of all other rights and powers of the owner, except that interest payments shall be made to the person shown as owner on the fifteenth day of the month preceding each interest payment date.

All acts, conditions and things required to happen, exist or be performed precedent to and in the issuance of this Series 2017A Senior Lien Bond have happened, exist and have been performed.

This Series 2017A Senior Lien Bond shall not become obligatory for any purpose or be entitled to any security or benefit under the Indenture or be valid until the Trustee shall have executed the Certificate of Authentication appearing hereon and inserted the date of authentication hereon.

IN WITNESS WHEREOF, the DISTRICT OF COLUMBIA WATER AND SEWER
AUTHORITY has caused this Series 2017A Senior Lien Bond to be executed by the manual or
facsimile signatures of the Chairman of the Board of Directors, its seal to be affixed hereto or a
facsimile to be printed hereon and attested by the manual or facsimile signature of the Secretary
to the Authority, and this Series 2017A Senior Lien Bond to be dated February , 2017.

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Secretary to the Authority

Chairman

[SEAL]

CERTIFICATE OF AUTHENTICATION

Date Authenticated:	
This Series 2017A Senior Lien described in the within mentioned Inde	Bond is one of the Series 2017A Senior Lien Bonds enture.
	Wells Fargo Bank, N.A., Trustee
	By
	Authorized Officer or Employee

ASSIGNMENT

NOTICE: Signature(s) must be guaranteed by an Eligible Guarantor Institution such as a Commercial Institution such as a Commercial Bank, Trust Company, Securities Broker/Dealer, Credit Union, or Savings Association who is a member of a medallion program approved by The Securities Transfer Association, Inc.

NOTICE: The signature above must correspond with the name of the registered owner as it appears on the front of this Series 2017A Senior Lien Bond in every particular, without alteration or enlargement or any change whatsoever.

EXHIBIT A-2

SERIES 2017B BOND FORM

Unless this certificate is presented by an authorized representative of The Depository Trust Company, a New York corporation ("DTC"), to the Authority or its agent for registration of transfer, exchange, or payment, and any certificate is registered in the name of Cede & Co., or in such other name as is requested by an authorized representative of DTC (and any payment is made to Cede & Co. or to such other entity as is requested by an authorized representative of DTC), ANY TRANSFER, PLEDGE, OR OTHER USE HEREOF FOR VALUE OR OTHERWISE BY OR TO ANY PERSON IS WRONGFUL inasmuch as the registered owner hereof, Cede & Co., has an interest herein.

REGISTERED NO. RB-1		REGISTERED \$
	UNITED STATES OF AMERICA	

DISTRICT OF COLUMBIA WATER AND SEWER AUTHORITY

PUBLIC UTILITY SENIOR LIEN REVENUE BOND, SERIES 2017B

INTEREST RATE%	MATURITY DATE	DATED DATE February, 2017	CUSIP
REGISTERED OWNER:	CEDE & CO.		
PRINCIPAL AMOUNT:	T	HOUSAND DOLLARS	

The District of Columbia Water and Sewer Authority (the "Authority"), for value received, hereby promises to pay upon surrender hereof at the designated corporate trust office of Wells Fargo Bank, N.A., as trustee, or its successor in trust (the "Trustee"), under the Indenture, as hereinafter defined, solely from the sources and as hereinafter provided, to the registered owner hereof, or registered assigns or legal representative, the principal sum stated above on the maturity date stated above, subject to prior redemption as hereinafter provided, and to pay, solely from such sources, interest hereon semiannually on each April 1 and October 1, beginning April 1, 2017, at the annual rate stated above, calculated on the basis of a 360-day year of twelve 30-day months. Interest is payable from the date of this Series 2017B Senior Lien Bond (unless payment of interest hereon is in default, in which case this Series 2017B Senior Lien Bond shall bear interest from the date to which interest has been paid). Interest is payable by check or draft mailed to the registered owner hereof at its address as it appears on the fifteenth day of the month

preceding each interest payment date on registration books kept by the Trustee; provided, however, that if the Series 2017B Senior Lien Bonds, as hereinafter defined, are registered in the name of a securities depository or its nominee as registered owner or at the option of a registered owner of at least \$1,000,000 of Series 2017B Senior Lien Bonds, payment will be made by wire transfer to an account within the United States pursuant to the most recent wire instructions received by the Trustee from such registered owner. Principal, premium, if any, and interest are payable in lawful money of the United States of America. Capitalized terms which are not defined herein shall have the meanings set forth in the Indenture.

Notwithstanding any other provision hereof, this Series 2017B Senior Lien Bond is subject to book-entry form maintained by The Depository Trust Company ("DTC"), and the payment of principal, premium, if any, and interest, the providing of notices and other matters shall be made as described in the Authority's Blanket Letter of Representations to DTC.

This Series 2017B Senior Lien Bond is one of an issue of \$ Public Utility Senior Lien Revenue Bonds, Series 2017B (the "Series 2017B Senior Lien Bonds"), of like date and tenor, except as to number, denomination, rate of interest, privilege of redemption and maturity. The Series 2017B Senior Lien Bonds are being issued on the same day as the Authority's \$ Public Utility Senior Lien Revenue Bonds, Series 2017A (Green Bonds) (the "Series 2017A Senior Lien Bonds" and, together with the Series 2017B Senior Lien Bonds, the "Series 2017A/B Senior Lien Bonds"). The Series 2017B Senior Lien Bonds are issued under a Master Indenture of Trust, dated as of April 1, 1998, between the Authority and the Trustee (f.k.a. Norwest Bank, N.A.) (the "Master Indenture"), as amended and supplemented by the Twenty-Second Supplemental Indenture of Trust, dated as of February ____, 2017, between the Authority and the Trustee (the "Twenty-Second Supplemental Indenture"), and as previously amended and supplemented by the First Supplemental Indenture, the Second Supplemental Indenture, the Third Supplemental Indenture, the Fourth Supplemental Indenture, the Fifth Supplemental Indenture, the Sixth Supplemental Indenture, the Seventh Supplemental Indenture, the Eighth Supplemental Indenture, the Ninth Supplemental Indenture, the Tenth Supplemental Indenture, the Eleventh Supplemental Indenture, the Twelfth Supplemental Indenture, the Thirteenth Supplemental Indenture, the Fourteenth Supplemental Indenture, the Fifteenth Supplemental Indenture, the Sixteenth Supplemental Indenture, the Seventeenth Supplemental Indenture, the Eighteenth Supplemental Indenture, the Nineteenth Supplemental Indenture, the Twentieth Supplemental Indenture and the Twenty-First Supplemental Indenture, all as defined in the Twenty-Second Supplemental Indenture (the "Indenture"). The Series 2017B Senior Lien Bonds are secured under the Indenture as Senior Debt by a pledge of Net Revenues on a parity with the pledge that secures other Senior Debt and senior to the pledge that secures any Subordinate Debt. Reference is hereby made to the Indenture for a description of the provisions, among others, with respect to the nature and extent of the security, the rights, duties and obligations of the Authority and the Trustee, the rights of the holders of the Series 2017B Senior Lien Bonds and the terms upon which the Series 2017B Senior Lien Bonds are issued and secured.

The Series 2017B Senior Lien Bonds and the premium, if any, and the interest thereon are limited obligations of the Authority payable from Net Revenues of the System. The Series 2017A Senior Lien Bonds shall be without recourse to the District of Columbia (the "District"). The Series 2017A Senior Lien Bonds shall not be general obligations of the District, shall not be

a pledge of or involve the faith and credit or the taxing power of the District, shall not constitute a debt of the District, and shall not constitute lending of the public credit for private undertakings.				
The Series 2017B Bonds maturing on or after, are subject to redemption prior to maturity at the option of the Authority on and after, from any source, in whole or in part on any date, in such order of maturities as shall be determined by the Authority (and by lot within a maturity), at a redemption price of 100% of the principal amount thereof, together with accrued interest, if any, to the redemption date.				
The Term Series 2017B Senior Lien Bonds maturing on October 1 in the years and, are required to be redeemed prior to maturity on October 1 in years and amounts upon payment of 100% of the principal amount thereof plus interest accrued to the redemption date, as follows:				
The Term Series 2017B Senior Lien Bonds maturing, are subject to mandatory sinking fund redemption on each October 1 as set forth below:				
Year <u>Amount</u>				

*Final Maturity

The Term Series 2017B Senior Lien Bonds maturing ______, are subject to mandatory sinking fund redemption on each October 1 as set forth below:

Year Amount

*Final Maturity

If fewer than all of the Series 2017B Senior Lien Bonds are called for redemption, they shall be called in such order of maturity as the Authority may determine and direct the Trustee in writing. If less than all of the Series 2017B Senior Lien Bonds of any maturity date are called for redemption, the Series 2017B Senior Lien Bonds to be redeemed shall be selected by DTC pursuant to its rules and procedures or, if the book-entry system is discontinued, shall be selected by the Trustee by lot in such manner as the Trustee in its discretion may determine. The portion of any Series 2017B Senior Lien Bond to be redeemed shall be in the principal amount of \$5,000 or some integral multiple thereof. In selecting Series 2017B Senior Lien Bonds for redemption, each Series 2017B Senior Lien Bond shall be considered as representing that number of Bonds which is obtained by dividing the principal amount of such Series 2017B Senior Lien Bond by \$5,000. If a portion of a Series 2017B Senior Lien Bond shall be called for redemption, a new Series 2017B Senior Lien Bond in principal amount equal to the unredeemed portion thereof shall be issued to the registered owner upon the surrender thereof.

