



DISTRICT OF COLUMBIA WATER AND SEWER AUTHORITY

Board of Directors

Finance and Budget Committee

Thursday, July 25, 2019

11:00 a.m.

1. **Call to Order**..... Major Riddick, Chairperson
2. **June 2019 Financial Report (Attachment 1)**..... Matthew T. Brown
3. **Automated Metering Infrastructure (AMI) Program Update (Attachment 2)**April Bingham
4. **2019 Bond Transaction and Market Update (Attachment 3)**
.....Dan Hartman, Public Financial Management
5. **Action Items**..... Matthew T. Brown
 - A. **2019 A, B & C Bond Resolution and Related Documents (Attachment 4)**
 1. Authorizing Resolution for Series 2019A/B
 2. Authorizing Resolution for Series 2019C
 3. 24th Supplemental Indenture (Series 2019A/B)
 4. 25th Supplemental Indenture (Series 2019C)
 5. Bond Purchase Agreement for Series 2019A/B
 6. Bond Purchase Agreement for Series 2019C
6. **Agenda for September Committee Meeting (Attachment 5)**..... Major Riddick
7. **Executive Session***
8. **Adjournment**

FOLLOW-UP ITEMS

From the Finance and Budget Committee meeting held on May 23, 2019.

1. Provide an update on the AMR Project. **(Mr. Giancola) Status: See Attachment 2.**

From the Finance and Budget Committee meeting held on June 27, 2019.

1. Provide the Environmental Quality and Operations (EQ&OPS) Committee with an update on the curing pad and solar projects. **(Mr. Giancola) Status: Referred to the EQ&OPS Committee**

* The DC Water Board of Directors may go into executive session at this meeting pursuant to the District of Columbia Open Meetings Act of 2010, if such action is approved by a majority vote of the Board members who constitute a quorum to discuss: matters prohibited from public disclosure pursuant to a court order or law under D.C. Official Code § 2-575(b)(1); contract negotiations under D.C. Official Code § 2-575(b)(1); legal, confidential or privileged matters under D.C. Official Code § 2-575(b)(4); collective bargaining negotiations under D.C. Official Code § 2-575(b)(5); facility security under D.C. Official Code § 2-575(b)(8); disciplinary matters under D.C. Official Code § 2-575(b)(9); personnel matters under D.C. Official Code § 2-575(b)(10); proprietary matters under D.C. Official Code § 2-575(b)(11); decision in an adjudication action under D.C. Official Code § 2-575(b)(13); civil or criminal matters where disclosure to the public may harm the investigation under D.C. Official Code § 2-575(b)(14), and other matters provided in the Act.



Fiscal Year 2019

Monthly Financial Report

Period Ending June 30, 2019

DEPARTMENT OF FINANCE

Matthew T. Brown, Executive Vice President & CFO, Finance and Procurement

Ivan Boykin, Director, Finance

Syed Khalil, Director, Rates & Revenue

John Madrid, Controller

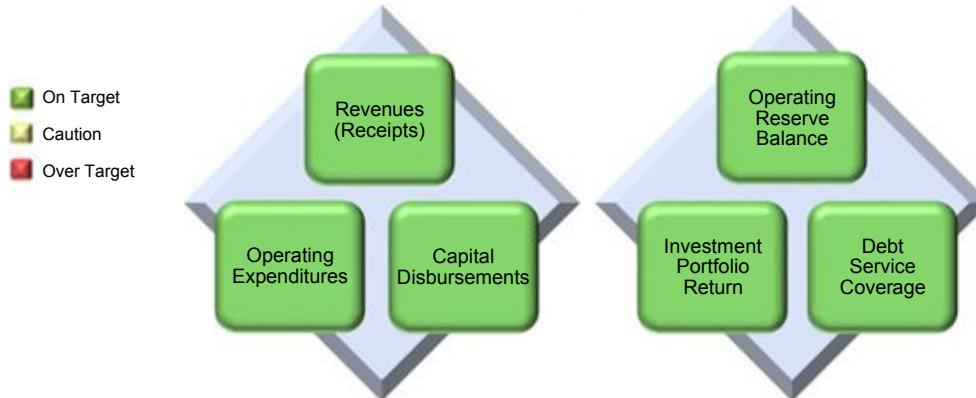
Lola Oyeyemi, Director, Budget

Monthly Financial Report

JUNE 2019

EXECUTIVE SUMMARY

As of the end of June 2019, with 75 percent of the fiscal year completed, we are on track with budgetary expectations and targeted performance metrics.



(\$ in millions)

	Budget	YTD Budget	Actual	Variance		Actual % Budget	Y/E Projection
				Favorable	(Unfavorable)		
Revenues (Receipts)*	\$665.7	\$499.2	\$508.6	\$9.4	1.9%	76.4%	\$686.9
Expenditures*	\$582.8	\$437.1	\$399.1	\$37.9	8.7%	68.5%	\$571.6
Capital Disbursements	\$439.1	\$358.4	\$288.5	\$69.9	19.5%	65.7%	\$429.5

* *Straight-lined (9/12 of budget)*

Highlights:

- Budget Calendar Update:
 - FY 2020 Board-adopted budget has been published online at www.dewater.com
 - FY 2021 Budget Kick-off scheduled for July 31, 2019
- FY 2019 Interim Financial Statement and Uniform Guidance audit processes are underway
- Public Hearing on Customer Assistance Program (CAP2) to extend program to FY 2020 and amend Retail Groundwater Sewer Rate is scheduled for August 14, 2019
- Fitch Rating Agency surveillance discussion at DC Water on August 5, 2019
- Standard & Poor’s and Moody’s rating agency meetings scheduled for September 4, 2019
- The bond sale for Series 2019A/B&C series of \$300 million is tentatively scheduled for September/October 2019

Matthew T. Brown, Executive Vice President & Chief Financial Officer

Monthly Financial Report

Fiscal Year-to-Date
As of June 30, 2019

Operating Revenues (\$000's)

Category	A	B	C	D=C/A	E=C-B	F=E/B	G	H=G/A
	FY 2019 REVISED BUDGET	YTD BUDGET*	ACTUAL	ACTUAL % of BUDGET	VARIANCE \$ Fav/(Unfav)	VARIANCE % Fav/(Unfav)	Year-End Projections	% of Budget
Res. / Comm. / Multi.	\$376,210	\$282,158	\$287,216	76.3%	\$5,059	1.8%	\$ 389,024	103.4%
Federal	67,054	50,290	\$50,866	75.9%	576	1.1%	67,054	100.0%
Municipal (DC Govt.)	18,009	13,507	\$12,244	68.0%	(1,263)	(9.4%)	16,733	92.9%
DC Housing Authority	9,860	7,395	\$8,360	84.8%	965	13.0%	10,714	108.7%
Metering Fee	10,776	8,082	\$8,726	81.0%	644	8.0%	11,544	107.1%
Water System Replacement Fee (WSRF)	39,717	29,788	\$30,565	77.0%	777	2.6%	40,527	102.0%
Wholesale	82,992	62,244	\$61,573	74.2%	(671)	(1.1%)	82,992	100.0%
PILOT/ROW	21,701	16,276	\$15,237	70.2%	(1,039)	(6.4%)	21,035	96.9%
All Other	39,331	29,498	\$33,866	86.1%	4,368	14.8%	47,325	120.3%
TOTAL	\$665,650	\$499,237	\$508,654	76.4%	\$9,417	1.9%	\$ 686,948	103.2%

*Straight-lined (9/12 of budget)

VARIANCE ANALYSIS FOR MAJOR REPORTED ITEMS

At the end of June 2019, cash receipts totaled \$508.6 million, or 76.4 percent of the revised FY 2019 budget. Several categories of customers make payments on a quarterly basis, including the Federal Government (which made their third quarterly payment in April), and wholesale customers (who made their third quarter payment in May).

Residential, Commercial and Multi-Family – Receipts for this category are higher at \$287.2 million or 76.3 percent of the revised budget. The higher receipts are partly due to increased year-end billing of the unbilled accounts. The CRIAC receipts are also slightly higher than the budget.

Federal – Actual receipts through June 2019 totaled \$50.9 million or 75.9 percent of the revised budget. The Federal Government made their third quarter payment in April 2019.

District Government – Receipts are slightly lower at \$12.2 million, or 68.0 percent of the revised budget.

DC Housing – Receipts are slightly higher at \$8.4 million or 84.8 percent of the revised budget. The DC Housing Authority had not paid the August billed amount of \$0.8 million in September 2018. The overdue amount was received in October 2018, which resulted in one additional payment in FY 2019.

Wholesale – The Wholesale customers' actual receipts through June 2019 total \$61.6 million or 74.2 percent of the revised FY 2019 budget. The Wholesale customers made their third quarter payment in May 2019.

Other Revenue – Receipts are higher than the straight-line budget at \$33.9 million or 86.1 percent of the budgeted category primarily due to (i) higher Development Contractor Water and Sewer Service Fees as compared to budget and (ii) \$6.03 million payment received from the District Government for the CAP2, CAP3 and CRIAC Non-Profit Relief programs.

Monthly Financial Report

Fiscal Year-to-Date
As of June 30, 2019

Operating Expenditures (\$000's)

Category	A FY 2019 BUDGET	B YTD BUDGET*	C ACTUAL	D=C/A ACTUAL % of BUDGET	E= C- B VARIANCE \$ Fav/(Unfav)	F= E/B VARIANCE % Fav/(Unfav)	G Year-End Projections	H= G/A % of Budget
Personnel	\$162,620	\$121,965	\$115,883	71.3%	\$6,082	5.0%	\$154,929	95.3%
Contractual Services	81,679	61,259	53,171	65.1%	8,089	13.2%	78,725	96.4%
Water Purchases	30,520	22,890	22,990	75.3%	(100)	(0.4%)	32,617	106.9%
Supplies & Chemicals	32,091	24,068	26,748	83.4%	(2,680)	(11.1%)	35,738	111.4%
Utilities	26,905	20,179	19,602	72.9%	577	2.9%	25,966	96.5%
Small Equipment	1,240	930	320	25.8%	610	65.6%	867	69.9%
SUBTOTAL O&M	\$335,055	\$251,291	\$238,714	71.2%	\$12,577	5.0%	328,842	98.1%
Debt Service	199,025	149,269	144,151	72.4%	5,118	3.4%	194,021	97.5%
PILOT/ROW	21,702	16,277	16,277	75.0%	0	0.0%	21,702	100.0%
Cash Financed Capital Improvements	26,999	20,249	0	0.0%	20,249	100.0%	26,999	100.0%
TOTAL OPERATING	\$582,781	\$437,086	\$399,141	68.5%	\$37,946	8.7%	571,564	98.1%
Capital Labor	(18,259)	(13,694)	(13,234)	72.5%	(460)	3.4%	(17,676)	96.8%
TOTAL NET OPERATING	\$564,522	\$423,392	\$385,907	68.4%	\$37,484	8.9%	553,888	98.1%

*Straight-lined (9/12 of budget)

VARIANCE ANALYSIS FOR MAJOR REPORTED ITEMS

Operating expenditures (including debt service and the Right-of-Way & PILOT fees) totaled \$399.1 million or 68.5 percent of the FY 2019 Board-approved budget of \$582.8 million. These numbers include estimated incurred but unpaid invoices and are subject to revision in subsequent months.

Personnel Services – As previously reported, YTD underspending is due to the temporary hiring freeze, eliminated vacancies and lower benefit costs versus budget. A total of 1125 positions were filled at the end of June with a year-to-date vacancy rate of 8.2 percent after the elimination of aged vacancies. Overtime spending totals \$6.0 million or 79.1 percent of the annual budget due to increased after-hour work performed in response to emergencies and water main breaks during the winter season.

Contractual Services – Spending is in line with expectations and higher spending is anticipated during the latter part of the fiscal year.

Water Purchases – Reflect DC Water's share of Washington Aqueduct expenditures with increase in consumption anticipated during the summer months.

Supplies & Chemicals – YTD overspending continues to be from increased chemical usage in the Tunnel Dewatering Pump Station (TDPS), higher than anticipated influent at the Plant, and higher unit prices of major chemicals (methanol and ferric chloride).

Utilities – Spending is in line with expectations at this time of the fiscal year.

Debt Service – YTD actuals are in line with budget and debt service payment schedule.

Capital Labor – YTD spending is in line with budget and historical trend.

Monthly Financial Report

Fiscal Year-to-Date
As of June 30, 2019

Capital Disbursements (\$000's)

Service Area	A	B	C	D=C/A	E=B-C	F=E/B	G	H=GA
	FY 2019 REVISED BUDGET	YTD BUDGET	ACTUAL	ACTUAL % BUDGET	VARIANCE \$ Fav/(Unfav)	VARIANCE % Fav/(Unfav)	Year-End Projections	% of Budget
Non Process Facilities	\$15,309	\$14,344	\$6,209	40.6%	\$8,135	56.7%	\$15,921	104.0%
Wastewater Treatment	69,979	57,418	40,872	58.4%	16,546	28.8%	67,152	96.0%
Combined Sewer Overflow	195,350	158,516	149,337	76.4%	9,179	5.8%	197,391	101.0%
Stormwater	4,220	2,858	1,354	32.1%	1,504	52.6%	5,286	125.2%
Sanitary Sewer	44,927	36,815	29,406	65.5%	7,409	20.1%	47,677	106.1%
Water	61,884	52,857	36,179	58.5%	16,678	31.6%	60,658	98.0%
SUBTOTAL: CAPITAL PROJECTS	\$391,669	\$322,808	\$263,357	67.2%	\$59,451	18.4%	394,084	100.6%
Capital Equipment*	34,518	25,888	14,737	42.7%	11,151	43.1%	25,740	74.6%
Washington Aqueduct*	12,930	9,698	10,443	80.8%	(745)	(7.7%)	9,664	74.7%
SUBTOTAL: ADD'L CAPITAL PROGRAMS	\$47,448	\$35,586	25,179	53.1%	\$10,406	29.2%	35,404	74.6%
TOTAL	\$439,117	\$358,393	\$288,536	65.7%	\$69,856	19.5%	\$429,489	97.8%

*Straight-lined (9/12 of budget)

VARIANCE ANALYSIS FOR MAJOR REPORTED ITEMS

At the end of June 2019, capital disbursements totaled \$288.5 million or 65.7 percent of the revised budget.

Capital Projects – As previously reported, YTD disbursements remain low across all service areas with an increase projected during the latter part of the fiscal year. Underspending in Non Process Facilities Service Area is primarily due to the delay in retention release for the Headquarters building, originally scheduled for the second quarter, but now anticipated in the fourth quarter. Wastewater Treatment Service Area lower disbursements are due to project delays on pump rebuilds for the Raw Wastewater Pumping Station, contract slippage on the Enhanced Clarification Facilities and Blue Plains Tunnel Dewatering Pumping Station projects, and delayed invoicing on the Enhanced Nitrogen Removal Program Management costs.

Underspending in Water and Sanitary Sewer Service Areas are driven by closeout delays on the Small Diameter Watermain and Saint Elizabeth Water Tank projects, and slower than anticipated progress on Small Local and Creekbed Sewer Rehabilitation projects and the Large Diameter Watermain project.

The detailed project performance will be reviewed as part of the quarterly CIP update by the Department of Engineering and Technical Services to the Environmental Quality & Operations and Finance & Budget Committees in September 2019.

Capital Equipment – YTD underspending is attributable to the lag in lead times for procurement and delivery of specialized Fleet equipment, delay in the Enterprise Resource Planning (ERP) Project, Facilities renovation and HVAC projects, and lower than anticipated use of the Authority-wide reserves.

Washington Aqueduct – Higher disbursements reflect the third quarter payment of \$7.4 million to execute contracts on the following projects: Dalecarlia Clearwell, Old Conduit, McMillian Backwash Discharge to Sewer, and 2nd High Reservoir Improvements.

Monthly Financial Report

Fiscal Year-to-Date
As of June 30, 2019

Cash Investments (\$ in millions)

Cash Balances

Rate Stabilization Fund Balance	\$	55.5
DC Insurance Reserve Balance		1.0

<i>Operating Reserve Accounts</i>	
Renewal & Replacement Balance	35.0
O & M Reserve per Indenture	51.7
Undesignated Reserve Balance	38.8
O & M Reserve per Board Policy	125.5
Excess Above O & M Reserve	14.5
Management O & M Reserve Policy	140.0
Project Billing Refunds	11.0
Excess Revenue	14.6
Operating Reserve Accounts	165.6

Operating Cash Balance Including RSF	\$	222.1
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<i>Additional Reserve Accounts</i>	
Unrestricted	
Bond Fund - Construction 2016B	4.9
Bond Fund - Construction 2018A	34.5
Bond Fund - Construction 2018B	109.1
CSO LTCP Appropriations	8.0
Unrestricted Total	156.6

Restricted	
Debt Service Reserve - Series 1998	23.7
Fleet Relocation Fund	3.6
DC Water - CAP2	5.8
DOEE - CAP2	1.2
DOEE - CAP3/Non-Profit	3.2
Developer Deposits	0.5
Danbury Meter Installation Project	0.5
Restricted Total	38.4

Total All Funds	\$	417.1
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OVERALL PORTFOLIO PERFORMANCE

- The operating reserve balance was \$165.6 million as compared to the operating reserve level of \$140.0 million for FY 2019
- Average cash balance for the month of June was \$168.5 million
- Total investment portfolio was in compliance with the Authority's Investment Policy
- Operating funds interest income for June (on a cash basis) was \$248,096; YTD \$2,089,045
- A detailed investment performance report is attached

Monthly Financial Report

Fiscal Year-to-Date
As of June 30, 2019

Cash Flow Summary (\$000's)

	Annual Budget Cash Basis	YTD 75% Cash Budget	YTD Actual Cash Oct. 1, 2018 - Jun. 30, 2019	Variance Favorable (Unfavorable)		FY 2019 Year End Projection
OPERATING BUDGET						
Cash Provided						
Retail	\$521,626	\$391,220	\$397,978	\$6,758	2%	535,595
Wholesale	82,992	62,244	61,573	(671)	-1%	82,992
Other	60,608	45,456	48,712	3,256	7%	67,973
Total Cash Provided	665,226	498,920	508,263	9,343	2%	686,560
Operating Cash Used						
Personnel Services	144,361	108,271	106,394	1,876	2%	137,253
Contractual Services	81,679	61,259	68,332	(7,072)	-12%	78,725
Chemicals & Supplies	32,082	24,062	28,922	(4,861)	-20%	35,738
Utilities	26,915	20,186	19,245	942	5%	25,966
Water Purchases	30,520	22,890	23,227	(337)	-1%	32,617
Small Equipment	1,240	930	365	565	61%	867
Total Operating Cash Used	316,797	237,598	246,484	(8,886)	-4%	311,166
Defeasance D.S./Cash Financed Capital Construction	26,999	20,249	0	20,249	100%	26,999
Other Cash Used						
Debt Service	198,754	149,066	144,151	4,915	3%	194,021
Payment In Lieu of Taxes/Right of Way	21,702	16,276	16,276	0	0%	21,702
Total Other Cash Used	220,456	165,342	160,427	4,915	3%	215,723
Total Cash Used	564,252	423,189	406,911	16,278	4%	553,888
Net Cash Provided (Used) by Operating Act.	100,974	75,731	101,352	25,621		132,672
CAPITAL BUDGET						
Cash Provided						
Debt Proceeds	110,000	82,500	132,044	49,544	60%	110,000
EPA Grants	18,215	13,661	13,078	(583)	-4%	16,385
CSO Grants			8,000	8,000	0%	8,000
System Availability Fee	3,850	2,888	0	(2,888)	-100%	1,130
Transfer from Operations	98,540	73,905	(73,905)	(73,905)	-100%	101,259
Interest Income	2,981	2,236	3,651	1,415	63%	2,981
Wholesale Capital Contributions	67,112	50,334	38,563	(11,771)	-23%	63,877
Total Cash Provided	300,698	225,524	195,336	(30,188)	-13%	334,903
Cash Used						
DC Water Capital Program	426,187	319,640	278,669	40,972	13%	419,826
Washington Aqueduct Projects	12,930	9,698	10,443	(745)	-8%	9,664
Total Cash Used	439,117	329,338	289,111	40,226	12%	429,490
Net Cash/PAYGO Provided (Used) by Cap. Act.	(\$138,419)	(\$103,814)	(\$93,776)	\$10,038		(\$94,587)
Beginning Balance, October 1 (Net of Rate Stab. Fund) Projected						
Plus (Less) Operating Surplus	166,796		166,796			166,796
Wholesale Customer Refunds from Prior Years	100,974	75,731	101,352			132,672
DC Fleet Payment	(11,000)	(8,250)	(5,797)			(15,446)
Interest Earned From Bond Reserve			773			
Transfer to CAP Fund	424	318	391			389
Prior Year Federal Billing Reconciliation			240			(10,246)
Project Billing Refunds	(5,821)	(4,365)	(4,365)			(5,821)
Cash Used for Capital	(11,000)	(8,250)	(8,250)			(11,000)
Balance Attributable to O&M Reserve	(75,391)	(56,543)	(93,776)			(75,391)
	\$164,982		\$165,613			\$181,953
OTHER CASH RESERVES						
Rate Stabilization Fund	\$55,450					
DC Insurance Reserve	1,000					
Unrestricted Reserves	156,625					
Restricted Reserves	38,390					

Monthly Financial Report

APPENDIX

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Monthly Financial Report

Fiscal Year-to-Date
As of June 30, 2019

Operating Revenues Detail

(\$ in millions)

Revenue Category	FY 2019 Budget	YTD Budget	Actual	Variance Favorable / (Unfavorable)		Actual % of Budget	Year End Projections	Variance Proj v. Bud	% of Budget
Residential, Commercial, and Multi-family	\$376.2	\$282.2	\$287.2	\$5.0	1.8%	76.3%	\$389.0	\$12.8	103.4%
Federal	67.1	50.3	50.9	0.6	1.1%	75.9%	67.1	0.0	100.0%
District Government	18.0	13.5	12.2	(1.3)	-9.4%	68.0%	16.7	(1.3)	92.9%
DC Housing Authority	9.9	7.4	8.4	1.0	13.0%	84.8%	10.7	0.8	108.7%
Customer Metering Fee	10.8	8.1	8.7	0.6	8.0%	81.0%	11.5	0.7	107.1%
Water System Replacement Fee (WSRF)	39.7	29.8	30.6	0.8	2.6%	77.0%	40.5	0.8	102.0%
Wholesale	83.0	62.3	61.6	(0.7)	-1.1%	74.2%	83.0	0.0	100.0%
Right-of-Way Fee/PILOT	21.7	16.3	15.2	(1.0)	-6.4%	70.2%	21.0	(0.7)	96.9%
Subtotal (before Other Revenues)	\$626.4	\$469.8	\$474.8	\$5.0	1.1%	75.8%	\$639.5	\$13.1	102.1%
Other Revenue without RSF									
IMA Indirect Cost Reimb. For Capital Projects	4.6	3.5	3.3	(0.2)	-5.7%	71.7%	4.4	(0.2)	95.7%
DC Fire Protection Fee	12.5	9.4	9.4	0.0	0.0%	75.2%	12.5	0.0	100.0%
Stormwater (MS4)	1.0	0.8	1.0	0.2	25.0%	100.0%	1.3	0.3	130.0%
Interest	3.1	2.3	2.5	0.2	8.7%	80.6%	3.2	0.1	103.2%
Developer Fees (Water & Sewer)	6.0	4.5	7.7	3.2	71.1%	128.3%	9.3	3.3	155.0%
Transfer From Rates Stabilization	6.0	4.5	0.0	(4.5)	-100.0%	0.0%	6.0	0.0	100.0%
System Availability Fee (SAF)	3.9	2.9	1.4	(1.5)	-51.7%	38.5%	1.1	(2.8)	28.2%
Others	2.2	1.7	8.6	6.9	405.9%	390.9%	9.6	7.4	436.4%
Subtotal	\$39.3	\$29.5	\$33.9	\$4.4	14.8%	86.1%	\$47.4	\$8.1	120.3%
Rate Stabilization Fund Transfer	\$0.0	\$0.0	\$0.0	\$0.0	0.0%	0.0%	\$0.0	\$0.0	0.0%
Other Revenue Subtotal	\$39.3	\$29.5	\$33.9	\$4.4	14.8%	86.1%	\$47.4	\$8.1	120.3%
Grand Total	\$665.7	\$499.2	\$508.6	\$9.4	1.9%	76.4%	\$686.9	\$21.2	103.2%

BREAKDOWN OF RETAIL RECEIPTS BY CUSTOMER CATEGORY
(\$ in 000's)

Customer Category	Water	Sewer	Clean Rivers IAC	Metering Fee	WSRF	Total
Residential	\$25,964	\$40,954	\$24,504	\$3,877	\$6,987	\$102,286
Commercial	44,002	49,688	29,642	2,622	12,075	138,028
Multi-family	24,372	37,486	10,605	1,210	5,356	79,029
Federal	14,845	16,875	19,146	590	4,332	55,788
District Govt	2,116	2,863	7,264	323	1,478	14,044
DC Housing Authority	2,930	4,341	1,089	105	337	8,802
Total:	\$114,229	\$152,206	\$92,251	\$8,726	\$30,565	\$397,978

Note: The breakdown of Collections into Residential, Commercial, & Multi-family and Water and sewer is approximate as it is based on percentages of historical data and does not take into account adjustments and timing differences

Clean Rivers IAC - Actual vs Budget
(\$ in 000's)

Customer Category	FY2019 Budget	Year-To-Date Budget	Actual Received	Variance Favorable / <Unfavorable>	Variance % of YTD Budget	Actual % of Budget
Residential	\$31,594	\$23,696	\$24,504	\$809	3%	78%
Commercial	35,847	26,885	29,642	2,757	10%	83%
Multi-family	13,567	10,175	10,605	430	4%	78%
Federal	25,529	19,147	19,146	(0)	0%	75%
District Govt	8,888	6,666	7,264	598	9%	82%
DC Housing Authority	1,520	1,140	1,089	(51)	-4%	72%
Total:	\$116,945	\$87,709	\$92,251	\$4,542	5%	79%

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Fiscal Year-to-Date
As of June 30, 2019

Retail Accounts Receivable (Delinquent Accounts)

The following tables show retail accounts receivable over 90 days including a breakdown by customer class.

Greater Than 90 Days by Month

	\$ in millions	# of accounts
September 30, 2012	\$5.5	13,063
September 30, 2013	\$4.9	11,920
September 30, 2014	\$5.3	12,442
September 30, 2015	\$6.5	11,981
September 30, 2016	\$7.7	12,406
September 30, 2017	\$8.4	11,526
September 30, 2018	\$13.4	16,273
October 31, 2018	\$14.4	14,890
November 30, 2018	\$13.9	14,091
December 31, 2018	\$14.6	14,373
January 31, 2019	\$13.6	12,153
February 28, 2019	\$12.5	11,732
March 31, 2019	\$11.8	10,033
April 30, 2019	\$11.3	9,408
May 31, 2019	\$11.1	9,651
June 30, 2019	\$11.4	9,395

Notes: The increase in the accounts receivable over 90 days is due to the temporary suspension of collections procedures because of the new billing system VertexOne, which was implemented in December 2017.

Greater Than 90 Days by Customer

	Number of Accounts			Month of June (All Categories)				Total Delinquent				
	W & S		Total No. of	Active		Inactive		May		Jun		
	Impervious Only	a/c		a/c	a/c	Amount (\$)	a/c	Amount (\$)	a/c	Amount (\$)	%	
Commercial	8,982	2,434	11,416	929	\$3,673,347	37	\$143,603	943	\$3,661,921	966	\$3,816,950	34%
Multi-family	8,349	359	8,708	778	\$3,513,903	11	\$67,973	790	\$3,476,857	789	\$3,581,876	31%
Single-Family Residential	105,869	2,973	108,842	7,553	\$3,890,395	87	\$90,697	7,918	\$3,986,215	7,640	\$3,981,093	35%
Total	123,200	5,766	128,966	9,260	\$11,077,646	135	\$302,273	9,651	\$11,124,993	9,395	\$11,379,919	100%

Notes: Included in the above \$11.38M (or 9,395 accounts) of the DC Water Over 90 days delinquent accounts, \$4,260,722.82 (or 1,823 accounts) represents Impervious only accounts over 90 days delinquent.
-Reportable delinquencies do not include balances associated with a long standing dispute between DC Water and a large commercial customer.

Monthly Financial Report

Fiscal Year-to-Date
As of June 30, 2019

Overtime by Department

Department	Budget	YTD Actual	YTD Actual % of Budget	% of Regular Pay
Office of the Board Secretary *	\$9,000	\$10,349	115.0%	5.0%
General Manager	9,000	519	5.8%	0.0%
General Counsel	3,000	2,320	77.3%	0.1%
External Affairs	5,000	2,210	44.2%	0.2%
Internal Audit	-	0	0.0%	0.0%
Information Technology	15,000	7,334	48.9%	0.3%
Procurement **	30,000	30,976	103.3%	1.2%
Customer Service ***	311,000	321,077	103.2%	4.5%
Finance, Accounting & Budget	40,000	24,350	60.9%	0.5%
Assistant General Manager - Administrative Services	1,000	0	0.0%	0.0%
Office of Emergency Management	-	0	0.0%	0.0%
Human Capital Management	6,000	825	13.8%	0.0%
Occupational Safety and Health	1,000	75	7.5%	0.0%
Facilities Management	300,000	165,432	55.1%	6.2%
Department of Security	-	354	0.0%	0.1%
Wastewater Engineering	36,000	5,273	0.0%	0.3%
Water Quality and Technology	30,000	1,882	0.0%	0.1%
Distribution and Conveyance System	800,000	515,467	64.4%	9.2%
Engineering and Technical Services	864,000	538,860	62.4%	4.8%
Water Services ****	1,522,000	1,344,718	88.4%	13.5%
Clean Rivers	-	0	0.0%	0.0%
Sewer Services *****	1,068,000	1,184,810	110.9%	22.0%
Wastewater Treatment - Operations	1,831,000	1,351,305	73.8%	15.5%
Wastewater Treatment - Process Engineering	45,000	23,086	51.3%	0.8%
Maintenance Services	545,000	436,863	80.2%	7.3%
Permit Operations	99,000	15,078	15.2%	1.0%
Fleet Management *****	4,000	8,988	224.7%	1.6%
Total DC WATER	\$7,575,000	\$5,992,151	79.1%	9.2%

* Office of the Board Secretary is experiencing high overtime due to new member orientations

** Procurement is experiencing high overtime as a result of warehouse inventory management activities

*** Customer Service is experiencing high overtime to complete meter reader replacement project

**** Water Services is experiencing high overtime spending related to emergency repairs to watermain breaks

***** Sewer Services is experiencing high overtime for after hours and emergency repairs

***** Fleet Management is experiencing high overtime spending due to short staffing in the department

Fiscal Year-to-Date
As of June 30, 2019

Capital Disbursements Detail by Program (\$000's)

Service Areas	Budget		Actual			Variance			Projections	
	FY 2019 REVISED BUDGET	YTD BUDGET	Oct 2018 - May 2019	Jun 2019	YTD	ACTUAL % BUDGET	VARIANCE \$ Fav/(Unfav)	VARIANCE % Fav/(Unfav)	Year-End Projection	% of Budget
NON PROCESS FACILITIES										
Facility Land Use	\$15,309	\$14,344	\$5,718	\$491	\$6,209	40.6%	\$8,135	56.7%	\$15,921	104.0%
Subtotal	15,309	14,344	5,718	491	6,209	40.6%	8,135	56.7%	15,921	104.0%
WASTEWATER TREATMENT										
Liquid Processing	21,488	17,384	13,009	922	13,932	64.8%	3,453	19.9%	20,734	96.5%
Plantwide	15,777	11,181	7,415	296	7,711	48.9%	3,470	31.0%	14,240	90.3%
Solids Processing	6,672	5,761	4,419	-	4,419	66.2%	1,343	23.3%	6,516	97.7%
Enhanced Nitrogen Removal Facilities	26,042	23,091	14,165	645	14,810	56.9%	8,281	35.9%	25,661	98.5%
Subtotal	69,979	57,418	39,009	1,863	40,872	58.4%	16,546	28.8%	67,152	96.0%
COMBINED SEWER OVERFLOW										
D.C. Clean Rivers	187,859	152,759	129,080	14,664	143,744	76.5%	9,015	5.9%	187,859	100.0%
Program Management	1,685	1,292	1,773	-	1,773	105.2%	(481)	-37.3%	1,817	107.8%
Combined Sewer	5,805	4,465	3,780	40	3,819	65.8%	646	14.5%	7,716	132.9%
Subtotal	195,350	158,516	134,633	14,704	149,337	76.4%	9,179	5.8%	197,391	101.0%
STORMWATER										
Local Drainage	8	8	-	-	-	0.0%	8	100.0%	8	108.7%
On-Going	1,056	680	884	5	889	84.2%	(209)	-30.7%	1,357	128.5%
Pumping Facilities	1,996	1,166	334	98	432	21.6%	734	63.0%	3,391	169.9%
DDOT	-	-	-	-	-	0.0%	-	0.0%	-	0.0%
Research and Program Management	1,078	-	-	-	-	0.0%	-	0.0%	447	41.5%
Trunk/Force Sewers	82	1,003	33	-	33	40.1%	970	96.7%	81	98.7%
Subtotal	4,220	2,858	1,251	103	1,354	32.1%	1,504	52.6%	5,286	125.2%
SANITARY SEWER										
Collection Sewers	5,434	5,228	2,928	76	3,003	55.3%	2,225	42.6%	6,086	112.0%
On-Going	13,653	10,633	8,271	935	9,207	67.4%	1,426	13.4%	12,197	89.3%
Pumping Facilities	2,248	1,747	926	-	926	41.2%	821	47.0%	2,015	89.6%
Program Management	3,321	2,688	2,228	10	2,238	67.4%	451	16.8%	3,091	93.1%
Interceptor/Trunk Force Sewers	20,270	16,519	12,267	1,767	14,033	69.2%	2,486	15.0%	24,288	119.8%
Subtotal	44,927	36,815	26,619	2,788	29,406	65.5%	7,409	20.1%	47,677	106.1%
WATER										
Distribution Systems	30,729	27,334	16,528	791	17,319	56.4%	10,015	36.6%	30,185	98.2%
Lead Program	4,338	3,537	2,729	433	3,162	72.9%	375	10.6%	3,804	87.7%
On-Going	10,080	8,676	6,302	462	6,764	67.1%	1,912	22.0%	10,421	103.4%
Pumping Facilities	1,199	1,128	465	-	465	38.8%	662	58.7%	1,259	105.0%
DDOT	992	825	-	-	-	0.0%	825	100.0%	1,521	153.3%
Storage Facilities	9,384	8,082	4,684	151	4,835	51.5%	3,247	40.2%	9,198	98.0%
Program Management	5,163	3,275	3,387	246	3,633	70.4%	(358)	-10.9%	4,269	82.7%
Subtotal	61,884	52,857	34,095	2,084	36,179	58.5%	16,678	31.6%	60,658	98.0%
Capital Projects	391,669	322,808	241,324	22,033	263,357	67.2%	59,451	18.4%	\$394,084	100.6%
CAPITAL EQUIPMENT	34,518	25,888	13,818	919	14,737	42.7%	11,151	43.1%	25,740	74.6%
WASHINGTON AQUEDUCT	12,930	9,698	3,090	7,353	10,443	80.8%	(745)	-7.7%	9,664	74.7%
Additional Capital Programs	47,448	35,586	16,908	8,272	25,179	53.1%	10,406	29.2%	35,404	74.6%
Total	\$439,117	\$358,393	\$258,231	\$30,305	\$288,536	65.7%	\$69,856	19.5%	\$429,489	97.8%

Monthly Financial Report

Fiscal Year-to-Date
As of June 30, 2019

Accounts Payable

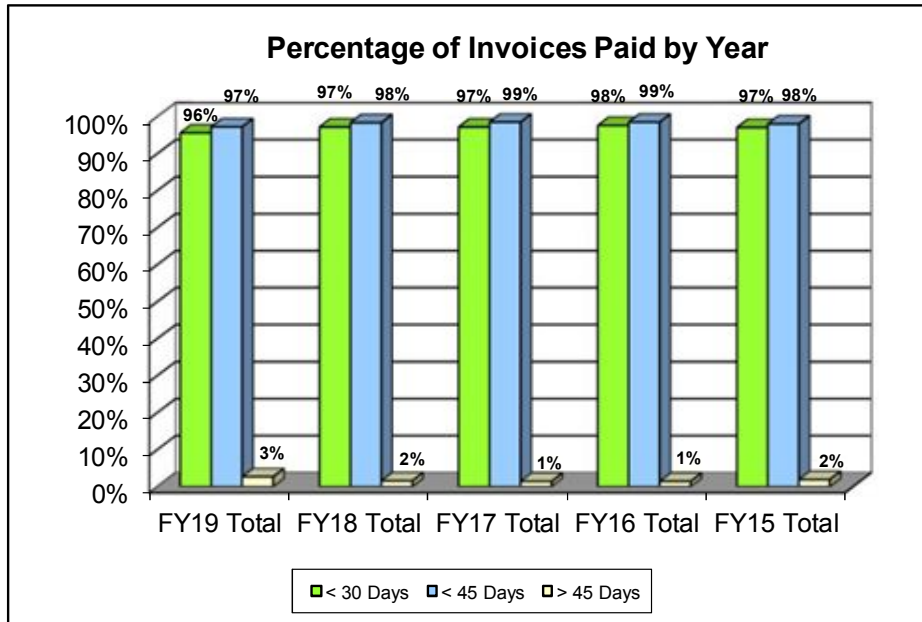
Cumulative performance for the nine-month period ending June FY 2019, a total of 15,235 vendor payments were processed and paid within 30 days compared to 15,503 in FY 2018 (as shown in the table below) and with a dollar value of \$468.9 million compared to \$554.6 million for FY 2018.

For FY 2019, approximately 96% of the invoices were paid within 30 days compared to 97% for FY 2018. The Authority's goal is to pay 97% of all undisputed invoices within 30 days.

Accounts Payable Performance

Days	FY 2019		FY 2018	
	Number	Percent	Number	Percent
Less than 30	15,235	95.6%	15,503	97.2%
Less than 45	15,496	97.3%	15,690	98.4%
Greater than 45	432	2.7%	254	1.6%
Sub-Total ≤ 45	15,928	100%	15,944	100%
Retainage/Dispute	184		164	
Total	16,112		16,108	

The chart below shows cumulative year to date historical performance for fiscal year 2015 through fiscal year 2019.