If any of the Series 2017B Senior Lien Bonds or portions thereof are called for redemption, the Trustee shall send notice of the call for redemption, identifying the Series 2017B Senior Lien Bonds or portions thereof to be redeemed, not fewer than 30 nor more than 60 days prior to the redemption date, by facsimile, registered or certified mail or overnight express delivery, to the registered owner of each the Series 2017B Senior Lien Bond. Provided funds for their redemption are on deposit at the place of payment on the redemption date, all Series 2017B Senior Lien Bonds or portions thereof so called for redemption shall cease to bear interest on such date, shall no longer be secured by the Indenture and shall not be deemed to be Outstanding under the provisions of the Indenture. If a portion of the Series 2017B Senior Lien Bonds shall be called for redemption, a new Series 2017B Senior Lien Bond in principal amount equal to the unredeemed portion hereof will be issued to DTC or its nominee upon the surrender hereof, or if the book-entry system is discontinued, to the registered owners of the Series 2017B Senior Lien Bonds.

The registered owner of this Series 2017B Senior Lien Bond shall have no right to enforce the provisions of the Indenture or to institute action to enforce the covenants therein or to take any action with respect to any Event of Default or Series 2017B Senior Lien Bond Event of Default under the Indenture or to institute, appear in or defend any suit or other proceedings with respect thereto, except as provided in the Indenture. Specifically, and without limiting the generality of the foregoing, the Series 2017B Senior Lien Bonds, as Subordinate Debt, may not be accelerated if any Senior Debt is outstanding. Modifications or alterations of the Indenture, or

of any supplement thereto, may be made only to the extent and in the circumstances permitted by the Indenture.

No covenant, agreement or obligation contained herein shall be deemed to be a covenant, agreement or obligation of any present or future member of the Board of Directors of the Authority or officer, employee or agent of the Authority in his or her individual capacity, and neither the members of the Board of Directors of the Authority nor any officer of the Authority executing the Series 2017B Senior Lien Bonds shall be liable personally on the Series 2017B Senior Lien Bonds or be subject to any personal liability or accountability by reason of the issuance thereof. No member of the Board of Directors of the Authority or officer, employee, agent or advisor of the Authority shall incur any personal liability with respect to any other action taken by him or her pursuant to this Series 2017B Senior Lien Bond, the Twenty-Second Supplemental Indenture or the Indenture or any other document authorized by the Indenture, provided such member, officer, employee, agent or advisor acts in good faith.

The Series 2017B Senior Lien Bonds are issuable as registered bonds in denominations of \$5,000 and integral multiples thereof. Upon surrender for transfer or exchange of this Series 2017B Senior Lien Bond at the principal corporate trust office of the Trustee, together with an assignment duly executed by the registered owner or its duly authorized attorney or legal representative in such form as shall be satisfactory to the Trustee, the Authority shall execute, and the Trustee shall authenticate and deliver in exchange, a new Series 2017B Senior Lien Bond or Series 2017B Senior Lien Bonds in the manner and subject to the limitations and conditions provided in the Indenture, having an equal aggregate principal amount, in authorized denominations, of the same series, form and maturity, bearing interest at the same rate and registered in the name or names as requested by the then registered owner hereof or its duly authorized attorney or legal representative. Any such exchange shall be at the expense of the Authority, except that the Trustee may charge the person requesting such exchange the amount of any tax or other governmental charge required to be paid with respect thereto.

The Trustee shall treat the registered owner as the person exclusively entitled to payment of principal, premium, if any, and interest and the exercise of all other rights and powers of the owner, except that interest payments shall be made to the person shown as owner on the fifteenth day of the month preceding each interest payment date.

All acts, conditions and things required to happen, exist or be performed precedent to and in the issuance of this Series 2017B Senior Lien Bond have happened, exist and have been performed.

This Series 2017B Senior Lien Bond shall not become obligatory for any purpose or be entitled to any security or benefit under the Indenture or be valid until the Trustee shall have executed the Certificate of Authentication appearing hereon and inserted the date of authentication hereon.

IN WITNESS WHEREOF, the DISTRICT OF COLUMBIA WATER AND SEWER
AUTHORITY has caused this Series 2017B Senior Lien Bond to be executed by the manual or
facsimile signatures of the Chairman of the Board of Directors, its seal to be affixed hereto or a
facsimile to be printed hereon and attested by the manual or facsimile signature of the Secretary
to the Authority, and this Series 2017B Senior Lien Bond to be dated February , 2017.

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Secretary to the Authority

Chairman

[SEAL]

CERTIFICATE OF AUTHENTICATION

Date Authenticated:	
This Series 2017B Senior Lien I described in the within mentioned Inder	Bond is one of the Series 2017B Senior Lien Bonds nture.
	Wells Fargo Bank, N.A., Trustee
	By
	Authorized Officer or Employee

ASSIGNMENT

NOTICE: Signature(s) must be guaranteed by an Eligible Guarantor Institution such as a Commercial Institution such as a Commercial Bank, Trust Company, Securities Broker/Dealer, Credit Union, or Savings Association who is a member of a medallion program approved by The Securities Transfer Association, Inc.

Signature Guaranteed

NOTICE: The signature above must correspond with the name of the registered owner as it appears on the front of this Series 2017B Senior Lien Bond in every particular, without alteration or enlargement or any change whatsoever.

M&A draft 11/29/16

BOND PURCHASE AGREEMENT

\$____*
DISTRICT OF COLUMBIA WATER AND SEWER AUTHORITY
Public Utility Senior Lien Revenue Bonds, Series 2017A (Green Bonds)

\$_____ DISTRICT OF COLUMBIA WATER AND SEWER AUTHORITY Public Utility Senior Lien Revenue Bonds, Series 2017B

January, 2017

District of Columbia Water and Sewer Authority 5000 Overlook Avenue, S.W. Washington, D.C. 20032

Ladies and Gentlemen:

Goldman, Sachs & Co., as representative of the underwriters (the "Representative") on behalf of itself and Samuel A. Ramirez & Co., Inc. (as co-Senior Managers), and on behalf of Loop Capital Markets LLC, Barclays Capital Inc. and Merrill Lynch, Pierce, Fenner & Smith Inc. (collectively, the "Underwriters"), offer to enter into this bond purchase agreement (this "Agreement") with the District of Columbia Water and Sewer Authority (the "Authority"). The offer made hereby is subject to acceptance thereof by execution of this Agreement and its delivery to the Representative, on behalf of the Underwriters, at or prior to 5:00 p.m., New York, New York Time, on the date hereof, or on such other date as may be agreed upon by the Underwriters. Upon such acceptance, this Agreement shall be in full force and effect in accordance with its terms and shall be binding upon the Authority and the Underwriters. If this offer is not so accepted, it is subject to withdrawal by the Representative on behalf of the Underwriters upon written notice delivered to the Authority at any time prior to acceptance. Terms used but not defined herein are defined in the Indenture identified below.

1.	Purchase and Sale of Bonds.	On the terms and conditions and on the basis of
the representa	ations, warranties, covenants and a	agreements set forth herein, the Representative, on
behalf of the	Underwriters, hereby agrees to	purchase from the Authority for offering to the
public, and th	ne Authority hereby agrees to sell	and deliver to the Underwriters for such purpose,
all (but not le	ess than all) of its Public Utility S	enior Lien Revenue Bonds, Series 2017A (Green
Bonds), in th	ne original principal amount of \$	(the "Series 2017A Bonds") and its
Public Utility	Senior Lien Revenue Bonds, Se	eries 2017B, in the original principal amount of
\$	(the "Series 2017B Bonds" and	collectively with the Series 2017A Bonds, the
"Bonds"). T	The proceeds of the Bonds will l	be used to pay (i) a portion of the costs of the

^{*} Preliminary; subject to change.

Authority's DC Clean Rivers Project, (ii) a portion of the costs	s of certain other capital
improvements to the System and (iii) pay costs of issuing the Bonds.	The purchase price of the
Series 2017A Bonds will be \$ (the par amount of the Ser	ies 2017A Bonds less the
Underwriters' discount of \$ plus net original issue premi	ium of \$). The
purchase price of the Series 2017B Bonds will be \$ (the par a	mount of the Series 2017B
Bonds less the Underwriters' discount of \$ plus net o	riginal issue premium of
\$). The Bonds will mature on the dates and in the amounts	s and will bear interest and
will be subject to redemption prior to maturity as set forth on Exhibit A	A hereto.

- Bond Authorization. The Bonds shall be issued under and pursuant to provisions of the laws of the United States of America and the District of Columbia (the "District"), including particularly, an act of the Council of the District entitled the "Water and Sewer Authority Establishment and Department of Public Works Reorganization Act of 1996," as amended, codified at District of Columbia Official Code Ann. Sections 34-2201.01 et seq., and the acts amendatory thereof and supplemental thereto (the "Act"), and an act of the United States Congress entitled the "District of Columbia Water and Sewer Authority Act of 1996" (Public Law 104-184), as amended (the "Federal Act"), and all proceedings necessary to authorize and provide for the issuance of the Bonds, including Resolution No.17- adopted by the Board of Directors of the Authority, on January 5, 2017 (the "Resolution"), and the Master Indenture of Trust, dated as of April 1, 1998 (the "Master Indenture"), between the Authority and Wells Fargo Bank, N.A., as trustee (the "Trustee"), as amended and supplemented, including by the Twenty-Second Supplemental Indenture of Trust, dated as of the Closing Date (as defined below) (the "Twenty-Second Supplemental Indenture," and together with the Master Indenture as previously amended and supplemented, the "Indenture"), between the Authority and the Trustee, substantially in the forms previously delivered to us.
- 2017, or at such other time and date as may be mutually agreed upon by the Authority and the Underwriters (the "Closing Date"), the Authority will, subject to the terms and conditions hereof, deliver the Bonds to the Underwriters in definitive form, duly executed and authenticated, together with the other documents hereinafter required, and, subject to the terms and conditions hereof, the Underwriters will accept such delivery and pay the purchase price of the Bonds as set forth in Section 1 hereof in federal funds to the order of the Authority (the "Closing"). Delivery of the Bonds will be made through the facilities of The Depository Trust Company, New York, New York. The Closing will occur at the offices of Squire Patton Boggs (US) LLP, Washington, D.C., or such other place as may be mutually agreed on by the Authority and the Underwriters.
- 4. <u>Public Offering of the Bonds</u>. It is a condition of the Authority's obligation to sell and deliver the Bonds to the Underwriters, and of the obligation of the Underwriters to purchase and accept delivery of the Bonds, that the entire principal amount of the Bonds is sold and delivered by the Authority and accepted and paid for by the Underwriters at the Closing. The Underwriters intend to make an initial public offering of all of the Bonds at prices not in excess of the initial public offering prices set forth on the cover page of the Official Statement. The Underwriters may offer and sell the Bonds to certain dealers (including dealers depositing Bonds into investment trusts) at prices lower than the initial public offering prices.