Monthly Financial Report

Fiscal Year-to-Date
As of June 30, 2019

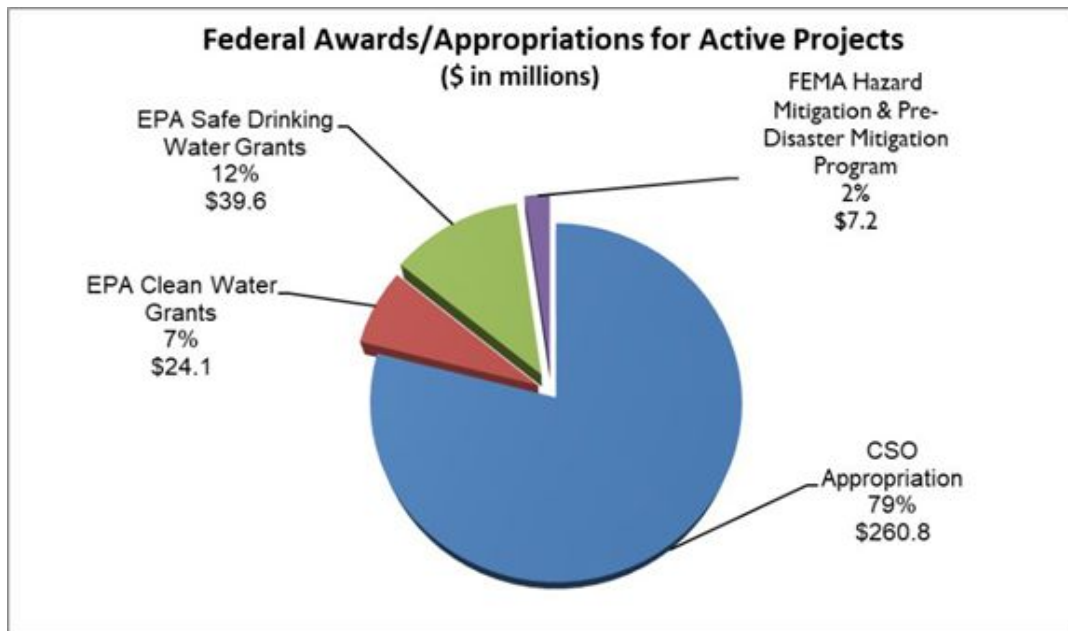
Grants Report

The Authority currently receives grants to fund portions of its capital project costs from the U.S. Environmental Protection Agency (EPA) and the Federal Emergency Management Agency (FEMA).

The EPA grants are issued under two acts, the Clean Water Act of 1972 and the Safe Drinking Water Act of 1974.

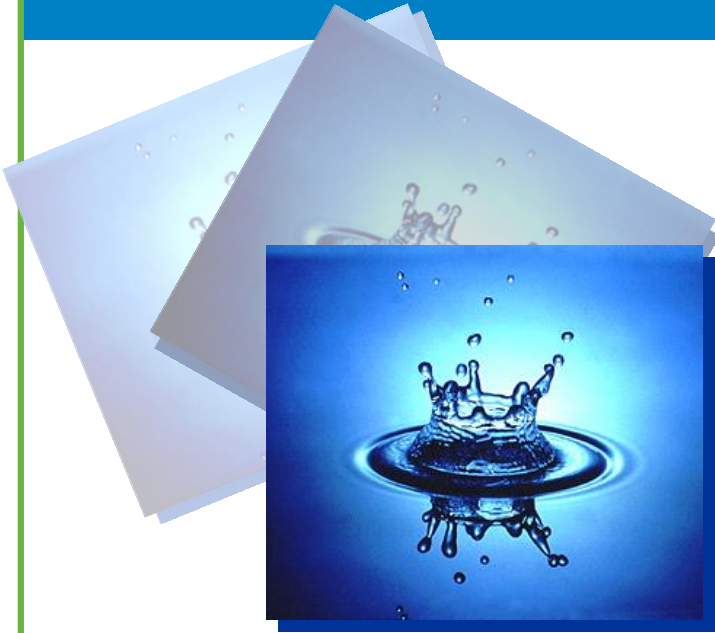
The FEMA mitigation grants are issued under the Robert T. Stafford Disaster Relief and Emergency Assistance Act through the Hazard Mitigation Grant Program (HMGP) Act of 1993 and the Pre-Disaster Mitigation Grant Program (PDM) Act of 2000.

As of June 30, 2019, DC Water has \$331.7 million in total federal funds for active projects, as indicated below:



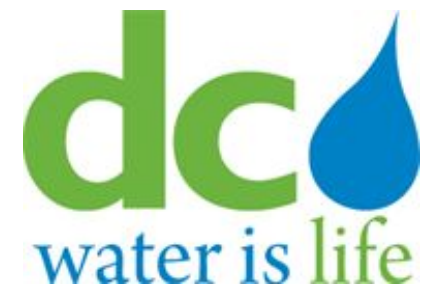
The remaining balance of the EPA funding as of June 30, 2019 is \$19.7 million. FEMA grants have a balance of \$6.9 million as of June 30, 2019. FEMA grants include \$2.2 million in approved funds that the Authority is awaiting award documents from FEMA and sub-award document from the District.

DC Water has received twenty separate Congressional CSO appropriations totaling \$260.8 million plus accrued interest of \$12.4 million, resulting in total CSO funding of \$273.2 million. Of this amount, \$8.0 million appropriated for FY 2019 under Public Law 116-6 was received from Treasury on April 1, 2019 (Q3 FY2019). The cumulative CSO appropriation life-to-date cash disbursement is \$273.2 million. As of June 30, 2019, the remaining CSO balance is \$8,046,713 which represents FY19 appropriation and interest earned on CSO funds through the month of June 2019.



DC Water

Investment Performance Report – June 2019



**DC Water
Finance Division
Economic Update**

ECONOMIC COMMENTARY

- Since June of 2009, the U.S. economy has been growing on average 2.3% each year. The country recently entered into the 121st month of gradual economic expansion, making the current expansion the longest in history. The U.S. Gross Domestic Product (“GDP”) increased at an annual rate of 3.1% in the first quarter of 2019, according to the Bureau of Economic Analysis’ third estimate.
- The U.S. economy added 224,000 jobs in June, which beat the market’s expectations and rebounded from May’s jobs hiring slowdown. The Bureau of Labor Statistics reported a slight uptick in the unemployment rate at 3.7% from 3.6% in May and continued to be at a 50- year low.
- The Federal Reserve held rates steady and signaled future rate cuts in the months ahead at the Federal Open Market Committee (“FOMC”) meeting on June 19, 2019. Rates remained steady at 2.25-2.50%. The FOMC’s focus continues to be on sustaining the current economic expansion amid a strong labor market, though they also acknowledged that there is greater uncertainty threatening this outcome.
- During the month of June, U.S. Treasury yields continued to decrease across the curve, reflecting market expectations that the Fed will cut rates as well as worries over slowing global growth and global trade. The yield curve inversion continues to remain between the 3-month Treasury bill and the 10-year Treasury note, which yielded 2.09% and 2.01%, respectively, as of June 30, 2019. The yield on the 10-year Treasury note has fallen by more than a full percentage point in the past three quarters, which has been the biggest decline over such a period since 2011.

PORTFOLIO RECAP

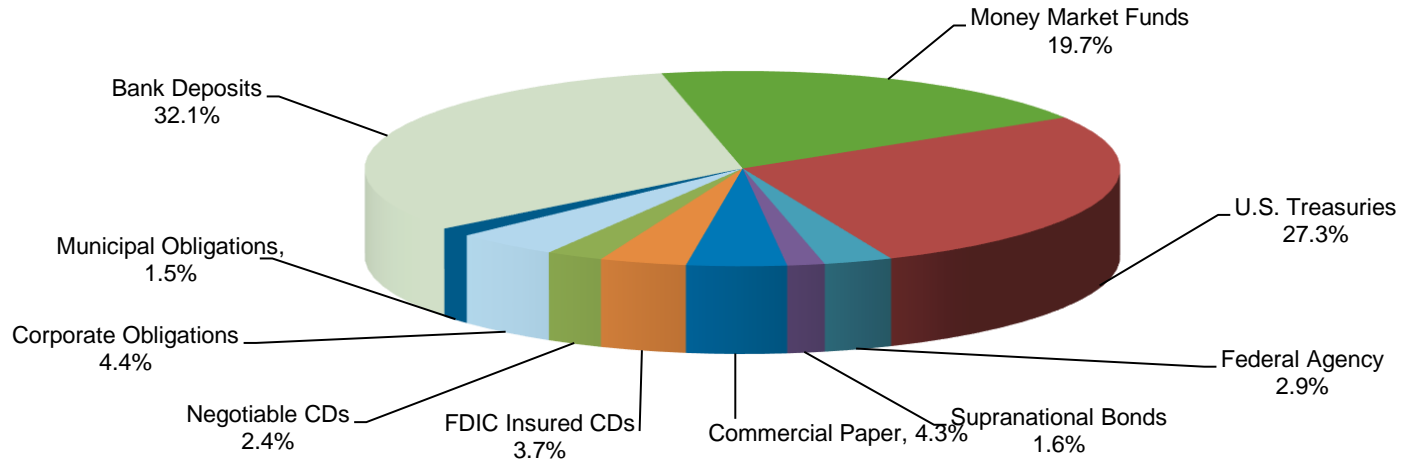
- The portfolio is diversified among Bank Deposits, U.S. Treasuries, Federal Agencies, Supranational Bonds, Commercial Paper, Negotiable CDs, Corporate Notes/Bonds, Municipal Bonds, FDIC Insured CDs, and SEC registered money market funds.
- The overall yield-to-maturity on cost of the portfolio is 2.04%.

Operating Reserve

- PFM purchased \$4.0 million of a 3-year Treasury at a yield of 1.85%.
- PFM purchased \$1.4million of 3-year corporate notes from various issuers with an average weighted yield of 2.24%.



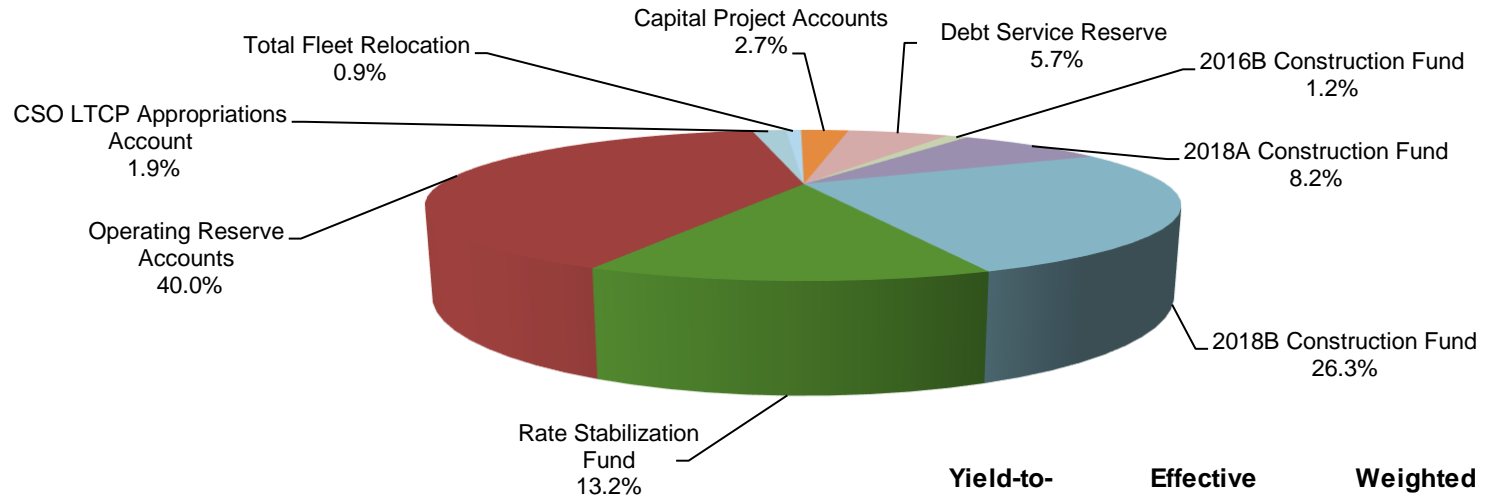
**DC Water
Finance Division
Investments - By Security Type
As of June 30, 2019**



Security Type	Book Value + Accrued Interest	Asset Allocation	Permitted By Policy
Bank Deposits	134,512,593	32.1%	100.0%
Money Market Funds	82,540,014	19.7%	100.0%
U.S. Treasuries	114,596,002	27.3%	100.0%
Federal Agency	12,274,339	2.9%	80.0%
Supranational Bonds	6,707,270	1.6%	30.0%
Commercial Paper	17,899,154	4.3%	35.0%
FDIC Insured CDs	15,544,847	3.7%	30.0%
Negotiable CDs	10,239,948	2.4%	30.0%
Corporate Obligations	18,609,324	4.4%	30.0%
Municipal Obligations	6,098,691	1.5%	20.0%
Total	\$ 419,022,182	100.0%	



**DC Water
Finance Division
Investment Analysis – By Fund
As of June 30, 2019**

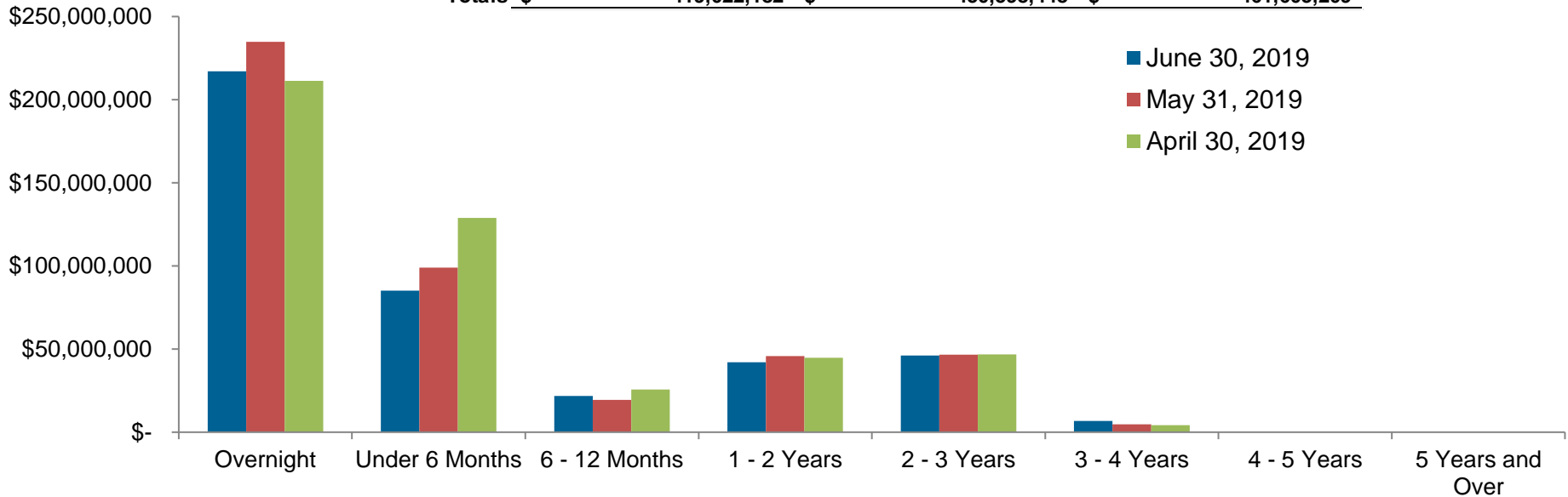


Fund Name	Book Value + Accrued Interest	Yield-to- Maturity at Cost	Effective Duration (years)	Weighted Average Maturity (days)
Rate Stabilization Fund	\$ 55,450,000	2.05%	0.00	1.0
Operating Reserve Accounts	\$ 167,401,439	1.87%	1.08	415.9
CSO LTCP Appropriations Account	\$ 8,046,713	2.27%	0.00	1.0
Fleet Relocation	\$ 3,577,746	2.04%	0.00	1.0
Capital Project Accounts	\$ 11,246,000	1.66%	0.00	1.0
Debt Service Reserve	\$ 23,825,138	2.48%	1.15	430.2
Series B Commercial Paper Construction Fund	\$ 2,848	1.79%	0.00	1.0
2016B Construction Fund	\$ 4,902,224	2.22%	0.00	1.0
2018A Construction Fund	\$ 34,563,649	2.23%	0.01	4.3
2018B Construction Fund	\$ 110,006,424	2.39%	0.12	42.5
Total	\$ 419,022,182	2.04%	0.53	202.3



**DC Water
Finance Division
Investment Analysis – By Maturity**

Maturity Distribution	June 30, 2019	May 31, 2019	April 30, 2019
Overnight	\$ 217,052,607.03	\$ 234,870,072.22	\$ 211,311,493.85
Under 6 Months	85,160,767.26	99,087,639.00	128,874,229.05
6 - 12 Months	21,847,108.74	19,435,028.25	25,678,901.84
1 - 2 Years	42,057,698.16	45,846,010.93	44,789,909.47
2 - 3 Years	46,092,080.98	46,708,450.40	46,725,469.18
3 - 4 Years	6,811,920.30	4,651,246.87	4,225,205.62
4 - 5 Years	-	-	-
5 Years and Over	-	-	-
Totals	\$ 419,022,182	\$ 450,598,448	\$ 461,605,209





**DC Water
Finance Division
Investments – Issuer Allocation**

	Credit Ratings S&P / Moody's	Book Value		Investment Policy Limit	Compliance with Investment Policy
Bank Deposits					
TD Bank		134,512,593.39	32.1%	100.0%	Yes
Sub-Total Bank Deposits		134,512,593.39	32.1%	100.0%	Yes
Money Market Mutual Funds					
Wells Fargo Treasury Plus MMF	AAA	82,419,934.84	19.7%	50.0%	Yes
Wells Fargo Government MMF	AAA	117,230.33	0.0%	50.0%	Yes
First American Treasury	AAA	2,848.47	0.0%	50.0%	Yes
Sub-Total Money Market Mutual Funds		82,540,013.64	19.7%	100.0%	Yes
U.S. Treasuries					
Treasury Note	AA+ / Aaa	114,596,002.11	27.3%	100.0%	Yes
Sub-Total Treasuries		114,596,002.11	27.3%	100.0%	Yes
Federal Agencies					
Fannie Mae	AA+ / Aaa	6,922,462.32	1.7%	40.0%	Yes
Federal Home Loan Bank	AA+ / Aaa	5,351,876.77	1.3%	40.0%	Yes
Sub-Total Federal Agencies		12,274,339.09	2.9%	80.0%	Yes
Supranational Bonds					
African Development Bank	AAA / Aaa	805,293.46	0.2%	5.0%	Yes
Asian Development Bank	AAA / Aaa	706,649.99	0.2%	5.0%	Yes
Inter-American Development Bank	AAA / Aaa	1,985,744.09	0.5%	5.0%	Yes
International Bank for Reconstruction and Development	AAA / Aaa	2,277,400.87	0.5%	5.0%	Yes
International Finance Corporation Note	AAA / Aaa	932,181.60	0.2%	5.0%	Yes
Sub-Total Supranational Bonds		6,707,270.01	1.6%	30.0%	Yes
Commercial Paper					
BNP Paribas NY Branch	A-1 / P-1	3,973,711.08	0.9%	5.0%	Yes
JP Morgan Securities LLC	A-1 / P-1	6,457,609.15	1.5%	5.0%	Yes
MUFG Bank Ltd. NY	A-1 / P-1	2,489,166.65	0.6%	5.0%	Yes
Toyota Motor Credit Corporation	A-1+ / P-1	4,978,666.65	1.2%	5.0%	Yes
Sub-Total Commercial Paper		17,899,153.53	4.3%	35.0%	Yes

CDARS holdings are not managed by PFMAM, and we therefore cannot guarantee the accuracy of holdings information provided.



**DC Water
Finance Division
Investments – Issuer Allocation**

	Credit Ratings S&P / Moody's	Book Value		Investment Policy Limit	Compliance with Investment Policy
FDIC Insured Certificates of Deposit					
CDARS - Placed by Industrial Bank	NR / NR	15,544,847.26	3.7%	5.0%	Yes
Sub-Total FDIC-Insured Certificates of Deposit		15,544,847.26	3.7%	30.0%	Yes
Negotiable Certificates of Deposit					
Bank of Montreal Chicago	A+ / Aa2	952,212.47	0.2%	5.0%	Yes
Bank of Nova Scotia Houston	A-1 / P-1	926,890.93	0.2%	5.0%	Yes
Canadian Imperial Bank NY	A-1 / P-1	1,409,515.64	0.3%	5.0%	Yes
HSBC Bank USA	AA- / Aa2	931,105.00	0.2%	5.0%	Yes
Nordea Bank AB NY	A-1+ / P-1	1,868,310.89	0.4%	5.0%	Yes
Royal Bank of Canada NY	AA- / Aa2	701,512.00	0.2%	5.0%	Yes
Swedbank NY	AA- / Aa2	927,683.01	0.2%	5.0%	Yes
UBS AG Stamford CT	A-1 / P-1	1,615,337.78	0.4%	5.0%	Yes
Westpac Banking Corp NY	AA- / Aa3	907,380.00	0.2%	5.0%	Yes
Sub-Total Negotiable Certificates of Deposit		10,239,947.72	2.4%	30.0%	Yes
Corporate Obligations					
3M Company	AA- / A1	342,513.92	0.1%	5.0%	Yes
Apple	AA+ / Aa1	979,311.18	0.2%	5.0%	Yes
Bank of Montreal	A- / A2	467,477.52	0.1%	5.0%	Yes
Bank of New York Mellon	A / A1	922,583.71	0.2%	5.0%	Yes
Bank of Nova Scotia Houston	A+ / Aa2	934,179.93	0.2%	5.0%	Yes
Blackrock	AA- / Aa3	926,709.89	0.2%	5.0%	Yes
Chevron	AA / Aa2	478,128.46	0.1%	5.0%	Yes
Coca-Cola	A+ / A1	378,332.94	0.1%	5.0%	Yes
Johnson & Johnson	AAA / Aaa	195,442.72	0.0%	5.0%	Yes
JP Morgan	A- / A2	1,405,795.13	0.3%	5.0%	Yes
Merck & Co.	AA / A1	895,940.68	0.2%	5.0%	Yes
Pfizer Inc.	AA / A1	851,799.31	0.2%	5.0%	Yes
Proctor & Gamble Co	AA- / Aa3	958,047.56	0.2%	5.0%	Yes
Royal Bank of Canada	AA- / Aa2	874,333.57	0.2%	5.0%	Yes
Toronto Dominion Bank NY	AA- / Aa1	1,859,693.65	0.4%	5.0%	Yes
Total Capital	A+ / Aa3	870,295.93	0.2%	5.0%	Yes
Toyota	AA- / Aa3	922,488.30	0.2%	5.0%	Yes
US Bank Cincinnati	A+ / A1	990,334.40	0.2%	5.0%	Yes
Visa	AA- / Aa3	919,302.46	0.2%	5.0%	Yes

CDARS holdings are not managed by PFMAM, and we therefore cannot guarantee the accuracy of holdings information provided.



**DC Water
Finance Division
Investments – Issuer Allocation**

	Credit Ratings S&P / Moody's	Book Value		Investment Policy Limit	Compliance with Investment Policy
Corporate Obligations					
Wal-Mart Stores Inc.	AA / Aa2	1,500,820.82	0.4%	5.0%	Yes
Westpac Banking	AA- / Aa3	935,792.22	0.2%	5.0%	Yes
Sub-Total Corporate Obligations		18,609,324.30	4.4%	30.0%	Yes
Municipal Obligations					
California State	AA- / Aa3	1,082,543.81	0.3%	5.0%	Yes
Connecticut State	A / A1	989,925.60	0.2%	5.0%	Yes
Florida State	AA / Aa3	1,819,467.00	0.4%	5.0%	Yes
NYC Transitional Finance Authority	AAA / Aa1	1,471,879.25	0.4%	5.0%	Yes
New York State	NR / Aa1	393,559.83	0.1%	5.0%	Yes
University of California	AA / Aa2	341,315.93	0.1%	5.0%	Yes
Sub-Total Municipal Obligations		6,098,691.42	1.5%	20.0%	Yes
Grand Total		\$ 419,022,182.47	100.0%		

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**DC Water
Finance Division
Book Value Performance
As of June 30, 2019**

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

	Trailing 1 Month		Trailing 3 Months		Trailing 6 Months		Trailing 12 Months	Trailing 24 Months
	Periodic	Annualized	Periodic	Annualized	Periodic	Annualized		
Rate Stabilization Fund	0.15%	2.05%	0.50%	2.01%	0.98%	1.99%	1.93%	1.39%
Operating Reserve Accounts	0.22%	2.69%	0.49%	1.98%	0.85%	1.72%	1.72%	1.52%
Debt Service Reserve	0.20%	2.49%	0.62%	2.50%	1.17%	2.36%	2.13%	1.72%
2018A Construction Fund	0.18%	2.24%	0.54%	2.18%	1.12%	4.58%	2.16%	n/a
2018B Construction Fund	0.15%	1.90%	0.55%	2.23%	1.15%	4.70%	2.29%	n/a
Short-Term	0.16%	1.98%	0.50%	2.00%	0.99%	2.02%	1.97%	1.64%
ICE BoAML 3-Month Treasury Index (Book Value) ¹	0.17%	2.10%	0.57%	2.29%	1.16%	2.36%	2.29%	1.93%
Core (1+ Years)	0.20%	2.49%	0.62%	2.51%	1.22%	2.48%	2.35%	2.06%
ICE BoAML 1-3 Year Treasury Index (Book Value) ²	0.15%	1.80%	0.51%	2.05%	1.11%	2.26%	2.50%	2.33%

- (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.



**DC Water
Finance Division
Portfolio Holdings by Fund**

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
Rate Stabilization Fund										
TD BANK BANK DEPOSIT		\$ 55,450,000		7/1/2019		2.05%	\$ 55,450,000	\$ 55,450,000	\$ 55,450,000	\$ 55,450,000.00
Operating Reserve Accounts										
TD BANK BANK DEPOSIT		\$ 55,192,134		7/1/2019		0.90%	\$ 55,192,134	\$ 55,192,134	\$ 55,192,134	
DC RESERVES TD BANK DEPOSIT		1,000,000		7/1/2019		2.27%	1,000,000	1,000,000	1,000,000	
WELLS FARGO GOVERNMENT MMF		117,230		7/1/2019		2.27%	117,230	117,230	117,230	
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	1,819,467	1,819,467	
CT ST TXBL GO BONDS	20772J3D2	985,000	1.300	8/15/2019	8/17/2016	1.23%	987,128	988,636	989,926	
INDUSTRIAL BANK CDARS		5,077,888	0.500	10/10/2019	10/11/2018	0.50%	5,077,888	5,096,215	5,096,215	
INDUSTRIAL BANK CDARS		5,110,912	1.500	11/7/2019	11/8/2018	1.49%	5,110,912	5,160,509	5,160,509	
INDUSTRIAL BANK CDARS		2,640,952	2.000	1/16/2020	1/17/2019	1.99%	2,640,952	2,664,847	2,664,847	
INDUSTRIAL BANK CDARS		2,599,667	2.000	1/16/2020	1/17/2019	1.99%	2,599,667	2,623,277	2,623,277	
NORDEA BANK AB NY CD	65590ASN7	1,850,000	2.720	2/20/2020	2/22/2018	2.72%	1,850,000	1,874,958	1,868,311	
UBS AG STAMFORD CT LT CD	90275DHG8	1,600,000	2.900	3/2/2020	3/6/2018	2.93%	1,600,000	1,622,418	1,615,338	
CANADIAN IMP BK COMM NY FLT CERT DEPOS	13606BVF0	1,400,000	2.984	4/10/2020	4/10/2018	2.78%	1,400,000	1,412,503	1,409,516	
NYC TRANS FIN AUTH, NY TXBL REV BONDS	64971W5W6	540,000	1.960	5/1/2020	6/29/2017	1.96%	540,000	541,688	541,764	
BANK OF NOVA SCOTIA HOUSTON CD	06417GU22	925,000	3.080	6/5/2020	6/7/2018	3.10%	924,649	934,817	926,891	
WAL-MART STORES INC CORP NOTES	931142E G4	925,000	2.850	6/23/2020	6/27/2018	2.87%	924,713	931,781	925,442	
TOTAL CAPITAL SA CORP NOTES	89152UAD4	850,000	4.450	6/24/2020	4/10/2017	2.07%	912,492	869,070	870,296	
US TREASURY NOTES	912828XH8	900,000	1.625	6/30/2020	6/28/2017	1.50%	903,234	897,087	901,129	
BANK OF NOVA SCOTIA HOUSTON CORP BOND	064159JX5	925,000	2.150	7/14/2020	7/14/2017	2.15%	924,871	933,982	934,180	
FNMA NOTES	3135G0T60	1,850,000	1.500	7/30/2020	9/1/2017	1.49%	1,850,481	1,852,404	1,861,823	
US TREASURY NOTES	912828XM7	825,000	1.625	7/31/2020	7/7/2017	1.60%	825,516	827,853	830,778	
BANK OF MONTREAL CHICAGO CERT DEPOS	06370REU9	925,000	3.190	8/3/2020	8/3/2018	3.23%	925,000	958,645	952,212	
WESTPAC BANKING CORP NY CD	96121T4A3	900,000	2.050	8/3/2020	8/7/2017	2.05%	900,000	906,123	907,380	
INTL BANK OF RECONSTRUCTION AND DEV NOTE	45905UP32	925,000	1.561	9/12/2020	9/19/2017	1.64%	922,780	924,722	928,467	
TORONTO-DOMINION BANK	89114QC71	925,000	3.150	9/17/2020	9/17/2018	3.16%	924,806	944,357	933,299	
FHLB NOTES	3130ACE26	965,000	1.375	9/28/2020	9/8/2017	1.48%	961,902	962,055	967,152	
HSBC BANK USA NA CERT DEPOS	40435RCN9	925,000	2.700	10/2/2020	4/4/2019	2.70%	925,000	933,659	931,105	
FANNIE MAE NOTES	3135G0U84	1,850,000	2.875	10/30/2020	11/6/2018	2.95%	1,847,373	1,882,502	1,857,237	
US TREASURY NOTES	912828L99	250,000	1.375	10/31/2020	10/17/2017	1.71%	247,539	248,958	249,485	
INTER-AMERICAN DEVELOPMENT BANK	4581X0CD8	915,000	2.125	11/9/2020	10/10/2017	1.81%	923,481	920,078	921,600	
JOHNSON & JOHNSON CORP NOTE	478160CH5	195,000	1.950	11/10/2020	11/10/2017	1.99%	194,791	195,707	195,443	
COCA-COLA CO/THE GLOBAL NOTES	191216AR1	370,000	3.150	11/15/2020	9/12/2017	1.78%	385,584	376,830	378,333	
SWEDBANK (NEW YORK) CERT DEPOS	87019U6D6	925,000	2.270	11/16/2020	11/17/2017	2.30%	925,000	924,956	927,683	
US TREASURY NOTES	912828M98	3,000,000	1.625	11/30/2020	11/3/2017	1.77%	2,986,992	2,994,637	2,998,060	
US TREASURY NOTES	912828N48	1,975,000	1.750	12/31/2020	12/5/2017	1.91%	1,965,588	1,972,471	1,970,441	
US TREASURY NOTES	912828N48	975,000	1.750	12/31/2020	12/6/2017	1.96%	968,830	973,752	971,991	
ASIAN DEVELOPMENT BANK NOTE	045167EF6	700,000	2.250	1/20/2021	1/19/2018	2.29%	699,251	710,136	706,650	
US TREASURY NOTES	912828N89	1,750,000	1.375	1/31/2021	1/4/2018	2.05%	1,715,000	1,747,733	1,741,745	
US TREASURY NOTES	912828N89	800,000	1.375	1/31/2021	1/4/2018	2.08%	783,188	798,964	795,800	
US TREASURY NOTES	912828P87	1,100,000	1.125	2/28/2021	2/16/2018	2.42%	1,058,707	1,091,718	1,081,097	
INTERNATIONAL FINANCE CORPORATION NOTE	45950VLQ7	925,000	2.635	3/9/2021	3/16/2018	2.66%	924,306	939,120	932,182	
NY ST DORM AUTH PITS TXBL REV BONDS	64990FJN5	390,000	3.100	3/15/2021	12/21/2018	3.10%	390,000	400,307	393,560	
AFRICAN DEVELOPMENT BANK NOTE	00828ECZ0	800,000	2.625	3/22/2021	3/22/2018	2.66%	799,176	815,563	805,293	
CA ST TXBL GO BONDS	13063DGA0	1,075,000	2.800	4/1/2021	4/25/2018	2.80%	1,075,043	1,099,306	1,082,544	
TOYOTA MOTOR CREDIT CORP	89236TCZ6	475,000	1.900	4/8/2021	3/6/2018	2.82%	462,223	474,996	469,633	
TOYOTA MOTOR CREDIT CORP NOTES	89236TEU5	290,000	2.950	4/13/2021	4/13/2018	2.96%	289,884	295,845	291,783	

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**DC Water
Finance Division
Portfolio Holdings by Fund**

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										
TOYOTA MOTOR CREDIT CORP NOTES	89236TEU5	160,000	2.950	4/13/2021	4/13/2018	2.93%	160,082	163,225	161,072	
BANK OF NEW YORK MELLON CORP (CALLABLE)	06406FAA1	515,000	2.500	4/15/2021	2/16/2018	2.93%	508,300	520,549	513,862	
BANK OF NEW YORK MELLON CORP (CALLABLE)	06406FAA1	410,000	2.500	4/15/2021	2/16/2018	2.99%	404,022	414,417	408,722	
INTER-AMERICAN DEVELOPMENT BANK NOTE	4581X0DB1	1,060,000	2.625	4/19/2021	4/19/2018	2.70%	1,057,668	1,079,360	1,064,144	
ROYAL BANK OF CANADA CORP NOTES	78013XKG2	870,000	3.200	4/30/2021	4/30/2018	3.23%	869,382	890,166	874,334	
US TREASURY NOTES	9128284P2	1,900,000	2.625	5/15/2021	2/11/2019	2.45%	1,907,348	1,935,687	1,912,523	
UNIV OF CAL TXBL REV BONDS	91412HBH5	340,000	3.029	5/15/2021	6/5/2018	3.03%	340,000	348,143	341,316	
US TREASURY NOTES	912828WN6	975,000	2.000	5/31/2021	6/6/2018	2.62%	957,671	980,841	965,377	
ROYAL BANK OF CANADA NY CD	78012UEE1	700,000	3.240	6/7/2021	6/8/2018	3.24%	700,000	715,346	701,512	
TORONTO DOMINION BANK CORP NOTES	89114QBZ0	925,000	3.250	6/11/2021	6/12/2018	3.27%	924,584	944,995	926,395	
FANNIE MAE NOTES	3135G0U35	1,320,000	2.750	6/22/2021	6/25/2018	2.76%	1,319,696	1,344,743	1,320,703	
WAL-MART STORES INC CORP NOTES	931142EJ8	575,000	3.125	6/23/2021	6/27/2018	3.13%	574,971	587,946	575,379	
INTL BANK OF RECONSTRUCTION AND DEV NOTE	459058GH0	1,335,000	2.750	7/23/2021	7/25/2018	2.83%	1,331,876	1,375,786	1,348,934	
US TREASURY NOTES	9128284W7	3,500,000	2.750	8/15/2021	9/7/2018	2.72%	3,502,871	3,608,484	3,538,285	
US TREASURY NOTES	9128284W7	1,100,000	2.750	8/15/2021	9/28/2018	2.91%	1,095,316	1,134,095	1,107,889	
US TREASURY NOTES	9128284W7	450,000	2.750	8/15/2021	10/4/2018	2.89%	448,295	463,948	453,378	
US TREASURY NOTES	9128284W7	425,000	2.750	8/15/2021	10/11/2018	2.97%	422,443	438,173	427,469	
3M COMPANY	88579YBA8	340,000	3.000	9/14/2021	9/14/2018	3.07%	339,303	349,476	342,514	
PFIZER INC CORP NOTE	717081EM1	575,000	3.000	9/15/2021	9/7/2018	3.05%	574,224	591,585	579,504	
FEDERAL HOME LOAN BANKS NOTES (CALLABLE)	3130AEXV7	925,000	3.000	9/20/2021	9/20/2018	3.00%	925,000	934,048	932,785	
FEDERAL HOME LOAN BANKS NOTES	3130AF5B9	1,850,000	3.000	10/12/2021	11/6/2018	3.02%	1,848,927	1,911,456	1,861,356	
FEDERAL HOME LOAN BANKS NOTES	3130AF5B9	1,575,000	3.000	10/12/2021	12/12/2018	2.85%	1,581,395	1,627,320	1,590,584	
UNITED STATES TREASURY NOTES	9128285F3	1,000,000	2.875	10/15/2021	12/12/2018	2.77%	1,002,852	1,031,479	1,008,381	
FANNIE MAE NOTES	3135G0U92	935,000	2.625	1/11/2022	1/11/2019	2.65%	934,327	966,007	946,019	
FANNIE MAE NOTES	3135G0U92	925,000	2.625	1/11/2022	1/31/2019	2.62%	925,241	955,676	936,680	
WESTPAC BANKING CORP NY CORP NOTES	961214DG5	925,000	2.800	1/11/2022	4/10/2019	2.86%	923,418	948,741	935,792	
US TREASURY NOTES	9128285V8	4,600,000	2.500	1/15/2022	1/31/2019	2.55%	4,593,352	4,740,020	4,647,336	
US TREASURY NOTES	9128285V8	1,000,000	2.500	1/15/2022	2/11/2019	2.43%	1,001,992	1,030,439	1,013,277	
US TREASURY NOTES	912828V72	3,800,000	1.875	1/31/2022	1/9/2019	2.50%	3,730,828	3,843,081	3,771,017	
MERCK & CO INC CORP NOTES	58933YAG8	450,000	2.350	2/10/2022	1/16/2019	2.99%	441,639	457,895	446,988	
US TREASURY NOTES	9128286C9	5,150,000	2.500	2/15/2022	3/5/2019	2.54%	5,144,367	5,299,557	5,193,363	
US TREASURY NOTES	9128286C9	1,250,000	2.500	2/15/2022	4/3/2019	2.29%	1,257,275	1,286,300	1,268,420	
CHEVRON CORP (CALLABLE) NOTES	166764BN9	475,000	2.498	3/3/2022	5/17/2019	2.56%	474,202	483,730	478,128	
PFIZER INC CORP BONDS	717081ER0	270,000	2.800	3/11/2022	3/11/2019	2.80%	269,984	277,078	272,295	
US BANK NA CINCINNATI (CALLABLE) NOTE	91159HHC7	965,000	3.000	3/15/2022	6/18/2019	2.33%	982,032	995,308	990,334	
BANK OF MONTREAL	06367WJM6	465,000	2.900	3/26/2022	3/26/2019	2.99%	463,819	475,677	467,478	
UNITED STATES TREASURY NOTES	9128286M7	1,685,000	2.250	4/15/2022	5/3/2019	2.23%	1,686,185	1,716,738	1,694,101	
APPLE INC CORP NOTES	037833BF6	500,000	2.700	5/13/2022	1/10/2019	3.08%	494,015	510,427	496,640	
APPLE INC CORP NOTES	037833BF6	475,000	2.700	5/13/2022	6/14/2019	2.25%	481,056	484,905	482,671	
BLACKROCK INC CORP NOTES	09247XAJ0	925,000	3.375	6/1/2022	11/9/2018	3.41%	923,909	959,936	926,710	
JPMORGAN CHASE & CO CORP NOTES	46647PAS5	925,000	3.514	6/18/2022	6/26/2018	3.50%	925,564	946,492	926,606	
US TREASURY NOTES	9128282P4	3,050,000	1.875	7/31/2022	6/5/2019	1.85%	3,052,502	3,087,555	3,076,313	
PROCTER & GAMBLE CO/THE CORP NOTES	742718EU9	950,000	2.150	8/11/2022	6/21/2019	2.15%	950,105	963,236	958,048	
MERCK & CO INC CORP NOTES	589331AT4	450,000	2.400	9/15/2022	3/15/2019	2.71%	445,401	457,324	448,952	
VISA INC (CALLABLE) NOTE	92826CAG7	925,000	2.150	9/15/2022	5/24/2019	2.56%	913,086	934,729	919,302	
NYC TRANS FIN AUTH, NY TXBL REV BONDS	64971XHY7	925,000	2.520	11/1/2022	4/12/2019	2.52%	925,000	942,085	930,115	
JPMORGAN CHASE & CO BONDS	46647PBB1	475,000	3.207	4/1/2023	3/22/2019	3.21%	475,000	488,968	479,189	
										\$ 167,401,439.42