5. Preliminary and Final Official Statement. The Authority ratifies and consents to the legally permissible use by the Underwriters, prior to the date hereof, of the Preliminary Official Statement, dated January ___, 2017, relating to the Bonds (the "Preliminary Official Statement") in connection with the public offering of the Bonds and the Authority represents that such Preliminary Official Statement is deemed final as of its date and as of the date hereof under Rule15c2-12 ("Rule 15c2-12") promulgated by the U.S. Securities and Exchange Commission (the "SEC") under the Securities Exchange Act of 1934, as amended (the "1934 Exchange Act"), except for Permitted Omissions (as defined in Rule 15c2-12). The form of the final Official Statement of the Authority relating to the Bonds, dated January __, 2017, including the cover page and Appendices thereto, and any revisions, amendments or supplements thereto (the "Official Statement") as have been approved by the Authority, Co-Bond Counsel, and the Representative. The Authority authorizes, approves, ratifies and confirms the distribution of the Preliminary Official Statement and the Official Statement in paper and electronic format by the Underwriters in connection with the public offering and sale of the Bonds.

The Authority agrees to provide to the Underwriters, at such addresses as the Underwriters specify, as many copies of the Official Statement as the Underwriters reasonably request as necessary to comply with Rule G-32 and all other applicable rules of the Municipal Securities Rulemaking Board (the "MSRB"). The Authority agrees to deliver the Official Statement within seven business days after the date hereof and not later than one business day before the Closing Date and in sufficient time to accompany any confirmation that requests payment from any customer and to permit the Underwriters to comply with the requirements of Rule 15c2-12 (defined below). The Preliminary Official Statement and the Official Statement may be revised, amended, changed or supplemented by the Authority after the execution of this Agreement only with the permission of the Underwriters.

If, during the period from the date hereof to and including the date which is 25 days after the "end of the underwriting period" (as hereinafter defined), there shall exist any event, including, but not limited to, any material adverse change in the financial condition, results of operation or condition, financial or otherwise, of the Authority, and of which the Authority has knowledge, which, in the opinion of the Underwriters and counsel to the Underwriters or in the opinion of the Authority, requires a supplement or amendment to the Official Statement so that it will not contain an untrue statement of a material fact or omit to state a material fact necessary in order to make the statements therein, in the light of the circumstances under which they were made, not misleading, when it is delivered to a potential investor, the Authority will supplement or amend or cause to be supplemented or amended the Official Statement in a form and in a manner approved by the Underwriters and the Authority and will furnish to the Underwriters such supplement or amendment in sufficient quantity to permit the Underwriters to comply with the requirements of Rule 15c2-12 ("Rule 15c2-12") promulgated by the Securities and Exchange Commission (the "SEC") under the 1934 Exchange Act.

For the purpose of the preceding paragraph, the Authority may assume that the "end of the underwriting period" (in accordance with and as defined in Rule 15c2-12) means the Closing Date unless the Representative advises the Authority in writing on the Closing Date that there remains an unsold balance of the Bonds, in which case the "end of the underwriting period" means the date as of which the Representative notifies the Authority that the Underwriters, directly or as a syndicate, no longer retain an unsold balance of the Bonds for sale to the public.

The deemed end of the underwriting period, in order to allow the Underwriters to comply with Rule 15c2-12, shall be extended for additional periods of 30 days each upon receipt of written notification from the Underwriters that any Bonds remain unsold however, in no event shall the "end of the underwriting period" extend beyond the date sixty (60) days from the Closing Date. The Representative agrees to provide to the Authority written notification that none of the Bonds remain unsold which will be deemed the end of the underwriting period.

The Representative hereby agrees to deliver a copy of the printed paper form of the Official Statement to the MSRB in an electronic format prescribed by the MSRB for its Electronic Municipal Market Access ("EMMA") website at www.emma.msrb.org within one (1) business day of receipt of the executed final Official Statement by the Underwriters.

- 6. **Representations, Warranties and Covenants of the Authority**. The Authority hereby represents, warrants, covenants and agrees as follows:
- The Authority is, and at the Closing Date will be, a duly organized and validly existing corporate body and independent authority of the District established under the laws of the United States and the District, including the Act and the Federal Act, with the full legal right, power and authority to (i) adopt the Resolution, (ii) execute, deliver and perform its obligations under this Agreement, the Indenture, the Certificate of Award of the Authority establishing the purchase price, maturities, interest rates, redemption provisions and other terms of the Bonds, dated the date hereof (the "Certificate of Award"), and the Continuing Disclosure Agreement of the Authority dated as of the Closing Date (the "Continuing Disclosure Agreement," and together with this Agreement and the Indenture, the "Bond Documents"); (iii) perform its obligations under the Water Sales Agreement, dated as of July 31, 1997, between the Authority and the United States of America, acting through the Secretary of the Army (the "Water Sales Agreement") and the Blue Plains Intermunicipal Agreement of 2012 between the District, Fairfax County, Virginia, Montgomery County, Maryland, Prince George's County, Maryland and the Washington Suburban Sanitary Commission (the "IMA," and together with the Water Sales Agreement, the "System Agreements"), (iv) sell, issue and deliver the Bonds to the Underwriters as provided herein, and (v) carry out and consummate the transactions contemplated by the Resolution, the Bond Documents, the Preliminary Official Statement, the Official Statement and the System Agreements; and the Authority has complied, and at the Closing Date will be in compliance, in all material respects, with the Act and the Federal Act and with the obligations on its part in connection with the issuance of the Bonds contained in the Bonds, the Resolution, the Indenture, the Preliminary Official Statement, the Official Statement and this Agreement.
- b. The Authority (i) has duly and validly adopted the Resolution, (ii) has authorized the execution and delivery of the Bond Documents, (iii) is authorized to execute, issue, sell and deliver the Bonds in book-entry form, (iv) is authorized to appoint, and has appointed, Wells Fargo Bank, N.A., as Trustee (the "Trustee"), (v) is authorized to apply and will apply the proceeds of the Bonds as provided in and subject to all of the terms and provisions of the Resolution, including the payment or reimbursement of the Authority expenses incurred in connection with the negotiation, marketing, issuance and delivery of the Bonds to the extent required by Section 14, (vi) has taken or will take on or before the Closing Date, all action necessary or appropriate for (a) execution, issuance, sale and delivery of the Bonds in book-entry

form to the Underwriters, (b) approval, execution and delivery of and the performance by the Authority of its obligations contained in the Bonds and the Bond Documents, (c) the approval, distribution and use of the Preliminary Official Statement and the approval, execution, distribution and use of the Official Statement for use by the Underwriters in connection with the public offering of the Bonds and (d) the consummation by it of all other transactions described in the Official Statement, the Bond Documents and any and all such other agreements and documents as may be required to be executed, delivered and/or received by the Authority in order to carry out, give effect to, and consummate the transactions described herein and in the Official Statement.

- c. The adoption of the Resolution, the execution and delivery of the Bond Documents, the execution, issuance, sale and delivery of the Bonds in book-entry form and the performance by the Authority of its obligations hereunder and thereunder, and the performance by the Authority of its obligations under the System Agreements (collectively, the "Authority Undertakings") are within the corporate powers of the Authority and are not in conflict with and will not constitute a breach, default or result in a violation of (i) the Act, (ii) any federal constitutional or federal or District statutory provision, including the Federal Act, (iii) any agreement or other instrument to which the Authority is a party, or (iv) any order, rule, regulation, decree or ordinance of any court of competent jurisdiction, government or governmental authority having jurisdiction over the Authority or its property.
- d. The District has authorized the Authority to use all of the property and assets of the water distribution and wastewater collection, treatment and disposal systems of the Authority (the "System"), uninterrupted by the District, for as long as any revenue bonds of the Authority, including the Bonds, remain outstanding. The Authority has the full legal right, power and authority to operate the System and to collect and pledge the Revenues therefrom in accordance with the Indenture.
- e. The Resolution or other appropriate actions adopted or taken by the Authority establishing the rates and charges for services of the System described in the Preliminary Official Statement and the Official Statement have been duly adopted or taken and are in full force and effect.
- f. The System Agreements and all other agreements, permits, licenses, consents, approvals, actions, consent decrees and settlement orders material to the operation and management of the System, including the collection of the Revenues therefrom as described in the Preliminary Official Statement and the Official Statement, are in full force and effect as of the date hereof and will be on the Closing Date, and the Authority is not and will not be in default thereunder or in breach thereof. The System Agreements have been duly authorized, executed and delivered by the Authority and constitute valid and binding obligations of the Authority enforceable in accordance with their respective terms, subject to applicable bankruptcy, insolvency and similar laws affecting creditors' rights generally and subject, as to enforceability, to general principles of equity.
- g. The Bonds, when issued, delivered to the Underwriters and paid for, in accordance with the Act, the Resolution, the Indenture and this Agreement, will have been duly authorized, executed, issued and delivered by the Authority and will constitute valid and binding

obligations of the Authority, enforceable against the Authority in accordance with their terms, subject to applicable bankruptcy, insolvency, reorganization, moratorium and similar laws affecting creditors' rights generally and subject, as to enforceability, to general principles of equity. The Bonds are not a pledge of and do not involve the faith and credit or the taxing power of the District and the District shall not be liable thereon. The Bonds, the Indenture and the Resolution conform to the descriptions thereof contained in the Preliminary Official Statement and the Preliminary Official Statement and the Official Statement.