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Investment Performance Report – June 2019



DC Water
Finance Division
Portfolio Holdings by Fund

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
Debt Service Reserve										
WELLS FARGO TREASURY PLUS MMF		\$ 12,329		7/1/2019		2.22%	\$ 12,329	\$ 12,329	\$ 12,329	
US TREASURY NOTES	912828TR1	5,035,000	1.000	9/30/2019	4/5/2019	2.43%	5,000,384	5,033,296	5,029,960	
US TREASURY N/B NOTES	9128284C1	7,475,000	2.250	3/31/2020	2/6/2019	2.56%	7,449,013	7,529,835	7,500,299	
US TREASURY NOTES	912828VZ0	4,275,000	2.000	9/30/2020	4/5/2019	2.40%	4,249,951	4,302,502	4,275,403	
US TREASURY NOTES	912828F21	7,025,000	2.125	9/30/2021	4/2/2018	2.49%	6,940,206	7,121,801	7,007,147	
										\$ 23,825,137.59
CSO LTCP Appropriations Account										
TD BANK BANK DEPOSIT		\$ 8,046,713		7/1/2019		2.27%	\$ 8,046,713	\$ 8,046,713	\$ 8,046,713	
										\$ 8,046,713.22
Fleet Relocation Account										
TD BANK BANK DEPOSIT		\$ 3,577,746		7/1/2019		2.04%	\$ 3,577,746	\$ 3,577,746	\$ 3,577,746	
										\$ 3,577,746.43
Capital Project Accounts										
TD BANK BANK DEPOSIT - DC WATER CAP2		\$ 5,760,000		7/1/2019		1.66%	\$ 5,760,000	\$ 5,760,000	\$ 5,760,000	
TD BANK BANK DEPOSIT - DOEE CAP2		\$ 1,200,000		7/1/2019		1.66%	\$ 1,200,000	\$ 1,200,000	\$ 1,200,000	
TD BANK BANK DEPOSIT - DOEE CAP3/NON-PROFIT		\$ 3,286,000		7/1/2019		1.66%	\$ 3,286,000	\$ 3,286,000	\$ 3,286,000	
TD BANK BANK DEPOSIT - DANBURY MTR PROJECT		\$ 500,000		7/1/2019		1.66%	\$ 500,000	\$ 500,000	\$ 500,000	
TD BANK BANK DEPOSIT - DEVELOPER DEPOSITS > \$250K		\$ 500,000		7/1/2019		1.66%	\$ 500,000	\$ 500,000	\$ 500,000	
										\$ 11,246,000.00
Series B Commercial Paper Construction Fund										
FIRST AMERICAN FUNDS TREASURY MMF		\$ 2,848		7/1/2019		1.79%	\$ 2,848	\$ 2,848	\$ 2,848	
										\$ 2,848.47
2016B Construction Fund										
WELLS FARGO TREASURY PLUS MMF		\$ 4,902,224		7/1/2019		2.22%	\$ 4,902,224	\$ 4,902,224	\$ 4,902,224	
										\$ 4,902,224.33
2018A Construction Fund										
WELLS FARGO TREASURY PLUS MMF		\$ 32,706,099		7/1/2019		2.22%	\$ 32,706,099	\$ 32,706,099	\$ 32,706,099	
US TREASURY NOTES	912828D80	1,850,000	1.625	8/31/2019	8/28/2018	2.45%	1,834,896	1,858,009	1,857,550	
										\$ 34,563,648.78
2018B Construction Fund										
WELLS FARGO TREASURY PLUS MMF		\$ 44,799,283		7/1/2019		2.22%	\$ 44,799,283	\$ 44,799,283	\$ 44,799,283	
US TREASURY NOTES	912828K5	4,660,000	1.375	7/31/2019	8/28/2018	2.42%	4,615,766	4,683,344	4,682,742	
MUFG BANK LTD/NY COMM PAPER	62479MVVW0	2,500,000	-	8/30/2019	3/1/2019	2.63%	2,467,139	2,489,640	2,489,167	
TOYOTA MOTOR CREDIT CORP COMM PAPER	89233HVW1	5,000,000	-	8/30/2019	3/1/2019	2.59%	4,935,289	4,979,630	4,978,667	
US TREASURY NOTES	912828D80	28,225,000	1.625	8/31/2019	8/31/2018	2.46%	27,994,569	28,347,197	28,339,871	
BNP PARIBAS NY BRANCH COMM PAPER	09659CWW4	4,000,000	-	9/30/2019	3/1/2019	2.64%	3,938,467	3,976,156	3,973,711	
JP MORGAN SECURITIES LLC COMM PAPER	46640QWW7	6,500,000	-	9/30/2019	3/1/2019	2.62%	6,400,778	6,460,695	6,457,609	
US TREASURY NOTES	912828F39	14,250,000	1.750	9/30/2019	3/1/2019	2.53%	14,185,986	14,297,651	14,285,375	
										\$ 110,006,424.23
							\$ 417,349,521.31	\$ 420,320,187.62	\$ 419,022,182.47	\$ 419,022,182.47

CDARS holdings are not managed by PFMAM, and we therefore cannot guarantee the accuracy of holdings information provided.



**DC Water
Finance Division
Security Purchases
Last 6 Months**

CUSIP	DESCRIPTION	PAR	COUPON	MATURITY DATE	TRADE DATE	SETTLE DATE	YTM	TRANSACTION AMOUNT
Operating Reserve Accounts								
912828V72	US TREASURY NOTES	3,800,000.00	1.88	1/31/2022	1/7/2019	1/9/2019	2.50	3,762,193.62
037833BF6	APPLE INC CORP NOTES	500,000.00	2.70	5/13/2022	1/8/2019	1/10/2019	3.08	496,152.50
3135G0U92	FANNIE MAE NOTES	935,000.00	2.63	1/11/2022	1/9/2019	1/11/2019	2.65	934,326.80
58933YAQ8	MERCK & CO INC CORP NOTES	450,000.00	2.35	2/10/2022	1/14/2019	1/16/2019	2.99	446,221.50
RE1061648	INDUSTRIAL BANK CDARS	2,640,951.83	2.00	1/16/2020	1/17/2019	1/17/2019	2.02	2,640,951.83
RE1061648	INDUSTRIAL BANK CDARS	2,599,666.74	2.00	1/16/2020	1/17/2019	1/17/2019	2.02	2,599,666.74
3135G0U92	FANNIE MAE NOTES	925,000.00	2.63	1/11/2022	1/29/2019	1/31/2019	2.62	926,589.46
9128285V8	US TREASURY NOTES	4,600,000.00	2.50	1/15/2022	1/29/2019	1/31/2019	2.55	4,598,434.43
9128284P2	US TREASURY NOTES	1,900,000.00	2.63	5/15/2021	2/8/2019	2/11/2019	2.45	1,919,471.97
9128285V8	US TREASURY NOTES	1,000,000.00	2.50	1/15/2022	2/8/2019	2/11/2019	2.43	1,003,856.83
9128286C9	US TREASURY NOTES	5,150,000.00	2.50	2/15/2022	3/1/2019	3/5/2019	2.54	5,150,769.12
717081ER0	PFIZER INC CORP BONDS	270,000.00	2.80	3/11/2022	3/4/2019	3/11/2019	2.80	269,983.80
589331A74	MERCK & CO INC CORP NOTES	450,000.00	2.40	9/15/2022	3/13/2019	3/15/2019	2.71	445,401.00
46647PBB1	JPMORGAN CHASE & CO BONDS	475,000.00	3.21	4/1/2023	3/15/2019	3/22/2019	3.21	475,000.00
06367WJM6	BANK OF MONTREAL	465,000.00	2.90	3/26/2022	3/21/2019	3/26/2019	2.99	463,818.90
64971XHY7	NYC TRANS FIN AUTH, NY TXBL REV BONDS	925,000.00	2.52	11/1/2022	3/27/2019	4/12/2019	2.52	925,000.00
9128286C9	US TREASURY NOTES	1,250,000.00	2.50	2/15/2022	4/1/2019	4/3/2019	2.29	1,261,332.71
40435RCN9	HSBC BANK USA NA CERT DEPOS	925,000.00	2.70	10/2/2020	4/3/2019	4/4/2019	2.25	925,000.00
961214DG5	WESTPAC BANKING CORP NY CORP NOTES	925,000.00	2.80	1/11/2022	4/8/2019	4/10/2019	2.86	929,821.31
9128286M7	UNITED STATES TREASURY NOTES	2,150,000.00	2.25	4/15/2022	5/1/2019	5/3/2019	2.23	2,153,890.82
166764BN9	CHEVRON CORP (CALLABLE) NOTES	475,000.00	2.50	3/3/2022	5/15/2019	5/17/2019	2.56	476,641.02
92826CAG7	VISA INC (CALLABLE) NOTE	925,000.00	2.15	9/15/2022	5/22/2019	5/24/2019	2.56	916,897.77
9128282P4	US TREASURY NOTES	4,000,000.00	1.88	7/31/2022	6/3/2019	6/5/2019	1.85	4,029,179.04
037833BF6	APPLE INC CORP NOTES	475,000.00	2.70	5/13/2022	6/12/2019	6/14/2019	2.25	482,160.63
91159HHC7	US BANK NA CINCINNATI (CALLABLE) NOTE	965,000.00	3.00	3/15/2022	6/14/2019	6/18/2019	2.33	989,511.00
742718EU9	PROCTER & GAMBLE CO/THE CORP NOTES	950,000.00	2.15	8/11/2022	6/18/2019	6/21/2019	2.15	957,480.19
Total Debt Service Reserve								
9128284C1	US TREASURY N/B NOTES	7,475,000.00	2.25	3/31/2020	2/5/2019	2/6/2019	2.56	7,508,617.61
912828TR1	US TREASURY NOTES	5,035,000.00	1.00	9/30/2019	4/5/2019	4/5/2019	2.43	5,001,072.22
912828VZ0	US TREASURY NOTES	4,275,000.00	2.00	9/30/2020	4/5/2019	4/5/2019	2.40	4,251,119.20
2018A Construction Fund								
912828D23	US TREASURY NOTES	19,950,000.00	1.625	4/30/2019	2/28/2019	3/1/2019	2.440	20,031,085.63
912828W97	US TREASURY NOTES	16,080,000.00	1.250	3/31/2019	2/28/2019	3/1/2019	2.472	16,147,602.82
2018B Construction Fund								
09659CWW4	BNP PARIBAS NY BRANCH COMM PAPER	4,000,000.00	0.000	9/30/2019	3/1/2019	3/1/2019	2.672	3,938,466.67
46640QWW7	JP MORGAN SECURITIES LLC COMM PAPER	6,500,000.00	0.000	9/30/2019	3/1/2019	3/1/2019	2.651	6,400,777.50
62479MVW0	MUFG BANK LTD/NY COMM PAPER	2,500,000.00	0.000	8/30/2019	3/1/2019	3/1/2019	2.671	2,467,138.89
89233HVW1	TOYOTA MOTOR CREDIT CORP COMM PAPER	5,000,000.00	0.000	8/30/2019	3/1/2019	3/1/2019	2.630	4,935,288.89
912828F39	US TREASURY NOTES	14,250,000.00	1.750	9/30/2019	3/1/2019	3/1/2019	2.531	14,290,120.95

Securities highlighted in **blue font** denote trades executed during the current month.



DC Water
Finance Division
Security Sales
Last 6 Months

CUSIP	DESCRIPTION	PAR	COUPON	MATURITY DATE	TRADE DATE	SETTLE DATE	YTM	TRANSACTION AMOUNT
Operating Reserve Accounts								
912828G61	US TREASURY NOTES	2,325,000.00	1.50	11/30/2019	1/7/2019	1/9/2019	2.62	2,306,127.34
3135G0P49	FNMA NOTES	625,000.00	1.00	8/28/2019	1/7/2019	1/9/2019	2.56	621,155.56
00828EBQ1	AFRICAN DEVELOPMENT BANK NOTE	700,000.00	1.13	9/20/2019	1/7/2019	1/9/2019	2.70	694,831.38
912828H52	US TREASURY NOTES	500,000.00	1.25	1/31/2020	1/8/2019	1/10/2019	2.60	495,756.62
912828H52	US TREASURY NOTES	925,000.00	1.25	1/31/2020	1/9/2019	1/11/2019	2.61	917,108.90
931142DY6	WAL-MART STORES INC CORP NOTE	430,000.00	1.75	10/9/2019	1/14/2019	1/16/2019	2.71	429,056.27
30231GAG7	EXXON MOBIL (CALLABLE) CORP NOTE	925,000.00	1.91	3/6/2020	1/29/2019	1/31/2019	2.68	924,473.78
742718EZ8	THE PROCTER & GAMBLE CO CORP NOTES	440,000.00	1.75	10/25/2019	1/29/2019	1/31/2019	2.70	439,026.13
3135G0T29	FNMA NOTES	1,150,000.00	1.50	2/28/2020	1/29/2019	1/31/2019	2.62	1,143,692.25
912828H52	US TREASURY NOTES	2,050,000.00	1.25	1/31/2020	1/29/2019	1/31/2019	2.60	2,022,773.44
045167DT7	ASIAN DEVELOPMENT BANK NOTE	925,000.00	1.75	1/10/2020	1/30/2019	1/31/2019	2.66	918,165.02
83050FXT3	SKANDINAVISKA ENSKILDA BANKEN NY CD	1,850,000.00	1.84	8/2/2019	2/7/2019	2/11/2019	2.63	1,843,599.00
912828J50	US TREASURY NOTES	725,000.00	1.38	2/29/2020	2/8/2019	2/11/2019	2.54	720,850.22
912828J50	US TREASURY NOTES	275,000.00	1.38	2/29/2020	2/8/2019	2/11/2019	2.54	273,425.94
912828J50	US TREASURY NOTES	2,625,000.00	1.38	2/29/2020	3/1/2019	3/5/2019	2.56	2,595,343.92
00828ECA5	AFRICAN DEVELOPMENT BANK NOTE	1,035,000.00	1.88	3/16/2020	3/4/2019	3/6/2019	2.68	1,035,811.61
40054PAE5	GOLDMAN SACHS BANK USA CERT DEPOS	1,400,000.00	2.80	8/5/2019	3/4/2019	3/5/2019	2.72	1,422,669.13
717081EB5	PFIZER INC CORP NOTE	595,000.00	1.70	12/15/2019	3/5/2019	3/5/2019	2.70	592,690.08
717081EB5	PFIZER INC CORP NOTE	300,000.00	1.70	12/15/2019	3/5/2019	3/5/2019	2.70	298,835.33
912828K58	US TREASURY NOTES	100,000.00	1.38	4/30/2020	3/5/2019	3/5/2019	2.56	99,131.04
912828K58	US TREASURY NOTES	150,000.00	1.38	4/30/2020	3/15/2019	3/22/2019	2.53	148,934.05
06367T4W7	BANK OF MONTREAL CHICAGO CORP NOTES	470,000.00	3.10	4/13/2021	3/21/2019	3/26/2019	2.76	479,731.87
912828K58	US TREASURY NOTES	925,000.00	1.38	4/30/2020	3/27/2019	4/3/2019	2.37	920,654.88
912828K58	US TREASURY NOTES	1,150,000.00	1.38	4/30/2020	4/1/2019	4/3/2019	2.41	1,144,148.74
912828XH8	US TREASURY NOTES	915,000.00	1.63	6/30/2020	4/3/2019	4/4/2019	2.41	910,175.60
961214DJ9	WESTPAC BANKING CORP NOTES	925,000.00	2.15	3/6/2020	4/8/2019	4/10/2019	2.71	922,225.51
912828K58	US TREASURY NOTES	425,000.00	1.38	4/30/2020	5/1/2019	5/3/2019	2.39	420,830.84
912828K58	US TREASURY NOTES	1,575,000.00	1.38	4/30/2020	5/1/2019	5/3/2019	2.39	1,559,549.59
912828VF4	US TREASURY NOTES	400,000.00	1.38	5/31/2020	5/15/2019	5/17/2019	2.32	398,663.46
912828VF4	US TREASURY NOTES	925,000.00	1.38	5/31/2020	5/22/2019	5/24/2019	2.37	921,900.91
912828VF4	US TREASURY NOTES	325,000.00	1.38	5/31/2020	6/3/2019	6/5/2019	2.18	322,521.99
912828XH8	US TREASURY NOTES	910,000.00	1.63	6/30/2020	6/3/2019	6/5/2019	2.16	911,253.76
912828XH8	US TREASURY NOTES	2,750,000.00	1.63	6/30/2020	6/3/2019	6/5/2019	2.16	2,753,788.85
89236TDU6	TOYOTA MOTOR CREDIT CORP	425,000.00	1.95	4/17/2020	6/12/2019	6/14/2019	2.31	425,028.69
89236TDU6	TOYOTA MOTOR CREDIT CORP	205,000.00	1.95	4/17/2020	6/14/2019	6/18/2019	2.30	205,095.15
89236TDU6	TOYOTA MOTOR CREDIT CORP	295,000.00	1.95	4/17/2020	6/14/2019	6/18/2019	2.30	295,136.93
912828M7	UNITED STATES TREASURY NOTES	465,000.00	2.25	4/15/2022	6/14/2019	6/18/2019	1.82	472,315.06
912828P4	US TREASURY NOTES	950,000.00	1.88	7/31/2022	6/18/2019	6/21/2019	1.83	958,162.63
Debt Service Reserve								
912828C65	US TREASURY NOTES	7,475,000.00	1.63	3/31/2019	2/5/2019	2/6/2019	2.47	7,508,704.24

Securities highlighted in **blue font** denote trades executed during the current month.

Investment Performance Report – June 2019



DC Water
Finance Division
Security Maturities
Last 6 Months

CUSIP	DESCRIPTION	PAR	COUPON	MATURITY DATE	TRADE DATE	SETTLE DATE	TRANSACTION AMOUNT
Operating Reserve Accounts							
RE0959859	INDUSTRIAL BANK CDARS	2,614,746.18	1.00	1/17/2019	1/17/2019	1/17/2019	2,640,822.00
RE0959867	INDUSTRIAL BANK CDARS	2,573,870.75	1.00	1/17/2019	1/17/2019	1/17/2019	2,599,538.94
Total Debt Service Reserve							
912828C65	US TREASURY NOTES	3,850,000.00	1.63	3/31/2019	3/31/2019	3/31/2019	3,850,000.00
912828W97	US TREASURY NOTES	5,175,000.00	1.25	3/31/2019	3/31/2019	3/31/2019	5,175,000.00
2018A Construction Fund							
25214PHP1	DEXIA CREDIT LOCAL SA NY COMM PAPER	3,500,000.00	-	2/26/2019	2/26/2019	2/26/2019	3,500,000.00
09659CQ19	BNP PARIBAS NY BRANCH COMM PAPER	3,500,000.00	-	3/1/2019	3/1/2019	3/1/2019	3,500,000.00
21687BQ12	COOPERATIVE RABOBANK U.A. COMM PAPER	2,380,000.00	-	3/1/2019	3/1/2019	3/1/2019	2,380,000.00
46640QQ12	JP MORGAN SECURITIES LLC COMM PAPER	5,750,000.00	-	3/1/2019	3/1/2019	3/1/2019	5,750,000.00
89233HQ15	TOYOTA MOTOR CREDIT CORP COMM PAPER	2,300,000.00	-	3/1/2019	3/1/2019	3/1/2019	2,300,000.00
912828W97	US TREASURY NOTES	16,080,000.00	1.25	3/31/2019	3/31/2019	3/31/2019	16,080,000.00
912828D23	US TREASURY NOTES	19,950,000.00	1.63	4/30/2019	4/30/2019	4/30/2019	19,950,000.00
912828XS4	US TREASURY NOTES	4,795,000.00	1.25	5/31/2019	5/31/2019	5/31/2019	4,795,000.00
2018B Construction Fund							
25214PHP1	DEXIA CREDIT LOCAL SA NY COMM PAPER	4,400,000.00	-	2/26/2019	2/26/2019	2/26/2019	4,400,000.00
63873KPU5	NATIXIS NY BRANCH COMM PAPER	4,400,000.00	-	2/28/2019	2/28/2019	2/28/2019	4,400,000.00
912828C24	US TREASURY NOTES	830,000.00	1.50	2/28/2019	2/28/2019	2/28/2019	830,000.00
46640QQ12	JP MORGAN SECURITIES LLC COMM PAPER	7,250,000.00	-	3/1/2019	3/1/2019	3/1/2019	7,250,000.00
89233HQ15	TOYOTA MOTOR CREDIT CORP COMM PAPER	1,500,000.00	-	3/1/2019	3/1/2019	3/1/2019	1,500,000.00
62479MSQ7	MUFG BANK LTD/NY COMM PAPER	1,500,000.00	-	5/24/2019	5/24/2019	5/24/2019	1,500,000.00
89233HSQ8	TOYOTA MOTOR CREDIT CORP COMM PAPER	1,500,000.00	-	5/24/2019	5/24/2019	5/24/2019	1,500,000.00
912828XS4	US TREASURY NOTES	27,200,000.00	1.25	5/31/2019	5/31/2019	5/31/2019	27,200,000.00
912828WS5	US TREASURY NOTES	14,000,000.00	1.63	6/30/2019	6/30/2019	6/30/2019	14,000,000.00

Securities highlighted in **blue font** denote trades executed during the current month.



**DC Water
Finance Division
Upcoming Transaction Cash Flows
Next 30 Days**

DATE	TRANSACTION	CUSIP	DESCRIPTION	COUPON	MATURITY DATE	PAR VALUE/SHARES	PRINCIPAL	INTEREST	TOTAL
07/01/19	MATURITY	341271AA2	FL ST BOARD ADMIN FIN CORP TXBL REV BD	2.163	07/01/19	1,800,000.00	1,800,000.00	19,467.00	1,819,467.00
07/10/19	INTEREST	13606BFV0	CANADIAN IMP BK COMM NY FLT CERT DEPOS	2.984	04/10/20	1,400,000.00	0.00	9,687.57	9,687.57
07/11/19	INTEREST	3135G0U92	FANNIE MAE NOTES	2.625	01/11/22	925,000.00	0.00	12,140.63	12,140.63
07/11/19	INTEREST	3135G0U92	FANNIE MAE NOTES	2.625	01/11/22	935,000.00	0.00	12,271.88	12,271.88
07/11/19	INTEREST	961214DG5	WESTPAC BANKING CORP NY CORP NOTES	2.800	01/11/22	925,000.00	0.00	12,950.00	12,950.00
07/14/19	INTEREST	064159JX5	BANK OF NOVA SCOTIA HOUSTON CORP BOND	2.150	07/14/20	925,000.00	0.00	9,943.75	9,943.75
07/15/19	INTEREST	9128285V8	US TREASURY NOTES	2.500	01/15/22	1,000,000.00	0.00	12,500.00	12,500.00
07/15/19	INTEREST	9128285V8	US TREASURY NOTES	2.500	01/15/22	4,600,000.00	0.00	57,500.00	57,500.00
07/20/19	INTEREST	045167EF6	ASIAN DEVELOPMENT BANK NOTE	2.250	01/20/21	700,000.00	0.00	7,875.00	7,875.00
07/23/19	INTEREST	459058GH0	INTL BANK OF RECONSTRUCTION AND DEV NOTE	2.750	07/23/21	1,335,000.00	0.00	18,356.25	18,356.25
07/10/19	INTEREST	13606BFV0	CANADIAN IMP BK COMM NY FLT CERT DEPOS	2.984	04/10/20	1,400,000.00	0.00	9,687.57	9,687.57
07/11/19	INTEREST	3135G0U92	FANNIE MAE NOTES	2.625	01/11/22	925,000.00	0.00	12,140.63	12,140.63
07/11/19	INTEREST	3135G0U92	FANNIE MAE NOTES	2.625	01/11/22	935,000.00	0.00	12,271.88	12,271.88
07/11/19	INTEREST	961214DG5	WESTPAC BANKING CORP NY CORP NOTES	2.800	01/11/22	925,000.00	0.00	12,950.00	12,950.00
07/14/19	INTEREST	064159JX5	BANK OF NOVA SCOTIA HOUSTON CORP BOND	2.150	07/14/20	925,000.00	0.00	9,943.75	9,943.75
07/15/19	INTEREST	9128285V8	US TREASURY NOTES	2.500	01/15/22	1,000,000.00	0.00	12,500.00	12,500.00
07/15/19	INTEREST	9128285V8	US TREASURY NOTES	2.500	01/15/22	4,600,000.00	0.00	57,500.00	57,500.00
07/20/19	INTEREST	045167EF6	ASIAN DEVELOPMENT BANK NOTE	2.250	01/20/21	700,000.00	0.00	7,875.00	7,875.00
07/23/19	INTEREST	459058GH0	INTL BANK OF RECONSTRUCTION AND DEV NOTE	2.750	07/23/21	1,335,000.00	0.00	18,356.25	18,356.25
07/30/19	INTEREST	3135G0T60	FNMA NOTES	1.500	07/30/20	1,850,000.00	0.00	13,875.00	13,875.00
07/31/19	INTEREST	9128282P4	US TREASURY NOTES	1.875	07/31/22	3,050,000.00	0.00	28,593.75	28,593.75
07/31/19	INTEREST	912828N89	US TREASURY NOTES	1.375	01/31/21	800,000.00	0.00	5,500.00	5,500.00
07/31/19	INTEREST	912828N89	US TREASURY NOTES	1.375	01/31/21	1,750,000.00	0.00	12,031.25	12,031.25
07/31/19	INTEREST	912828V72	US TREASURY NOTES	1.875	01/31/22	3,800,000.00	0.00	35,625.00	35,625.00
07/31/19	INTEREST	912828XM7	US TREASURY NOTES	1.625	07/31/20	825,000.00	0.00	6,703.13	6,703.13
07/31/19	MATURITY	9128282K5	US TREASURY NOTES	1.375	07/31/19	4,660,000.00	4,660,000.00	32,037.50	4,692,037.50

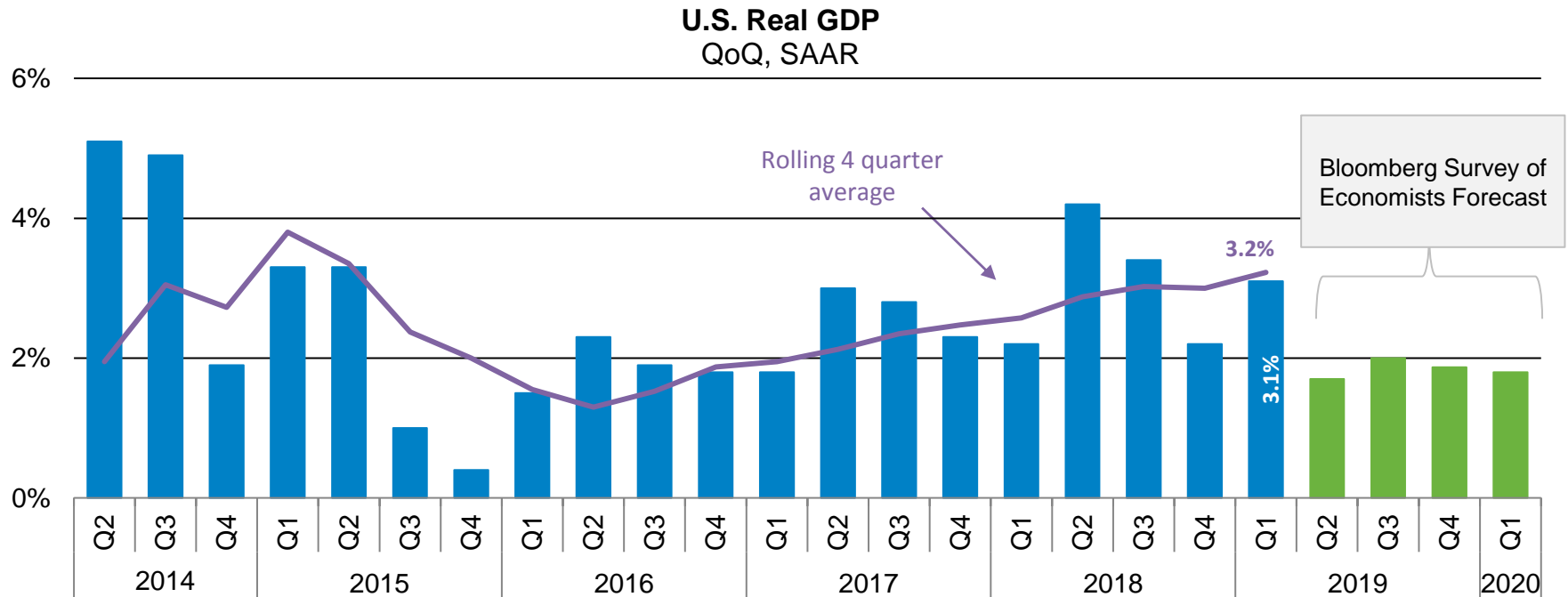


Appendix: Economic Update



Economic Growth Increases in First Quarter

- U.S. economic activity experienced relatively high growth during the first quarter of 2019.
 - The third estimate of U.S. GDP growth remained at 3.1%, which marks a significant bounce-back from the 4th quarter’s revised growth of 2.2%.
- Growth is projected to decline in in the remaining quarters of 2019 and into 2020. Estimated projections decreased further from last month’s estimates.
 - The main causes for this expected decrease in future growth include overall slower global growth and increasing trade tensions between the U.S. and other nations, primarily China.



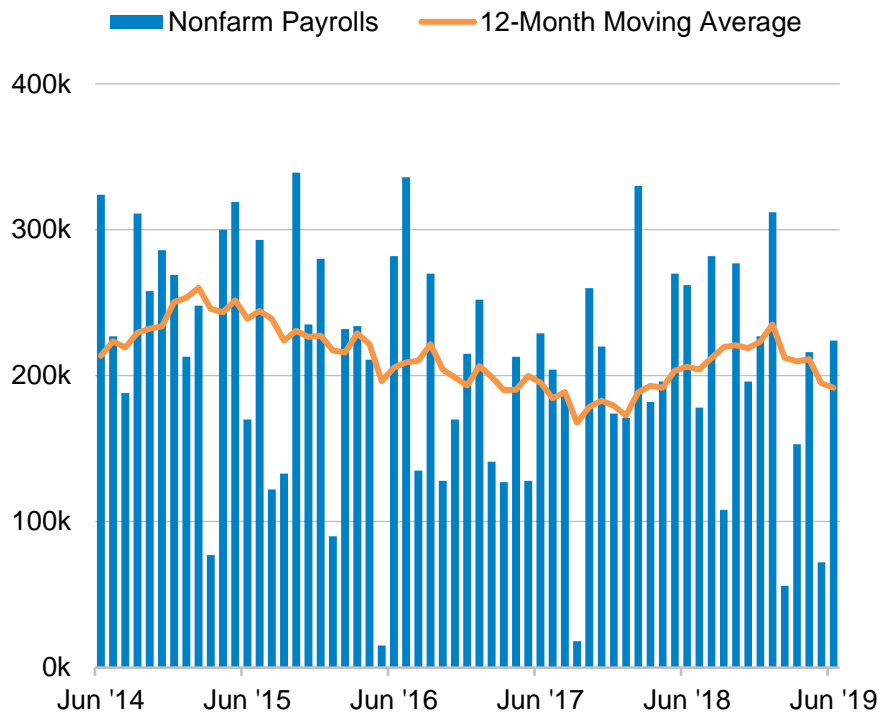
Source: Bloomberg, as of June 30, 2019. SAAR is seasonally adjusted annualized rate. Purple denotes rolling four-quarter averages.



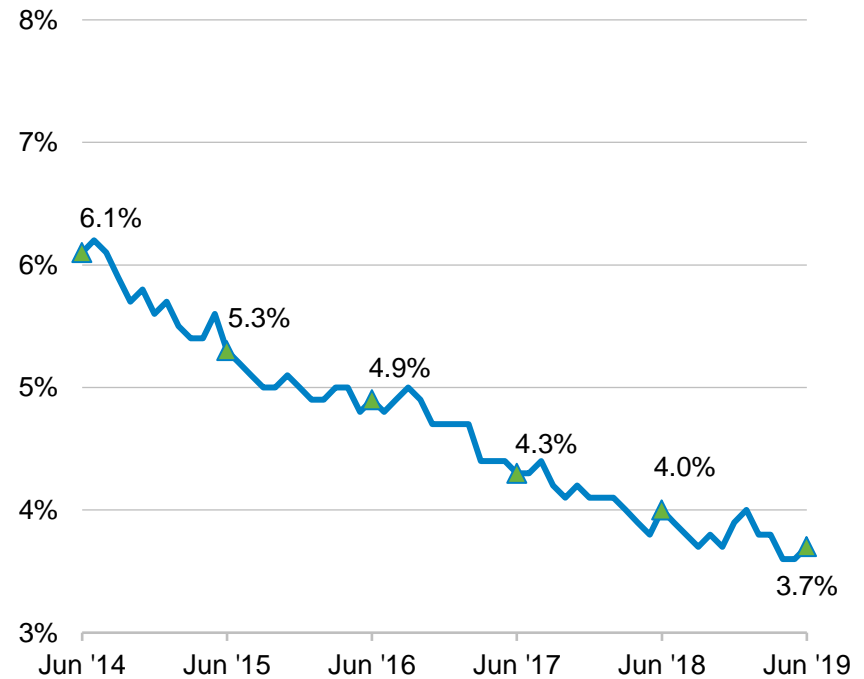
Labor Market Bounces Back in June

- The U.S. economy added 224,000 jobs in June, a strong comeback after a disappointing May.
- The unemployment rate rose slightly to 3.7% though, from increased job prospects.
- Average hourly earnings YoY remained at 3.1% in June for a second straight month.
- For the year, the economy added an average of 172,000 jobs, underscoring a still healthy labor market.

Monthly Change in Nonfarm Payrolls



Unemployment Rate



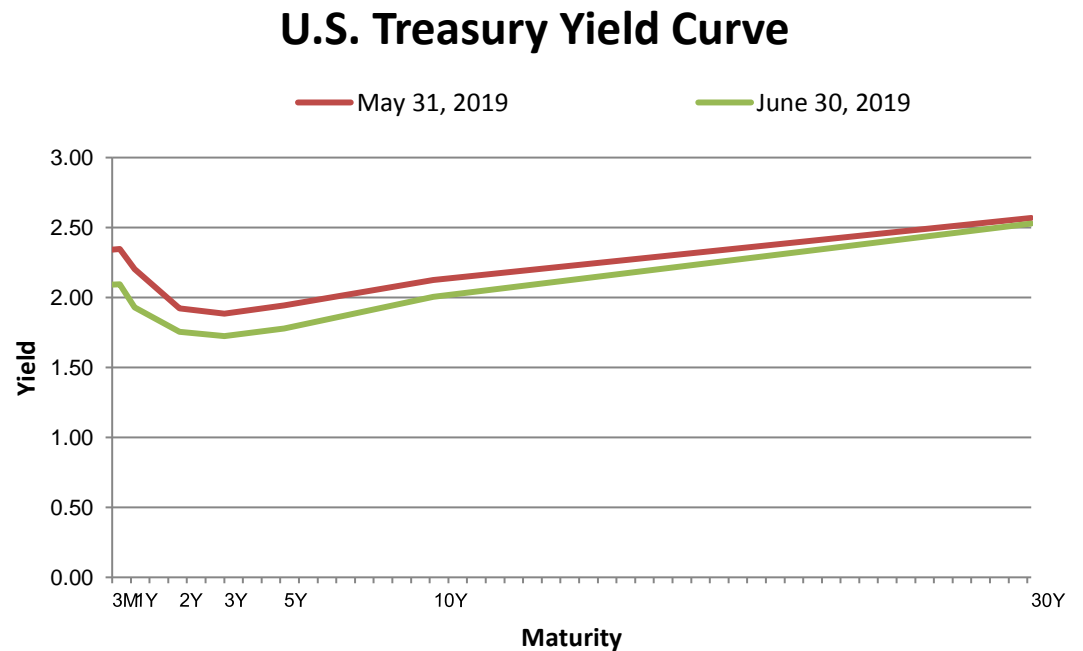
Source: Bloomberg, as of June 30, 2019.



U.S. Treasury Yield Curve

- The U.S. Treasury yield curve continues to exhibit a more pronounced inversion as yields across maturities fall again this month.
- 6-month Treasury notes are providing considerably higher yields than those of intermediate-term notes up to 10 years as of June 30th, 2019, causing the abnormal curvature at the shorter end of the curve.

	<u>5/31/19</u>	<u>6/30/2019</u>	<u>Change</u>
3 month	2.34%	2.09%	-0.25%
6 month	2.34%	2.10%	-0.25%
1 year	2.20%	1.93%	-0.28%
2 year	1.92%	1.76%	-0.17%
3 year	1.87%	1.72%	-0.16%
5 year	1.91%	1.78%	-0.16%
10 year	2.12%	2.01%	-0.12%
30 year	2.57%	2.53%	-0.04%



Source: Bloomberg, as of June 30, 2019.



The Market Now Expects Three Rate Cuts by Year End

**2019 Rate Moves
Priced into the Futures Market**



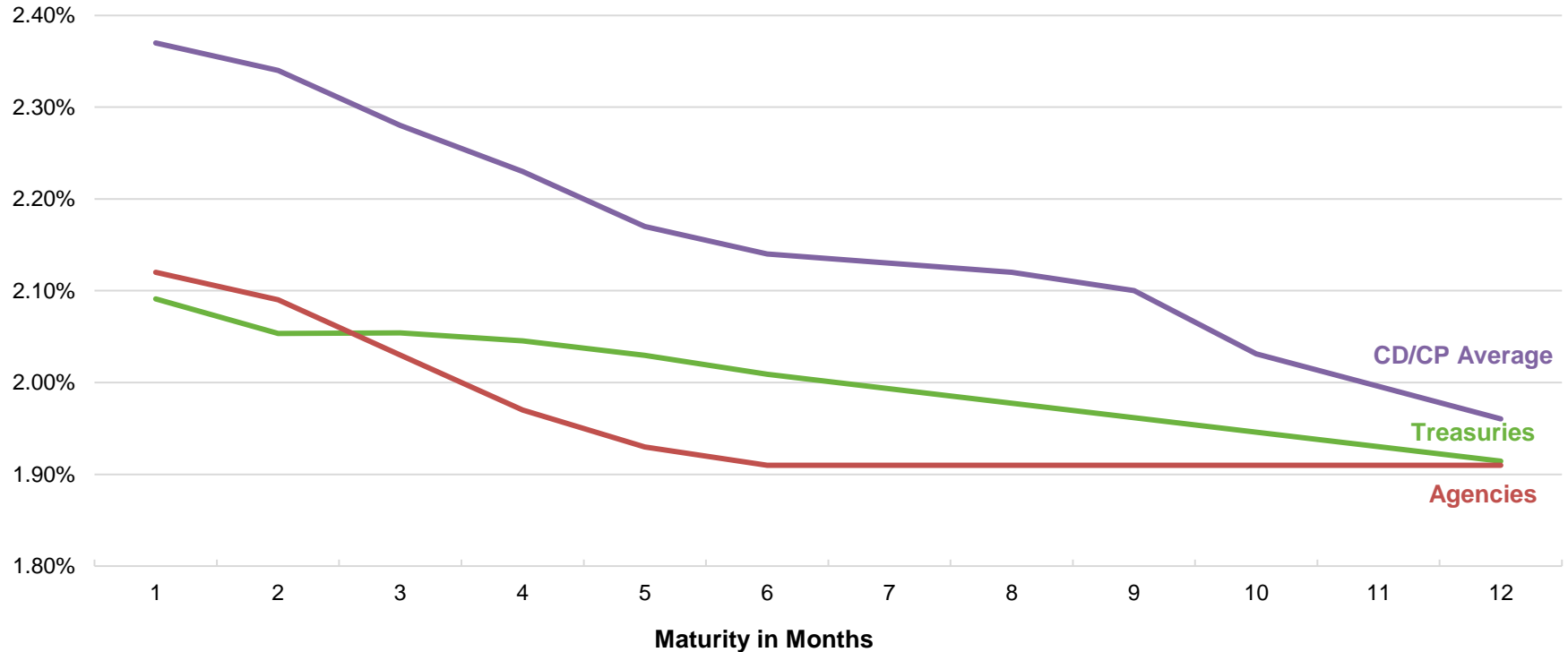
Source: Bloomberg, as of June 30, 2019.



Current Short-Term Interest Rate Environment

- Longer-term commercial paper and bank certificate of deposit (CP/CD) yield spreads decreased significantly in June.
- Though the spread is tightening, Treasuries continue to be relatively attractive versus agency discount notes, especially in the 3-11 month maturity range.

Money Market Yield Curves



Source: Bloomberg as of 6/30/19. Some yields are not available at certain maturities and are extrapolated based on linear growth. Not a specific recommendation.



Disclosure

This material is based on information obtained from sources generally believed to be reliable and available to the public, however PFM Asset Management LLC cannot guarantee its accuracy, completeness or suitability. This material is for general information purposes only and is not intended to provide specific advice or a specific recommendation. All statements as to what will or may happen under certain circumstances are based on assumptions, some but not all of which are noted in the presentation. Assumptions may or may not be proven correct as actual events occur, and results may depend on events outside of your or our control. Changes in assumptions may have a material effect on results. Past performance does not necessarily reflect and is not a guaranty of future results. The information contained in this presentation is not an offer to purchase or sell any securities.

CDARS holdings and Bank Deposits are not managed by PFMAM, and therefore we cannot guarantee the accuracy of holdings.



Automated Metering Infrastructure “It’s More Than a Reading”



July 25, 2019



AMI Program Update **AGENDA**

- **Project Charter**
- **AMI @ DC Water**
- **Project Accomplishments**
- **High Usage Alerts**
- **Lessons Learned**
- **AMI Next Steps**



AMI Program Update **AMI – Project Charter**

Goal: To successfully replace 85,000 meters and associated transmitting units (MTU's), while managing reputational risk

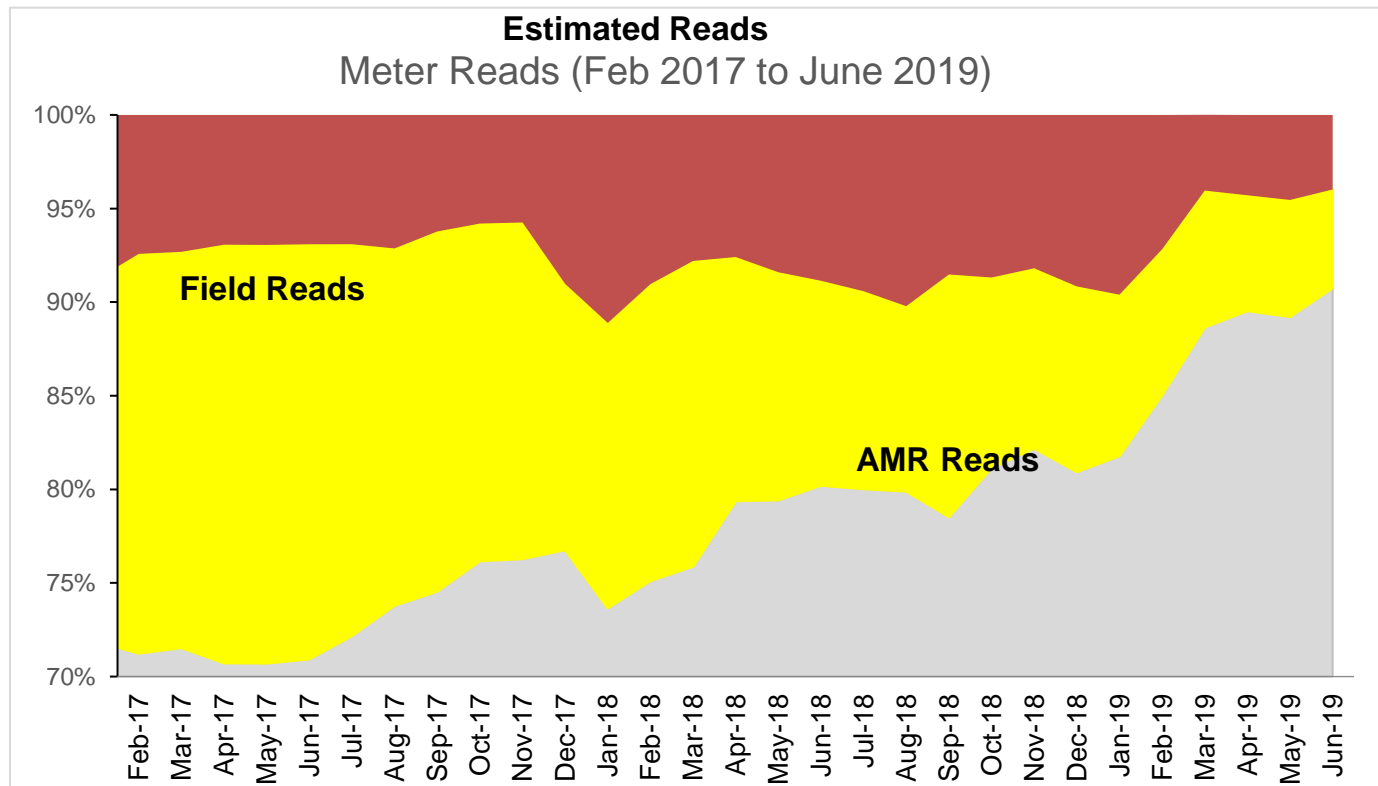
- June 2016 to October 2018
- Address the end of useful life meters and MTU's
- Increase the percentage of meters transmitting
- Reduce estimates



AMI Program Update Project Accomplishments

Installed 84,534 Meters and MTUs

- Increased overall AMI (Advanced Meter Infrastructure) transmission rate from 70% to 92.4%
- Reduced the number of estimated bills
- Improved transmission & redundancy efforts through 90 upgraded Data Collection Units





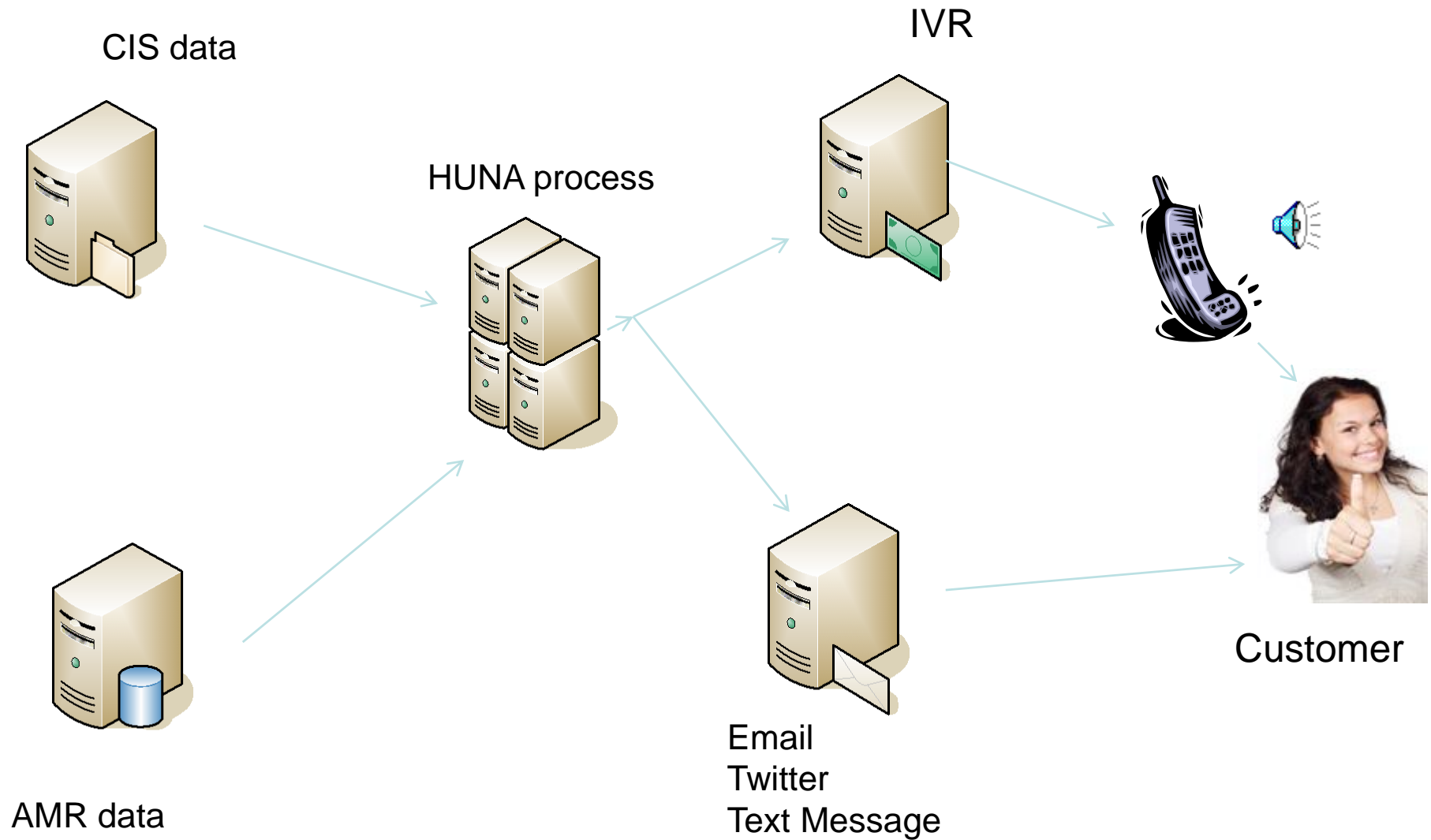
AMI Program Update Project Accomplishments

- Minimal customer inquiries
 - Approximately 1% of the replacements
 - Secondary adjustments less than \$417K
- Low number of potential risk management claims (25 total or 0.03% of work orders)
- Expanded insight into customer usage
 - More frequent reads
 - Improved communication on leak issues
 - Enhanced & customized alerts to customers

Note: Complete details found in closeout report published 03/29/2019



Leading Edge... High Use Notification Application





High Usage Notification Alert

- **DC Water's High Usage Notification Application (HUNA) leverages AMI data for customers**
 - Usage can be viewed hourly, daily or monthly and downloaded for offline analysis
 - As of a year ago, customers were able to customize their own notifications
- **New features coming within the next 60 days**
 - Customers will be able to compare their usage against their neighbors (on the block, zip code or ward) or the entire rate class
 - Notification of continuous usage in the event of a broken pipe or a significant leak
 - Customers will set the number of hours (6, 12 or 24), and alerted if use is greater
- **Other Features**
 - HUNA also analyzes new reads against individual customer historical usage patterns
 - If high usage is detected, HUNA will call, text and/or email customers
 - Customers can set their own usage thresholds for notifications, and up to 4 text, phone and/or email addresses
 - This is especially useful for rental properties when an owner, tenant and/or management company needs to be contacted



AMI Program Update
AMI - Lessons Learned

What worked well?

Proper Advanced Planning

- Startup Workshops
- Ramp Period
- Separate Inventory Tracking

Blended Program Management

- Dedicated staffing
- Cost effective resourcing
- Reduced response time
- Field oversight (mitigating issues)

Executive Oversight Committee

- Monthly reporting
- Cross functional insight

Customer Outreach Efforts

- Minimal complaints
- Reduced long standing estimates



AMI Program Update
AMI - Lessons Learned

What Opportunities Were Revealed?

- Unplanned Escalations

Type	#	Description
Vacant, Razed or Construction	588	Building observed to be vacant, demolished or under construction / redevelopment.
Access Obstructed*	1,292	No access for various reasons (tree roots, buried pit, collapsed pit, etc.)
Inoperable Valve*	894	Shut off valve broke or not operable. Resolution varies based on RES vs. NON-RES
Mismatches	892	Size or serial number changes performed by DCW prior to project
Previously Replaced	671	New meter / MTU observed
Others	791	Confined space permit and miscellaneous other reasons. Resolution varies

- Alignment with DDOT re: Public Space Tripping Hazards (18,274 Locations)
 - Loose cover, gap observed and pit/frame/cover is not broken
 - ¼ “ above grade or ½ “ below grade in sidewalk, road or driveway
 - 2” tree space or yard



AMI Program Update **AMI - Lessons Learned**

- Single Contractor Responsibility
 - Single contractor (purchase & install) be used for future projects.
 - Goods & Services contract is not recommended for construction work.
- Data / Workflow Processes
 - Base scope vs. non-base scope
 - Exception Processing Remodeling
- Inside Meters / Unresponsive Customers Process Design
- Annual Replacement Program (Long Term)

10 Year Plan - \$28.68M	
FY2019-20	\$2,618K
FY2021-28	\$2,930K



AMI Program Update **AMI - Next Steps**

- In close-out with the selected vendor
- Resolve 1,500 certified/paid locations not transmitting
- Develop process to address hard to resolve accounts through use of an AMI consultant & new installation vendor
 - Seasoned in AMI project close outs
 - Ability to complete complex and unresolved work orders and replacement of legacy equipment
 - Contract will follow a performance base pay module
- Continue the ongoing replacement of remainder of small meters & large meters not transmitting



APPENDIX

Appendix 1 - High Usage Alert Sample Email



High Usage Alert Email

From: Customer Service
Sent: Sunday, December 24, 2017 12:15 PM
To: dcarrillo@vidarealestateproperties.com
Subject: High Usage Detected at your Address - 3415 13th St NW

Dear Valued Customer:

The District of Columbia Water and Sewer Authority (DC Water) implemented an automated meter reading (AMR) system to improve its service delivery to you. DC Water collects daily AMR readings, which helps us monitor and track usage across the entire distribution system. One extended feature of AMR is our ability to trend your usage to help detect potential problems. Few, if any water utilities are doing this today so we are treading new ground in providing value added services to our customers. Between 12/19/2017 and 12/22/2017, we have observed a significant increase in your daily usage that may be indicative of a problem with your internal plumbing or higher weekend usage. We strongly urge you to check your internal fixtures such as a toilet, sink, or water heater to ensure there are no leaks. You should also check your outside hose bib for leaks. This email message is not meant to alarm you; however, leaking fixtures left undetected can cost consumers hundreds of dollars over the course of a month. If you have any questions please contact our customer service professionals at (202) 354-3600, Monday through Friday from 8:00 AM - 5:00 PM, and they will gladly assist you. Please reference premise number "3029899" (or address - 3415 13th St NW) when calling.

Thank you,
DC Water Customer Service

To stop notifications like this or to change your preferred method of notification, please go to <https://www.dewater.com/> and login to your account. Click on 'Water Usage History' and then 'AMR Usage History'. You may choose not to receive notifications or choose to be called instead.



ATTACHMENT 3



2019 Bond Transaction and Market Update to Finance & Budget Committee

July 25, 2019

PFM Financial Advisors LLC

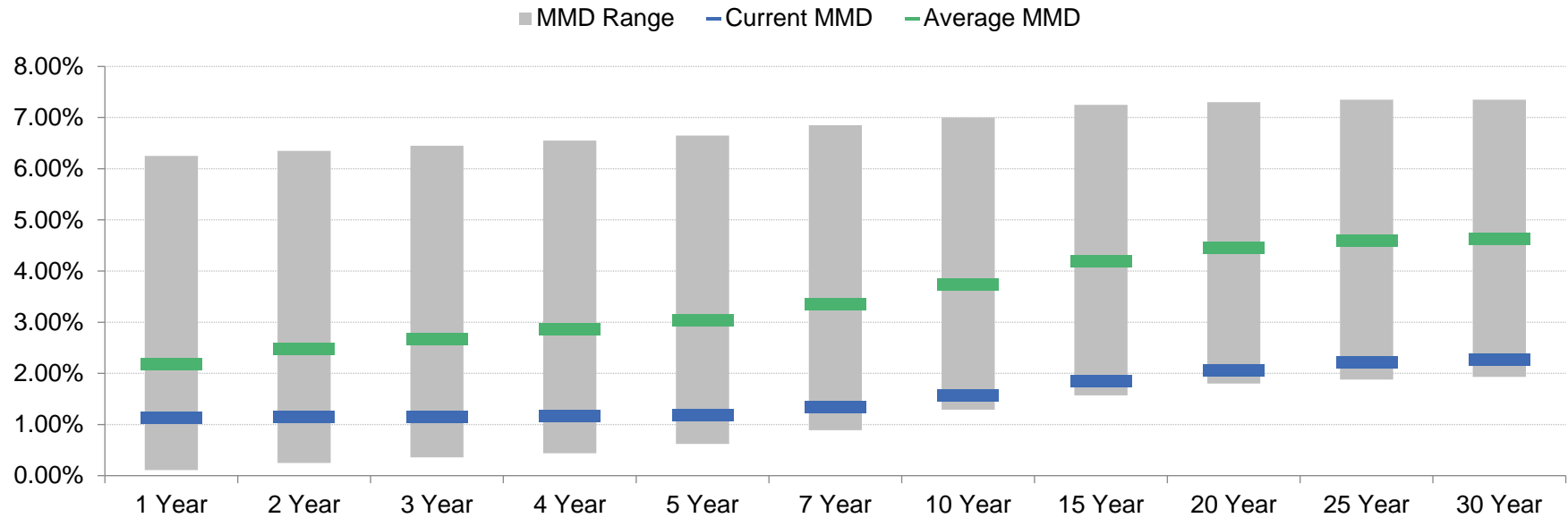
4350 N. Fairfax Drive
Suite 580
Arlington, VA 22203

703.741.0175
pfm.com



Municipal Borrowing Rates Remain Low - AAA MMD Position Since Inception

AAA MMD Rate Position
(July 18, 1989 to July 17, 2019)

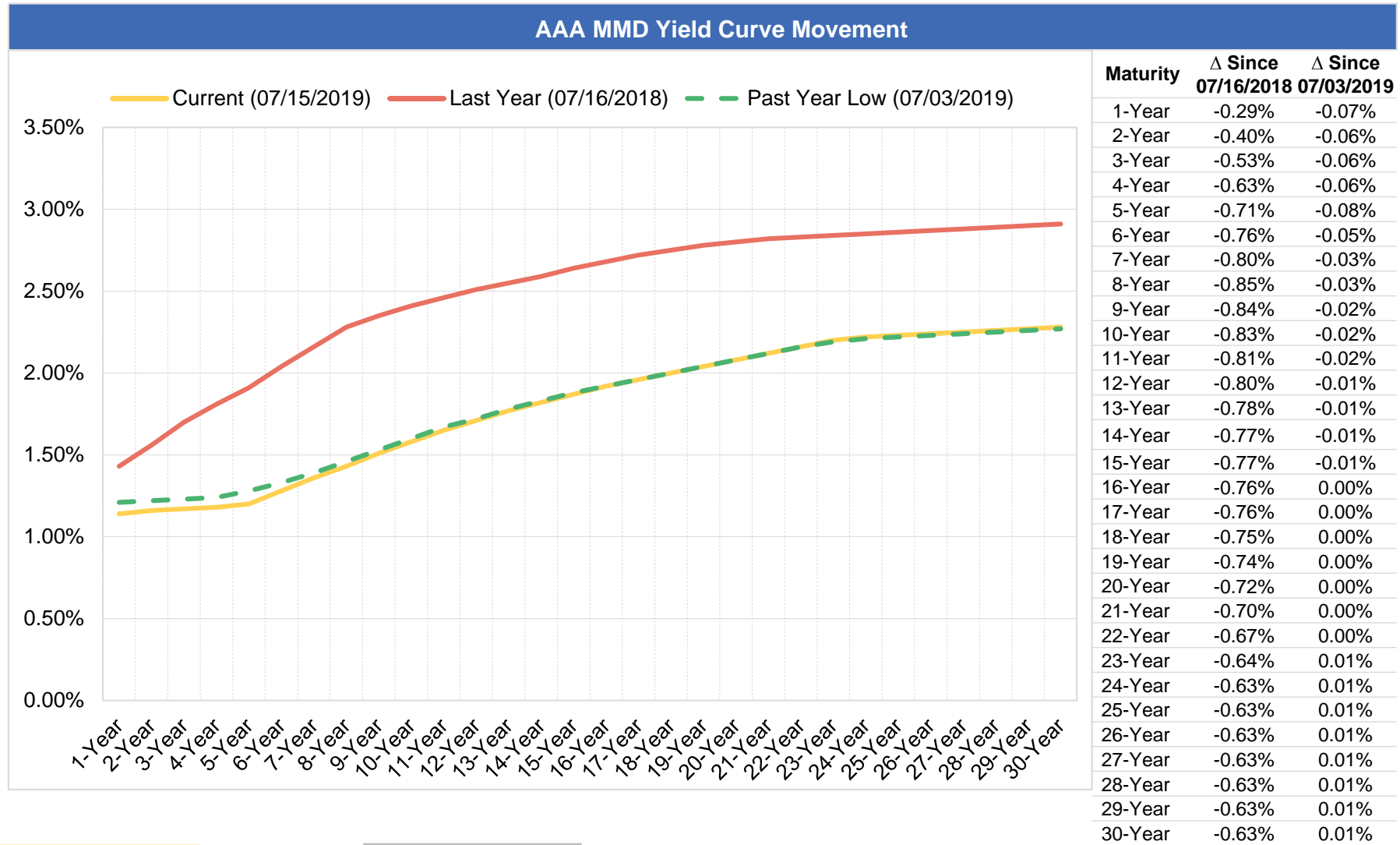


Summary of July 17, 2019 vs. Historical (30-Year Average) MMD Rates											
Statistic	1-Year	2-Year	3-Year	4-Year	5-Year	7-Year	10-Year	15-Year	20-Year	25-Year	30-Year
July 17, 2019	1.13%	1.14%	1.15%	1.16%	1.18%	1.34%	1.56%	1.85%	2.06%	2.22%	2.27%
Historical Average	2.19%	2.47%	2.67%	2.86%	3.03%	3.36%	3.73%	4.19%	4.45%	4.59%	4.63%
Spread to Average	-1.06%	-1.33%	-1.52%	-1.70%	-1.85%	-2.02%	-2.17%	-2.34%	-2.39%	-2.37%	-2.36%
Minimum	0.11%	0.25%	0.36%	0.44%	0.62%	0.89%	1.29%	1.57%	1.80%	1.88%	1.93%
Maximum	1.02%	0.89%	0.79%	0.72%	0.56%	0.45%	0.27%	0.28%	0.26%	0.34%	0.34%
% of Time Lower	6.25%	6.35%	6.45%	6.55%	6.65%	6.85%	7.00%	7.25%	7.30%	7.35%	7.35%

Source: Thomson Reuters



Recent AAA MMD Yield Curve Movement



Source: Thomson Reuters



Series 2019 Bond Transaction Highlights

- ◆ DC Water plans to issue up to \$325 million in proceeds to address the Capital Improvement Program in three series:
 - \$125 million in Series 2019A proceeds for Clean Rivers project
 - \$75 million in Series 2019B proceeds for general CIP projects
 - \$100 million in Series 2019C proceeds for general CIP projects
- ◆ Series 2019A/B will be issued as long-term fixed-rate debt under the Subordinate lien
- ◆ Series 2019C will be issued as long-term variable rate debt under the Subordinate lien
- ◆ DC Water expects to affirm credit ratings from Moody's Investors Service (Aa1 for Sr.; Aa2 for Sub.) and Standard & Poor's (AAA for Sr.; AA+ for Sub.), as well as obtain independent green bond certification for Series 2019A
- ◆ Siebert Cisneros Shank & Co. and J.P. Morgan Securities have been selected to lead the underwriting groups as bookrunners for Series 2019A/B and Series 2019C, respectively
- ◆ Pursuant to Authorizing Resolutions, DC Water Board will be asked to approve several documents related to the financing plan described in the presentation
 - 24th Supplemental Indenture (Series 2019A/B) and 25th Supplemental Indenture (Series 2019C)
 - Form of Bond Purchase Agreements for Series 2019A/B and for Series 2019C
 - Preliminary Official Statements for Series 2019A/B and Series 2019C (drafts provided prior to Board meeting)
 - Remarketing Agreement for Series 2019C (draft provided prior to Board meeting)



Series 2019 Preliminary Plan of Finance

Series 2019A (Green Bonds)*	Series 2019B*	Series 2019C*
<ul style="list-style-type: none"> Par Amount: \$102.6 million Purpose: Clean Rivers Project Term: Up to 35 years Tax Status: Tax-Exempt Lien: Subordinate Expected 10 year optional par call 	<ul style="list-style-type: none"> Par Amount: \$61.5 million Purpose: General CIP Term: Up to 35 years Tax Status: Tax-Exempt Lien: Subordinate Expected 10-year optional par call 	<ul style="list-style-type: none"> Par Amount: \$99.9 million Purpose: General CIP Term: Up to 40 years Tax Status: Tax-Exempt Lien: Subordinate Expected 5-year mandatory tender (soft put) Expected optional par call 3-6 months prior to mandatory tender

Sources & Uses*				
	Series 2019A	Series 2019B	Series 2019C	Total
Sources (\$)				
Par Amount	102,555,000	61,535,000	99,925,000	264,015,000
Net Premium	23,239,247	13,944,157	798,401	37,981,805
Total	125,794,247	75,479,157	100,723,401	301,996,805
Uses (\$)				
Project Fund	125,000,000	75,000,000	100,000,000	300,000,000
Issuance and Underwriting Expenses	794,247	479,157	723,401	1,996,805
Total	125,794,247	75,479,157	100,723,401	301,996,805

*Preliminary, subject to change within the parameters of Board authorization.



Multi-Modal Bond Structure – Series 2019C

- ◆ DC Water will issue multi-modal bonds with a long-dated final maturity, with scheduled principal amortization over the life of the transaction
 - DC Water has issued multimodal bonds several times in the past, including 2012 and 2016
- ◆ DC Water will issue the Series 2019C Bonds initially in a Long-Term Rate Period, where the interest rate is fixed for a set period of time (e.g. 5 years) and then subject to remarketing
 - The multi-modal bond structure allows DC Water to obtain short-term interest rates (less than 2.00% currently) during the Initial Period, notwithstanding this a long term debt issuance
- ◆ Documents allow DC Water to remarket bonds either with a Hard Put or a Soft Put, without a credit facility
 - DC Water intends to use a Soft Put, meaning that in the highly unlikely instance that DC Water cannot remarket the bonds at the end of the initial term, this is NOT an event of default but the bonds would go to a Penalty Rate until they can be remarketed successfully into one of the allowable modes
- ◆ The documentation also incorporates different interest rate periods in the bond documents to give DC Water future flexibility and adapt the structure of an interest rate period to meet structuring objectives, including:
 - Long-Term Rate Period
 - Index Rate Period (interest rate is tied to the short-term SIFMA or LIBOR index plus a fixed spread)
 - Daily, Weekly, or Short-Term Rate Period (interest rate is reset periodically as a result of remarketing, requires a credit facility)
 - Fixed Rate Period (interest rate is fixed for the full term of the bonds)



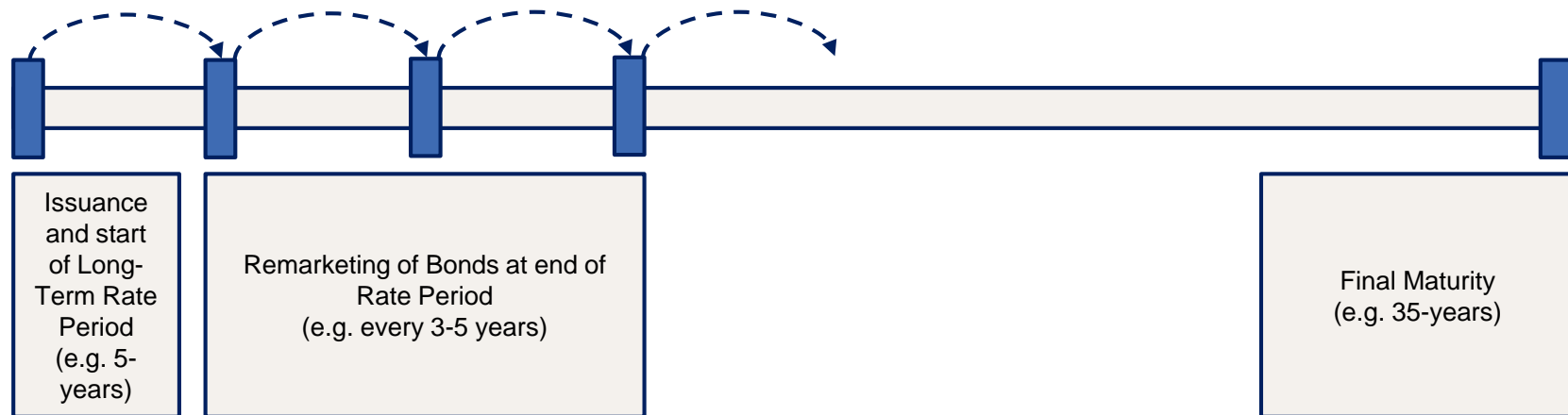
Initial Issuance in Long-Term Rate Period – Series 2019C

- ◆ Issuance in a Long-Term Rate Period provides DC Water a beneficial alternative to traditional variable rate debt
 - Short-term rates within a long-term debt issuance
 - No bank liquidity is needed, therefore no counterparty risk
 - Structural features provide significant protection to DC Water, particularly the use of a stepped rate if there is a failure to remarket the bonds at the end of an interest rate period
 - Flexibility with multiple modes in legal documents, which allows changes to different interest rate modes that DC Water believes to be most advantageous
- ◆ Unlike traditional VRDOs, bonds in a Long-Term Rate Period bear interest at a rate that is fixed through the expiration of the Rate Period
- ◆ Bonds in Long-Term Rate Period do not have counterparty risk/third party credit risk but do have remarketing risk



Long-Term Rate Period

- While in a Long-Term Rate Period, the bonds will bear interest at a fixed rate through the expiration of the Rate Period
- The interest rate paid during the Initial Period is determined during the initial pricing based upon the term of the Interest Period and investor evaluation of the creditworthiness of DC Water
- At the end of the Rate Period the bonds are intended be remarketed in a subsequent Long-Term Rate Period or another interest rate mode
- If the bonds are not remarketed or there is a failed remarketing, the bonds would bear interest at a Stepped Rate (e.g. 8.00%) until the final maturity of the bonds or until the bonds can be remarketed



- The Series 2019C Bonds may have a call option (typically exercisable 3-6 months prior to the end of the Rate Period) which will allow DC Water to opt to have the remarketing agent remarket the bonds prior to the end of the Interest Rate Period



Rating Agency Outreach

- ◆ Current Subordinate Lien Ratings are as follows (noting they are one notch below the senior lien ratings):
 - Standard & Poor's: AA+
 - Moody's: Aa2
 - Fitch: AA- (positive outlook)
- ◆ DC Water has a scheduled surveillance meeting in early August with Fitch, and hope that favorable rating action will be taken related to Fitch's positive outlook
- ◆ Depending on outcome of Fitch decision, DC Water will use 2 or 3 ratings
- ◆ Meetings are scheduled with Moody's and S&P in early September to obtain ratings on all three series of bonds
- ◆ Expectation to maintain the current very high ratings at S&P and Moody's
- ◆ Also expect to obtain a green bond rating or opinion for Clean Rivers-related bonds, as has been the practice since 2014



Preliminary Financing Schedule Highlights

- ◆ **July 25, 2019** – Request Finance & Budget Committee review and recommendation for approval
- ◆ **September 5, 2019** – Request DC Water Board approval of transaction
- ◆ **Week of September 23, 2019** – Receive credit ratings and green bond rating
- ◆ **October 8, 2019** – Series 2019A/B bond pricing
- ◆ **October 24, 2019** – Series 2019C bond pricing
- ◆ **November 6, 2019**– Series 2019A/B and Series 2019C bond closing

ATTACHMENT 4

**FINANCE & BUDGET COMMITTEE
APPROVAL OF
2019 A, B & C SERIES SENIOR LIEN REVENUE BONDS
FINANCING DOCUMENTS**

ACTION ITEM A: Approval of documents authorizing the issuance of the 2019 A, B & C Series Senior Lien Revenue Bonds:

1. Authorizing Resolution for Series 2019A/B
2. Authorizing Resolution for Series 2019C
3. 24th Supplemental Indenture (Series 2019A/B)
4. 25th Supplemental Indenture (Series 2019C)
5. Bond Purchase Agreement for Series 2019A/B
6. Bond Purchase Agreement for Series 2019C

DRAFT 07-18-19

Presented and Adopted: [_____], 2019
Subject: Authorizing the Sale and Setting Terms and Details
of the Series 2019A and Series 2019B Subordinate Bonds

#19- _____
RESOLUTION
OF THE
BOARD OF DIRECTORS
OF THE
DISTRICT OF COLUMBIA WATER AND SEWER AUTHORITY

The members of the Board of Directors (“Board”) of the District of Columbia Water and Sewer Authority (“Authority”), at the Board meeting held on September 5, 2019, upon consideration of a joint use matter, decided by a vote of _____ (____) in favor and _____ (____) opposed, to authorize and approve the sale of the Authority’s Public Utility Subordinate Lien Revenue Bonds, Series 2019A (Green Bonds) (the “Series 2019A Subordinate Bonds”) and Public Utility Subordinate Lien Revenue Bonds, Series 2019B (the “Series 2019B Subordinate Bonds” and, together with the Series 2019A Subordinate Bonds, the “Series 2019A/B Subordinate Bonds”) on the following terms and details.

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-three (23) 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 the “Series 2019A Subordinate 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 September [____], 2019, for the Series 2019A/B Subordinate Bonds); (b) fund a Series 2019A Debt Service Reserve Requirement (as defined herein), if determined necessary; and (c) pay certain costs of issuance; (ii) to issue the Series

2019B Subordinate Bonds to (a) finance certain Costs of the System; (b) fund a Series 2019B Debt Service Reserve Requirement, (as defined herein), if determined necessary; and (c) pay certain costs of issuance; (iii) to designate the Series 2019A/B Subordinate Bonds as Subordinate Debt for purposes of the Indenture; and (iv) to secure the Series 2019A/B 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 other Subordinate Debt, including, without limitation, other Subordinate Debt that the Authority may issue from time to time in the future; and

WHEREAS, the CEO and General Manager, the Chief Financial Officer and Executive Vice President, Finance and Procurement, Executive Vice President Operations and Engineering, the Senior Vice President and Chief Engineer and the Interim Executive Vice President, Legal Affairs 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 July 25, 2019, to review the issuance of the Series 2019A/B Subordinate Bonds and has recommended approval of this Resolution by the Board.

NOW, THEREFORE BE IT RESOLVED THAT:

Section 1. Definitions and Interpretations. Unless otherwise defined herein and unless the context indicates otherwise, the terms used herein and defined in the Indenture (including the Twenty-Fourth 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 and Executive Vice President, Finance and Procurement, Controller, Budget Director, Finance Director and Rates and Revenue Director of the Authority, including any of the foregoing who are in an interim, acting or similar capacity, 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 2019A/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 2019A/B Subordinate Bonds to the Series 2019A/B Original Purchasers and specifying terms of the Series 2019A/B Subordinate Bonds, as provided for in Section 4 of this Resolution.

“Continuing Disclosure Agreement” means the Continuing Disclosure Agreement executed by the Authority, dated as of the same date as the date of issuance and delivery of the Series 2019A/B Subordinate Bonds, as originally executed and as it may be amended from time to time in accordance with its terms.

“Financial Advisor” means PFM Financial Advisors LLC.

“Interest Payment Dates” means for the Series 2019A/B Subordinate 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 2019A/B Subordinate Bonds are Outstanding.

“Series 2019A Debt Service Reserve Requirement” means, if determined in the Certificate of Award to be necessary, a required fund balance in the Series 2019A Debt Service Reserve Account or Accounts established under the Twenty-Fourth 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 2019A Debt Service Reserve Account in the amount of the specified required fund balance will not cause the interest on any Series 2019A Subordinate Bonds intended to be excluded from gross income for federal income tax purposes not to be so excluded.

“Series 2019A/B Original Purchasers” for the Series 2019A/B Subordinate Bonds means the purchasers identified as such in the Bond Purchase Agreement.

“Series 2019B Debt Service Reserve Requirement” means, if determined in the Certificate of Award to be necessary, a required fund balance in the Series 2019B Debt Service Reserve Account or Accounts established under the Twenty-Fourth 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 2019B Debt Service Reserve Account in the amount of the specified required fund balance will not cause the interest on any Series 2019B Subordinate Bonds intended to be excluded from gross income for federal income tax purposes not to be so excluded.