- h. The Authority is not currently failing to comply and except as disclosed in the Preliminary Official Statement and the Official Statement, has not failed to comply during the past five years with any continuing disclosure obligation pursuant to Rule 15c2-12. The Authority has agreed to deliver to the Underwriters a Continuing Disclosure Agreement with respect to the Bonds that complies with the requirements of Rule 15c2-12.
- i. This Agreement constitutes, and, upon execution and delivery by the Authority and the other parties thereto, each of the other Bond Documents will constitute, the valid, binding and enforceable obligation of the Authority in accordance with their respective terms, subject to applicable bankruptcy, insolvency, and similar laws affecting creditors' rights generally and subject, as to enforceability, to general principles of equity.
- j. The Authority is not in material breach of or material default under any applicable constitutional provision or law of the United States, the District or any applicable judgment or decree, or any loan agreement, indenture, bond, note, resolution, agreement or other instrument to which it is a party or to which it or any of its property or assets is otherwise subject, and no event has occurred and is continuing which, with the passage of time or the giving of notice, or both, would constitute a default or event of default under any such instrument; and the execution and delivery of the Bonds, this Agreement and the other Bond Documents and the adoption of the Resolution, and compliance with the provisions contained therein and herein, and in the System Agreements, do not conflict with or constitute a breach of or default under any constitutional provision, law, administrative regulation, judgment, decree, loan agreement, indenture, bond, note, resolution, agreement, or other instrument to which it is a party or any of its property or assets are otherwise subject, nor will any such execution, delivery, adoption, or compliance result in the creation or imposition of any lien, charge, or other security interest or encumbrance of any nature whatsoever upon any of its property or assets or under the terms of any such law, regulation or instrument, except as provided by the Bonds.
- k. All authorizations, approvals, licenses, permits, consents and orders of any governmental authority, legislative body, board, agency or commission having jurisdiction of the matter have been duly obtained or, with respect to the issuance of the Bonds, will be obtained prior to the issuance of the Bonds, which are required for the due authorization by or which would constitute a condition precedent to or the absence of which would materially adversely affect the due performance by the Authority of its obligations in connection with the issuance of the Bonds and under this Agreement, except for such approvals, consents and orders as may be required under the Blue Sky or securities laws of any state in connection with the offering and sale of the Bonds.

- Except as otherwise described in the Preliminary Official Statement and the Official Statement, there is no litigation, action, suit, proceeding, inquiry or investigation, at law or in equity, before or by any court, government agency, public board or body, pending or, to the best knowledge of the Authority, threatened against the Authority (i) affecting or seeking to prohibit, restrain or enjoin the issuance, sale or delivery of the Bonds, the use of the Preliminary Official Statement or the Official Statement or the collection of the Revenues pledged to the payment of the principal of and interest on the Bonds, (ii) in any way contesting or affecting any authority for the issuance of the Bonds or the validity, enforceability, due authorization, execution or delivery of the Bonds, including this Agreement or the other Bond Documents, or the validity or enforceability of the System Agreements, nor, to the best knowledge of the Authority, is there any basis therefor, wherein an unfavorable decision, ruling or finding would materially adversely affect the validity or enforceability of the Bonds or the Bond Documents, (iii) questioning the tax-exempt status of the Bonds under the laws of the District or the United States, (iv) affecting or in any way contesting the corporate existence or powers of the Authority or the titles of the officers of the Authority to their respective offices, (v) which may result in any material adverse change in the business or the financial condition or the financial prospects of the Authority or (vi) asserting that the Preliminary Official Statement or the Official Statement or any supplement thereto contains any untrue statement of a material fact or omits any material fact necessary to make the statements therein, in light of the circumstances under which they were made, not misleading.
- m. The Authority will furnish such information, execute such instruments and take such other action in cooperation with the Underwriters as the Underwriters may reasonably request in order to (i) qualify the Bonds for offer and sale under the Blue Sky or other securities laws and regulations of such states and other jurisdictions of the United States as the Underwriters may designate, (ii) determine the eligibility of the Bonds for investment under the laws of such states and other jurisdictions, and (iii) continue such qualifications in effect so long as required for the distribution of the Bonds and will advise the Representative promptly of receipt by the Authority of any written notification with respect to the suspension of the qualification of the Bonds for sale in any jurisdiction or the initiation or threat of any proceeding for that purpose; provided, however, that the Authority will not be required to execute a general or special consent to service of process or qualify to do business in connection with any such qualification or determination in any jurisdiction.
- n. The audited balance sheets of the Authority for the years ended September 30, 2016 and September 30, 2015, and the related statements of revenues, expenditures and changes in net assets and cash flows for the fiscal year ended on such date, as set forth in the Preliminary Official Statement and the Official Statement, are true, complete and correct and fairly present the financial condition of the Authority as of such date and the results of its operations for such fiscal year. There has been no material adverse change in the financial condition of the Authority since September 30, 2016, except as described in the Preliminary Official Statement and the Official Statement. The financial statements of, and other financial information of the Authority in the Preliminary Official Statement and in the Official Statement fairly present the financial position and results of the Authority as of the dates and for the periods therein set forth, and except as noted in the Preliminary Official Statement and in the Official Statement, the other historical financial information set forth in the Preliminary Official Statement and in the Official Statement and in the Official Statement has been presented on a basis consistent with that of the

Authority's audited financial statements included in the Preliminary Official Statement and in the Official Statement.

- o. The Authority has duly authorized, approved and delivered the Preliminary Official Statement and the Official Statement to the Underwriters.
- The Preliminary Official Statement, as of its date and as of the date of this Agreement, did not and does not, and the Official Statement, is, as of its date and (unless the Official Statement is amended or supplemented pursuant to this Agreement) at all times subsequent thereto during the period up to and including the Closing Date, did not and will not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements therein, in the light of the circumstances under which they were made, not misleading. If between the date of the Official Statement and the Closing Date any event shall occur or any pre-existing fact or condition shall become known to the Authority that might or would cause the Official Statement, as then supplemented or amended, to contain any untrue statement of a material fact or to omit to state a material fact necessary to make the statements therein, in the light of the circumstances under which they were made, not misleading, the Authority shall promptly notify the Underwriters thereof, and if in the reasonable opinion of the Underwriters, such event, fact or condition requires the preparation and publication of a supplement or amendment to the Official Statement, the Authority will at its expense supplement or amend the Official Statement in a form and in a manner approved by the Underwriters, which approval shall not be unreasonably withheld. If the Official Statement is supplemented or amended as aforesaid, at the time of each supplement or amendment thereto and (unless subsequently again supplemented or amended pursuant to such paragraph) at all times subsequent thereto during the underwriting period, as defined in Section 5, the Official Statement as so supplemented or amended will not contain any untrue statement of a material fact or omit to state any material fact required to be stated therein or necessary to make the statements therein, in the light of the circumstances under which made, not misleading.
- q. The obligation of the Authority to know or provide information within the knowledge of the Authority is limited to providing information that is in the actual knowledge of, or reasonably should have been in the actual knowledge of, the key staff members of the Authority listed in the Official Statement under the caption "Senior Management" or their respective successors.
- r. The Authority undertakes that, for a period beginning with the day on which the Bonds are delivered to the Underwriters and ending on the 25th day following the end of the underwriting period, as defined in Section 5, it will apprise the Underwriters of all material developments, if any, occurring with respect to the Authority, and if requested by the Underwriters, at the Authority's expense, prepare a supplement to the Official Statement in respect of any such material event.
- s. The Authority has not been notified of any listing or proposed listing by the Internal Revenue Service to the effect that the Authority is a bond issuer whose arbitrage certificates may not be relied upon.

- t. Any certificate signed by an authorized delegate of the Authority in connection with the transactions described in this Agreement will be deemed a representation, warranty, covenant and agreement by the Authority to the Underwriters as to the statements made therein
- u. Prior to the Closing, the Authority will not take any action within or under its control that will cause any adverse change of a material nature in the Authority's financial position, or its results of operations or condition, financial or otherwise.
- v. The Authority will not, prior to the Closing, offer or issue any bonds, notes or other obligations for borrowed money or incur any material liabilities, direct or contingent, except in the ordinary course of business, without the prior approval of the Representative.
- w. The Bonds and the Twenty-Second Supplemental Indenture conform to the descriptions thereof contained in the Preliminary Official Statement and the Official Statement under the caption "THE SERIES 2017A/B BONDS" and in Appendix C "GLOSSARY AND SUMMARY OF THE INDENTURE."
- 7. Representations of Underwriters. The Underwriters represent and warrant that they will offer the Bonds only pursuant to the Official Statement and the Underwriters agree to make a public offering of the Bonds at the initial offering prices or yields set forth in the Official Statement as the Underwriters may deem necessary or desirable in connection with the offering and sale of the Bonds and to sell the Bonds to dealers (including dealer banks and dealers depositing Bonds into investment trusts) and others at prices lower than the public offering prices. At the Closing, the Representative, on behalf of the Underwriters, shall deliver to the Authority a certificate, acceptable to Co-Bond Counsel, substantially in the form of Exhibit D hereto. The Underwriters agree to deliver a final Official Statement to all purchasers of the Bonds in accordance with all applicable legal requirements.
- **Rights to Cancellation by Underwriters**. The Underwriters will have the right 8. to cancel their obligation to purchase, accept delivery of and to pay for the Bonds if between the date hereof and the Closing Date, the market price or marketability of the Bonds or the ability of the Underwriters to enforce contracts for the sale of the Bonds shall be materially adversely affected in the reasonable judgment of the Representative, on behalf of the Underwriters, by the occurrence of any of the following: (a) legislation has been enacted by or introduced in Congress or a decision by a federal court of the United States or the United States Tax Court has been rendered, or a ruling, regulation or official statement by or on behalf of the Treasury Department of the United States, the Internal Revenue Service or other governmental agency has been made or proposed to be made with respect to federal taxation on revenues or other income to be derived from the operation of the Authority, or other actions or events have occurred which have the purpose or effect, directly or indirectly, of materially adversely affecting the federal income tax consequences of any of the transactions contemplated in connection herewith, including the tax-exempt status of bonds issued by the Authority under the Internal Revenue Code of 1986, as amended, or (b) legislation has been enacted, or actively considered for enactment with an effective date being prior to the date of the issuance of the Bonds, or a decision by a court of the

United States has been rendered, or a ruling or regulation by the SEC or another governmental agency having jurisdiction of the subject matter has been made, the effect of which is that the Bonds are not exempt from the registration or other requirements of the Securities Act of 1933, as amended and as then in effect (the "1933 Securities Act"), or that the Indenture is not exempt from the qualification or other requirements of the Trust Indenture Act of 1939, as amended and as then in effect (the "Trust Indenture Act"), or (c) a stop order, ruling or regulation by the SEC has been issued or made, the effect of which is that the issuance, offering or sale of the Bonds as contemplated hereby or by the Official Statement is or would be in violation of any provision of the 1933 Securities Act, or of the 1934 Exchange Act, or of the Trust Indenture Act, or (d) there exists any event which in the reasonable judgment of the Underwriters either (i) makes untrue or incorrect any statement or information of a material fact contained in the Official Statement or (ii) is not reflected in the Official Statement but should be reflected therein in order to make the statements and information contained therein, in light of the circumstances under which they were made, not misleading, and, in either such event the Authority refuses to permit the Official Statement to be supplemented to correct or supply such statement or information, or the statement or information as supplemented is such as in the reasonable judgment of the Underwriters would materially adversely affect the market for the Bonds or the sale, at the contemplated offering price, by the Underwriters of the Bonds, or (e) there has occurred any new outbreak of hostilities (including, without limitation, an act of terrorism) or escalation of hostilities existing prior to the date hereof or any other extraordinary event, material national or international calamity or crisis, including a financial crisis, not existing on the date hereof, or (f) any new restriction on transactions in securities materially affecting the market for securities (including the imposition of any limitation on interest rates or the establishment of minimum or maximum prices) or any material increase of restrictions now in force (including the extension of credit by, or a charge to the net capital requirements of, Underwriters) shall have been established by the New York Stock Exchange, the SEC, any other federal agency, the Congress of the United States, or by Executive Order, or (g) there is in force a general suspension of trading in securities on the New York Stock Exchange or any other national securities exchange or (h) a general banking moratorium has been declared by Federal, District or New York authorities, or (i) there has occurred since the date hereof any material adverse change in the affairs of the Authority from that reflected in the financial information and data of the Authority included in or as an appendix to the Official Statement, other than as previously disclosed to the Underwriters, or (j) a material disruption in securities settlement, payment or clearance services shall have occurred, or (k) there shall have occurred any downgrading or published negative credit watch or similar published information from a rating agency that on the date hereof has published a rating (or has been asked to furnish a rating on the Bonds) on any of the Authority's debt obligations, which action reflects a change or possible change in the ratings accorded any such obligations of the Authority (including any rating to be accorded to the Bonds) or (1) there shall have occurred any downgrading or published negative credit watch or similar published information from a rating agency that at the date of this Agreement has published a rating (or has been asked to furnish a rating on the Bonds) on any of the Authority's debt obligations, which action reflects a change or possible change, in the ratings accorded any such obligations of the Authority (including any rating to be accorded the Bonds).

9. Rights to Cancellation by the Authority. The Authority will have the right to cancel its obligation to issue, sell and deliver the Bonds if between the date hereof and the Closing Date, the market price or marketability of the Bonds shall be materially adversely

affected, in the reasonable judgment of the Authority, by the occurrence of any of the following: (a) legislation has been enacted by or introduced in Congress or a decision by a federal court of the United States or the United States Tax Court has been rendered, or a ruling, regulation or official statement by or on behalf of the Treasury Department of the United States, the Internal Revenue Service or other governmental agency has been made or proposed to be made with respect to federal taxation on revenues or other income to be derived from the operation of the Authority, or other actions or events have occurred which have the purpose or effect, directly or indirectly, of materially adversely affecting the federal income tax consequences of any of the transactions contemplated in connection herewith, or (b) legislation has been enacted, or actively considered for enactment with an effective date being prior to the date of the issuance of the Bonds, or a decision by a court of the United States has been rendered, or a ruling or regulation by the SEC or another governmental agency having jurisdiction of the subject matter has been made, the effect of which is that the Bonds are not exempt from the registration or other requirements of the 1933 Securities Act, or that the Indenture is not exempt from the qualification or other requirements of the Trust Indenture Act, or (c) a stop order, ruling or regulation by the SEC has been issued or made, the effect of which is that the issuance, offering or sale of the Bonds as contemplated hereby or by the Official Statement is or would be in violation of any provision of the 1933 Securities Act, or of the 1934 Exchange Act, or of the Trust Indenture Act, or (d) there has occurred any new outbreak of hostilities (including, without limitation, an act of terrorism) or escalation of hostilities existing prior to the date hereof or any other extraordinary event, material national or international calamity or crisis, including a financial crisis, not existing on the date hereof, or (e) any new restriction on transactions in securities materially affecting the market for securities (including the imposition of any limitation on interest rates or the establishment of minimum or maximum prices) or any material increase of restrictions now in force (including the extension of credit by, or a charge to the net capital requirements of, Underwriters) shall have been established by the New York Stock Exchange, the SEC, any other federal agency, the Congress of the United States, or by Executive Order, or (f) there is in force a general suspension of trading in securities on the New York Stock Exchange or any other national securities exchange or (g) a general banking moratorium has been declared by Federal, District or New York authorities, or (h) a material disruption in securities settlement, payment or clearance services shall have occurred.

- 10. <u>Conditions to Obligations of Underwriters at Closing</u>. The Underwriters have entered into this Agreement in reliance on the representations, warranties, covenants and agreements of the Authority contained herein, and in reliance on the representations, warranties, covenants and agreements to be contained in the documents and instruments to be delivered at the Closing and on the performance by the Authority of its obligations hereunder, as of the Closing Date. Accordingly, the Underwriters' obligations under this Agreement to purchase, to accept delivery of and to pay for the Bonds, are conditioned on the performance by the Authority of its obligations to be performed hereunder and the delivery of such documents and instruments enumerated herein in form and substance reasonably satisfactory to the Underwriters and Orrick, Herrington & Sutcliffe LLP, and McKenzie & Associates, co-counsel to the Underwriters, at or before the Closing, and are also subject to the following additional conditions:
- a. The representations, warranties, covenants and agreements of the Authority contained herein are true, complete and correct on the date hereof and on and as of the Closing Date, as if made on the Closing Date;

- b. The provisions of the Act and the Federal Act, as in effect on the date of this Agreement, shall be in full force and effect and shall not have been amended, except as to amendments which, in the reasonable opinion of the Underwriters, are not adverse to the interest of the Underwriters or the Bondholders:
- c. At the time of the Closing, the Resolution is in full force and effect in accordance with its terms and has not been amended, modified or supplemented, and the Official Statement has not been supplemented or amended, except in any such case as may have been agreed to by the Underwriters;
- d. At the time of the Closing, all official action of the Authority relating to the Bonds, the Bond Documents and the System Documents are in full force and effect in accordance with their respective terms and have not been amended, modified or supplemented, except in each case as may have been agreed to by the Underwriters;
- e. At the time of the Closing the Authority will perform or will have performed all of its obligations required under or specified in this Agreement, the Resolution and the Indenture, or contemplated by the Resolution, the Indenture or the Official Statement, to be performed prior to the Closing; and
- f. At or before the Closing, the Underwriters will have received true and correct copies of each of the following documents:
 - i. A certified copy of the Resolution;
 - ii. The Official Statement and each supplement or amendment, if any, thereto, executed by the Authority;
 - iii. Counterparts of each of the fully executed Bond Documents and the System Agreements;
 - iv. The approving opinion of Co-Bond Counsel in substantially the form attached to Preliminary Official Statement and the Official Statement as Appendix F and a supplemental opinion, dated the Closing Date, in form and substance satisfactory to the Underwriters, and reliance letters with respect to such opinions addressed to Wells Fargo Bank, N.A., as Trustee;
 - v. An opinion, dated the Closing Date, of the General Counsel to the Authority, substantially in the form of <u>Exhibit B</u> hereto;
 - vi. An opinion, dated the Closing Date, of Orrick, Herrington & Suttcliffe LLP and McKenzie & Associates, co-counsel to the Underwriters, substantially in the form of Exhibit C hereto;
 - vii. An opinion, dated the Closing Date, of Squire Patton Boggs (US) LLP and Leftwich LLC, in their capacity as co-disclosure counsel to the Authority, in form and substance satisfactory to the Underwriters and their co-counsel;