“Twenty-Fourth Supplemental Indenture” means the Twenty-Fourth Supplemental Indenture of Trust by and between the Authority and the Trustee, dated as of the same date as and relating to the Series 2019A/B Subordinate 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. Authorization, Designation and Purposes of Series 2019A/B Subordinate Bonds. 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) Two Hundred Fifty Million Dollars (\$250,000,000) aggregate principal amount of Series 2019A/B Subordinate Bonds which aggregate amount shall be allocated between the Series 2019A Subordinate Bonds and the Series 2019B Subordinate Bonds in the Certificate of Award. The Series 2019A Subordinate Bonds shall be designated “Public Utility Subordinate Lien Revenue Bonds, Series 2019A (Green Bonds)” and shall constitute Subordinate 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 2019A Debt Service Reserve Requirement, if determined necessary in the Certificate of Award; and (c) paying issuance costs of the Series 2019A Subordinate Bonds. The Series 2019B Subordinate Bonds shall be designated “Public Utility Subordinate Lien Revenue Bonds, Series 2019B” and shall constitute Subordinate Debt for purposes of the Indenture, for the purpose of: (a) financing certain Costs of the System; (b) funding a Series 2019B Debt Service Reserve Requirement, if determined necessary in the Certificate of Award; and (c) paying issuance costs of the Series 2019B Subordinate Bonds. For those purposes the proceeds from the sale of the Series 2019A/B Subordinate Bonds shall be allocated and deposited, as provided in the Twenty-Fourth Supplemental Indenture. If and to the extent that any Series 2019A/B Subordinate Bonds are issued for the purpose of funding a Series 2019A Debt Service Reserve Requirement and/or a Series 2019B Debt Service Reserve Requirement, then the aggregate principal amount of Series 2019A/B Subordinate Bonds hereby authorized may exceed \$250,000,000 by the aggregate principal amount of the Series 2019A/B Subordinate 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 2019A/B Subordinate Bonds.

(a) Form, Transfer and Exchange. The Series 2019A/B Subordinate Bonds: (i) shall initially be issued only in fully registered form and substantially in the forms attached as Exhibits to the Twenty-Fourth 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-Fourth Supplemental Indenture.

(b) Denominations and Dates. The Series 2019A/B Subordinate Bonds shall be dated as of the date of issuance and delivery, but in no event later than December 31, 2019, and there shall be a single Series 2019A/B Subordinate Bond representing each interest rate for each maturity of the Series 2019A/B Subordinate Bonds bearing the same series or subseries designation.

(c) Principal Maturities. The principal of the Series 2019A/B Subordinate 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, 2059.

(d) Interest Rates and Interest Rate Periods for the Series 2019A/B Subordinate Bonds. The Series 2019A/B Subordinate 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 2019A/B Subordinate Bonds shall not exceed five and one half percent (5.50%) per annum.

(e) Optional and Mandatory Redemption.

(i) *Optional* - The Series 2019A/B Subordinate 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 the outside date permitted by law) are not subject to prior optional redemption. Any Series 2019A/B Subordinate 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 2019A/B Subordinate Bonds to be redeemed.

(ii) *Mandatory Sinking Fund Redemption* - Any Series 2019A/B Subordinate 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.

(iii) *Make Whole* – If so designated in the Certificate of Award, the Series 2019A/B Subordinate Bonds shall also be subject to redemption at the option of the Authority prior to their stated maturities at any time in whole or in part (in whole multiples of \$5,000) on any date, at a redemption price which will make the holders of such Series 2019A/B Subordinate Bonds whole through the Earliest Optional Redemption Date for the early redemption. The Certificate of Award shall specify the method by which the “make whole” redemption price shall be determined, provided that the redemption price shall not exceed 110% of the principal amount of the Series 2019A/B Subordinate Bonds then redeemed, without further action by this Board on or before the date of redemption.

(f) Redemption Provisions. Redemption of Series 2019A/B Subordinate Bonds shall be effected in accordance with Article IV of the Master Indenture; provided, however, that notices of redemption of the Series 2019A/B Subordinate 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.

(g) Places and Manner of Payment. The principal of and the interest and any redemption premium on the Series 2019A/B Subordinate Bonds shall be payable at the places and in the manner specified in the Twenty-Fourth Supplemental Indenture.

(h) Execution. The Authorized Officials are, and each of them is, authorized and directed to execute the Series 2019A/B Subordinate Bonds, and the Secretary of the Board is authorized and directed to affix the seal of the Authority to the Series 2019A/B Subordinate Bonds and to deliver them to the Trustee for authentication in accordance with the Indenture.

Section 4. Sale of Series 2019A/B Subordinate Bonds.

(a) General. The Series 2019A/B Subordinate Bonds shall be awarded and sold to the Series 2019A/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 2019A/B Subordinate Bonds times the percentage of such principal amount at which such Series 2019A/B Subordinate 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 2019A/B Subordinate Bonds.

(b) Bond Purchase Agreement. 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 2019A/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 applicable Bond Purchase Agreement by such Authorized Official. The price for and terms of the Series 2019A/B Subordinate Bonds and the sale thereof, all as provided in this Resolution, the Bond Purchase Agreement, the Certificate of Award and the Twenty-Fourth Supplemental Indenture, are hereby approved and determined to be in the best interests of the Authority.

(c) 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 2019A/B Subordinate Bonds approved in the Certificate of Award shall be incorporated into the Twenty-Fourth 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 2019A/B Subordinate 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 any of the Series 2019A/B Subordinate Bonds and, if so, from whom and on what terms; (iii) specify the amount, if any, of the Series 2019A Debt Service Reserve Requirement and the Series 2019B 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.

(d) Authorization of Bond Insurance and Qualified Reserve Credit Facilities. The submission of any applications to: (i) recognized providers of municipal bond insurance requesting the issuance of one or more municipal bond insurance policies to insure the Authority's obligation to make payments of principal of and interest on any of the Series 2019A/B Subordinate 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 2019A 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 2019A Subordinate Bonds. There is hereby authorized to be paid from the moneys deposited in the Series 2019B 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 2019B Subordinate Bonds. The Authorized Officials are, and each of them is, hereby further authorized to enter into a reimbursement agreement with the provider of any Qualified Reserve Credit Facility to provide for the Authority's reimbursement of the provider for any amounts drawn under the Qualified Reserve Credit Facility in a manner consistent with the Indenture. Any determination of the Authorized Officials under this paragraph shall be based on the written advice of the Financial Advisor.

(e) Certificates. The Authorized Officials are, and each of them is, authorized and directed, in their official capacities, to execute and deliver to the Series 2019A/B Original Purchasers the certificates required by the Bond Purchase Agreement to be executed on behalf of the Authority.

(f) Delivery of Bonds. The Authorized Officials are, and each of them is, authorized and directed to make the necessary arrangements with the Series 2019A/B Original Purchasers to establish the date, location, procedure and conditions for the delivery of the Series 2019A/B Subordinate Bonds to the Series 2019A/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 2019A/B Subordinate Bonds, and the execution, authentication and delivery of the Series 2019A/B Subordinate Bonds to DTC for the accounts of the Series 2019A/B Original Purchasers, in accordance with this Resolution and the Indenture, and upon the receipt of payment of the purchase price, to cause such amount to be applied in accordance with the terms and provisions of this Resolution and the Indenture.

Section 5. Allocation of Proceeds of the Series 2019A/B Subordinate Bonds; Tax Covenants.

(a) Allocation of Proceeds of the Series 2019A/B Subordinate Bonds. The proceeds from the sale of the Series 2019A/B Subordinate Bonds shall be allocated, deposited and credited for the purposes approved in this Resolution and as specified in the Twenty-Fourth Supplemental Indenture.

(b) Tax Covenants. 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 2019A/B Subordinate Bonds.

Section 6. Twenty-Fourth Supplemental Indenture and Other Documents. The Authorized Officials are, and each of them is, authorized in connection with the issuance of the Series 2019A/B Subordinate Bonds, to execute, acknowledge and deliver in the name of and on behalf of the Authority, the Twenty-Fourth 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 2019A/B Subordinate 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-Fourth 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 2019A/B Subordinate 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 2019A/B Subordinate 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 2019A/B Original Purchasers for distribution to prospective purchasers of the Series 2019A/B Subordinate 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 2019A/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 2019A/B Original Purchasers to sell book entry interests in the Series 2019A/B Subordinate 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 2019A/B Original Purchasers as may be reasonably requested to qualify the Series 2019A/B Subordinate 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 2019A/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 2019A/B Original Purchasers and to specify the final principal amount, interest rates and redemption provisions of the Series 2019A/B Subordinate Bonds, the price of the Series 2019A/B Subordinate Bonds to the general public, any credit enhancement provisions with respect to the Series 2019A/B Subordinate Bonds and any change in ratings of the Series 2019A/B Subordinate 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 2019A/B Subordinate 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 2019A/B Subordinate Bonds may, and the Trustee may (and, at the request of the Holders of at least 25% in aggregate principal amount of Outstanding Series 2019A/B Subordinate 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. General. 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 2019A/B Original Purchasers of the Series 2019A/B Subordinate Bonds a true and certified transcript of all proceedings relating to the authorization and issuance of the Series 2019A/B Subordinate Bonds along with other information as is necessary or proper with respect to the Series 2019A/B Subordinate Bonds.

Section 9. Multiple Series. Notwithstanding anything herein to the contrary, each of the Series 2019A Subordinate Bonds and the Series 2019B Subordinate Bonds may be issued in one or more separate series or subseries, each bearing a distinctive designation, provided that the Series 2019A/B Subordinate 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 2019A/B Subordinate Bonds may be issued at the same or different times and so may have different dates of issuance. The Series 2019A/B Subordinate 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-Fourth Supplemental Indenture shall refer to each and all such Supplemental Trust Indentures, but any Supplemental Trust Indenture subsequent to the Twenty-Fourth 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.

This Resolution is effective immediately.

Secretary to the Board of Directors

DRAFT 07-18-19

Presented and Adopted: [_____], 2019
 Subject: Authorizing the Sale and Setting Terms and Details of the
 Series 2019C Subordinate Bonds

#19-_____
 RESOLUTION
 OF THE
 BOARD OF DIRECTORS
 OF THE
 DISTRICT OF COLUMBIA WATER AND SEWER AUTHORITY

The members of the Board of Directors (“Board”) of the District of Columbia Water and Sewer Authority (“Authority”), at the Board meeting held on September 5, 2019, upon consideration of a joint use matter, decided by a vote of _____ (____) in favor and _____ (____) opposed, to authorize and approve the sale of the Authority’s Public Utility Subordinate Lien Multimodal Revenue Bonds, Series 2019C (the “Series 2019C Subordinate Bonds”) on the following terms and details.

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-three (23) 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 or clarify provisions of the Master Indenture; and

WHEREAS, the Authority now intends (i) to issue Public Utility Subordinate Lien Multimodal Revenue Bonds, Series 2019C (the “Series 2019C Subordinate Bonds”) to finance certain Costs of the System, fund a Series 2019C Debt Service Reserve Requirement (as defined herein), if determined necessary, and pay certain costs of issuance, (ii) to designate the Series 2019C Subordinate Bonds as Subordinate Debt for purposes of the Indenture, and (iii) to secure the Series 2019C 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 other

Subordinate Debt, including, without limitation, other Subordinate Debt that the Authority may issue from time to time in the future; and

WHEREAS, there have been presented at this meeting drafts of the following documents, all as hereinafter defined: the Twenty-Fifth Supplemental Indenture, the form of the Series 2019C Subordinate Bond (attached as an Exhibit to the Twenty-Fifth Supplemental Indenture); the Bond Purchase Agreement, the Remarketing Agreement with the initial Remarketing Agent, the Official Statement and the Continuing Disclosure Agreement; and

WHEREAS, the CEO and General Manager, the Chief Financial Officer and Executive Vice President, Finance and Procurement, Executive Vice President Operations and Engineering, the Senior Vice President and Chief Engineer and the Interim Executive Vice President, Legal Affairs 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 July 25, 2019, to review the issuance of the Series 2019C Subordinate Bonds and has recommended approval of this Resolution by the Board.

NOW THEREFORE BE IT RESOLVED THAT:

Section 1. Definitions and Interpretations. Unless otherwise defined herein and unless the context indicates otherwise, the terms used herein and defined in the Indenture (including the Twenty-Fifth 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 ascribed 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 and Executive Vice President, Finance and Procurement, Controller, Budget Director, Finance Director and Rates and Revenue Director of the Authority, including any of the foregoing who are in an interim, acting or similar capacity, 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 Series 2019C Original Purchasers and the Authority dated as of the same date as the Certificate of Award.

“Certificate of Award” means the certificate of an Authorized Official awarding the Series 2019C Subordinate Bonds to the Series 2019C Original Purchasers and specifying terms of the Series 2019C Subordinate Bonds, as provided for in Section 4 of this Resolution.

“Continuing Disclosure Agreement” means the Continuing Disclosure Agreement executed by the Authority, dated as of the same date as the date of issuance and delivery of the Series 2019C Subordinate Bonds, as originally executed and as it may be amended from time to time in accordance with its terms.

“Financial Advisor” means PFM Financial Advisors LLC.

“Interest Payment Dates” means the “Interest Payment Date” as defined for the Series 2019C Subordinate Bonds in the Twenty-Fifth Supplemental Indenture.

“Remarketing Agent” means any Remarketing Agent designated for the Series 2019C Subordinate Bonds under the Twenty-Fifth Supplemental Indenture. J.P. Morgan Securities is the initial Remarketing Agent.

“Remarketing Agreement” means any Remarketing Agreement entered into for the Series 2019C Subordinate Bonds under the Twenty-Fifth Supplemental Indenture.

“Series 2019C Debt Service Reserve Requirement” means a required fund balance, if determined necessary, in the Series 2019C Debt Service Reserve Account or Accounts established under the Twenty-Fifth 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 Section 1.148-2(f)(2) of 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 the opinion of nationally recognized bond counsel to the effect that the required balance in the Series 2019C Debt Service Reserve Account does not exceed the amount that qualifies as a “reasonably required reserve or replacement fund” within the meaning of Section 148(d) of the Code and the Treasury Regulations thereunder and that the existence of a balance in the Series 2019C Debt Service Reserve Account in the amount of the required fund balance will not cause the interest on any Series 2019C Subordinate Bonds that had been excluded from gross income for federal income tax purposes to cease to be so.

“Series 2019C Original Purchasers” for the Series 2019C Subordinate Bonds means the purchasers identified as such in the Bond Purchase Agreement for the Series 2019C Subordinate Bonds.

“Tender Agent” means any Tender Agent designated for the Series 2019C Subordinate Bonds under the Twenty-Fifth Supplemental Indenture. The Trustee is the initial Tender Agent.

“Twenty-Fifth Supplemental Indenture” means the Twenty-Fifth Supplemental Indenture of Trust by and between the Authority and the Trustee, dated as of the same date as and relating to the Series 2019C Subordinate 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 which succeed to their functions, duties or responsibilities by operation of law and also those who at the time may legally act in their place.

Section 2. Authorization, Designation and Purposes of Series 2019C Subordinate Bonds. 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) One Hundred Million Dollars (\$100,000,000) principal amount of bonds of the Authority, which shall be designated “Public Utility Subordinate Lien Multimodal Revenue Bonds, Series 2019C” and constituting Subordinate Debt for purposes

of the Indenture, for the purpose of: (i) financing certain Costs of the System,; (ii) funding a Series 2019C Debt Service Reserve Requirement, if determined necessary; and (iii) paying issuance costs of the Series 2019C Subordinate Bonds. For those purposes the proceeds from the sale of the Series 2019C Subordinate Bonds shall be allocated and deposited, as provided in the Twenty-Fifth Supplemental Indenture. If and to the extent that any Series 2019C Subordinate Bonds are issued for the purpose of funding a Series 2019C Debt Service Reserve Requirement, then the aggregate principal amount of Series 2019C Subordinate Bonds hereby authorized may exceed \$100,000,000 by the aggregate principal amount of the Series 2019C Subordinate Bonds to be issued for that purpose.

Section 3. Terms and Provisions Applicable to Series 2019C Subordinate Bonds.

(a) Form, Numbering, Transfer and Exchange. The Series 2019C Subordinate Bonds: (i) shall initially be issued only in fully registered form and substantially in the form attached as Exhibit A to the Twenty-Fifth 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-Fifth Supplemental Indenture.

(b) Denominations and Dates. The Series 2019C Subordinate Bonds shall be dated as of the date of issuance and delivery, but in no event later than December 31, 2019, and there shall be a single Series 2019C Subordinate Bond for each maturity of the Series 2019C Subordinate Bonds bearing the same series or subseries designation as provided in the Twenty-Fifth Supplemental Indenture.

(c) Maturities. The principal of the Series 2019C Subordinate Bonds shall be payable 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, 2059.

(d) Interest Rates and Interest Rate Periods for the Series 2019C Subordinate Bonds. The Series 2019C Subordinate Bonds shall initially be issued as Long-Term Rate Bonds. The initial interest rate for the Series 2019C Subordinate Bonds will be the rate that the Series 2019C Original Purchasers determine is necessary to sell the Series 2019C Subordinate Bonds at a minimum price of ninety-eight percent (98%) of the principal amount of the Series 2019C Subordinate Bonds and subject to the Maximum Rate. The Series 2019C Subordinate Bonds initially may be issued in multiple subseries, as determined in the Certificate of Award. The provisions of Section 403 of the Twenty-Fifth Supplemental Indenture shall govern the interest rates per annum and payment terms of the Series 2019C Subordinate Bonds. After the Initial Period, the Series 2019C Subordinate Bonds may bear interest at Daily Rates, Weekly Rates, Short-Term Rates, Index Rates or Fixed Rates, or may continue to bear interest at Long-Term Rates, all determined in accordance with the Twenty-Fifth Supplemental Indenture, and shall be subject to conversion between Interest Rate Periods on the terms, in the manner, and subject to the conditions set forth in the Indenture.

(e) Tender, Purchase, Remarketing and Optional Redemption. For the purpose of effecting the provisions of the Twenty-Fifth Supplemental Indenture relating to the tender, purchase and remarketing of the Series 2019C Subordinate Bonds, the Authority shall appoint or engage the Tender Agent and Remarketing Agent at the times, in the manner, and subject to the conditions set forth in the Twenty-Fifth Supplemental Indenture. The Series 2019C Subordinate Bonds shall be subject to redemption prior to stated maturity as and to the extent provided in the Twenty-Fifth Supplemental Indenture and shall be subject from time to time to optional and mandatory tender for purchase as provided in the Twenty-Fifth Supplemental Indenture.

(f) Places and Manner of Payment, and Paying Agents. The principal and tender price of and the interest and any redemption premium on the Series 2019C Subordinate Bonds shall be payable as specified in the Twenty-Fifth Supplemental Indenture.

(g) Execution. The Authorized Officials are, and each of them is, authorized and directed to execute the Series 2019C Subordinate Bonds, and the Secretary of the Board is authorized and directed to affix the seal of the Authority to the Series 2019C Subordinate Bonds and to deliver them to the Trustee for authentication in accordance with the Indenture.

Section 4. Sale of Series 2019C Subordinate Bonds.

(a) General. The Series 2019C Subordinate Bonds shall be awarded and sold to the Series 2019C 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 2019C Subordinate Bond times the percentage of such principal amount at which such Series 2019C Subordinate Bond shall be initially offered to the public.

(b) Bond Purchase Agreement. 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 2019C 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 2019C Subordinate Bonds and the sale thereof, all as provided in this Resolution, the Bond Purchase Agreement, the Certificate of Award, and the Twenty-Fifth Supplemental Indenture, are hereby approved and determined to be in the best interests of the Authority.

(c) 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 2019C Subordinate Bonds approved in the Certificate of Award shall be incorporated into the Twenty-Fifth Supplemental Indenture. The Certificate of Award, subject to the restrictions set forth herein, shall: (i) state, with respect to the Series 2019C Subordinate Bonds, the aggregate principal amount, the purchase price, the Interest Payment Dates, the principal retirement dates, the mandatory sinking fund requirements (if any), the mandatory tender date (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 2019C Subordinate Bonds and, if so, from whom and on what terms; (iii) specify the amount, if determined necessary, of the Series 2019C Debt Service Reserve Requirement and determine whether it shall be met entirely with (X) cash and Permitted Investments; (Y) a Qualified Reserve Credit Facility (as defined in the Twenty-Fifth Supplemental Indenture); or (Z) a specified combination of (X) and (Y); 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. A separate Certificate of Award may be delivered for each subseries of the Series 2019C Subordinate Bonds, and each reference in this Resolution to the Certificate of Award shall refer to each and all such Certificates of Award. A separate Bond Purchase Agreement, and Continuing Disclosure Agreement may be entered into for each subseries of the Series 2019C Subordinate Bonds, 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.

(d) Authorization of Bond Insurance and Qualified Reserve Credit Facilities. The submission of 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 2019C Subordinate 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 2019C 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 2019C Subordinate Bonds. The Authorized Officials are, and each of them is, hereby further authorized to enter into a reimbursement agreement with the provider of any Qualified Reserve Credit Facility to provide for the Authority's reimbursement of the provider for any amounts drawn under the Qualified Reserve Credit Facility in a manner consistent with the Indenture. Any determination of the Authorized Officials under this paragraph shall be based on the written advice of the Financial Advisor.]

(e) Certificates. The Authorized Officials are, and each of them is, authorized and directed, in their official capacities, and only in those capacities, to execute and deliver to the Series 2019C Original Purchasers the certificates required by the Bond Purchase Agreement to be executed on behalf of the Authority.

(f) Delivery of Bonds. The Authorized Officials are, and each of them is, authorized and directed to make the necessary arrangements with the Series 2019C Original Purchasers to establish the date, location, procedure and conditions for the delivery of the Series 2019C Subordinate Bonds to the Series 2019C 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 2019C Subordinate Bonds, and the execution, authentication and delivery of the Series 2019C Subordinate Bonds to DTC for the accounts of the Series 2019C Original Purchasers in accordance with this Resolution and the Indenture, and upon the receipt of payment

of the purchase price, to cause such amount to be applied in accordance with the terms and provisions of this Resolution and the Indenture.

Section 5. Allocation of Proceeds of the Series 2019C Subordinate Bonds; Tax Covenants.

(a) Allocation of Proceeds of the Series 2019C Subordinate Bonds. The proceeds from the sale of the Series 2019C Subordinate Bonds, including any accrued interest, shall be allocated, deposited and credited for the purposes approved in this Resolution and as specified in the Twenty-Fifth Supplemental Indenture.

(b) Tax Covenants. 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 2019C Subordinate Bonds.

Section 6. Twenty-Fifth Supplemental Indenture and Other Documents. The Authorized Officials are, and each of them is, authorized in connection with the issuance of the Series 2019C Subordinate Bonds, to execute, acknowledge and deliver in the name of and on behalf of the Authority, the Twenty-Fifth Supplemental Indenture and the Remarketing Agreement with the initial Remarketing Agent, substantially in the respective forms thereof submitted to the Authority at or prior to this meeting, but with such changes therein as may be permitted by the Indenture 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 2019C Subordinate 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-Fifth Supplemental Indenture, the Bond Purchase Agreement and this Resolution.

Following the issuance of the Series 2019C Subordinate Bonds, if a successor Remarketing Agent is appointed by the Authority, the Authorized Officials are, and each of them is, authorized to execute, acknowledge and deliver, in the name of and on behalf of the Authority, the Remarketing Agreement with the successor Remarketing Agent in a form then determined by the Authorized Officer executing the document on behalf of the Authority to be consistent with the Indenture and this Resolution. The determination of such consistency shall be conclusively evidenced by the execution of the document by an Authorized Official.

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 2019C Subordinate 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 2019C Subordinate 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 2019C Original Purchasers for distribution to prospective purchasers of the Series 2019C Subordinate 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 2019C 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 2019C Original Purchasers to sell book-entry interests in the Series 2019C Subordinate Bonds, and will provide copies as appropriate to the Municipal Securities Rulemaking Board through its Electronic Municipal Market Access.

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 2019C Original Purchasers as may be reasonably requested to qualify the Series 2019C Subordinate 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 2019C 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 2019C Original Purchasers, and to specify the final principal amount, interest rates and redemption provisions of the Series 2019C Subordinate Bonds, the price of the Series 2019C Subordinate Bonds to the general public and such other information as is necessary to supplement and complete the Official Statement with the approved and agreed upon terms of Series 2019C Subordinate 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 2019C Subordinate Bonds may, and the Trustee may (and, at the request of the Holders of at least 25% in aggregate principal amount of Outstanding Series 2019C Subordinate 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. General. 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 2019C Original Purchasers a true and certified transcript of all proceedings relating to the authorization and issuance of the Series 2019C Subordinate Bonds along with other information as is necessary or proper with respect to the Series 2019C Subordinate Bonds.

This Resolution is effective immediately.

Secretary to the Board of Directors

SPB DRAFT: 7/18/19

TWENTY-FOURTH SUPPLEMENTAL INDENTURE OF TRUST

between

**DISTRICT OF COLUMBIA
WATER AND SEWER AUTHORITY**

and

**WELLS FARGO BANK, NATIONAL ASSOCIATION
AS TRUSTEE**

Dated [November __, 2019]

THIS TWENTY-FOURTH SUPPLEMENTAL INDENTURE OF TRUST dated the ___ day of [November], 2019 (as defined in more detail below, the “**Twenty-Fourth 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, National Association, a national banking association, having a corporate trust office in Philadelphia, Pennsylvania, 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, the Twenty-First Supplemental Indenture, the Twenty-Second Supplemental Indenture and the Twenty-Third 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 defined therein as the Series A-B Notes, (ii) designated the Series A-B Notes as Subordinate Debt for purposes of the Indenture, and (iii) made provision for the securing of the Series A-B Notes and of the Reimbursement Obligations to the Bank that provided the Letters of Credit (all as defined therein) that secure the Series A-B 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 the 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 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 the 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 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 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 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 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 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 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 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 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 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 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 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 or 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 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 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 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 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, 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 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 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-Second Supplemental Indenture of Trust, dated February 23, 2017 (the “**Twenty-Second Supplemental Indenture**”), between the Authority and the Trustee, the Authority: (i) issued its Public Utility Senior Lien Revenue Bonds, Series 2017A in the aggregate principal amount of \$100,000,000 (the “**Series 2017A Senior Lien 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 issuance costs of the Series 2017A Senior Lien Bonds, (ii) designated the Series 2017A Senior Lien Bonds as Senior Debt for purposes of the Indenture, (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 other Senior Debt, including, without limitation, other Senior Debt that the Authority may issue from time to time in the future, (iv) issued its Public Utility Senior Lien Revenue Bonds, Series 2017B in an aggregate principal amount of \$200,000,000 (the “**Series 2017B Senior Lien Bonds**” and, together with the Series 2017A Senior Lien Bonds, the “**Series 2017A/B Senior Lien Bonds**”) to (a) finance certain Costs of the System, and (b) pay issuance costs of the Series 2017B Senior Lien Bonds, (v) designated the Series 2017B Senior Lien Bonds as Senior Debt for purposes of the Indenture, and (vi) secured the Series 2017B Senior Lien 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, pursuant to the Twenty-Third Supplemental Indenture of Trust, dated April 30, 2018 (the “**Twenty-Third Supplemental Indenture**”), between the Authority and the Trustee, the Authority: (i) issued its Public Utility Subordinate Lien Revenue Bonds, Series 2018A in the aggregate principal amount of \$100,000,000 (the “**Series 2018A Senior Lien 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 issuance costs of the Series 2018A Senior Lien Bonds, (ii) designated the Series 2018A Senior Lien Bonds as Senior Debt for purposes of the Indenture, (iii) secured the Series 2018A Senior Lien 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, (iv)

issued its Public Utility Senior Lien Revenue Bonds, Series 2018B in an aggregate principal amount of \$200,000,000 (the “**Series 2018B Senior Lien Bonds**” and, together with the Series 2018A Senior Lien Bonds, the “**Series 2018A/B Senior Lien Bonds**”) to (a) finance certain Costs of the System, (b) pay issuance costs of the Series 2018B Senior Lien Bonds and (c) refund all of the Authority’s then outstanding Commercial paper Notes, Series B, (v) designated the Series 2018B Senior Lien Bonds as Senior Debt for purposes of the Indenture, and (vi) secured the Series 2018B Senior Lien 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 Authority now intends to: (i)(a) issue Public Utility Subordinate Lien Revenue Bonds, Series 2019A (Green Bonds) in the aggregate principal amount of \$_____ (the “**Series 2019A Subordinate 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 2019A Subordinate Bonds, (b) designate the Series 2019A Subordinate Bonds as Subordinate Debt for purposes of the Indenture, and (iii) secure the Series 2019A 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 other Subordinate Debt, including, without limitation, other Subordinate Debt that the Authority may issue from time to time in the future, and (ii)(a) issue the Public Utility Subordinate Revenue Bonds, Series 2019B in an aggregate principal amount of \$_____ (the “**Series 2019B Subordinate Bonds**” and, together with the Series 2019A Subordinate Bonds, the “**Series 2019A/B Subordinate Bonds**”) to (1) finance certain Costs of the System, and (2) pay issuance costs of the Series 2019B Subordinate Bonds, (b) designate the Series 2019B Subordinate Bonds as Subordinate Debt for purposes of the Indenture, and (iii) secure the Series 2019B 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 other Subordinate Debt, including, without limitation, other Subordinate 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-FOURTH SUPPLEMENTAL INDENTURE**

Section 101. Authorization of Twenty-Fourth Supplemental Indenture.

This Twenty-Fourth 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 2019A/B Subordinate Bonds as Subordinate Debt and to the Holders thereof as Holders of Subordinate Debt, except as otherwise provided in this Twenty-Fourth Supplemental Indenture.

Section 102. Definitions.

Except as otherwise defined in this Twenty-Fourth 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 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, the Twenty-First Supplemental Indenture, the Twenty-Second Supplemental Indenture and the Twenty-Third Supplemental Indenture are used in this Twenty-Fourth Supplemental Indenture with the meanings assigned to them therein. In addition, the following words as used in this Twenty-Fourth 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 2019A/B Subordinate Bond certificates in fully registered form are issued only to a Depository or its nominee as Holder, with the certificated Series 2019A/B Subordinate 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 2019A/B Subordinate 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 2019A/B Subordinate Bonds, and to effect transfers of book-entry interests in Series 2019A/B Subordinate Bonds, and includes and means initially The Depository Trust Company (a limited purpose trust company) (“DTC”), New York, New York.

“Interest Payment Dates” for the Series 2019A/B Subordinate Bonds means each April 1 and October 1 commencing [April 1, 2020], and thereafter during the time the Series 2019A/B Subordinate Bonds are outstanding.

“Series 2019A Construction Account” means the Series 2019A Construction Account established by this Twenty-Fourth Supplemental Indenture in the Construction Fund.

“Series 2019A Costs of Issuance Subaccount” means the Series 2019A Costs of Issuance Subaccount established by this Twenty-Fourth Supplemental Indenture in the Series 2019A Construction Account of the Construction Fund.

“Series 2019B Construction Account” means the Series 2019B Construction Account established by this Twenty-Fourth Supplemental Indenture in the Construction Fund.

“Series 2019B Costs of Issuance Subaccount” means the Series 2019B Costs of Issuance Subaccount established by this Twenty-Fourth Supplemental Indenture in the Series 2019B Construction Account of the Construction Fund.

“Series 2019A/B Rebate Fund” means the Series 2019A/B Rebate Fund established by this Twenty-Fourth Supplemental Indenture.

“Series 2019A/B Resolution” means Resolution No. _____, adopted by the Authority’s Board of Directors on _____, authorizing the Series 2019A/B Subordinate Bonds.

“Series 2019A/B Subordinate Bond Event of Default” means any of the events defined as such in Section 703 of this Twenty-Fourth Supplemental Indenture.

“Series 2019A/B Subordinate Bondholder” or “holder of Series 2019A/B Subordinate Bonds” means the registered owner of a Series 2019A/B Subordinate Bond.

“Series 2019A/B Subordinate Bonds Interest Subaccount” means the Series 2019A/B Subordinate Bonds Interest Subaccount established by this Twenty-Fourth Supplemental Indenture in the Interest Account in the Bond Fund.

“Series 2019A/B Subordinate Bonds Principal Subaccount” means the Series 2019A/B Subordinate Bonds Principal Subaccount established by this Twenty-Fourth Supplemental Indenture in the Principal Account in the Bond Fund.

“Series 2019A/B Subordinate Debt Service Reserve Requirement” means zero.

“Twenty-Fourth Supplemental Indenture” means this Twenty-Fourth Supplemental Indenture of Trust, dated [November __, 2019], 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 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, the Twenty-First Supplemental Indenture, the Twenty-Second Supplemental Indenture and the Twenty-Third Supplemental Indenture.

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-Fourth Supplemental Indenture.

**ARTICLE II
AUTHORIZATION, DETAILS AND FORM
OF SERIES 2019A/B SUBORDINATE BONDS**

Section 201. Authorization of Series 2019A/B Subordinate Bonds.

Pursuant to Article III of the Master Indenture and, specifically, Section 305 thereof, and the Series 2019A/B Resolution, the Authority is authorized to issue:

(i) Series 2019A Subordinate Bonds in the aggregate principal amount of \$ _____, for the purpose of (a) financing Costs of the System (specifically, a portion of the costs of the Authority’s DC Clean Rivers Project), and (b) paying issuance costs of the Series 2019A Subordinate Bonds. The Series 2019A Subordinate Bonds shall be issued as Subordinate Debt pursuant to the Indenture; and

(ii) Series 2019B Subordinate 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 2019B Subordinate Bonds. The Series 2019B Subordinate Bonds shall be issued as Subordinate Debt pursuant to the Indenture.

Section 202. Details of Series 2019A/B Subordinate Bonds.

The Series 2019A Subordinate Bonds shall be designated “Public Utility Subordinate Lien Revenue Bonds, Series 2019A (Green Bonds)”, shall be dated [November __, 2019], 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
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The Series 2019B Subordinate Bonds shall be designated “Public Utility Subordinate Lien Revenue Bonds, Series 2019B”, shall be dated [November __, 2019], 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
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Each Series 2019A/B Subordinate Bond shall bear interest: (a) from its date, if such Series 2019A/B Subordinate 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 2019A/B Subordinate Bond is authenticated; provided, however, that if at the time of authentication of any Series 2019A/B Subordinate Bond payment of interest is in default, such Series 2019A/B Subordinate Bond shall bear interest from the date to which interest has been paid. The interest payable on the Series 2019A/B Subordinate 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 2019A/B Subordinate Bonds shall be payable to the registered owners thereof upon the surrender of the applicable Series 2019A/B Subordinate Bonds at the designated office of the Trustee. Interest on the Series 2019A/B Subordinate 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 2019A/B

Subordinate 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 2019A/B Subordinate 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 2019A/B Subordinate 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 2019A/B Subordinate Bonds shall initially be issued to a Depository for holding in a book-entry system. Those Series 2019A/B Subordinate 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 2019A/B Subordinate Bonds for holding in a book-entry system or the Authority determines to remove the Series 2019A/B Subordinate 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 2019A/B Subordinate Bonds from the Depository, and shall execute and direct the Trustee to authenticate and deliver Series 2019A/B Subordinate Bond certificates, in fully registered form, to the assigns of the Depository or its nominee (if such Series 2019A/B Subordinate Bonds were held by a nominee), all at the cost and expense (including costs of printing or otherwise preparing and delivering replacement Series 2019A/B Subordinate Bonds), if the event is not the result of Authority action or inaction, of those persons requesting that authentication and delivery. Series 2019A/B Subordinate Bond certificates authenticated and delivered pursuant to this paragraph shall be in authorized denominations. In the event that Series 2019A/B Subordinate 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 2019A/B Subordinate 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 2019A/B Subordinate 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

2019A/B Subordinate Bonds, may authorize the exchange of Series 2019A/B Subordinate Bond certificates in fully registered form or Series 2019A/B Subordinate 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 2019A/B Subordinate 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 2019A/B Subordinate 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 2019A/B Subordinate Bonds in a book-entry system (i) it or its nominee shall be the registered owner of the Series 2019A/B Subordinate Bonds, (ii) notwithstanding anything to the contrary in this Twenty-Fourth 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-Fourth Supplemental Indenture to registered owners of the Series 2019A/B Subordinate Bonds shall mean such Depository or its nominee and shall not mean the beneficial owners of the Series 2019A/B Subordinate Bonds.

Section 205. Delivery of Series 2019A/B Subordinate Bonds.

The Trustee shall authenticate and deliver the Series 2019A/B Subordinate Bonds when there have been filed with or delivered to it the following items:

(i) An original executed counterpart of this Twenty-Fourth 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-Fourth Supplemental Indenture, and (b) authorizing the issuance, sale, award, execution and delivery of the Series 2019A/B Subordinate 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 2019A/B Subordinate 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 2019A/B Subordinate 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-Fourth 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 2019A/B Subordinate Bonds has been duly authorized, that the Series 2019A/B Subordinate Bonds are valid and binding limited obligations of the Authority, and that the interest on the Series 2019A/B Subordinate 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 2019A/B Subordinate 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 2019A/B SUBORDINATE BONDS

Section 301. Redemption Dates and Prices.

The Series 2019A/B Subordinate Bonds may not be called for redemption by the Authority except as provided below:

(i) Optional Redemption. (a) The Series 2019A Subordinate Bonds maturing on or after _____ 1, 20__, are subject to redemption prior to maturity at the option of the Authority 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.

(b) The Series 2019B Subordinate Bonds maturing on or after _____ 1, 20__, are subject to redemption prior to maturity at the option of the Authority on and 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

(ii) Mandatory Redemption. (a) The Series 2019A Subordinate Bonds bearing interest at a rate of ____%, and maturing on _____ 1, 20__ (the “____ Term Series 2019A Subordinate 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:

Year	Amount
------	--------

† Final Maturity

(b) The Series 2019B Subordinate Bonds each bearing interest at a rate of ____% and maturing on _____ 1, 20__ (the “____ Term Series 2019B Subordinate Bonds”) and _____ 1, 20__ (the “____ Term Series 2019B Subordinate Bonds”), 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 2019B Subordinate Bonds are subject to mandatory sinking fund redemption on each October 1 as set forth below:

Year	Amount
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† Final Maturity

The ____ Term Series 2019B Subordinate Bonds are subject to mandatory sinking fund redemption on each October 1 as set forth below:

Year	Amount
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† Final Maturity

The Trustee shall provide for a mandatory redemption of the Term Series 2019A/B Subordinate 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 2019A/B Subordinate 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 2019A/B Subordinate 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 2019A/B Subordinate Bonds so delivered or previously redeemed. Any principal amount of such Term Series 2019A/B Subordinate 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 2019A/B Subordinate Bonds so purchased towards the sinking fund installments for the Term Series 2019A/B Subordinate 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 2019A/B Subordinate 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 2019A/B Subordinate 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 2019A/B Subordinate 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 2019A/B Subordinate Bonds of any maturity date is called for redemption, the Series 2019A/B Subordinate 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 2019A/B Subordinate Bond to be redeemed shall be in the principal amount of \$5,000 or some integral multiple thereof. In selecting Series 2019A/B Subordinate Bonds for redemption, each Series 2019A/B Subordinate Bond shall be considered as representing that number of Bonds which is obtained by dividing the principal amount of such Series 2019A/B Subordinate Bond by \$5,000. If a portion of a Series 2019A/B Subordinate Bond shall be called for redemption, a new Series 2019A/B Subordinate 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 2019A/B Subordinate Bonds shall be given in the manner set forth in Section 402 of the Master Indenture; provided, however, that notices of redemption of Series 2019A/B Subordinate 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 2019A/B Subordinate Bonds to be redeemed, or (ii) be sent only if sufficient money to pay the full redemption price of the Series 2019A/B Subordinate 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 2019A/B Subordinate 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 2019A/B Subordinate Bonds are in book-entry form and registered with a Depository, initially DTC.