- viii. An opinion, dated the Closing Date, of counsel to the Trustee, in a form approved by the Underwriters and their co-counsel;
- ix. A manually signed Financial Feasibility Opinion Letter dated January ___, 2017, of Amawalk Consulting Group LLC (the "Financial Feasibility Consultant"), regarding the financial feasibility of the issuance of the Bonds in substantially the form attached to the Preliminary Official Statement and the final Official Statement as Appendix A and a certificate of the Financial Feasibility Consultant with respect to the issuance and sale of the Bonds, permitting the use of such letter and references to said firm in the Preliminary Official Statement and the Official Statement in form and substance satisfactory to the Underwriters;
- x. One or more certificates of the Authority, dated the Closing Date, (A) to the effect that the representations, warranties, covenants and agreements of the Authority herein are true and correct on and as of the Closing Date as if made on the Closing Date, and that the Authority has performed all obligations to be performed hereunder as of the Closing Date; (B) to the effect that the Bond Documents, the Bonds and the System Agreements have not been modified, amended or repealed after the date hereof without the written consent of the Underwriters; (C) to the effect that no material change has occurred with respect to the System from the period from the date of this Agreement through the Closing Date;
- xi. Evidence of the completion of Internal Revenue Service Form 8038-G with respect to the issuance of the Bonds;
- xii. Evidence that Moody's Investors Service, Inc. ("Moody's") and S&P Global Ratings Services ("S&P") have issued ratings on the Bonds of "___" and "___" respectively;
- xiii. Such additional legal opinions, certificates, instruments and other documents as the Underwriters may reasonably request to evidence the truth and accuracy, as of the Closing Date, of the Authority's representations, warranties, covenants and agreements contained herein and of the statements and information contained in the Official Statement and the due performance or satisfaction by the Authority on or prior to the Closing Date of all the agreements then to be performed and conditions then to be satisfied by it.

All the opinions, letters, certificates, instruments and other documents mentioned above or elsewhere in this Agreement will be deemed to be in compliance with the provisions hereof if, but only if, they are in form and substance satisfactory to the Underwriters.

11. <u>Obligations Upon Cancellation</u>. If the Authority is unable to satisfy the conditions to the obligations of the Underwriters to purchase, to accept the delivery of and to pay for the Bonds contained in this Agreement, or if the obligations of the Underwriters to purchase, to accept delivery of and to pay for the Bonds is terminated for any reason permitted by this Agreement, this Agreement will terminate and neither the Underwriters nor the Authority will be

under any further obligation hereunder, except that the Authority and the Underwriters shall pay their respective expenses as set forth in Section 14.

- 12. <u>Certain Information Provided by Underwriters</u>. The Underwriters confirm and the Authority acknowledges that the statements with respect to the public offering of the Bonds by the Underwriters set forth on the cover page of the Official Statement, the legend concerning over-allotments in the Official Statement and the text under the caption "UNDERWRITING" in the Official Statement constitute the only information concerning the Underwriters furnished in writing to the Authority by or on behalf of the Underwriters for inclusion in the Official Statement.
- 13. No Advisory or Fiduciary Role. The Authority acknowledges and agrees that: (i) the transactions contemplated by this Agreement are arm's-length, commercial transactions between the Authority and the Underwriters in which the Underwriters are acting solely as principals, and are not acting as an agent, a municipal advisor, financial advisor or fiduciary to the Authority; (ii) the Underwriters have not assumed any advisory or fiduciary responsibility to the Authority with respect to the transactions contemplated hereby and the discussions, conferences, negotiations, undertakings and procedures leading thereto (irrespective of whether the Underwriters or their affiliates have provided other services or are currently providing other services to the Authority on other matters); (iii) the only obligations the Underwriters have to the Authority with respect to the transaction contemplated hereby expressly are set forth in this Agreement; (iv) the Authority has consulted its own financial and/or municipal, legal, accounting, tax, and other advisors, as applicable, to the extent it has deemed appropriate; and (v) this Agreement expresses the entire relationship between the parties hereto.
- **Expenses**. The Authority will pay all costs of issuance of the Bonds including, but not limited to (a) the cost of preparation and posting of the Preliminary Official Statement and the cost of preparation, posting, printing and delivery of the Official Statement, including the number of copies the Underwriters and the Authority deem reasonable; (b) any cost of preparation of the Bonds; (c) the fees and disbursements of Co-Bond Counsel; (d) the fees and disbursements of any accountants, consultants, financial advisors or additional legal counsel retained in connection with the issuance of the Bonds, including the Independent Engineer and the Financial Feasibility Consultant; (e) fees for Bond ratings and CUSIP numbers; (f) the expenses of travel, lodging and meals for Authority representatives in connection with the negotiation, marketing, issuance and delivery of the Bonds; (g) all advertising expenses in connection with the public offering of the Bonds, including investor meetings; (h) the costs of filing fees required by any of the Blue Sky laws; and (i) all reasonable and necessary out-ofpocket associated with the issuance of the Bonds. The Authority shall reimburse the Underwriters for the fees and expenses of Underwriters' counsel, any expense advanced or incurred by the Underwriters for which the Authority is responsible hereunder including (f) above and other reasonable expenses incurred in connection with the performance of Underwriters' obligations hereunder (reimbursement may be included in the expense component of the Underwriters' discount, which the Underwriters acknowledge includes their expenses as set forth in Section 1).
- 15. **Notices**. Any notice or other communication to be given to the Authority under this Agreement may be given by delivering the same in writing to the address shown on the first

page of this Agreement to the attention of the Chief Financial Officer, and any notice or other communication to be given to the Representative under this Agreement may be given by delivering the same in writing to Goldman, Sachs & Co., 200 West Street, 33rd floor, New York, NY 10282, Attention: Jeffrey Scruggs, Managing Director.

- Agreement, when accepted in accordance with the provisions hereof, shall constitute the entire agreement between the Authority and the Underwriters and is made solely for the benefit of the Authority and the Underwriters (including the successors or assigns of the Authority or the Underwriters) and no other person will acquire or have any right hereunder or by virtue hereof. All of the Authority's and Underwriters' representations, warranties, covenants and agreements contained in this Agreement will remain operative and full force and effect regardless of (a) any investigations made by or on behalf of the Underwriters; or (b) delivery of and payment for the Bonds pursuant to this Agreement.
- 17. **Effective Date**. This Agreement will become effective upon its acceptance by the Authority, as evidenced by the execution hereof by the appropriate official of the Authority, and will be valid and enforceable at the time of such acceptance.
- 18. **Execution in Counterparts**. This Agreement may be executed in counterparts each of which shall be regarded as an original and all of which shall constitute one and the same document.
- 19. <u>Finder</u>. The Authority represents and warrants that no finder or other agent of a finder has been employed or consulted by it in connection with this transaction.

20. <u>Governing Law</u>. This Agreement shall be governed by and construed in accordance with the laws of the District of Columbia.

GOLDMAN, SACHS & CO. SAMUEL A. RAMIREZ & CO., INC. LOOP CAPITAL MARKETS LLC BARCLAYS CAPITAL INC. MERRILL LYNCH, PIERCE, FENNER & SMITH INC.

By: GOLDMAN, SACHS & CO., as Representative of the Underwriters

By	r:	
•	Jeffrey Scruggs	
	Managing Director	

[SIGNATURE PAGE TO SERIES 2017A/B BOND PURCHASE AGREEMENT]

Accepted:	January	, 2017
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DISTRICT OF COLUMBIA WATER AND SEWER AUTHORITY

By_______Name: Mark T. Kim
Title: Chief Financial Officer

[SIGNATURE PAGE TO SERIES 2017A/B BOND PURCHASE AGREEMENT]

EXHIBIT A

\$000,000,000 DISTRICT OF COLUMBIA WATER AND SEWER AUTHORITY Public Utility Senior Lien Revenue Refunding Bonds Series 2017A (Green Bonds)

Serial Bonds

Year	Principal	Interest	Yield	
(Oct. 1)	Amount	Rate		
20	\$	%	%	
20				
20				
20				
20				
20				
20				
20				
20				
20				
20				
20				
20				
20				
20				

2017A Term Bonds

00,000,000 __% Term Bonds, due October 1, 20__, Yield __% 00,000,000 __% Term Bonds, due October 1, 20__, Yield __%

\$000,000,000 DISTRICT OF COLUMBIA WATER AND SEWER AUTHORITY Public Utility Senior Lien Revenue Bonds Series 2017B

Serial Bonds

	Year (Oct. 1)	Principal Amount	Interest Rate	Yield		
	20	\$	%	%		
	20					
	20					
	20					
	20					
	20					
	20					
	20					
	20					
	20					
		2017	л т D	. 1.		
			B Term Bo			
)		% Term Box	nds, due Oct	ober 1, 20	. Yield	0/

\$ % Term Bonds, due October 1, 20, Yield	%
\$ % Term Bonds, due October 1, 20, Yield	%

TERMS OF REDEMPTION

Optional Redemption

The Series 2017A Bonds are subject to optional redemption prior to maturity on or after1 20 from any source, in whole or in part on any date, in such order of maturities as shall be determined by the Authority (and by lot within a maturity), at a redemption price of 100% of the principal amount thereof, together with accrued interest, if any, to the redemption date.
MANDATORY SINKING FUND REDEMPTION
The \$ Series 2017A Term Bonds maturing on October 1, 20 shall be subject to mandatory sinking fund redemption, on October 1 of that respective year, as follows:
Year Principal Amount 20 \$ 20* \$
The \$ Series 2017A Term Bonds maturing on October 1, 20 shall be subject to mandatory sinking fundation, on October 1 of that respective year, as follows:
Year Principal Amount

*Final maturity.

Optional Redemption

The Series 2017B Bonds are subject to optional redemption prior to maturity on or after ______1, 20___ from any source, in whole or in part on any date, in such order of maturities as shall be determined by the Authority (and by lot within a maturity), at a redemption price of 100% of the principal amount thereof, together with accrued interest, if any, to the redemption date.

MANDATORY SINKING FUND REDEMPTION

The \$_____ Series 2017B Term Bonds maturing on October 1, 20__ shall be subject to mandatory sinking fund redemption, on October 1 of that respective year, as follows:

Year 20__* Principal Amount \$

The \$____ Series 2017b Term Bonds maturing on October 1, 20__ shall be subject to mandatory sinking fund redemption, on October 1 of that respective year, as follows:

<u>Year</u> <u>Principal Amount</u> 20__ * \$

^{*}Final maturity.

EXHIBIT B

FORM OF AUTHORITY'S GENERAL COUNSEL OPINION

February , 2017

District of Columbia Water and Sewer Authority 5000 Overlook Avenue, S.W. Washington, DC 20032

DISTRICT OF COLUMBIA WATER AND SEWER AUTHORITY
Public Utility Senior Lien Revenue Bonds, Series 2017B

Ladies and Gentlemen:

I am General Counsel to the District of Columbia Water and Sewer Authority (the "Authority") and in connection with the issuance by the Authority of its Public Utility Senior Lien Revenue Bonds, Series 2017A (Green Bonds), in the original principal amount of \$_______ (the "Series 2017A Bonds") and its Public Utility Senior Lien Revenue Bonds, Series 2017B, in the original principal amount of \$______ (the "Series 2017B Bonds" and collectively with the Series 2017A Bonds, the "Bonds"). I have reviewed an executed copy of the Bond Purchase Agreement, dated January ___, 2017, between the Authority and Goldman, Sachs & Co., as Representative on behalf of the Underwriters, with respect to the Bonds (the "Bond Purchase Agreement") and the Preliminary Official Statement, dated January ___, 2017 (the "Preliminary Official Statement") and the Official Statement, dated January ___, 2017, being distributed in connection with the issuance of the Bonds (collectively, the "Official Statement"). Capitalized terms used and not defined herein shall have the respective meanings given to such terms in the Bond Purchase Agreement.

I have also examined an act of the Council of the District of Columbia entitled the "Water and Sewer Authority Establishment and Department of Public Works Reorganization Act of 1996," codified, as amended, at District of Columbia Official Code Ann. Sections 34-2201.01 *et seq.*, and the acts amendatory thereof and supplemental thereto (the "Act"), and an act of the United States Congress entitled the "District of Columbia Water and Sewer Authority Act of 1996" (Public Law 104-184), as amended (the "Federal Act"), certified copies of proceedings of the Authority authorizing the issuance of the Bonds, including the Resolution and such other proceedings as I have considered necessary or advisable to render the following opinions.

^{*} Preliminary; subject to change.

In rendering the following opinions, I have relied on representations of the Authority as to matters of fact without independent investigation or verification and, as to matters of law, the representations of Co-Bond Counsel without independent research or verification and have assumed the genuineness of all signatures, the authenticity of all documents tendered to me as originals and the conformity to original documents of all documents submitted to me as certified or photostatic copies.

Based upon review of the materials described above and subject to the recitals and qualifications herein contained, to the best of my knowledge, information and belief, it is my opinion that:

- 1. The Authority is a body corporate duly created, organized and validly existing as an independent authority of the District under the Act and under the Federal Act (the Act and the Federal Act being sometimes hereinafter referred to as, the "Acts"). The Authority has the full legal right, power and authority to (i) adopt the Resolution, (ii) issue the Bonds, (iii) execute, deliver and perform its obligations under the Bond Documents, and (iv) perform its obligations under the System Agreements.
- 2. The Federal Act was duly enacted by Congress and the Act was duly enacted by the Council of the District of Columbia. The Acts remain in full force and effect. The Act transferred all assets and liabilities of the Water and Sewer Utility Administration ("WASUA") as indicated on the balance sheet prepared by WASUA, effective April 17, 1996, on an interim basis for the exclusive use and possession of the Authority for so long as any revenue bonds of the Authority, including the Bonds, remain outstanding.
- 3. The Resolution was adopted by the Authority and has not been amended since the date of the adoption thereof and remains in full force and effect as of the date hereof.
- 4. (i) The adoption of the Resolution, the issuance of the Bonds, the execution and delivery of the Bond Documents and the performance of the Authority's obligations thereunder, and (ii) the performance of the Authority's obligations under the System Agreements, under the circumstances contemplated thereby, do not and will not in any material respect conflict with or constitute on the part of the Authority, a breach of or default under any agreement or other instrument to which the Authority is a party, or any existing law, administrative regulation, court order, settlement order or consent decree to which the Authority is subject.
- 5. Except as otherwise described in the Preliminary Official Statement and the Official Statement, there is no action, suit, proceeding, inquiry or investigation, at law or in equity, before or by any court, government agency, public board or body, pending or, to the best of my knowledge, threatened against the Authority (i) seeking to prohibit, restrain or enjoin the issuance, sale or delivery of the Bonds, the use of the Official Statement or the collection of the revenues pledged to the payment of the principal of and interest on the Bonds, (ii) in any way contesting or affecting any authority for the issuance of the Bonds or the validity, enforceability, due authorization, execution or delivery of the Bonds, including the Bond Purchase Agreement or the other Bond Documents, or the validity or enforceability of the System Agreements, (iii)

questioning the tax-exempt status of the Bonds under the laws of the District or the United States, (iv) in any way contesting the corporate existence or powers of the Authority or the titles of the officers of the Authority to their respective offices, (v) which may result in any material adverse change in the business or the financial condition or the financial prospects of the Authority or (vi) asserting that the Preliminary Official Statement or the Official Statement contains any untrue statement of a material fact or omits any material fact necessary to make the statements therein, in light of the circumstances under which they were made, not misleading.

- 6. The statements and information contained in the Preliminary Official Statement and the Official Statement under the caption entitled "LITIGATION," are true, correct and complete in all material respects, and the information under such caption does not contain any untrue statement of a material fact and does not omit to state any material fact required to be stated therein or necessary to make the statements therein, in light of the circumstances under which they were made, not misleading in any material respect.
- 7. Pursuant to the Acts, the Authority has the full legal right, power and authority to operate the System and to collect and pledge the Revenues therefrom in accordance with the Indenture.
- 8. The Authority has approved the form of the Preliminary Official Statement and the Official Statement, the execution of the Official Statement and the delivery of the Official Statement to the purchasers of the Bonds.
- 9. The Authority has obtained the consents, approvals, authorizations or other orders required for the consummation of the transactions contemplated by the Bond Purchase Agreement, including the issuance of the Bonds.

This opinion and all documents which relate to this opinion are to be construed in accordance with the laws of the District and the United States of America. This opinion is rendered solely for the use of the Authority and may not be relied on by any other person.

Very truly yours,

General Counsel

EXHIBIT C

FORM OF OPINION OF UNDERWRITERS' COUNSEL

February ___, 2017

\$

DISTRICT OF COLUMBIA WATER AND SEWER AUTHORITY Public Utility Senior Lien Revenue Bonds, Series 2017A (Green Bonds)

\$_____*
DISTRICT OF COLUMBIA WATER AND SEWER AUTHORITY
Public Utility Senior Lien Revenue Bonds, Series 2017B

Goldman, Sachs & Co., as Representative 200 West Street, 33rd floor New York, NY 10282

Ladies and Gentlemen:

We have acted as counsel for you as the representative (the "Representative") acting on behalf of yourself and other underwriters (the "Underwriters") in connection with your purchase from the District of Columbia Water and Sewer Authority (the "Authority") of its Public Utility Senior Lien Revenue Bonds, Series 2017A (Green Bonds), in the original principal amount of (the "Series 2017A Bonds") and its Public Utility Senior Lien Revenue Bonds, Series 2017B, in the original principal amount of \$_____ (the "Series 2017B Bonds" and collectively with the Series 2017A Bonds, the "Bonds"), pursuant to the Bond Purchase Agreement, dated January ___, 2017 (the "Purchase Agreement"), between you and the Authority. The Bonds are to be issued pursuant to the Master Indenture of Trust, dated as of April 1, 1998 (the "Master Indenture"), as amended and supplemented to the date of delivery of the Bonds (the "Indenture"), including by the Twenty-Second Supplemental Indenture of Trust, to be dated the date of issuance and delivery of the Bonds (the "Twenty-Second Supplemental Indenture"), each by and between the Authority and Wells Fargo Bank, N.A., as trustee (the "Trustee"). The proceeds of the Bonds will be used to pay (i) a portion of the costs of the Authority's DC Clean Rivers Project, (ii) a portion of the costs of certain other capital improvements to the System and (iii) pay costs of issuing the Bonds. Capitalized terms not otherwise defined herein shall have the meanings ascribed thereto in the Purchase Agreement.

In that connection, we have reviewed the Indenture, the Preliminary Official Statement of the Authority dated January ___, 2017 (the "Preliminary Official Statement") and the Official Statement of the Authority, dated January ___, 2017, with respect to the Bonds (the "Official Statement"), the Continuing Disclosure Agreement, dated February ___, 2017 (the "Continuing Disclosure Agreement"), the Purchase Agreement, certificates of the Authority, the Trustee and

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^{*} Preliminary; subject to change.

others, the opinions referred to in paragraph 10(f)(vi) of the Purchase Agreement, and such records and documents, and we have made such investigations of law, as we have deemed appropriate as a basis for the opinions and conclusions hereinafter expressed. We do not assume any responsibility for any electronic version of the Official Statement and assume that any such version is identical in all material respects to the printed version.