ARTICLE IV

APPLICATION OF PROCEEDS OF SERIES 2019A/B SUBORDINATE BONDS

Section 401. Application of Proceeds of Series 2019A/B Subordinate Bonds; Application of Related Amounts.

The net proceeds of the Series 2019A/B Subordinate Bonds in the amount of \$_____, which represents the par amount of the Series 2019A/B Subordinate Bonds (\$_____), minus the underwriters' discount (\$_____), and plus original issue 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 2019A Subordinate Bonds shall be deposited in the Series 2019A Construction Account.

(ii) \$_____ from the net proceeds of the Series 2019B Subordinate Bonds shall be deposited in the Series 2019B Construction Account.

(iii) \$_____ from the net proceeds of the Series 2019A Subordinate Bonds shall be deposited in the Series 2019A Costs of Issuance Subaccount of the Series 2019A Construction Account of the Construction Fund and used to pay costs of issuance of the Series 2019A Subordinate Bonds.

(iv) \$_____ from the net proceeds of the Series 2019B Subordinate Bonds shall be deposited in the Series 2019B Costs of Issuance Subaccount of the Series 2019B Construction Account of the Construction Fund and used to pay costs of issuance of the Series 2019B Subordinate Bonds.

**ARTICLE V
FUNDS AND ACCOUNTS**

Section 501. Series 2019A Construction Account and Series 2019B Construction Account.

(i) In the Construction Fund, there shall be established a Series 2019A Construction Account and, within that Account, a Series 2019A Costs of Issuance Subaccount. The portion of the proceeds of the Series 2019A Subordinate Bonds specified in Section 401(iii) shall be deposited in the Series 2019A Costs of Issuance Subaccount and used to pay costs of issuance related to the Series 2019A Subordinate 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 2019A Subordinate Bond proceeds remaining in excess of the amount to be reserved for payment of unpaid costs of issuance shall, as directed by the Authority, either (i) be deposited in the Series 2019A Construction Account of the Construction Fund and used to pay Costs of the System, or (ii) be deposited in the Bond Fund to be used solely to pay principal of and interest on the Series 2019A Subordinate Bonds, in either case to the extent approved by Bond Counsel.

(ii) In the Construction Fund, there shall be established a Series 2019B Construction Account and, within that Account, a Series 2019B Costs of Issuance Subaccount. The portion of the proceeds of the Series 2019B Subordinate Bonds specified in Section 401(iv) shall be deposited in the Series 2019B Costs of Issuance Subaccount and used to pay costs of issuance related to the Series 2019B Subordinate 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 2019B Subordinate Bond proceeds remaining in excess of the amount to be reserved for payment of unpaid costs of issuance shall, as directed by the Authority, either (i) be deposited in the Series 2019B Construction Account of the Construction Fund and used to pay Costs of the System, or (ii) be deposited in the Bond Fund to be used solely to pay principal of and interest on the Series 2019B Subordinate Bonds, in either case to the extent approved by Bond Counsel.

Section 502. Series 2019A/B Subordinate Bonds Subaccounts in the Interest Account and Principal Account.

(i) Within the Interest Account there shall be established a “Series 2019A/B Subordinate Bonds Interest Subaccount.” Within the Principal Account there shall be established a “Series 2019A/B Subordinate Bonds Principal Subaccount.”

(ii) In accordance with Section 604(e) of the Master Indenture, Net Revenues shall be deposited in the Series 2019A/B Subordinate 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 2019A/B Subordinate Bonds on such Interest Payment Date.

(iii) In accordance with Section 604(e) of the Master Indenture, Net Revenues shall be deposited in the Series 2019A/B Subordinate 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 2019A/B Subordinate 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 2019A/B Subordinate Bonds in such month.

Section 503. Series 2018A/B Rebate Fund. There is hereby established the Series 2018A/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 [November __, 2019].

ARTICLE VI SECURITY FOR SERIES 2019A/B SUBORDINATE BONDS

Section 601. Security for Series 2019A/B Subordinate Bonds.

The Series 2019A/B Subordinate Bonds shall be secured as Subordinate Debt under the Indenture, including, without limitation, by a pledge of: (i) 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 Subordinate Debt, including, without limitation, any other Subordinate Debt that the Authority may issue in the future, without preference, priority or distinction of any Series 2019A/B Subordinate Bond over any other Series 2019A/B Subordinate Bond or of any Subordinate Debt over any other Subordinate Debt, as provided in the Indenture; and (ii) the moneys and Permitted Investments in the Subordinate Bond Fund on a parity with the pledge of Net Revenues that secures other Subordinate Debt, including, without limitation, any other Subordinate Debt that the Authority may issue in the future, without preference, priority or distinction of any Series 2019A/B Subordinate Bond over any other Series 2019A/B Subordinate Bond or of any Subordinate Debt over any other Subordinate Debt, as provided in the Indenture.

Pursuant to the WASA Act (as defined in the Master Indenture), the Authority hereby includes in this Twenty-Fourth 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 DEFAULTS AND REMEDIES

Section 701. Application of Article IX and Other Remedies Provisions of the Master Indenture.

The Series 2019A/B Subordinate Bonds do not constitute "Bonds" under the Master Indenture. Accordingly, the provisions of Article IX of the Master Indenture that confer certain rights upon the Holders of Bonds or a specified percentage thereof do not apply to the Series 2019A/B Subordinate Bonds or to the Series 2019A/B Subordinate Bondholders. Pursuant to Section 305 of the Master Indenture, the Series 2019A/B Subordinate Bonds, as Subordinate Debt, may not be accelerated if any Senior Debt is outstanding.

Section 702. Rights of Series 2019A/B Subordinate Bondholders Upon Occurrence of Events of Default.

In addition to and in furtherance and implementation of the rights that Series 2019A/B Subordinate Bondholders have under the penultimate paragraph of Section 906 of the Master Indenture, Sections 703 through 711, inclusive, of this Twenty-Fourth Supplemental Indenture shall apply to the Series 2019A/B Subordinate Bonds.

Section 703. Events of Default.

Each of the following events shall be a Series 2019A/B Subordinate Bond Event of Default:

(i) Default in the due and punctual payment of the principal of or premium, if any, on any Series 2019A/B Subordinate Bond (whether at maturity or call for redemption);

(ii) Default in the due and punctual payment of the interest on any Series 2019A/B Subordinate Bond;

(iii) Failure of the Authority to make the deposits required by subsection (e) or subsection (f) of Section 604 of the Master Indenture at the time and in the amount required from Net Revenues available for such deposit under the Indenture; or

(iv) Failure of the Trustee to apply moneys in accordance with the penultimate paragraph of Section 906 of the Master Indenture.

Section 704. Remedies of Series 2019A/B Subordinate Bondholders.

Upon the occurrence and continuation of a Series 2019A/B Subordinate Bond Event of Default, the Trustee may, and if requested by the holders of not less than 25% in aggregate principal amount of outstanding Series 2019A/B Subordinate Bonds and if indemnified to its reasonable satisfaction, shall proceed to protect and enforce their rights by mandamus or other suit, action or proceeding at law or in equity, including an action for specific performance.

No remedy conferred by this Indenture upon or reserved to the Trustee and Series 2019A/B Subordinate Bondholders is intended to be exclusive of any other remedy, but each such remedy shall be cumulative and shall be in addition to any other remedy given to the Trustee and Series 2019A/B Subordinate Bondholders hereunder or now or hereafter existing at law, in equity or by statute.

No delay or omission to exercise any right or power accruing upon any default or Series 2019A/B Subordinate Bond Event of Default shall impair any such right or power or shall be construed to be a waiver of any such default or Series 2019A/B Subordinate Bond Event of Default or acquiescence therein, and every such right and power may be exercised from time to time and as often as may be deemed expedient.

No waiver of any default or Series 2019A/B Subordinate Bond Event of Default hereunder by the Trustee or Series 2019A/B Subordinate Bondholders shall extend to or shall affect any subsequent Series 2019A/B Subordinate Bond Event of Default or shall impair any rights or remedies consequent thereon.

Section 705. Right of Series 2019A/B Subordinate Bondholders to Direct Proceedings.

The holders of a majority in aggregate principal amount of Series 2019A/B Subordinate Bonds then outstanding shall have the right, at any time, by an instrument or instruments in writing executed and delivered to the Trustee, to direct the method and place of conducting all proceedings to be taken in connection with the enforcement of the terms and conditions of this Twenty-Fourth Supplemental Indenture or any other proceedings hereunder; provided, however, that such direction shall not be otherwise than in accordance with the provisions of law and of the Indenture.

Section 706. Application of Moneys.

All moneys received by the Trustee pursuant to any right given or action taken under the provisions of this Article shall, after payment of the cost and expenses of the proceedings resulting in the collection of such moneys, the expenses, liabilities and advances incurred or reasonably anticipated to be made by the Trustee, and its fees and the expenses of the Authority in carrying out this Twenty-Fourth Supplemental Indenture, be deposited in the Series 2019A/B Subordinate Bonds Interest Subaccount or the Series 2019A/B Subordinate Bonds Principal Subaccount, as the case may be, and applied as follows and for no other purpose:

- (i) All such moneys shall be applied:

First - To the payment to the persons entitled thereto of all installments of interest then due on the Series 2019A/B Subordinate Bonds, in the order of the maturity of the installments of such interest and, if the amount available shall not be sufficient to pay in full any particular installment, then to the payment ratably, according to the amounts due on such installment, to the persons entitled thereto, without any discrimination or preference except as to any difference in the respective rates of interest specified in the Series 2019A/B Subordinate Bonds; and

Second - To the payment to the persons entitled thereto of the unpaid principal of and premium, if any, on any of the Series 2019A/B Subordinate Bonds which shall have become due (other than Series 2019A/B Subordinate Bonds called for redemption for the payment of which moneys are held pursuant to the provisions of the Indenture), in the order of their due dates, and, if the amount available shall not be sufficient to pay in full Series 2019A/B Subordinate Bonds due on any particular date, then to the payment of such principal and premium, if any, ratably, according to the amount of such principal due on such date, to the persons entitled thereto, without any discrimination or preference.

(ii) Whenever moneys are to be applied pursuant to the provisions of this Section, such moneys shall be applied at such times and from time to time as the Trustee shall determine, having due regard to the amount of such moneys available for application and the likelihood of additional moneys becoming available for such application in the future. Whenever the Trustee shall apply such moneys, it shall fix the date (which shall be an Interest Payment Date unless it shall deem another date more suitable) on which such application is to be made and on such date interest shall cease to accrue on the amounts of principal to be paid. The Trustee shall give such notice as it may deem appropriate of the deposit with it of any such moneys and of the fixing of any such date.

Section 707. Remedies Vested in Trustee.

All rights of action (including the right to file proof of claims) under this Twenty-Fourth Supplemental Indenture or under any of the Series 2019A/B Subordinate Bonds may be enforced by the Trustee without the possession of any of the Series 2019A/B Subordinate Bonds or the production thereof in any trial or other proceeding relating thereto and any such suit or proceeding instituted by the Trustee may be brought in its name as Trustee without the necessity of joining as plaintiffs or defendants any Series 2019A/B Subordinate Bondholders, and any recovery of judgment shall be for the equal benefit of the Series 2019A/B Subordinate Bondholders.

Section 708. Limitation on Suits.

Except to enforce the rights given under Sections 704 and 705 of this Twenty-Fourth Supplemental Indenture, no Series 2019A/B Subordinate Bondholder shall have any right to institute any action, suit or proceeding at law or in equity for the enforcement of the Indenture or for the execution of any trust thereof or any other remedy hereunder, unless: (i) a Series 2019A/B Subordinate Bond Event of Default has occurred and is continuing and the Holders of 25% in aggregate principal amount of Series 2019A/B Subordinate Bonds then outstanding have made written request to the Trustee and offered it reasonable opportunity either to proceed to exercise the powers hereinbefore granted or to institute such action, suit or proceeding in its own name, (ii) such requesting Series 2019A/B Subordinate Bondholders have offered to the Trustee indemnity as provided in Section 1101(l) of the Master Indenture, (iii) the Trustee has thereafter failed or refused to exercise the powers hereinbefore granted, or to institute such action, suit or proceeding in its own name, (iv) no direction inconsistent with such written request has been given to the Trustee by the holders of a majority in aggregate principal amount of Series 2019A/B Subordinate Bonds then outstanding, and (v) notice of such action, suit or proceeding is given to the Trustee; it being understood and intended that no one or more Series 2019A/B Subordinate Bondholders shall have any right in any manner whatsoever to affect, disturb or prejudice the Indenture by its or their action or to enforce any rights hereunder except in the manner herein provided, and that all proceedings at law or in equity shall be instituted and maintained in the manner herein provided and for the equal benefit of all Series 2019A/B Subordinate Bondholders then outstanding. The notification, request and offer of indemnity set forth above, at the option of the Trustee, shall be conditions precedent to the execution of the powers and trusts of this Twenty-Fourth Supplemental Indenture and to any action or cause of action for the enforcement of this Twenty-Fourth Supplemental Indenture or for any other remedy hereunder.

Section 709. Termination of Proceedings.

In case the Trustee shall have proceeded to enforce any right under this Twenty-Fourth Supplemental Indenture and such proceedings shall have been discontinued or abandoned for any reason or shall have been determined adversely to the Trustee, then and in every such case the Authority and the Trustee shall be restored to their former positions and rights hereunder, and all rights, remedies and powers of the Trustee shall continue as if no such proceedings had been taken.

Section 710. Waivers of Events of Default.

Subject to the Indenture (including, without limitation, Section 1101 of the Master Indenture), the Trustee may in its discretion waive any Series 2019A/B Subordinate Bond Event of Default hereunder or any action taken pursuant to any Series 2019A/B Subordinate Bond Event of Default, and shall do so at the written request of the holders of: (i) a majority in aggregate principal amount of Series 2019A/B Subordinate Bonds then outstanding in respect of which default in the payment of principal and/or premium, if any, and/or interest exists, or (ii) a majority in aggregate principal amount of Series 2019A/B Subordinate Bonds then outstanding in the case of any other Series 2019A/B Subordinate Bond Event of Default; provided, however, that there shall not be waived without the written consent of all then Outstanding Series 2019A/B Subordinate Bondholders (a) any Series 2019A/B Subordinate Bond Event of Default in the payment of the principal of any Outstanding Series 2019A/B Subordinate Bonds (whether at maturity or by mandatory redemption), or (b) any default in the payment when due of the interest on any such Series 2019A/B Subordinate Bonds unless, prior to such waiver or rescission,

- (1) there shall have been paid or provided for all arrears of interest with interest, to the extent permitted by law, at the rate borne by the Series 2019A/B Subordinate Bonds on overdue installments of interest, all arrears of principal and premium, if any, and all expenses of the Trustee in connection with such default, and
- (2) in case of any such waiver or rescission or in the case of any discontinuance, abandonment or adverse determination of any proceeding taken by the Trustee on account of any such default, the Authority, the Trustee, and the Series 2019A/B Subordinate Bondholders shall be restored to their former positions and rights hereunder respectively.

No such waiver or rescission relating to the Series 2019A/B Subordinate Bonds shall extend to any subsequent or other default or impair any right consequent thereon.

Section 711. Non-Impairment of Authority's Obligation to Pay Principal, Premium and Interest.

Nothing in this Twenty-Fourth Supplemental Indenture shall, however, affect or impair the obligation of the Authority to pay the principal of, premium, if any, and interest on each of the Series 2019A/B Subordinate Bonds to the respective Holders thereof at the time and place, from the source and in the manner specified in the Indenture.

**ARTICLE VIII
TAX COVENANTS**

Section 801. Tax Covenants – General.

(i) The Authority covenants that it will use, and will restrict the use and investment of, the proceeds of the Series 2019A/B Subordinate Bonds in such manner and to such extent as may be necessary so that (a) the Series 2019A/B Subordinate 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 2019A/B Subordinate 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 2019A/B Subordinate 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 2019A/B Subordinate 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 702 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.

(iii) 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 2019A/B Subordinate 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 2019A/B Subordinate 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 2019A/B Subordinate Bonds, and (c) to give one or more appropriate certificates, for inclusion in the transcript of proceedings for the Series 2019A/B Subordinate Bonds, setting forth the reasonable expectations of the Authority regarding the amount and use of all the proceeds of the Series 2019A/B Subordinate 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 2019A/B Subordinate Bonds.

Section 802. 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 2019A/B Subordinate Bonds) provided for the computation of the Rebate Amount for the Series 2019A/B Subordinate 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 2019A/B Subordinate 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 2019A/B Subordinate Bonds are outstanding, and (b) the date on which the last Series 2019A/B Subordinate 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 2019A/B Subordinate 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 2019A/B Subordinate Bonds (but less any portion of the Rebate Amount previously paid to the United States pursuant to this Section 802(iii)).

(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 2019A/B Subordinate Bonds.

(v) The Authority, in connection with investments of the proceeds of the Series 2019A/B Subordinate 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 2019A/B Subordinate 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 2019A/B Subordinate 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 2019A/B Subordinate 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 2019A/B Subordinate Bonds, the Authorized Representative of the Authority may, without the consent of or notice to any bondholders, adopt supplements to this Twenty-Fourth 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-Fourth 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 2019A/B Subordinate 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 IX MISCELLANEOUS

Section 901. Limitation of Rights.

With the exception of rights herein expressly conferred, nothing expressed or mentioned in or to be implied from this Twenty-Fourth Supplemental Indenture or the Series 2019A/B Subordinate Bonds is intended or shall be construed to give to any person other than the parties hereto and the Series 2019A/B Subordinate Bondholders any legal or equitable right, remedy or claim under or in respect to this Twenty-Fourth Supplemental Indenture or any covenants, conditions and agreements herein contained since this Twenty-Fourth 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 and the Series 2019A/B Subordinate Bondholders as herein provided.

Section 902. Severability.

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

Section 903. Successors and Assigns.

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

Section 904. 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 2019A/B Subordinate Bonds shall be liable personally on the Series 2019A/B Subordinate 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-Fourth 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 905. Applicable Law.

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

Section 906. Counterparts.

This Twenty-Fourth 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-Fourth 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 and Executive Vice
President, Finance and Procurement

**WELLS FARGO BANK, NATIONAL
ASSOCIATION, AS TRUSTEE**

By _____

Its _____

EXHIBIT A-1

SERIES 2019A SUBORDINATE 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 SUBORDINATE LIEN REVENUE BOND
SERIES 2019A
(Green Bonds)**

INTEREST RATE	MATURITY DATE	DATED DATE	CUSIP
_____%	October 1, [____]	[November __, 2019]	254845[____]

REGISTERED OWNER: CEDE & CO.

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, National Association, 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 _____, 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 2019A Subordinate Bond (unless payment of interest hereon is in default, in which case this Series 2019A Subordinate 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 2019A Subordinate 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 2019A Subordinate 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 2019A Subordinate 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 2019A Subordinate Bond is one of an issue of \$_____ Public Utility Subordinate Lien Revenue Bonds, Series 2019A (Green Bonds) (the “Series 2019A Subordinate Bonds”), of like date and tenor, except as to number, denomination, rate of interest, privilege of redemption and maturity. The Series 2019A Subordinate Bonds are being issued on the same day as the Authority’s \$_____ Public Utility Subordinate Lien Revenue Bonds, Series 2019B (the “Series 2019B Subordinate Bonds” and, together with the Series 2019A Subordinate Bonds, the “Series 2019A/B Subordinate Bonds”). The Series 2019A Subordinate 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-Fourth Supplemental Indenture of Trust, dated as of [November __, 2019], between the Authority and the Trustee (the “Twenty-Fourth 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, the Twenty-First Supplemental Indenture, the Twenty-Second Supplemental Indenture and the Twenty-Third Supplemental Indenture, all as defined in the Twenty-Fourth Supplemental Indenture (the “Indenture”). The Series 2019A Subordinate Bonds are secured under the Indenture as Subordinate Debt by a pledge of Net Revenues subordinate to the pledge that secures Senior Debt and on a parity to the pledge that secures other 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 2019A Subordinate Bonds and the terms upon which the Series 2019A Subordinate Bonds are issued and secured.

The Series 2019A Subordinate Bonds and the premium, if any, and the interest thereon are limited obligations of the Authority payable from Net Revenues of the System, subject to the

prior payment therefrom of the principal of and interest due and payable on all Senior Debt heretofore and hereafter issued or incurred by the Authority, and from certain other funds and accounts pledged thereto by, and on the terms set forth in, the Indenture. The Series 2019A Subordinate Bonds shall be without recourse to the District of Columbia (the "District"). The Series 2019A Subordinate 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 2019A Subordinate 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), at a redemption price of 100% of the principal amount thereof, together with accrued interest, if any, to the redemption date.

The Term Series 2019A Subordinate Bonds maturing on _____, and bearing interest at rates of ____% , 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:

Year	Amount
------	--------

† Final Maturity

If fewer than all of the Series 2019A Subordinate 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 2019A Subordinate Bonds of any maturity date are called for redemption, the Series 2019A Subordinate 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 2019A Subordinate Bond to be redeemed shall be in the principal amount of \$5,000 or some integral multiple thereof. In selecting Series 2019A Subordinate Bonds for redemption, each Series 2019A Subordinate Bond shall be considered as representing that number of Bonds which is obtained by dividing the principal amount of such Series 2019A Subordinate Bond by \$5,000. If a portion of a Series 2019A Subordinate Bond shall be called for redemption, a new Series 2019A Subordinate 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 2019A Subordinate Bonds or portions thereof are called for redemption, the Trustee shall send notice of the call for redemption, identifying the Series 2019A Subordinate 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 such Series 2019A Subordinate Bond. Provided funds for their redemption are on deposit at the place of payment on the redemption date, all Series 2019A Subordinate 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 2019A Subordinate Bonds shall be called for redemption, a new Series 2019A Subordinate 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 2019A Subordinate Bonds.

The registered owner of this Series 2019A Subordinate 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 2019A/B Subordinate 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 2019A Subordinate 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 2019A Subordinate Bonds shall be liable personally on the Series 2019A Subordinate 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 2019A Subordinate Bond, the Twenty-Fourth 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 2019A Subordinate Bonds are issuable as registered bonds in denominations of \$5,000 and integral multiples thereof. Upon surrender for transfer or exchange of this Series 2019A Subordinate 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 2019A Subordinate Bond or Series 2019A Subordinate 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 2019A Subordinate Bond have happened, exist and have been performed.

This Series 2019A Subordinate 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 2019A Subordinate 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 2019A Subordinate Bond to be dated [November __, 2019].

ATTEST:

Secretary to the Authority

Chairman

[SEAL]

CERTIFICATE OF AUTHENTICATION

Date Authenticated: _____

This Series 2019A Subordinate Bond is one of the Series 2019A Subordinate Bonds described in the within mentioned Indenture.

Wells Fargo Bank, National Association,
Trustee

By _____
Authorized Officer or Employee

ASSIGNMENT

FOR VALUE RECEIVED the undersigned hereby sell(s), assign(s) and transfer(s) unto

(please print or typewrite name and address, including zip code, of Transferee)

PLEASE INSERT SOCIAL SECURITY OR OTHER
IDENTIFYING NUMBER OF TRANSFEREE

: :
: :
: :
: :

the within Series 2019A Subordinate Bond and all rights thereunder, hereby irrevocably
constituting _____ and _____ appointing

_____, Attorney, to transfer said Series
2019A Subordinate Bond on the books kept for the registration thereof, with full power of
substitution in the premises.

Dated: _____

Signature Guaranteed

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
2019A Subordinate Bond in every particular,
without alteration or enlargement or any
change whatsoever.

EXHIBIT A-2

SERIES 2019B SUBORDINATE 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 SUBORDINATE LIEN REVENUE BOND
SERIES 2019B**

INTEREST RATE	MATURITY DATE	DATED DATE	CUSIP
_____%	October 1, [____]	[November __, 2019]	254845[____]

REGISTERED OWNER: CEDE & CO.

PRINCIPAL AMOUNT: _____ THOUSAND 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, National Association, 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 _____, 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 2019B Subordinate Bond (unless payment of interest hereon is in default, in which case this Series 2019B Subordinate 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 2019B Subordinate 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 2019B Subordinate 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 2019B Subordinate 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 2019B Subordinate Bond is one of an issue of \$_____ Public Utility Subordinate Lien Revenue Bonds, Series 2019B (the “Series 2019B Subordinate Bonds”), of like date and tenor, except as to number, denomination, rate of interest, privilege of redemption and maturity. The Series 2019B Subordinate Bonds are being issued on the same day as the Authority’s \$_____ Public Utility Subordinate Lien Revenue Bonds, Series 2019A (Green Bonds) (the “Series 2019A Subordinate Bonds” and, together with the Series 2019B Subordinate Bonds, the “Series 2019A/B Subordinate Bonds”). The Series 2019B Subordinate 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-Fourth Supplemental Indenture of Trust, dated as of _____, between the Authority and the Trustee (the “Twenty-Fourth 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, the Twenty-First Supplemental Indenture, the Twenty-Second Supplemental Indenture and the Twenty-Third Supplemental Indenture, all as defined in the Twenty-Fourth Supplemental Indenture (the “Indenture”). The Series 2019B Subordinate Bonds are secured under the Indenture as Subordinate Debt by a pledge of Net Revenues subordinate to the pledge that secures Senior Debt and on a parity to the pledge that secures other 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 2019B Subordinate Bonds and the terms upon which the Series 2019B Subordinate Bonds are issued and secured.

The Series 2019B Subordinate Bonds and the premium, if any, and the interest thereon are limited obligations of the Authority payable from Net Revenues of the System, subject to the

prior payment therefrom of the principal of and interest due and payable on all Senior Debt heretofore and hereafter issued or incurred by the Authority, and from certain other funds and accounts pledged thereto by, and on the terms set forth in, the Indenture. The Series 2019B Subordinate Bonds shall be without recourse to the District of Columbia (the "District"). The Series 2019B Subordinate 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 2019B Subordinate 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 2019B Subordinate Bonds maturing on _____ and _____, and bearing interest at the rates of ____%, 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 2019B Subordinate 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

The Term Series 2019B Subordinate 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 2019B Subordinate 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 2019B Subordinate Bonds of any maturity date are called for redemption, the Series 2019B Subordinate 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 2019B Subordinate Bond to be redeemed shall be in the principal amount of \$5,000 or some integral multiple thereof. In selecting Series 2019B Subordinate Bonds for redemption, each Series 2019B Subordinate Bond shall be considered as representing that number of Bonds which is obtained by dividing the principal amount of such Series 2019B Subordinate Bond by \$5,000. If a portion of a Series 2019B Subordinate Bond shall be called for redemption, a new Series 2019B Subordinate 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 2019B Subordinate Bonds or portions thereof are called for redemption, the Trustee shall send notice of the call for redemption, identifying the Series 2019B Subordinate 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 such Series 2019B Subordinate Bond. Provided funds for their redemption are on deposit at the place of payment on the redemption date, all Series 2019B Subordinate 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 2019B Subordinate Bonds shall be called for redemption, a new Series 2019B Subordinate 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 2019B Subordinate Bonds.

The registered owner of this Series 2019B Subordinate 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 2019A/B Subordinate 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 2019B Subordinate 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 2019B Subordinate Bonds shall be liable personally on the Series 2019B Subordinate 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 2019B Subordinate Bond, the Twenty-Fourth

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 2019B Subordinate Bonds are issuable as registered bonds in denominations of \$5,000 and integral multiples thereof. Upon surrender for transfer or exchange of this Series 2019B Subordinate 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 2019B Subordinate Bond or Series 2019B Subordinate 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 2019B Subordinate Bond have happened, exist and have been performed.

This Series 2019B Subordinate 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 2019B Subordinate 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 2019B Subordinate Bond to be dated [November __, 2019].

ATTEST:

Secretary to the Authority

Chairman

[SEAL]

CERTIFICATE OF AUTHENTICATION

Date Authenticated: _____

This Series 2019B Subordinate Bond is one of the Series 2019B Subordinate Bonds described in the within mentioned Indenture.

Wells Fargo Bank, National Association,
Trustee

By _____
Authorized Officer or Employee

ASSIGNMENT

FOR VALUE RECEIVED the undersigned hereby sell(s), assign(s) and transfer(s) unto

(please print or typewrite name and address, including zip code, of Transferee)

PLEASE INSERT SOCIAL SECURITY OR OTHER
IDENTIFYING NUMBER OF TRANSFEREE

: :
: :
: :
: :

the within Series 2019B Subordinate Bond and all rights thereunder, hereby irrevocably
constituting _____ and _____ appointing

_____, Attorney, to transfer said Series
2019B Subordinate Bond on the books kept for the registration thereof, with full power of
substitution in the premises.

Dated: _____

Signature Guaranteed

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
2019B Subordinate Bond in every particular,
without alteration or enlargement or any
change whatsoever.

SPB DRAFT: 7/18/19

TWENTY-FIFTH SUPPLEMENTAL INDENTURE OF TRUST

between

**DISTRICT OF COLUMBIA
WATER AND SEWER AUTHORITY**

and

**WELLS FARGO BANK, N.A.
AS TRUSTEE**

Dated November __, 2019

THIS TWENTY-FIFTH SUPPLEMENTAL INDENTURE OF TRUST dated the _____ day of November, 2019 (as defined in more detail below, the “**Twenty-Fifth 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 Philadelphia, Pennsylvania, 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, the Twenty-First Supplemental Indenture, the Twenty-Second Supplemental Indenture, the Twenty-Third Supplemental Indenture and the Twenty-Fourth 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 \$266,120,000 Public Utility Revenue Bonds, Series 1998, dated as of April 1, 1998 (the “**Series 1998 Senior Lien Bonds**”), 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), which 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 defined therein as the Series A-B Notes, (ii) designated the Series A-B Notes as Subordinate Debt for purposes of the Indenture, and (iii) made provision for the securing of the Series A-B Notes and of the Reimbursement Obligations to the Bank that provided the Letters of Credit (all as defined therein) that secure the Series A-B 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 A-B 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 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, in the aggregate principal amount of \$218,715,000 to finance certain Costs of the System and retire Series A-B 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 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, 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 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, 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 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, in the aggregate principal amount of \$300,000,000 to finance certain Costs of the System and retire Series A-B 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 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 (the “**Eleventh Supplemental Indenture**”), between the Authority and the Trustee, the Authority: (i) issued its Commercial Paper Notes defined therein as the Series A-B-C Notes, (ii) designated the Series A-B-C Notes as Subordinate Debt for purposes of the Indenture, and (iii) made provision for the securing of the Series A-B-C Notes and of the Reimbursement Obligations to the Bank that provided the Letters of Credit (all as defined therein) that secure the Series A-B-C 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) 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 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: (A) (i) issued its Public Utility Subordinate Lien Revenue Bonds, Series 2012A in the aggregate principal of \$177,430,000 to finance certain Costs of the System and pay certain costs of issuance, (ii) designated the Series 2012A Subordinate Bonds as Subordinate Debt for purposes of the Indenture, and (iii) 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 other Subordinate Debt, including, without limitation, other Subordinate Debt that the Authority may issue from time to time in the future, (B) (i) issued its Public Utility Subordinate Lien Multimodal Revenue Bonds, Series 2012B 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, (ii) designated the Series 2012B Subordinate Bonds as Subordinate Debt for purposes of the Indenture, and (iii) 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 other Subordinate Debt, including, without limitation, other Subordinate Debt that the Authority may issue from time to time in the future, and (C) (i) issued its Public Utility Subordinate Lien Revenue Refunding Bonds, Series 2012C 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 Refunded Bonds (as defined in the Thirteenth Supplemental Indenture) and caused them to be deemed paid and no longer Outstanding for purposes of the Indenture, and paid certain costs of issuance, (ii) designated the Series 2012C Subordinate Bonds as Subordinate Debt for purposes of the Indenture, and (iii) 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 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 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 to (a) finance certain Costs of the System, and (b) pay issuance costs of the Series 2013A Subordinate Bonds, (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 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, in the aggregate principal amount of \$350,000,000 to finance certain Costs of the System, (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 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 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 or 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 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 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 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 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, 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 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 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-Second Supplemental Indenture of Trust, dated February 23, 2017 (the “**Twenty-Second Supplemental Indenture**”), between the Authority and the Trustee, the Authority: (i) issued its Public Utility Senior Lien Revenue Bonds, Series 2017A in the aggregate principal amount of \$100,000,000 (the “**Series 2017A Senior Lien 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 issuance costs of the Series 2017A Senior Lien Bonds, (ii) designated the Series 2017A Senior Lien Bonds as Senior Debt for purposes of the Indenture, (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 other Senior Debt, including, without limitation, other Senior Debt that the Authority may issue from time to time in the future, (iv) issued its Public Utility Senior Lien Revenue Bonds, Series 2017B in an aggregate principal amount of \$200,000,000 (the “**Series 2017B Senior Lien Bonds**” and, together with the Series 2017A Senior Lien Bonds, the “**Series 2017A/B Senior Lien Bonds**”) to (a) finance certain Costs of the System, and (b) pay issuance costs of the Series 2017B Senior Lien Bonds, (v) designated the Series 2017B Senior Lien Bonds as Senior Debt for purposes of the Indenture, and (vi) secured the Series 2017B Senior Lien 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, pursuant to the Twenty-Third Supplemental Indenture of Trust, dated April 30, 2018 (the “**Twenty-Third Supplemental Indenture**”), between the Authority and the Trustee, the Authority: (i) issued its Public Utility Subordinate Lien Revenue Bonds, Series 2018A in the aggregate principal amount of \$100,000,000 (the “**Series 2018A Senior Lien 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 issuance costs of the Series 2018A Senior Lien Bonds, (ii) designated the Series 2018A Senior Lien Bonds as Senior Debt for purposes of the Indenture, (iii) secured the Series 2018A Senior Lien 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, (iv) issued its Public Utility Senior Lien Revenue Bonds, Series 2018B in an aggregate principal amount of \$200,000,000 (the “**Series 2018B Senior Lien Bonds**” and, together with the Series 2018A Senior Lien Bonds, the “**Series 2018A/B Senior Lien Bonds**”) to (a) finance certain Costs of the System, (b) pay issuance costs of the Series 2018B Senior Lien Bonds and (c) refund all of the Authority’s then outstanding Commercial paper Notes, Series B, (v) designated the Series 2018B Senior Lien Bonds as Senior Debt for purposes of the Indenture, and (vi) secured the Series 2018B Senior Lien 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, pursuant to the Twenty-Fourth Supplemental Indenture of Trust, dated _____, 2019 (the “**Twenty-Fourth Supplemental Indenture**”), between the Authority and

the Trustee, the Authority: (i)(a) issued its Public Utility Subordinate Lien Revenue Bonds, Series 2019A in the aggregate principal amount of \$_____ (the “**Series 2019A Subordinate 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 2019A Subordinate Bonds, (b) designated the Series 2019A Subordinate Bonds as Subordinate Debt for purposes of the Indenture, and (iii) secured the Series 2019A 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 other Subordinate Debt, including, without limitation, other Subordinate Debt that the Authority may issue from time to time in the future, and (ii)(a) issued its Public Utility Subordinate Revenue Bonds, Series 2019B in an aggregate principal amount of \$_____ (the “**Series 2019B Subordinate Bonds**”) and, together with the Series 2019A Subordinate Bonds, the “**Series 2019A/B Subordinate Bonds**”) to (1) finance certain Costs of the System, and (2) pay issuance costs of the Series 2019B Subordinate Bonds, (b) designated the Series 2019B Subordinate Bonds as Subordinate Debt for purposes of the Indenture, and (iii) secured the Series 2019B 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 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) issue Public Utility Subordinate Lien Multimodal Revenue Bonds, Series 2019C (the “**Series 2019C Subordinate Bonds**”), [fund a Series 2019C Debt Service Reserve Requirement], to finance certain Costs of the System and pay certain costs of issuance, (ii) designate the Series 2019C Subordinate Bonds as Subordinate Debt for purposes of the Indenture, (iii) secure the Series 2019C 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 other Subordinate Debt, including, without limitation, other Subordinate Debt that the Authority may issue from time to time in the future;

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

ARTICLE I

TWENTY-FIFTH SUPPLEMENTAL INDENTURE

Section 101. Authorization of Twenty-Fifth Supplemental Indenture.

This Twenty-Fifth 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 2019C Subordinate Bonds as Subordinate Debt and to the Holders thereof as Holders of Subordinate Debt, except as otherwise provided in this Twenty-Fifth Supplemental Indenture.

Section 102. Definitions.

Except as otherwise defined in this Twenty-Fifth 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 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, the Twenty-First Supplemental Indenture, the Twenty-Second Supplemental Indenture, the Twenty-Third Supplemental Indenture and the Twenty-Fourth Supplemental Indenture, and in the Series 2019C Resolution, are used in this Twenty-Fifth Supplemental Indenture with the meanings assigned to them therein. In addition, the following words and terms as used in this Twenty-Fifth Supplemental Indenture have the following meanings, unless the context or use clearly indicates another or different intent or meaning:

(a) Generally Applicable Definitions

“Book-entry form” or “book-entry system” means a form or system under which the physical Series 2019C Subordinate Bond certificates in fully registered form are issued only to a Depository or its nominee as Holder, with the certificated Series 2019C Subordinate 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 2019C Subordinate 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 2019C Subordinate Bonds, and to effect transfers of book-entry interests in Series 2019C Subordinate Bonds, and includes and means initially The Depository Trust Company (a limited purpose trust company), New York, New York.

“Interest Payment Dates” means the “Interest Payment Dates” as defined under Section 102(b) below.

“Series 2019C Construction Account” means the Series 2019C Construction Account established by this Twenty-Fifth Supplemental Indenture in the Construction Fund.

“Series 2019C Costs of Issuance Subaccount” means the Series 2019C Costs of Issuance Subaccount established by this Twenty-Fifth Supplemental Indenture in the Series 2019C Construction Account of the Construction Fund.

“Series 2019C Rebate Fund” means the Series 2019C Rebate Fund established by this Twenty-Fifth Supplemental Indenture.

“Series 2019C Resolution” means Resolution No. _____, adopted by the Authority’s Board on _____, 2019, authorizing the Series 2019C Subordinate Bonds.

“Series 2019C Subordinate Bond Event of Default” means any of the events defined as such in Section 903 of this Twenty-Fifth Supplemental Indenture.

“Series 2019C Subordinate Bondholder” or “holder of Series 2019C Subordinate Bonds” means the registered owner of a Series 2019C Subordinate Bond.

“Series 2019C Subordinate Bonds Interest Subaccount” means the Series 2019C Subordinate Bonds Interest Subaccount established by this Twenty-Fifth Supplemental Indenture in the Subordinate Interest Account in the Subordinate Bond Fund.

“Series 2019C Subordinate Bonds Principal Subaccount” means the Series 2019C Subordinate Bonds Principal Subaccount established by this Twenty-Fifth Supplemental Indenture in the Subordinate Principal Account in the Subordinate Bond Fund.

“Series 2019C Subordinate Debt Service Reserve Requirement” means zero.

“Twenty-Fifth Supplemental Indenture” means this Twenty-Fifth Supplemental Indenture of Trust, dated November __, 2019, between the Authority and the Trustee, which supplements and amends the Master Indenture, as previously supplemented and amended.

“Variable Rate Series 2019C Subordinate Bonds” means, collectively, each series or subseries of the Series 2019C Subordinate Bonds designated as such in the applicable Certificate of Award pursuant to the Series 2019C Resolution and constituting Variable Rate Indebtedness under the Indenture.

(b) Definitions Applicable to Variable Rate Series 2019C Subordinate Bonds

“Applicable Spread” means the number of basis points or schedule of basis points determined in accordance with Section 403(j) that, when added to the SIFMA Index or the LIBOR Index, as the case may be, would equal the minimum interest rate per annum that would enable the Remarketing Agent to sell the Variable Rate Series 2019C Subordinate Bonds on such

date at a price equal to the principal amount thereof (but subject to the provisions of the final sentence of Section 403(j)), plus accrued interest, if any, thereon.

“Authority Purchase Account” means the account of that name that may be established in the Purchase Fund pursuant to Section 407.

“Authorized Denominations” means (i) with respect to Fixed Rate Bonds, \$5,000 and integral multiples thereof, (ii) with respect to Daily Rate Bonds, Weekly Rate Bonds, Short-Term Rate Bonds and Long-Term Rate Bonds, \$100,000 and integral multiples of \$5,000 in excess thereof, and (iii) with respect to Index Rate Bonds, \$5,000 or \$100,000 and integral multiples thereof, as may be specified in writing by an Authorized Official.

“Authorized Officials” means the Chairman and Vice Chairman of the Board and the CEO and General Manager, Chief Financial Officer and Executive Vice President, Finance and Procurement, Controller, Budget Director, Finance Director and Rates and Revenue Director of the Authority, including any of the foregoing who are in an interim, acting or similar capacity.

“Business Day” means a day other than (i) a Saturday or Sunday, (ii) a day on which commercial banks located in New York, New York or the cities in which the Designated Office of the Trustee, the Tender Agent, the Remarketing Agent or the Credit Facility Provider are located, are required or authorized by law or executive order to close, and (iii) a day on which the New York Stock Exchange is closed.

“Calculation Agent” means any Person appointed by the Authority to serve as calculation agent for the Series 2019C Subordinate Bonds.

“Closing Date” means November __, 2019, being the date of delivery of and payment for all of the Variable Rate Series 2019C Subordinate Bonds.

“Computation Date” means during any subsequent Index Rate Period, each Wednesday immediately preceding an Index Interest Period.

“Conversion Date” means a day on which the Variable Rate Series 2019C Subordinate Bonds are converted from one Rate Period to another Rate Period, in accordance with this Twenty-Fifth Supplemental Indenture.

“Credit Facility” means a letter of credit, liquidity facility or other credit enhancement instrument delivered by a Credit Facility Provider to the Trustee to secure the payment of the principal of and interest on, and any Purchase Price of, all or some of the Variable Rate Series 2019C Subordinate Bonds, or to provide liquidity for the purchase of tendered Variable Rate Series 2019C Subordinate Bonds. The term “Credit Facility” includes any Substitute Credit Facility. The Series 2019C Subordinate Bonds will not be secured by a Credit Facility during the Initial Period.

“Credit Facility Account” means the account by that name that may be established in the Subordinate Bond Fund pursuant to Section 701.

“Credit Facility Provider” means a bank, trust company, insurance company or other financial services company, or the Authority (if the Authority is providing liquidity for any Variable Rate Series 2019C Subordinate Bonds itself), issuing a Credit Facility then in effect in its capacity as provider of that Credit Facility.

“Credit Facility Provider Bonds” means Variable Rate Series 2019C Subordinate Bonds purchased by or on behalf of, or pledged to, a Credit Facility Provider pursuant to a Credit Facility and/or Reimbursement Agreement and the terms hereof but excluding Variable Rate Series 2019C Subordinate Bonds no longer considered Credit Facility Provider Bonds pursuant to the terms of a Credit Facility and/or Reimbursement Agreement.

“Credit Facility Provider Rate” means the interest rate(s) applicable from time to time on Credit Facility Provider Bonds as determined in accordance with the Credit Facility and/or Reimbursement Agreement; provided that no Credit Facility Provider Rate shall exceed the Maximum Rate.

“Credit Facility Purchase Account” means the account by that name that may be established in the Purchase Fund pursuant to Section 407.

“Credit Facility Request” means the submission by the Trustee to the Credit Facility Provider of a properly presented and conforming request or draw in accordance with the terms of the Credit Facility to provide funds to pay the Purchase Price of or Debt Service Charges on the Variable Rate Series 2019C Subordinate Bonds.

“Daily Interest Period” means each Interest Period described in Section 403(c) during which the Variable Rate Series 2019C Subordinate Bonds bear interest at a particular Daily Rate.

“Daily Rate” means the per annum interest rate for the Variable Rate Series 2019C Subordinate Bonds during a Daily Rate Period determined on a daily basis as provided in Section 403(c).

“Daily Rate Bonds” means Variable Rate Series 2019C Subordinate Bonds bearing interest at a Daily Rate.

“Daily Rate Period” means the Rate Period during which the Daily Rates are in effect for the Variable Rate Series 2019C Subordinate Bonds.

“Designated Office” means with respect to any entity performing functions under the Indenture, the office or offices of that entity or its affiliate at which those functions are performed, as designated in writing to the Authority, the Trustee, the Tender Agent, any Credit Facility Provider and the Remarketing Agent. The office initially designated by the Trustee for purposes of receiving notices under the Indenture is its Philadelphia, Pennsylvania corporate trust office located at 123 S. Broad Street, Suite 1500, MAC Y1379-157, Philadelphia, Pennsylvania 19109. The office initially designated by the Trustee for the purpose of presentation and surrender of Variable Rate Series 2019C Subordinate Bonds is its Minneapolis, Minnesota corporate trust operations office located at 600 South Fourth Street, 7th Floor, MAC N9300-070, Minneapolis, MN 55415. The Designated Office for any Credit Facility Provider is

the office at which Credit Facility Requests are to be submitted by the Trustee, in accordance with the Credit Facility.

“Electronic Means” means facsimile transmission, email transmission or other similar electronic means of communication providing evidence of transmission, including a telephone communication confirmed by any other method set forth in this definition.

“Eligible Account” means an account that is maintained with either (i) a federal or state-chartered depository institution or trust company that has a short-term debt rating assigned by a Rating Agency of at least A-2 (or, if it does not have a short-term debt rating, has a long-term debt rating assigned by the Rating Agency of at least BBB+); or (ii) the corporate trust department of a federal depository institution or state-chartered depository institution that, in either case, has corporate trust powers and is acting in its fiduciary capacity.

“Expiration Date” means, with respect to any Credit Facility, the date upon which the Credit Facility is stated to expire (taking into account any extensions of the Expiration Date) in accordance with its terms.

“Favorable Opinion of Bond Counsel” means an opinion of Bond Counsel addressed to the Authority, the Remarketing Agent, the Credit Facility Provider and the Trustee, to the effect that the proposed action to be taken regarding the Variable Rate Series 2019C Subordinate Bonds is authorized or permitted by this Twenty-Fifth Supplemental Indenture and will not adversely affect the exclusion of interest on the Variable Rate Series 2019C Subordinate Bonds from gross income for purposes of federal income taxation under Section 103 of the Code. If a Favorable Opinion of Bond Counsel is delivered in connection with the conversion from one Rate Period to another Rate Period, the opinion with respect to the exclusion of interest from gross income for federal income tax purposes may be limited to interest payable on or prior to the Conversion Date.

“Fixed Rate” means the interest rate or rates to maturity established in accordance with Section 403(g).

“Fixed Rate Bonds” means Variable Rate Series 2019C Subordinate Bonds bearing interest at a Fixed Rate.

“Fixed Rate Period” means the period of time, which shall end at the Maturity Date, during which the Variable Rate Series 2019C Subordinate Bonds bear interest at a Fixed Rate.

“Hard Tender Index Rate Bonds” means Index Rate Bonds that are specified in the applicable Notice of Conversion for any Subsequent Index Rate Period.

“Hard Tender Long-Term Rate Bonds” means Long-Term Rate Bonds designated as such in the applicable Notice of Conversion.

“Index Interest Period” means, during any Index Rate Period, each Interest Period during which the Variable Rate Series 2019C Subordinate Bonds bear interest at a particular Index Rate under Section 403(j) or (k).

“Index Rate” means the SIFMA Index Rate, the LIBOR Index Rate, or any other standardized rate index commonly utilized in municipal finance transactions as approved by the Authority’s Financial Advisor, as the case may be. If a rate index other than the SIFMA Index Rate or the LIBOR Index Rate is used, an Authorize Official of the Authority may execute an amendment to this Twenty-Fifth Supplemental Indenture to implement such additional rate index.

“Index Rate Bonds” means any Variable Rate Series 2019C Subordinate Bonds bearing interest at an Index Rate.

“Index Rate Bonds Purchase Date” means the date on which the Index Rate Bonds shall be required to be tendered for purchase in accordance with Section 408(a)(v).

“Index Rate Period” means any Rate Period during which the Variable Rate Series 2019C Subordinate Bonds bear interest at an Index Rate. For purposes of this definition, a [LIBOR Index Rate Period] and a SIFMA Index Rate Period shall be deemed to be different Index Rate Periods.

“Initial Period” means the initial Long-Term Rate Period commencing on the Issue Date and ending on the first to occur of (i) the Conversion Date next succeeding the Issue Date, or (iii) the Maturity Date.

“Interest Payment Date” means (i) when the Variable Rate Series 2019C Subordinate Bonds bear interest at a Daily Rate, a Weekly Rate or an Index Rate, the first Business Day of each calendar month; (ii) when the Variable Rate Series 2019C Subordinate Bonds bear interest at a Fixed Rate or Long-Term Rate, each April 1 and October 1 or such other date or dates as are specified in the applicable notice of conversion, commencing, during the Initial Period, on April 1, 2020; (iii) when the Variable Rate Series 2019C Subordinate Bonds bear interest at a Short-Term Rate, the last day of the Short-Term Rate Period; (iv) with respect to Credit Facility Provider Bonds, the interest payment dates set forth in the Credit Facility and/or Reimbursement Agreement; provided (unless otherwise provided in the Reimbursement Agreement with respect to Credit Facility Provider Bonds) that, if any such day is not a Business Day, any payment due on such date may be made on the next Business Day, without additional interest and with the same force and effect as if made on the specified date for such payment; and (v) each Conversion Date.

“Interest Period” means a (i) Daily Interest Period, (ii) a Weekly Interest Period, (iii) an Index Interest Period, (iv) a Short-Term Interest Period, (v) a Long-Term Interest Period, or (vi) a Fixed Interest Period.

“Issue Date” means November __, 2019.

“LIBOR Index” means, for any day, the London interbank offered rate for U.S. dollar deposits for a one month period, as reported on Reuters Screen LIBOR01 Page or any successor thereto, which shall be that one-month LIBOR rate in effect two New York Banking Days prior to the LIBOR Index Reset Date, such rate rounded up to the nearest one-Twenty-Fifth of one percent and such rate to be reset monthly on each LIBOR Index Reset Date.

“LIBOR Index Rate” means a per annum rate of interest equal to the sum of the Applicable Spread plus the LIBOR Index.

“LIBOR Index Rate Period” means each Index Interest Period during which the Variable Rate Series 2019C Subordinate Bonds bear interest at the LIBOR Index Rate, from and including the Conversion Date to but excluding the earlier of (i) the immediately succeeding Index Rate Bonds Purchase Date and (ii) the maturity or redemption date of the Variable Rate Series 2019C Subordinate Bonds.

“LIBOR Index Reset Date” means the first Business Day of each month; provided, however, that with respect to determining the LIBOR Index for purposes of the Closing Date, the LIBOR Rate shall be the LIBOR Rate in effect two New York Banking Days prior to the Closing Date.

“Long-Term Interest Period” means each Interest Period described in Section 403(f) during which Variable Rate Series 2019C Subordinate Bonds accrue interest at a particular Long-Term Rate.

“Long-Term Rate” means the per annum interest rate to be determined on the Variable Rate Series 2019C Subordinate Bonds for a term of at least 12 months pursuant to Section 403(f).

“Long-Term Rate Bonds” means any Variable Rate Series 2019C Subordinate Bonds bearing interest at a Long-Term Rate.

“Long-Term Rate Period” means the Rate Period during which Long-Term Rates are in effect for the Variable Rate Series 2019C Subordinate Bonds.

“Mandatory Sinking Fund Redemption Requirements” means the mandatory redemption requirements set forth in Section 501(b).

“Maturity Dates” means, for the Variable Rate Series 2019C Subordinate Bonds October 1, 20__, all subject to prior redemption as provided in Article V.

“Maximum Rate” means the least of (i) the maximum rate permitted by law, (ii) 12% per annum, and (iii) when a Credit Facility is in effect and solely with respect to Variable Rate Series 2019C Subordinate Bonds that are not Credit Facility Provider Bonds, the maximum rate utilized to determine the amount available under such Credit Facility.

“New York Banking Day” means any date (other than a Saturday or Sunday) on which commercial banks are open for business in New York, New York.

“Notice of Conversion” means any notice of conversion given by the Authority pursuant to Section 404(a)(i).

“Official’s Certificate” means a certificate signed by an Authorized Official.

“Participants” means those financial institutions for whom the Depository effects book-entry transfers and pledges of securities deposited with the Depository, as such listing of Participants exists at the time of such reference.

“Payment Date” means an Interest Payment Date or a Principal Payment Date.

“Payment Default” means a failure by the Authority to pay principal of or interest on Variable Rate Series 2019C Subordinate Bonds when due.

“Penalty Rate” means, for purposes of Section 407(e) with respect to (i) Soft Tender Index Rate Bonds and Soft Tender Long-Term Rate Bonds after they are tendered for purchase but not purchased, eight percent (8%) per annum, or (ii) Variable Rate Series 2019C Subordinate Bonds bearing interest at the Weekly Rate, Daily Rate, Short-Term Rate or Hard Tender Long-Term Rate Bonds with no Credit Facility in effect and funds are insufficient to purchase such Variable Rate Series 2019C Subordinate Bonds on a Purchase Date, the Maximum Rate.

“Prevailing Market Conditions” means, to the extent relevant (in the professional judgment of the Remarketing Agent) at the time of establishment of a rate or rates for Variable Rate Series 2019C Subordinate Bonds as provided in Section 403, (i) interest rates on comparable securities then being issued and traded, (ii) other financial market rates and indices that may have a bearing on rates of interest, (iii) general financial market conditions (including then current forward supply figures) that may have a bearing on rates of interest, and (iv) the financial condition, results of operation and credit standing of the Authority and the Credit Facility Provider to the extent such standing has a bearing on rates of interest.

“Principal Payment Date” means each date on which principal of a Variable Rate Series 2019C Subordinate Bond is due and payable, whether at maturity or upon redemption.

“Purchase Date” means each date on which Variable Rate Series 2019C Subordinate Bonds are subject to optional or mandatory purchase pursuant to Article IV.

“Purchase Fund” means the fund by that name established pursuant to Section 407 and held by the Tender Agent.

“Purchase Price” means, with respect to a Variable Rate Series 2019C Subordinate Bond subject to purchase on a Purchase Date, an amount equal to 100% of the principal amount thereof plus (if such Purchase Date is not an Interest Payment Date therefor) accrued and unpaid interest thereon to such Purchase Date.

“Rate Period” means (i) a Daily Rate Period (comprised of separate Daily Interest Periods), (ii) a Weekly Rate Period (comprised of separate Weekly Interest Periods), (iii) a Short-Term Rate Period (comprised of separate Short-Term Interest Periods), (iv) a Long-Term Rate Period (comprised of separate Long-Term Interest Periods), (v) a Fixed Rate Period, (vi) an Index Rate Period (comprised of separate Index Interest Periods) or (vii) a Subsequent Index Rate Period (comprised of separate Subsequent Index Interest Periods).

“Regular Record Date” means (i) with respect to each Interest Payment Date for Daily Rate Bonds, Weekly Rate Bonds, Index Rate Bonds or Short-Term Rate Bonds, the close of

business on the Business Day immediately preceding that Interest Payment Date, and (ii) with respect to each Interest Payment Date for Fixed Rate Bonds or Long-Term Rate Bonds, the close of business on the 15th day of the calendar month next preceding such Interest Payment Date.

“Reimbursement Agreement” means any reimbursement agreement (or standby bond purchase agreement) between the Authority and a Credit Facility Provider setting forth the obligations of the Authority to such Credit Facility Provider arising out of any payments under a Credit Facility and which provides that it shall be deemed to be a Reimbursement Agreement for the purpose of this Twenty-Fifth Supplemental Indenture.

“Reimbursement Obligations” means the Authority’s payment obligations pursuant to a Reimbursement Agreement.

“Remarketing Agent” means any Remarketing Agent designated for the Series 2019C Subordinate Bonds under this Twenty-Fifth Supplemental Indenture. J.P. Morgan Securities is the initial Remarketing Agent.

“Remarketing Agreement” means any Remarketing Agreement entered into for the Series 2019C Subordinate Bonds under this Twenty-Fifth Supplemental Indenture.

“Remarketing Proceeds Account” means the account of that name established in the Purchase Fund pursuant to Section 407.

“Short-Term Interest Period” means each Interest Period determined as provided in Section 403(e) during which the Variable Rate Series 2019C Subordinate Bonds bear interest at a particular Short-Term Rate.

“Short-Term Rate” means the per annum interest rate for the Variable Rate Series 2019C Subordinate Bonds during a Short-Term Rate Period determined on a periodic basis as provided in Section 403(e).

“Short-Term Rate Bonds” means any Variable Rate Series 2019C Subordinate Bonds bearing interest at a Short-Term Rate.

“Short-Term Rate Period” means the Rate Period during which Short-Term Rates are in effect for the Variable Rate Series 2019C Subordinate Bonds.

“SIFMA Index” means, for any Computation Date, the level of the index which is issued weekly and which is compiled from the weekly interest rate resets of tax-exempt variable rate issues included in a database maintained by Municipal Market Data which meet specific criteria established from time to time by the Securities Industry and Financial Markets Association and issued on Wednesday of each week, or if any Wednesday is not a Business Day, the next preceding Business Day. If the SIFMA Index is no longer published, then “SIFMA Index” shall mean the Standard & Poor’s Weekly High Grade Index. If the Standard & Poor’s Weekly High Grade Index is no longer published, then “SIFMA Index” shall mean the prevailing rate determined by the Calculation Agent for tax-exempt state and local government bonds meeting criteria determined in good faith by the Calculation Agent to be comparable under the circumstances to the criteria used by the Securities Industry and Financial Markets Association

to determine the SIFMA Index immediately prior to the date on which the Securities and Financial Markets Association ceased publication of the SIFMA Index.

“SIFMA Index Rate” means a per annum rate of interest equal to the sum of the Applicable Spread *plus* the relevant SIFMA Index.

“SIFMA Index Rate Period” means each Index Interest Period during which the Variable Rate Series 2019C Subordinate Bonds bear interest at the SIFMA Index Rate, from and including the Conversion Date to but excluding the earlier of (i) the immediately succeeding Index Rate Bonds Purchase Date and (ii) the maturity or redemption date of the Variable Rate Series 2019C Subordinate Bonds.

“SIFMA Index Reset Date” means Thursday of each week.

“Soft Tender Index Rate Bonds” means Index Rate Bonds that are designated as such in the applicable Notice of Conversion for any Subsequent Index Rate Period.

“Soft Tender Long-Term Rate Bonds” means Long-Term Rate Bonds designated as such in the Certificate of Award for purposes of the Initial Period or a Notice of Conversion.

“Subsequent Index Interest Period” means, during any Subsequent Rate Period, each period determined as provided in Section 403(j) during which the Variable Rate Series 2019C Subordinate Bonds bear interest at a particular Index Rate.

“Subsequent Index Rate Period” means any Rate Period during which the Variable Rate Series 2019C Subordinate Bonds bear interest at the Index Rate pursuant to Section 403(j).

“Substitute Credit Facility” means a letter of credit, standby bond purchase agreement or other similar agreement replacing a Credit Facility in accordance with Section 413.

“Substitution Date” means a date on which a Substitute Credit Facility is accepted by the Trustee and becomes effective with respect to the Variable Rate Series 2019C Subordinate Bonds, or a date on which an existing Credit Facility Provider assigns all or a portion of its rights and/or obligations to an assignee Credit Facility Provider (other than a participant), in each case, in accordance with Section 413(b).

“Tender Agent” means initially the Trustee, and any successor Tender Agent as determined or designated under or pursuant to this Twenty-Fifth Supplemental Indenture.

“Undelivered Bond” means any Variable Rate Series 2019C Subordinate Bond that is subject to purchase pursuant to Section 406 or 408 on a Purchase Date and that is not tendered and delivered for purchase on that Purchase Date but as to which the Tender Agent holds in the Purchase Fund sufficient funds to pay the Purchase Price of that Variable Rate Series 2019C Subordinate Bond.

“Undelivered Bond Payment Account” means the account by that name in the Purchase Fund established pursuant to Section 407.

“Voluntary Termination Date” means, with respect to any Credit Facility, the date chosen by the Authority on which the Credit Facility will terminate, as elected by the Authority.

“Weekly Interest Period” means each period described in Section 403(d) during which the Variable Rate Series 2019C Subordinate Bonds bear interest at a particular Weekly Rate.

“Weekly Rate” means the per annum interest rate for the Variable Rate Series 2019C Subordinate Bonds during a Weekly Interest Period determined on a weekly basis as provided in Section 403(d).

“Weekly Rate Bonds” means Variable Rate Series 2019C Subordinate Bonds bearing interest at a Weekly Rate.

“Weekly Rate Period” means the period during which Weekly Rates are in effect for the Variable Rate Series 2019C Subordinate Bonds.

“Written Request” means a request in writing signed by an Authorized Official.

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-Fifth Supplemental Indenture.

ARTICLE II

AUTHORIZATION OF SERIES 2019C SUBORDINATE BONDS

Section 201. Authorization of Series 2019C Subordinate Bonds.

Pursuant to Article III of the Master Indenture and, specifically, Section 305 thereof, and the Series 2019C Resolution, the Authority is authorized to issue its Series 2019C Subordinate Bonds in an aggregate principal amount of \$_____, designated “Public Utility Subordinate Lien Multimodal Revenue Bonds, Series 2019C,” issued for the purpose of: [(i) financing certain Costs of the System, and (ii) paying issuance costs of the Series 2019C Subordinate Bonds.]

The Series 2019C Subordinate Bonds are issued as Subordinate Debt pursuant to the Indenture. Under the Series 2019C Resolution, the Series 2019C Subordinate Bonds are designated in the Certificate of Award as Variable Rate Series 2019C Subordinate Bonds. The Series 2019C Subordinate Bonds will not be secured by a Credit Facility during the Initial Period.

ARTICLE III

Section 301. Delivery of Series 2019C Subordinate Bonds.

The Trustee shall authenticate and deliver the Series 2019C Subordinate Bonds when there have been filed with or delivered to it the following items:

- (a) An original executed counterpart of this Twenty-Fifth Supplemental Indenture;
- (b) A certified copy of applicable resolution(s) of the Board of Directors of the Authority and related Certificate of Award: (i) authorizing the execution and delivery of the Twenty-Fifth Supplemental Indenture, and (ii) authorizing the issuance, sale, award, execution and delivery of the Series 2019C Subordinate Bonds.
- (c) A certificate signed by an Authorized Representative of the Authority and dated the date of such issuance, to the effect that:
 - (1) Either: (A) 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 (B) 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 2019C Subordinate Bonds, and describing in reasonable detail the actions to be taken by the Authority toward such correction; and
 - (2) All required approvals, limitations, conditions and provisions precedent to the issuance of the Series 2019C Subordinate Bonds have been obtained, observed, met and satisfied.
- (d) An Opinion or Opinions of Counsel, subject to customary exceptions and qualifications, substantially to the effect that this Twenty-Fifth Supplemental Indenture has been duly authorized, executed and delivered to the Trustee and is a valid, binding and enforceable obligation of the Authority.
- (e) An opinion or opinions of Bond Counsel, subject to customary exceptions and qualifications, substantially to the effect that the issuance of the Series 2019C Subordinate Bonds has been duly authorized, and that the Series 2019C Subordinate Bonds are valid and binding limited obligations of the Authority.
- (f) 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 2019C Subordinate Bonds.
- (g) 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 IV

DETAILS AND FORM OF VARIABLE RATE SERIES 2019C SUBORDINATE BONDS

Section 401. Issuance and Delivery of Variable Rate Series 2019C Subordinate Bonds, Principal Maturity and Initial Interest Rate.

The Series 2019C Subordinate Bonds shall be designated “Public Utility Subordinate Lien Multimodal Revenue Bonds, Series 2019C.” The Variable Rate Series 2019C Subordinate Bonds shall be numbered in such manner and carry such other designations as determined by the Authority in order to distinguish each bond from any other bond and identify the interest payment and tender option provisions applicable thereto, shall be dated as of their date of original authentication and delivery, and shall bear interest from the most recent Interest Payment Date for which interest has been paid or duly provided for or, if no interest has been paid or duly provided for, from their date of original authentication and delivery. The Variable Rate Series 2019C Subordinate Bonds of the same maturity may bear interest at different interest rates.

The Series 2019C Subordinate Bonds shall mature on their Maturity Dates, subject to prior redemption as set forth herein.

The interest on the Variable Rate Series 2019C Subordinate Bonds shall be payable on the Interest Payment Dates applicable to the Rate Period then in effect. Interest on the Variable Rate Series 2019C Subordinate Bonds shall be payable by check or draft mailed to the registered owners at their addresses as they appear on the Regular Record Date preceding the Interest Payment Date on the registration books kept by the Trustee; provided, however, if the Variable Rate Series 2019C Subordinate 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 Variable Rate Series 2019C Subordinate Bonds, payment shall be made by wire transfer pursuant to the wire instructions received by the Trustee with respect to each such payment from such registered owner. Any interest that is not timely paid or duly provided for shall cease to be payable to the Holder hereof (or of one or more predecessor bonds) as of the Regular Record Date and shall be payable to the Holder hereof at the close of business on a special record date to be fixed by the Trustee for the payment of that overdue interest. Notice of such a special record date shall be mailed to Holders not less than ten days prior thereto. Principal, premium, if any, and interest shall be payable in lawful money of the United States of America.

The Variable Rate Series 2019C Subordinate Bonds shall be issued in Authorized Denominations.

During the Initial Period, the Variable Rate Series 2019C Subordinate Bonds shall bear interest at the Long-Term Rate.

The Variable Rate Series 2019C Subordinate Bonds are subject to optional redemption, purchase in lieu of optional redemption, and mandatory redemption through Mandatory Sinking Fund Requirements as provided in Article V.

In the event the Variable Rate Series 2019C Subordinate Bonds are designated Soft Tender Index Rate Bonds and are mandatorily tendered pursuant to Section 408(a)(v) and the Authority fails to pay the Purchase Price, the Variable Rate Series 2019C Subordinate Bonds shall bear interest at the Penalty Rate unless and until the Purchase Price is paid or the Variable Rate Series 2019C Subordinate Bonds otherwise cease to be Outstanding; provided, however, that the interest rate on the Variable Rate Series 2019C Subordinate Bonds shall at no time exceed the Maximum Rate.

In the event the Variable Rate Series 2019C Subordinate Bonds are designated Soft Tender Long-Term Rate Bonds and are mandatorily tendered pursuant to Section 408(a)(i) and the Authority fails to pay the Purchase Price, the Variable Rate Series 2019C Subordinate Bonds shall bear interest at the Penalty Rate unless and until the Purchase Price is paid or the Variable Rate Series 2019C Subordinate Bonds otherwise cease to be Outstanding; provided, however, that the interest rate on the Variable Rate Series 2019C Subordinate Bonds shall at no time exceed the Maximum Rate.

Section 402. Depository Provisions.

Notwithstanding any other provision of this Twenty-Fifth Supplemental Indenture or the Variable Rate Series 2019C Subordinate Bonds, so long as the Variable Rate Series 2019C Subordinate Bonds are in a Book Entry System and the Depository or its nominee is the Holder of the Variable Rate Series 2019C Subordinate Bonds:

(i) Presentation of Variable Rate Series 2019C Subordinate Bonds to the Trustee at redemption or at maturity, or delivery of Variable Rate Series 2019C Subordinate Bonds to the Tender Agent in connection with a purchase of tendered Variable Rate Series 2019C Subordinate Bonds, shall be deemed made to the Trustee when the right to exercise ownership rights in the Variable Rate Series 2019C Subordinate Bonds through the Depository or the Depository's participants is transferred by the Depository on its books.

(ii) Notice of a tender for purchase pursuant to Section 406 hereof shall be given by the beneficial owner of the Variable Rate Series 2019C Subordinate Bonds exercising ownership rights through the Depository or the Depository's participants by telephonic or written notice (confirmed in writing) to the Tender Agent at the times set forth in that Section.

(iii) The Depository may present notices, approvals, waivers, votes or other communications required or permitted to be made by Holders under this Twenty-Fifth Supplemental Indenture on a fractionalized basis on behalf of some or all of those persons entitled to exercise ownership rights in the Variable Rate Series 2019C Subordinate Bonds through the Depository or its participants.

(iv) Variable Rate Series 2019C Subordinate Bonds purchased by the Authority shall not be registered in the name of the Authority on the Register maintained by the Trustee and shall not be physically held by any party other than the Depository.

(v) Variable Rate Series 2019C Subordinate Bonds or any portion thereof shall not be transferable or exchangeable except:

(A) To any successor of the Depository;

(B) To any new Depository not objected to by the Trustee, upon (i) the resignation of then current Depository or its successor from its functions as Depository or (ii) termination of the use of the Depository by direction of the Authority;

(C) To any Persons who are the assigns of the Depository or its nominee, upon (i) the resignation of the Depository from its functions as Depository hereunder or (ii) termination by the Authority of use of the Depository.

Subject to any arrangements made by the Trustee with a Depository with respect to the Variable Rate Series 2019C Subordinate Bonds held in a Book Entry System, which arrangements are hereby authorized subject to the approval of an Authorized Official of the Authority, principal of, premium, if any, and interest shall be payable on any Variable Rate Series 2019C Subordinate Bond as provided in this Twenty-Fifth Supplemental Indenture.

Section 403. Determination of Interest Rates.

(a) General.

(i) The Variable Rate Series 2019C Subordinate Bonds may bear interest at any time in any Rate Period, and different subseries may bear interest in different Rate Periods.

(ii) The amount of interest payable with respect to Variable Rate Series 2019C Subordinate Bonds on any Interest Payment Date shall be computed (A) during a Daily Interest Period, Weekly Interest Period, Short-Term Interest Period or Index Rate Period, on the basis of a 365- or 366-day year for the number of days actually elapsed, and (B) during a Fixed Rate Period and any Long-Term Interest Periods, on the basis of a 360-day year of twelve 30-day months. Interest payable on each Interest Payment Date shall be the interest accrued and unpaid from and including the immediately preceding Interest Payment Date to and including the day preceding such Interest Payment Date. Notwithstanding the foregoing, the amount of interest payable with respect to Credit Facility Provider Bonds shall be calculated as provided in the Reimbursement Agreement.

(iii) All determinations of interest rates, amounts of interest payable on the Variable Rate Series 2019C Subordinate Bonds and Rate Periods pursuant to this Twenty-Fifth Supplemental Indenture shall be conclusive and binding upon the

Authority, the Trustee, the Tender Agent, the Credit Facility Provider and the Holders of the Variable Rate Series 2019C Subordinate Bonds to which such rates are applicable. The Authority, the Trustee, the Tender Agent, the Remarketing Agent and the Credit Facility Provider shall not be liable to any Holder for failure to give any notice specified in this Section or for the failure of any Holder to receive any such notice.

(b) Determination by Remarketing Agent.

(i) The interest rate for Daily Rate Bonds, Weekly Rate Bonds, Short-Term Rate Bonds, Long-Term Rate Bonds and, if engaged as Remarketing Agent in connection with the conversion to Fixed Rate Bonds, the Fixed Rate(s), for each Rate Period shall be determined by a Remarketing Agent, to be appointed by the Authority, as the lowest rate of interest that, in the judgment of the Remarketing Agent, would cause the Variable Rate Series 2019C Subordinate Bonds to be sold at a price as of the date of determination equal to the principal amount thereof, taking into account Prevailing Market Conditions, provided that in no event will the interest rate on any Variable Rate Series 2019C Subordinate Bonds exceed the Maximum Rate.

(ii) In the event the Remarketing Agent fails for any reason to determine the interest rate for any Rate Period:

(A) If the applicable Variable Rate Series 2019C Subordinate Bonds are bearing interest at a Daily Rate, Weekly Rate or Short-Term Rate, the applicable Variable Rate Series 2019C Subordinate Bonds shall bear interest at a rate equal to the prior week's rate, unless there is a failure by the Remarketing Agent to set the rate for two consecutive Weekly Rate Periods or seven consecutive Daily Rate Periods, in which case the applicable Variable Rate Series 2019C Subordinate Bonds shall bear interest at 105% of the SIFMA Index, until the Trustee is notified of a new Daily Rate, Weekly Rate or Short-Term Rate, as appropriate, determined by the Remarketing Agent.

(B) If the applicable Variable Rate Series 2019C Subordinate Bonds are bearing interest at a Long-Term Rate (1) the Rate Period shall be converted to a Weekly Rate Period and shall bear interest at Penalty Rate, but only if the Authority furnishes to the Trustee a Favorable Opinion of Bond Counsel or (2) if the opinion described in clause (1) is not furnished, the Rate Period will remain in the Long-Term Rate Period and the applicable Variable Rate Series 2019C Subordinate Bonds shall bear interest at a rate equal to the "Revenue Bond Index" as published in The Bond Buyer as of a recent date or, if such index is no longer published, then a comparable index selected by the Authority [and acceptable to the Trustee.]

(iii) Notice of the interest rate for each Daily Rate Bond, Weekly Rate Bond, Short-Term Rate Bond, Long-Term Rate Bond and, if engaged as Remarketing Agent in connection with the conversion to Fixed Rate Bonds, the Fixed Rate(s), shall be communicated by the Remarketing Agent to the Authority, the Trustee and any Credit Facility Provider by Electronic Means, (a) in the case of Daily Rate Bonds on the date

such interest rate is determined by 10:30 a.m., New York City time, and (b) in the case of Weekly Rate Bonds, Short-Term Rate Bonds, Long-Term Rate Bonds or Fixed Rate Bonds, not later than 5:00 p.m., New York City time, on the date such interest rate is determined, and shall be available to Holders after such time, from the Remarketing Agent at its Designated Office and shall also be communicated by the Remarketing Agent to any Holder upon request.

(c) Daily Rates.

(i) Whenever the Variable Rate Series 2019C Subordinate Bonds are to bear interest accruing at a Daily Rate, Daily Interest Periods shall commence on each Business Day and shall extend to, but not include, the next succeeding Business Day.

(ii) The interest rate for each Daily Interest Period shall be effective from and including the commencement date thereof and shall remain in effect to, but not including, the next succeeding Business Day.

(iii) Each such interest rate shall be determined by the Remarketing Agent no later than 10:00 a.m., New York City time, on the commencement date of the Daily Interest Period to which it relates.

(d) Weekly Rates.

(i) Whenever the Variable Rate Series 2019C Subordinate Bonds are to bear interest accruing at a Weekly Rate, Weekly Interest Periods shall commence on Thursday of each week and end on Wednesday of the following week; provided, however, that (A) in the case of a conversion to a Weekly Rate Period, the post-conversion initial Weekly Interest Period for the Variable Rate Series 2019C Subordinate Bonds shall commence on the Conversion Date and end on the next succeeding Wednesday; and (B) in the case of a conversion from a Weekly Rate to a Daily Rate, the last Weekly Interest Period prior to conversion shall end on the last day immediately preceding the Conversion Date.

(ii) The interest rate for each Weekly Interest Period shall be effective from and including the commencement date of such period and shall remain in effect through and including the last day thereof.

(iii) Each such interest rate shall be determined by the Remarketing Agent by 5:00 p.m., New York City time, on the Business Day immediately preceding the commencement date of the Weekly Interest Period to which it relates.

(e) Short-Term Rates. Short-Term Rates on, and Short-Term Interest Periods for, Short-Term Rate Bonds shall be determined as follows:

(i) Each Short-Term Interest Period shall be determined by the Remarketing Agent on the first Business Day of that Short-Term Interest Period as that Short-Term Interest Period which will, in the judgment of the Remarketing Agent, produce the greatest likelihood of the lowest net interest cost; provided that each Short-Term Interest Period (A) shall be from 1 to 270 days in length but shall not exceed the number of days

of interest coverage provided by the Credit Facility minus five days, shall not extend beyond the date that is five days before the Expiration Date of the Credit Facility and shall not exceed the remaining number of days prior to the Conversion Date if the Remarketing Agent has given or received notice of any conversion to a different Rate Period, (B) shall commence on a Business Day (except in the case of a conversion to a Short-Term Rate Period, the initial Short-Term Interest Period shall commence on the Conversion Date), shall end on a day preceding a Business Day, and (C) in any event shall end no later than the day preceding the Maturity Date. The Remarketing Agent may, in the reasonable exercise of its judgment, determine a Short-Term Interest Period that results in a Short-Term Rate on the Variable Rate Series 2019C Subordinate Bonds that is higher than would be borne by the Variable Rate Series 2019C Subordinate Bonds with a shorter Short-Term Interest Period in order to increase the likelihood of achieving the lowest net interest cost during the term of the Variable Rate Series 2019C Subordinate Bonds by assuring the effectiveness of such Short-Term Rate for a longer Short-Term Interest Period. The determination of a Short-Term Interest Period by the Remarketing Agent shall be based upon the relative market yields of the Variable Rate Series 2019C Subordinate Bonds and other securities that bear interest at a variable rate or at fixed rates that, in the reasonable exercise of the judgment of the Remarketing Agent are otherwise comparable to the Variable Rate Series 2019C Subordinate Bonds, or any fact or circumstance relating to the Variable Rate Series 2019C Subordinate Bonds or affecting the market for the Variable Rate Series 2019C Subordinate Bonds or affecting such other comparable securities in a manner that, in the reasonable exercise of the judgment of the Remarketing Agent, will affect the market for the Variable Rate Series 2019C Subordinate Bonds. The Remarketing Agent in its discretion, may consider such information and resources as it deems appropriate in making the determinations described in this paragraph, including consultations with the Authority, but the Remarketing Agent's determination of the Short-Term Interest Period will be based solely upon the reasonable exercise of the Remarketing Agent's judgment.