In arriving at the opinions and conclusions hereinafter expressed, we are not expressing any opinion or view on, and with your permission are assuming and relying on, the validity, accuracy and sufficiency of the records, documents, certificates and opinions referred to above, including the accuracy of all factual matters represented and legal conclusions contained therein, including (without limitation) any representations and legal conclusions regarding the due authorization, issuance, delivery, validity and enforceability of the Bonds, and any laws, documents and instruments that may be related to the issuance, payment or security of the Bonds. We have assumed that all records, documents, certificates and opinions that we have reviewed, and the signatures thereto, are genuine.

Based on and subject to the foregoing, and in reliance thereon, as of the date hereof, we are of the following opinions or conclusions:

- 1. The Bonds are not subject to the registration requirements of the Securities Act of 1933, as amended, and the Indenture is exempt from qualification pursuant to the Trust Indenture Act of 1939, as amended.
- We are not passing upon and do not assume any responsibility for the accuracy, completeness or fairness of any of the statements contained in the Preliminary Official Statement and the Official Statement and make no representation that we have independently verified the accuracy, completeness or fairness of any such statements. In our capacity as your counsel, to assist you with your responsibility with respect to the Preliminary Official Statement and the Official Statement, we participated in conferences with your representatives and representatives of the Authority, Squire Patton Boggs (US) LLP and Leftwich LLC, as co-bond counsel and as co-disclosure counsel, financial advisors, feasibility consultants and others, during which the contents of the Official Statement and related matters were discussed. Based on our participation in the above-mentioned conferences (which did not extend beyond the date of the Official Statement), and in reliance thereon, on oral and written statements and representations of the Authority and others and on the records, documents, certificates, opinions and matters herein mentioned (as set forth above), we advise you as a matter of fact and not opinion that, during the course of our representation of you on this matter, no facts came to the attention of the attorneys in our firm rendering legal services to you in connection with the Preliminary Official Statement and the Official Statement which caused us to believe that the Preliminary Official Statement and the Official Statement as of their dates and as of the date hereof (except for any CUSIP numbers, financial, accounting, statistical or economic, engineering or demographic data or forecasts, numbers, charts, tables, graphs, estimates, projections, assumptions or expressions of opinion, any information about litigation to which the Authority is a party, any management discussion and analysis, Appendices to the Preliminary Official Statement and the Official Statement, or any information about book-entry, DTC, ratings, rating agencies, and tax exemption of the Bonds, which we expressly exclude from the scope of this paragraph and as to which we express no opinion or view) contained or contains any untrue statement of a material fact or omitted or

omits to state any material fact necessary to make the statements therein, in the light of the circumstances under which they were made, not misleading. No responsibility is undertaken or view expressed with respect to any other disclosure document, materials or activity, or as to any information from another document or source referred to by or incorporated by reference in the Preliminary Official Statement and the Official Statement.

3. In our opinion, the Continuing Disclosure Agreement with respect to the Bonds for the benefit of the holders thereof, satisfies in all material respects the requirements for such an agreement in paragraph (b) (5) of the Rule 15c2-12; provided that, for purposes of this opinion, we are not expressing any view regarding the content of the Official Statement that is not expressly stated in numbered paragraph 2 of this letter.

We are furnishing this letter to you pursuant to paragraph 10(f)(vi) of the Purchase Agreement solely for your benefit as the Representative. We disclaim any obligation to update this letter. This letter is not to be used, circulated, quoted or otherwise referred to or relied upon for any other purpose or by any other person. This letter is not intended to, and may not, be relied upon by owners of Bonds or by any other party to whom it is not specifically addressed.

Very truly yours,

EXHIBIT D

FORM OF UNDERWRITER'S CERTIFICATE

DISTRICT OF COLUMBIA WATER AND SEWER AUTHORITY
Public Utility Senior Lien Revenue Bonds, Series 2017B

Goldman, Sachs & Co. (the "Underwriter"), for itself and as representative of the other underwriters for the bonds identified above (the "Issue"), issued by the District of Columbia Water and Sewer Authority (the "Issuer"), based on its knowledge regarding the sale of the Issue, certifies as of this date as follows:

- (1) **Issue Price**. All of the bonds of the Issue were actually offered to the general public in a bona fide public offering at the initial offering prices set forth on attached Exhibit 1 (the "Initial Offering Price" as applicable to respective maturities), there being no accrued interest, and as of January ___, 2017, the Sale Date of the Issue, at least 10% in principal amount of each maturity was first sold or was reasonably expected to be sold (other than to bond houses, brokers and other intermediaries) at the Initial Offering Price (the "Issue Price"). The aggregate Issue Price of the Issue is \$______. In addition, the Underwriter had no reason to believe that any of the Initial Offering Prices of the Bonds exceeded the fair market value of the Bonds as of the Sale Date
- **Yield.** Based on the methodology Bond Counsel has provided to us to compute the Yield, the Yield on the Issue is %, being the discount rate that, when used in computing the present worth of all payments of principal and interest to be paid on the Issue, computed on the basis of a 360-day year and semi-annual compounding, produces an amount equal to the Issue Price of the Issue as stated in paragraph (1) and computed with the following adjustment. The bonds of the Issue maturing in the year[s] 20 are the only bonds of the Issue that are subject to optional redemption before maturity and have an Initial Offering Price that exceeds their stated redemption price at maturity by more than one fourth of 1% multiplied by the product of their stated redemption price at maturity and the number of complete years to their first optional redemption date. Accordingly, in computing the Yield on the Issue stated in paragraph (2), such bonds were treated as retired on their optional redemption date or at maturity to result in the lowest Yield on the Issue. No bond of the Issue (a) that is subject to mandatory early redemption has a stated redemption price that exceeds the Initial Offering Price of such bond by more than one-fourth of 1% multiplied by the product of its stated redemption price at maturity and the number of years to its weighted average maturity date, (b) is subject to optional redemption within five years of the Issuance Date of the Issue or (c) bears interest at an increasing interest rate.

has provided to us to compute the wei (defined below) of the Issue is equal to the sum of the products of the Initial	Maturity. Based on the methodology Bond Counsel ghted average maturity, weighted average maturity years. The weighted average maturity of an issue is ial Offering Price of each maturity of the issue and the e respective maturity (taking into account mandatory the Initial Offering Price of the entire Issue.
	Int. The Underwriter's discount is \$, Issue Price (as set forth in paragraph (1)) exceeds the for the Issue.
(5) CUSIP Number. Base the CUSIP Number assigned to the final materials	ed on the notification from the CUSIP Service Bureau, aturity of the Issue is
All capitalized terms not de the Issuer's Tax Compliance Certificate or	fined in this Certificate have the meaning set forth in in Attachment A to it.
deliver this Certificate of the Underwrunderwriters. The Underwriter understand will be relied on by the Issuer in making Certificate and in completing and filing to	the Underwriter and duly authorized to execute and iter for itself and as representative of the other ds that the certifications contained in this Certificate certain of its representations in its Tax Compliance the Information Return for the Issue, and by Squire C, as co-bond counsel, in rendering certain of their nice of the Issue.
Dated: February, 2017	Goldman, Sachs & Co., for itself and as representative of Samuel A. Ramirez & Co., Inc., Loop Capital Markets, LLC Barclays Capital Inc., and Merrill Lynch, Pierce, Fenner & Smith Inc.



ATTACHMENT 3

D.C. WATER AND SEWER AUTHORITY BOARD OF DIRECTORS FINANCE & BUDGET JANUARY COMMITTEE MEETING

Thursday, January 26, 2017; 11:00 a.m.
Blue Plains Wastewater Treatment Plant
5000 Overlook Avenue, SW, DC
AGENDA

Call to Order Chairman

December 2016 Financial Report Chief Financial Officer

Agenda for February Committee Meeting Chairman

Adjournment Chairman

^{*}Detailed agenda can be found on DC Water's website at www.dcwater.com/about/board_agendas.cfm

ATTACHMENT 4

FY 2016 - FY 2018 Operating Budget

(\$000's)		FY 2016 Approved		FY 2016 Projection		Variance			FY 2017		FY 2018	
						ver/(under)	%	Approved		Approved		
Authorized Headcount		1260		1121		-139	89%		1260		1260	
Total Personnel Services		140,034	\$	143,977	\$	3,943	103%	\$	144,761	\$	149,193	
Non-Personnel Services												
Chemicals & Supplies		35,951		28,371		(7,580)	79%		34,709		30,659	
Utilities		35,018		25,155		(9,863)	72%		28,670		29,399	
Contractual Services		79,244		71,546		(7,698)	90%		82,760		79,354	
Water Purchases		30,740		26,572		(4,168)	86%		29,278		30,156	
Small Equipment		1,465		781		(684)	53%		1,230		1,071	
Total Non-Personnel Services		182,417		152,425		(29,992)	84%		176,647		170,638	
Total Operations & Maintenance		322,451	\$	296,401	\$	(26,050)	92%	\$	321,408	\$	319,831	
Debt Service		174,766		152,081		(22,685)	87%		169,346		185,480	
PILOT & ROW		20,744		20,744		-	100%		21,057		21,376	
Cash Financed Capital Improvements		23,644		23,475		(169)	99%		24,014		35,260	
Total Debt Service/PILOT/ROW/CFCI		219,154		196,300		(22,854)	90%		214,417		242,116	
Total Operating Expenditure	\$	541,605	\$	492,701	\$	(48,904)	91%	\$	535,825	\$	561,947	
Less: PS charged to Capital Projects		(18,993)		(17,791)		1,202	94%		(21,934)		(21,061)	
Total Net Operating Expenditure		522,612	\$	474,910	\$	(47,702)	91%	\$	513,891	\$	540,886	

As of the end of FY 2016, the operating projections totaled \$492.7 million or 91% of the approved budget. These are preliminary estimates and subject to change after completion of the annual financial statement audit.