(ii) The interest rate for each Short-Term Interest Period shall be effective from and including the commencement date of that Short-Term Interest Period and shall remain in effect through and including the last day thereof.

(iii) All Short-Term Rate Bonds of a subseries of the Variable Rate Series 2019C Subordinate Bonds shall bear interest accruing at the same Short-Term Rate, and for the same Short-Term Interest Period.

(iv) Each such interest rate shall be determined by the Remarketing Agent by 4:00 p.m., New York City time, on the Business Day immediately preceding the commencement date of the Short-Term Interest Period to which it relates.

(f) Long-Term Rates. A Long-Term Rate for Long-Term Rate Bonds shall be determined for each Long-Term Interest Period as follows:

(i) The interest rate on each Variable Rate Series 2019C Subordinate Bond then being converted shall be the lowest interest rate that will enable such Variable Rate Series 2019C Subordinate Bond, upon conversion, to be remarketed at par or at a

premium or discount (plus any accrued interest), taking into account (A) any market premium determined by the Authorized Official to be necessary to fund fees and expenses relating to the conversion and remarketing of the Variable Rate Series 2019C Subordinate Bonds, including fees and expenses relating to a Credit Facility, any deposit to the Debt Service Reserve Fund and any amount owed upon termination of any Hedge Agreement, (B) the principal amortization schedule for the Variable Rate Series 2019C Subordinate Bonds, and (C) current market conditions for bonds that have similar tax status and a comparable credit rating.

(ii) Long-Term Interest Periods shall commence on a Conversion Date and subsequently on an Interest Payment Date which is at least 12 calendar months after the Conversion Date to a Long-Term Rate Period, and end on the day preceding either the commencement date of the following Long-Term Interest Period or the Conversion Date on which a different Rate Period shall become effective or the Maturity Date; provided, however, that in the case of the Initial Long-Term Rate Period for the Variable Rate Series 2019C Subordinate Bonds, such period shall commence on the Closing Date and end on _____, 20__.

(iii) The Long-Term Rate for each Long-Term Interest Period shall be effective from and including the commencement date thereof and remain in effect to and including the last day thereof. Each such Long-Term Rate shall be determined on the Business Day immediately preceding the commencement date of such period.

(iv) Long-Term Interest Periods shall not extend to a date beyond the fifth day next preceding the Expiration Date of an applicable Credit Facility; provided, however, that in the case of the Initial Long-Term Rate Period, the Series 2019C Subordinate Bonds shall not be secured by a Credit Facility.

(v) The term of each Long-Term Interest Period shall be specified in writing by the Authority to the Remarketing Agent, the Trustee, the Tender Agent and the Credit Facility Provider, if applicable, at least 20 days before its commencement.

(g) Fixed Rate. The Fixed Rate shall be determined as set forth in this subsection (g). Variable Rate Series 2019C Subordinate Bonds bearing interest at a Fixed Rate may not be converted to any other type of Rate Period pursuant to Section 404.

The Fixed Rate Period shall commence on a Conversion Date and shall extend to the earlier of the date of redemption or the Maturity Date. The Fixed Rate shall be determined (1) by the Remarketing Agent, if the Remarketing Agent is engaged in connection with the conversion to Fixed Rate Bonds, not later than 12:00 noon, New York City time, on the Business Day prior to the Conversion Date; or (2) set in the firm underwriting or purchase contract described in Section 404(b)(v). Such determination shall be conclusive and binding on the Authority, the Trustee, any Credit Facility Provider and the Holders of the Variable Rate Series 2019C Subordinate Bonds to which such rate shall be applicable.

In determining the amount of interest and principal that shall be payable on the Payment Dates, the Remarketing Agent or the firm of underwriters or recognized institutional investors

(the “Firm”) underwriting or purchasing the Variable Rate Series 2019C Subordinate Bonds then being converted, as applicable, shall use the following guidelines:

(i) The interest rate on each Variable Rate Series 2019C Subordinate Bond then being converted shall be the lowest interest rate that will enable such Variable Rate Series 2019C Subordinate Bond, upon conversion, to be remarketed at par or at a premium or discount (plus any accrued interest), taking into account (A) any market premium determined by the Authorized Official to be necessary to fund fees and expenses relating to the conversion and remarketing of the Variable Rate Series 2019C Subordinate Bonds, including fees and expenses relating to a Credit Facility, any deposit to the Debt Service Reserve Fund and any amount owed upon termination of any Hedge Agreement, (B) the principal amortization schedule for the Variable Rate Series 2019C Subordinate Bonds, and (C) current market conditions for bonds that have similar tax status and a comparable credit rating; and

(ii) If a Favorable Opinion of Bond Counsel has been obtained, the schedule of principal payments of the Variable Rate Series 2019C Subordinate Bonds may be modified based on a Mandatory Sinking Fund Requirements schedule agreed to by the Authority and the firm that agrees to underwrite or purchase the Variable Rate Series 2019C Subordinate Bonds being converted, in accordance with Section 404(b)(v), and delivered to the Trustee. If a Favorable Opinion of Bond Counsel is not received, all Variable Rate Series 2019C Subordinate Bonds shall mature on the Maturity Date and shall be subject to mandatory sinking fund redemption (or serial maturities pursuant to subparagraph (iii) below) on the dates and in the respective principal amounts established at the time of original delivery of the Variable Rate Series 2019C Subordinate Bonds.

(iii) The foregoing subparagraphs (i) and (ii) notwithstanding, upon provision of a Favorable Opinion of Bond Counsel, Variable Rate Series 2019C Subordinate Bonds may be scheduled to mature serially on October 1 in the years and respective principal amounts agreed to by the Authority and delivered to the Trustee, and the Remarketing Agent may establish more than one Fixed Rate to apply to the Variable Rate Series 2019C Subordinate Bonds being converted to Fixed Rate Bonds, in accordance with this Section, taking into account the scheduled mandatory redemption dates or serial maturity dates to be assigned to the Variable Rate Series 2019C Subordinate Bonds.

(h) Credit Facility Provider Bonds. Notwithstanding the above provisions of this Section, Credit Facility Provider Bonds shall bear interest at the Credit Facility Provider Rate and shall be payable at the times and by such means as provided in the Reimbursement Agreement. The Trustee shall register on its books and records the Credit Facility Provider as the Holder or the pledgee of such Credit Facility Provider Bonds, as directed by such Credit Facility Provider. The Credit Facility Provider Rate shall be supplied in writing to the Trustee by the Credit Facility Provider. If the Remarketing Agent has notified the Holder of any Credit Facility Provider Bonds that it has located a purchaser for some or all of that Holder’s Credit Facility Provider Bonds, then, subject to Section 410, that Holder must deliver those Credit Facility Provider Bonds to the Tender Agent for purchase. Upon such delivery and receipt of the Purchase Price by that Holder, and provided no Event of Default has occurred and is continuing under the Reimbursement Agreement, the Tender Agent shall notify the Trustee that the Variable

Rate Series 2019C Subordinate Bonds so purchased are no longer “Credit Facility Provider Bonds” and the Trustee shall note on the registration books for the Variable Rate Series 2019C Subordinate Bonds that those Variable Rate Series 2019C Subordinate Bonds are not Credit Facility Provider Bonds. Notwithstanding anything herein to the contrary, only the Credit Facility Provider or any Holder of Credit Facility Provider Bonds may receive interest on any Variable Rate Series 2019C Subordinate Bonds at the Credit Facility Provider Rate.

For all purposes of the Indenture, payments of principal and interest on the Credit Facility Provider Bonds are secured in the same manner as payments of principal and interest on the Variable Rate Series 2019C Subordinate Bonds. Amounts owed by the Authority to a Credit Facility Provider (including, without limitation, reimbursement obligations) shall be included in the calculation of “Annual Debt Service” under the Indenture if and to the extent required by the Indenture’s definition of “Annual Debt Service.”

(i) [Reserved].

(j) Index Rates. During any Index Rate Period, a Remarketing Agent shall determine the Applicable Spread that will be used in determining the Index Rate for each Index Interest Period as follows: (i) the Applicable Spread shall be the number of basis points or schedule of basis points as determined by the Remarketing Agent that, when added to the SIFMA Index or the LIBOR Index, as the case may be, would equal the minimum interest rate per annum that would enable the Remarketing Agent to sell the applicable Variable Rate Series 2019C Subordinate Bonds on the first day of such Subsequent Rate Period at a price equal to the principal amount thereof (but subject to the final sentence of this Section 403(j)), plus accrued interest, if any, thereon. The Remarketing Agent shall determine the Applicable Spread for any such Index Rate Period not later than the day preceding the commencement of such Index Rate Period and shall notify the Trustee, the Calculation Agent and the Authority thereof by telephone or such other manner as may be appropriate by not later than 2:00 P.M. New York City time on such date, which notice shall be promptly confirmed in writing. If at any time that the Remarketing Agent is required to determine the Applicable Spread, the Remarketing Agent recommends in writing to the Authority that the Variable Rate Series 2019C Subordinate Bonds may be remarketed at a specified discount from their principal amount that would enable the Authority to achieve a lower net interest cost than if such Variable Rate Series 2019C Subordinate Bonds were remarketed at their principal amount, and if the Authority accepts that recommendation in writing signed by an Authorized Official, then the Remarketing Agent shall determine the Applicable Spread based upon the minimum interest rate per annum that would enable the Remarketing Agent to sell the applicable Variable Rate Series 2019C Subordinate Bonds at the agreed upon discounted price.

(k) Index Rates – General. During any Index Rate Period, the Calculation Agent shall determine the Index Rate on each Computation Date, and such rate shall become effective on the SIFMA Index Reset Date or [LIBOR Index Reset Date], as the case may be, next succeeding the Computation Date; provided that in no event will the Index Rate exceed the Maximum Rate. The Calculation Agent shall (i) upon determining the Index Rate for each week, notify the Authority and the Trustee of such Index Rate by Electronic Means as promptly as practicable, and (ii) no later than the day preceding each Interest Payment Date, provide the Authority and the Trustee with a report that shows all the reset rates for the preceding month. The determination of the Index Rate

(absent manifest error) shall be conclusive and binding upon the Authority and the Holders of the Variable Rate Series 2019C Subordinate Bonds. If for any reason the Index Rate shall not be established, the Variable Rate Series 2019C Subordinate Bonds shall bear interest at the Index Rate last in effect until such time as a new Index Rate shall be established pursuant to this Twenty-Fifth Supplemental Indenture.

Section 404. Conversions Between Rate Periods.

(a) Notice of Conversion. The Authority may, with the prior written consent of the Credit Facility Provider, if any, if the same Credit Facility will secure the Variable Rate Series 2019C Subordinate Bonds before and after the conversion, elect to convert all, but not less than all, of the Variable Rate Series 2019C Subordinate Bonds from one Rate Period to another Rate Period (other than from a Fixed Rate Period) as follows:

(i) Notices by Authority. The Authority shall give written notice of any proposed conversion of some or all Variable Rate Series 2019C Subordinate Bonds to the Trustee, and during an Index Rate Period to the Calculation Agent, not fewer than seven Business Days (14 Business Days in the case of a proposed conversion to a Short-Term Rate Period) prior to the date the notice to affected Holders must be given pursuant to Section 404(a)(ii).

(ii) Notices by Trustee. Upon receipt of the notice specified in Section 404(a)(i), the Trustee shall promptly give written notice of the proposed conversion, via Electronic Means or by written notice, to the Tender Agent, the Remarketing Agent, any Credit Facility Provider and any Rating Agency. The Trustee shall give notice (which may be combined, where applicable, with any notice required by Section 408(d) by first-class mail of the proposed conversion to the affected Holders of the Variable Rate Series 2019C Subordinate Bonds not less than 10 days before the proposed Conversion Date. Such notice shall state:

(A) the proposed Conversion Date and the proposed Rate Period to be effective on such date;

(B) that all or a specified portion of the Variable Rate Series 2019C Subordinate Bonds will be subject to mandatory tender for purchase on the Conversion Date and, if fewer than all;

(C) the conditions, if any, to the conversion pursuant to subsection (b), and the consequences of such conditions not being fulfilled pursuant to subsection (c);

(D) if the Variable Rate Series 2019C Subordinate Bonds are in certificated form, information with respect to required delivery of the Variable Rate Series 2019C Subordinate Bond certificates and payment of the Purchase Price;

(E) the new Interest Payment Dates and Regular Record Dates.

(b) Conditions to Conversion. No conversion of Rate Periods will become effective unless the prior written consent of the Credit Facility Provider, if any, if the same Credit Facility will secure the Variable Rate Series 2019C Subordinate Bonds before and after the conversion, is obtained, and:

(i) If the conversion is from a Short-Term Rate Period, the Trustee has received, prior to the date on which notice of conversion is required to be given to Holders, written confirmation from the Remarketing Agent that it has not established and will not establish any Short-Term Interest Periods extending beyond the day before the Conversion Date; and

(ii) If the conversion is either (A) from a Short-Term Rate Period, a Weekly Rate Period or a Daily Rate Period to a Long-Term Rate Period or a Fixed Rate Period, or (B) from a Long-Term Rate Period to a Short-Term Rate Period, a Weekly Rate Period or a Daily Rate Period, the Authority shall have provided to the Trustee, and the Remarketing Agent, no later than one day before the Conversion Date, a Favorable Opinion of Bond Counsel, which opinion shall be confirmed in writing on the Conversion Date; and

(iii) Any Credit Facility to be held by the Trustee after the Conversion Date shall be in an amount equal to the aggregate principal amount of all of the Outstanding Variable Rate Series 2019C Subordinate Bonds, plus an amount for payment of interest equal to at least (a) 34 days' interest (183 days' interest if the conversion is to Long-Term Rate Bonds or, if the conversion is to Short-Term Rate Bonds, the maximum number of days of a Short-Term Interest Period, as provided in Section 403(e)(i) plus five days), plus in the case of a Credit Facility that does not automatically reinstate coverage for interest following a drawing to pay interest on the Variable Rate Series 2019C Subordinate Bonds, the number of days during which the Variable Rate Series 2019C Subordinate Bonds may continue to bear interest until purchased upon mandatory tender under Section 408(a)(iv) following a drawing in which the Credit Facility Provider may notify the Trustee that interest coverage has not reinstated or (b) in the event that a rating will be maintained on the Variable Rate Series 2019C Subordinate Bonds, then such other number of days of interest as may be required by any Rating Agency; and

(iv) If an Index Rate is in effect prior to the Conversion, the Conversion Date must be on a date that would otherwise be an Interest Payment Date; and

(v) If the conversion is to a Fixed Rate Period, the Authority's written notice pursuant to Section 404(a)(i) shall also be provided to the Remarketing Agent and shall also specify the Conversion Date on which the Fixed Rate Period is to commence, and the Authority shall deliver with such notice any Favorable Opinion of Bond Counsel required pursuant to Section 403(g) and a firm underwriting or purchase contract from a firm, which can be the Remarketing Agent, to underwrite or purchase all of the Variable Rate Series 2019C Subordinate Bonds at a price of 100% of the principal amount thereof at an agreed upon interest rate which such firm certifies is the lowest rate that will permit the Variable Rate Series 2019C Subordinate Bonds to be sold at par on the first day of the Fixed Rate Period and containing a Mandatory Sinking Fund Requirements schedule

prepared in accordance with Section 403(g). Upon receipt by the Trustee of such notice from the Authority, the Trustee shall promptly cause the same information contained in such notice to be delivered to the Tender Agent, any Credit Facility Provider and any Rating Agency. A conversion to the Fixed Interest Rate shall not occur unless the Authority shall also file with the Trustee any Favorable Opinion of Bond Counsel to the same effect dated the Conversion Date; and

(vi) The conversion shall not occur unless the Conversion Date is a date on which the Variable Rate Series 2019C Subordinate Bonds being converted could be redeemed without premium pursuant to Section 501(a); and

(vii) If the conversion is to a Short-Term Rate Period, (A) the Authority must engage, at its expense, a commercial paper trustee and paying agent (the “Issuing Agent”), which may or may not be the Trustee and which shall be reasonably acceptable to the Trustee, any Credit Facility Provider and the Tender Agent, having access to the Depository’s electronic money market issuing and payment system and otherwise eligible to serve as an issuing and paying agent under the Depository’s policies and procedures for the issuance and payment of commercial paper; and (B) the Remarketing Agent must arrange for the execution and delivery to the Depository of its required letter of representation for the eligibility of the Variable Rate Series 2019C Subordinate Bonds in the Short-Term Rate Period in the Depository’s book entry system and the provision of any needed CUSIP numbers; and (C) the Authority shall take all other action needed to comply with the Depository’s requirements applicable to the issuance and payment of the Variable Rate Series 2019C Subordinate Bonds while in the Short-Term Rate Period; and (D) the Authority shall enter into any amendment of this Twenty-Fifth Supplemental Indenture permitted under the Indenture that is needed to comply with the Depository’s or any Rating Agency’s requirements concerning the issuance and payment of the Variable Rate Series 2019C Subordinate Bonds in the Short-Term Rate Period.

(c) Failure of Conditions to Conversion. In the event any condition precedent to a conversion is not fulfilled, (i) the Conversion Date shall not occur, (ii) the mandatory tender pursuant to Section 408(a)(ii) shall not occur and (iii) the Variable Rate Series 2019C Subordinate Bonds shall continue in the then existing Rate Period with the length of the Rate Period and the interest rate being determined in accordance with Section 403. Notice of withdrawal of a conversion notice shall be given by the Authority to the Trustee, the Remarketing Agent, the Tender Agent and any Credit Facility Provider by telephone, promptly confirmed in writing, and shall thereafter be promptly given to the Holders by the Trustee via Electronic Means or by first-class mail. No failure or cancellation of conversion pursuant to this subsection (c) shall constitute an Event of Default.

Section 405. Tender Agent.

The Trustee is the initial Tender Agent. There shall be a Tender Agent for the Variable Rate Series 2019C Subordinate Bonds as provided in this Section at all times that any Variable Rate Series 2019C Subordinate Bonds are Daily Rate Bonds, Weekly Rate Bonds, Short-Term Rate Bonds, Index Rate Bonds or Long-Term Rate Bonds. The Tender Agent shall be appointed by the Authority and shall be a commercial bank, national association or trust company

organized and doing business under the laws of the United States of America or of any state thereof, authorized to exercise corporate trust powers in the State, subject to supervision or examination by federal or state authority, and authorized to perform all of the duties imposed upon it by this Twenty-Fifth Supplemental Indenture, and having a combined capital and surplus of at least \$75,000,000. If such corporation or association publishes reports of condition at least annually, pursuant to law or to the requirements of such supervising or examining Authority, then for the purposes of this Section, the combined capital and surplus of such corporation or association shall be deemed to be its combined capital and surplus as set forth in its most recent report of condition so published.

The Tender Agent shall perform the duties imposed upon the Tender Agent by this Twenty-Fifth Supplemental Indenture, but only upon the terms and conditions set forth herein, including the following:

(a) hold all Variable Rate Series 2019C Subordinate Bonds delivered to it hereunder in trust for the benefit of the respective Holders which shall have so delivered such Variable Rate Series 2019C Subordinate Bonds until moneys representing the Purchase Price of such Variable Rate Series 2019C Subordinate Bonds shall have been delivered to or for the account of or to the order of such Holders;

(b) hold all moneys delivered to it hereunder for the purchase of Variable Rate Series 2019C Subordinate Bonds in trust solely for the benefit of the Person which shall have so delivered such moneys until the Variable Rate Series 2019C Subordinate Bonds purchased with such moneys shall have been delivered to or for the account of such Person;

(c) hold all moneys, other than proceeds of payments under a Credit Facility, delivered to it hereunder for the purchase of Variable Rate Series 2019C Subordinate Bonds as agent of, and in escrow for the exclusive benefit of, the Person which shall have so delivered such moneys until the Variable Rate Series 2019C Subordinate Bonds purchased with such moneys shall have been delivered to or for the account of such Person;

(d) hold all moneys delivered to it hereunder from payments under a Credit Facility for the purchase of Variable Rate Series 2019C Subordinate Bonds as agent of, and in escrow for the exclusive benefit of, the Holders who shall deliver Variable Rate Series 2019C Subordinate Bonds to it for purchase until the Variable Rate Series 2019C Subordinate Bonds purchased with such moneys shall have been delivered to or for the account of the Credit Facility Provider;

(e) keep such books and records as shall be consistent with customary corporate trust industry practice that shall accurately reflect the transactions hereunder and to make such books and records available for inspection by the Authority, the Trustee, the Remarketing Agent and the Credit Facility Provider during normal business hours upon reasonable prior written notice;

(f) hold all Credit Facility Provider Bonds delivered to it hereunder as agent of, and in escrow for the benefit of, the Credit Facility Provider;

(g) deliver any notices required by this Twenty-Fifth Supplemental Indenture to be delivered by the Tender Agent; and

(h) perform all other duties of the Tender Agent under this Twenty-Fifth Supplemental Indenture.

The Tender Agent shall be entitled to reasonable compensation for its services as Tender Agent as agreed upon with the Authority.

The Tender Agent at any time may resign and be discharged of the duties and obligations imposed upon the Tender Agent by this Twenty-Fifth Supplemental Indenture, by giving written notice thereof to the Authority, the Trustee, the Remarketing Agent and the Credit Facility Provider at least 30 days prior to the effective date of such resignation. The Tender Agent shall resign at any time that it shall cease to be eligible in accordance with the provisions of this Section, effective upon the appointment of and acceptance of such appointment by a successor Tender Agent.

The Tender Agent may be removed at any time by the Authority by an instrument in writing delivered to the Tender Agent, the Trustee, the Remarketing Agent and the Credit Facility Provider.

If the Tender Agent shall resign, be removed or become incapable of acting for any cause, the Authority shall promptly appoint a successor Tender Agent by an instrument in writing delivered to the Trustee, the Remarketing Agent, the Credit Facility Provider, and the retiring Tender Agent. Every such successor Tender Agent appointed pursuant to the provisions of this Section shall meet the eligibility requirements of this Section. No successor Tender Agent shall accept its appointment unless at the time of such acceptance such successor Tender Agent shall be qualified and eligible under this Article.

Every successor Tender Agent appointed hereunder shall execute and deliver to the Authority, the Trustee, the Remarketing Agent, any Credit Facility Provider, and the retiring Tender Agent an instrument accepting such appointment, designating its Designated Office and accepting the duties and obligations imposed upon it hereunder. No resignation or removal of the Tender Agent and no appointment of a successor Tender Agent pursuant to this Section shall become effective until the acceptance of appointment by the successor Tender Agent hereunder.

The Trustee shall give notice of each resignation and each removal of the Tender Agent and each appointment of a successor Tender Agent by mailing written notice of such event by first-class mail, within 30 days of the resignation or removal of the Tender Agent or the appointment of a successor Tender Agent, to the Authority, any Credit Facility Provider, the Remarketing Agent, each Rating Agency and the Holders as their names and addresses appear in the Bond Register maintained by the Trustee. Each notice shall include the name of the successor Tender Agent and the address of its Designated Office.

In the event of the resignation or removal of the Tender Agent, and the appointment of a successor Tender Agent, the retiring Tender Agent shall pay over, assign and deliver any moneys and Variable Rate Series 2019C Subordinate Bonds held by it in such capacity to its successor.

In the event that the Tender Agent shall resign or be removed, or be dissolved, or if the property or affairs of the Tender Agent shall be taken under the control of any state or federal court or administrative body because of bankruptcy or insolvency, or for any other reason, and

the Authority shall not have appointed a successor as Tender Agent, the Trustee shall ipso facto be deemed to be the Tender Agent for all purposes of this Twenty-Fifth Supplemental Indenture until the appointment by the Authority of the successor Tender Agent.

Any corporation or association into which the Tender Agent in its individual capacity may be merged or converted or with which it may be consolidated, or any merger, conversion or consolidation to which the Tender Agent in its individual capacity shall be a party, or any corporation or association to which all or substantially all the corporate trust business of the Tender Agent in its individual capacity may be sold or otherwise transferred, shall be the Tender Agent under this Twenty-Fifth Supplemental Indenture without further act; provided, that the Tender Agent shall promptly give notice of such action to the Authority, and the Authority shall have 45 days to exercise an option to appoint a successor Tender Agent by an instrument in writing delivered to the Trustee, the Remarketing Agent, the Credit Facility Provider, and the then current Tender Agent. Every such successor Tender Agent appointed pursuant to the provisions of this Section shall meet the eligibility requirements of this Section. No successor Tender Agent shall accept its appointment unless at the time of such acceptance such successor Tender Agent shall be qualified and eligible under this Article.

Section 406. Optional Tenders of Variable Rate Series 2019C Subordinate Bonds in Certain Rate Periods.

(a) Holders of Daily Rate Bonds or Weekly Rate Bonds may elect to have their Variable Rate Series 2019C Subordinate Bonds (other than Credit Facility Provider Bonds or Variable Rate Series 2019C Subordinate Bonds owned by or for the benefit of the Authority), or portions thereof in Authorized Denominations, purchased at the applicable Purchase Price on the following Purchase Dates and, upon the giving of the following Electronic Means or written notices meeting the further requirements set forth in subsection (b) below, provided, however, that so long as the Variable Rate Series 2019C Subordinate Bonds are in book entry form the provisions set forth in Section 402 and the procedures established by the Depository generally for tenders of Variable Rate Series 2019C Subordinate Bonds shall apply with respect to notice of tenders, delivery of Variable Rate Series 2019C Subordinate Bonds, payment of Purchase Price and related matters. If less than all of the Variable Rate Series 2019C Subordinate Bonds of a Holder are tendered for purchase the amount retained by that Holder must be in an Authorized Denomination.

(i) Daily Rate Bonds (other than Credit Facility Provider Bonds or Variable Rate Series 2019C Subordinate Bonds owned by or for the benefit of the Authority) may be tendered for purchase at the Purchase Price payable in immediately available funds on any Business Day upon Electronic Means or written notice of tender to the Tender Agent and the Remarketing Agent not later than 11:00 a.m., New York City time, on the designated Purchase Date.

(ii) Weekly Rate Bonds (other than Credit Facility Provider Bonds or Variable Rate Series 2019C Subordinate Bonds owned by or for the benefit of the Authority) may be tendered for purchase at the Purchase Price payable in immediately available funds on any Business Day upon delivery of a written or Electronic Means notice of tender to the

Tender Agent not later than 5:00 p.m., New York City time, on a Business Day not fewer than seven days prior to the designated Purchase Date.

(b) Each notice of tender for Daily Rate Bonds and Weekly Rate Bonds:

(i) shall, in case of a written notice, be delivered to the Tender Agent at its Designated Office and, with respect to Daily Rate Bonds, to the Remarketing Agent at its Designated Office, and be in form satisfactory to the Tender Agent;

(ii) shall state, whether delivered in writing or by Electronic Means, (A) the principal amount of the Daily Rate Bond or Weekly Rate Bond to which the notice relates and the CUSIP number of that Bond, (B) that the Holder irrevocably demands purchase of that Variable Rate Series 2019C Subordinate Bond or a specified portion thereof in an Authorized Denomination, (C) the Purchase Date on which that Variable Rate Series 2019C Subordinate Bond or portion thereof is to be purchased and (D) payment instructions with respect to the Purchase Price; and

(iii) shall automatically constitute, whether delivered in writing or by Electronic Means, (A) an irrevocable offer to sell the Variable Rate Series 2019C Subordinate Bond (or portion thereof) to which such notice relates on the Purchase Date to any purchaser selected by the Remarketing Agent (or to the Credit Facility Provider in the case of purchases made with funds paid under the Credit Facility), at a price equal to the Purchase Price, (B) an irrevocable authorization and instruction to the Tender Agent to effect transfer of such Variable Rate Series 2019C Subordinate Bond (or portion thereof) upon receipt by the Tender Agent of funds sufficient to pay the Purchase Price on the Purchase Date, (C) an irrevocable authorization and instruction to the Tender Agent to effect the exchange of the Variable Rate Series 2019C Subordinate Bond to be purchased in whole or in part for other Variable Rate Series 2019C Subordinate Bonds in an equal aggregate principal amount so as to facilitate the sale of that Variable Rate Series 2019C Subordinate Bond (or portion thereof to be purchased), (D) an acknowledgment that such Holder will have no further rights with respect to that Variable Rate Series 2019C Subordinate Bond (or portion thereof) upon deposit of an amount equal to the Purchase Price thereof with the Tender Agent on the Purchase Date, except for the right of such Holder to receive the Purchase Price upon surrender of that Variable Rate Series 2019C Subordinate Bond to the Tender Agent, and (E) an agreement of such Holder to deliver such Daily Rate Bonds or Weekly Rate Bonds, with all necessary endorsements for transfer and signature guarantees, to the Tender Agent at its Designated Office not later than 1:00 p.m., New York City time, on the Purchase Date.

The determination of the Tender Agent as to whether a notice of tender has been properly delivered pursuant to the foregoing shall be conclusive and binding upon the Holder. The Tender Agent may waive any irregularity or nonconformity in any notice of tender.

(c) Notwithstanding anything to the contrary herein, all Daily Rate Bonds or Weekly Rate Bonds as to which a written notice specifying the Purchase Date has been delivered pursuant to this Section (and which have not been tendered to the Tender Agent) shall be deemed tendered on the Purchase Date specified. From and after the specified Purchase Date of a

Variable Rate Series 2019C Subordinate Bond tendered to the Tender Agent or deemed tendered pursuant to this Section, the former Holder of such Variable Rate Series 2019C Subordinate Bond shall be entitled solely to the payment of the applicable Purchase Price of the Variable Rate Series 2019C Subordinate Bond tendered or deemed tendered which Purchase Price shall be payable only as set forth in Section 407(d).

(d) The Tender Agent shall promptly return any notice of tender delivered pursuant to this Section (together with the Variable Rate Series 2019C Subordinate Bonds submitted therewith) that is incomplete or improperly completed or not delivered within the times required by this Section to the Person or Persons submitting such notice.

(e) Notwithstanding the foregoing, if the Variable Rate Series 2019C Subordinate Bonds are held in a book-entry form at the Depository, the right to optionally tender Daily Rate Bonds or Weekly Rate Bonds may be exercised by the beneficial owners of those Variable Rate Series 2019C Subordinate Bonds. Such right shall be exercised by delivery by a beneficial owner to the Tender Agent no later than the times specified in subsection (a) of the notice described in subsection (b) stating that such beneficial owner will cause its beneficial interest (or portion thereof in an Authorized Denomination) to be tendered, the amount of such interest to be tendered, the date on which such interest will be tendered and the identity of the Participant through which the beneficial owner maintains its interest. Upon delivery of such notice, the beneficial owner must make arrangements to have its beneficial ownership interest in the Variable Rate Series 2019C Subordinate Bonds being tendered to the Tender Agent to be transferred on the records of the Depository to the Tender Agent at or prior to 1:00 p.m., New York City time, on the Purchase Date.

Section 407. Purchase Fund; Purchase of Variable Rate Series 2019C Subordinate Bonds by Tender Agent; Procedures and Consequences Related to Inadequate Funds for Purchase Upon Tender.

(a) The Tender Agent shall establish a special trust fund for the Variable Rate Series 2019C Subordinate Bonds to be designated the Purchase Fund. Within the Purchase Fund, the Tender Agent shall establish four separate accounts to be designated the Remarketing Proceeds Account, the Credit Facility Purchase Account, the Authority Purchase Account and the Undelivered Bond Payment Account, each of which shall be an Eligible Account. Only the Tender Agent shall have any right of withdrawal from the Purchase Fund; and the Purchase Fund and such right of withdrawal shall be for the sole and exclusive benefit of the Holders of the Variable Rate Series 2019C Subordinate Bonds subject to purchase on Purchase Dates (and the Credit Facility Provider to the extent provided in subsection (f)); and the Authority and the Holders of Variable Rate Series 2019C Subordinate Bonds not subject to purchase shall have no legal, beneficial or equitable interest in the Purchase Fund. Amounts on deposit in the Purchase Fund shall be held uninvested and without bearing interest. Amounts in a particular account of a Purchase Fund shall not be commingled with amounts in any other account of that Purchase Fund. Any moneys received by the Tender Agent by reason of the remarketing by the Remarketing Agent of any Variable Rate Series 2019C Subordinate Bonds subject to purchase on a Purchase Date shall be deposited by the Tender Agent in the Remarketing Proceeds Account and applied by the Tender Agent in accordance with subsections (d) and (e). Any moneys received by the Tender Agent representing amounts paid by the Credit Facility Provider

under the Credit Facility for the purchase of a Variable Rate Series 2019C Subordinate Bond subject to purchase on a Purchase Date shall be deposited by the Tender Agent in the Credit Facility Purchase Account and applied by the Tender Agent in accordance with subsections (d) and (e). Any moneys received by the Tender Agent representing amounts paid by the Authority for the purchase of a Variable Rate Series 2019C Subordinate Bond subject to purchase on a Purchase Date shall be deposited by the Tender Agent in the Authority Purchase Account of the Purchase Fund and applied by the Tender Agent in accordance with subsections (d) and (e). Moneys shall be transferred to the Undelivered Bond Payment Account from the other accounts of the Purchase Fund or to the Credit Facility Provider in accordance with subsection (e); and moneys shall be applied from the Undelivered Bond Payment Account in accordance with subsection (f) and (g).

(b) Upon receipt of notice, in writing or by any Electronic Means, of tender relating to Daily Rate Bonds, the Tender Agent shall promptly notify the Remarketing Agent, the Authority, the Trustee and any Credit Facility Provider by telephonic notice of the amount of the Variable Rate Series 2019C Subordinate Bonds to be tendered pursuant to such notice. The Tender Agent shall confirm such telephonic notice by Electronic Means by 11:15 a.m., New York City time, on the Purchase Date, with the Tender Agent including in such telephonic notice and the confirmation thereof the amount of the Purchase Price of the Variable Rate Series 2019C Subordinate Bonds and the portion, if any, thereof representing accrued and unpaid interest on such Bonds to the Purchase Date. Upon receipt of notice, in writing or by any Electronic Means, of tender relating to Weekly Rate Bonds, the Tender Agent shall, not later than 5:00 p.m., New York City time, on the next Business Day, send notice of such tender to the Authority, the Remarketing Agent, the Trustee and any Credit Facility Provider by Electronic Means, with the Tender Agent including in such notice the amount of the Purchase Price of the Variable Rate Series 2019C Subordinate Bonds and the portion, if any, thereof representing accrued and unpaid interest on the Variable Rate Series 2019C Subordinate Bonds to the Purchase Date. Simultaneously with giving notice pursuant to Section 408(d) of any mandatory tender of the Variable Rate Series 2019C Subordinate Bonds pursuant to Section 408(a), the Trustee shall give notice by telephone or Electronic Means, promptly confirmed in writing, to the Tender Agent, the Remarketing Agent, any Credit Facility Provider and the Authority specifying the Purchase Date, the aggregate principal amount and Purchase Price of the Variable Rate Series 2019C Subordinate Bonds subject to mandatory tender on such Purchase Date, and the portion, if any, of such Purchase Price representing accrued and unpaid interest on such Variable Rate Series 2019C Subordinate Bonds to such Purchase Date.

(c) Not later than 11:30 a.m., New York City time, on each Purchase Date, the Remarketing Agent shall notify the Trustee, the Tender Agent and any Credit Facility Provider by Electronic Means of (i) the Purchase Price of the Variable Rate Series 2019C Subordinate Bonds to be sold by the Remarketing Agent and (ii) the Purchase Price of the Variable Rate Series 2019C Subordinate Bonds tendered for purchase which will not be sold by the Remarketing Agent, and the Tender Agent shall then determine the amount, if any, by which the Purchase Price of the Variable Rate Series 2019C Subordinate Bonds to be purchased on such Purchase Date exceeds the amount of the proceeds of the remarketing of such Variable Rate Series 2019C Subordinate Bonds by the Remarketing Agent on deposit in the Remarketing Proceeds Account at such time and shall immediately give telephonic or Electronic Means notice

of that amount to the Trustee, the Authority and any Credit Facility Provider, which notice shall be promptly confirmed in writing; and

(i) if a Credit Facility is in effect on such Purchase Date, then, except with respect to Credit Facility Provider Bonds held pursuant to Section 411(b) and Variable Rate Series 2019C Subordinate Bonds held by the Authority, (A) the Trustee shall submit in accordance with the terms of the Credit Facility and by such time as is required to receive funds on the Purchase Date for the payment of the Purchase Price, a Credit Facility Request to the Credit Facility Provider requesting the purchase by that Credit Facility Provider under the Credit Facility, or the funding by the Credit Facility Provider under the Credit Facility of moneys for the purchase, of the Variable Rate Series 2019C Subordinate Bonds at a Purchase Price equal to the amount of the excess of the aggregate Purchase Price over any amounts on hand for payment to tendering Bondholders, and (B) not later than 2:00 p.m., New York City time, on such Purchase Date, the Trustee shall transfer to the Tender Agent and the Tender Agent shall deposit the proceeds of the Credit Facility Request received by the Trustee in the Credit Facility Purchase Account; or

(ii) if no Credit Facility is in effect on such Purchase Date, then (A) not later than 12:30 p.m., New York City time, on such Purchase Date, the Tender Agent shall notify the Authority of the amount of the excess of the aggregate Purchase Price over any amounts on hand for payment to tendering Bondholders, which shall thereupon be payable by the Authority to the Tender Agent for the purpose of causing the Tender Agent to purchase such Bonds on behalf of the Authority, and (B) not later than 2:30 p.m., New York City time, on such Purchase Date, the Tender Agent shall deposit the amount, if any, received by the Tender Agent from the Authority for such purpose in the Authority Purchase Account; provided, however, the Authority has no obligation to deposit moneys in the Authority Purchase Account and has no obligation to purchase tendered Variable Rate Series 2019C Subordinate Bonds.

(d) Not later than 2:30 p.m., New York City time, on each Purchase Date, the Tender Agent shall disburse the Purchase Price of the Variable Rate Series 2019C Subordinate Bonds to be purchased on such Purchase Date to the Holders thereof (upon surrender thereof for payment of such Purchase Price), from the following sources and in the following order of priority:

(i) Moneys on deposit in the Remarketing Proceeds Account (representing the proceeds of the remarketing by the Remarketing Agent of such Variable Rate Series 2019C Subordinate Bonds); and

(ii) If a Credit Facility is in effect on such Purchase Date, moneys on deposit in the Credit Facility Purchase Account (representing the proceeds of a Credit Facility Request); and

(iii) Moneys on deposit in the Authority Purchase Account (representing amounts paid by the Authority to the Tender Agent for the purchase of such Variable Rate Series 2019C Subordinate Bonds). The Authority has no obligation to deposit

moneys in the Authority Purchase Account and has no obligation to purchase tendered Variable Rate Series 2019C Subordinate Bonds that are not remarketed.

(e) If the funds available from the sources specified in the preceding clause (d) for the purchase of the Variable Rate Series 2019C Subordinate Bonds subject to purchase on a Purchase Date are insufficient to purchase all of the Variable Rate Series 2019C Subordinate Bonds subject to purchase on such Purchase Date (including Undelivered Bonds), then, no purchase of any of those Variable Rate Series 2019C Subordinate Bonds shall occur on such Purchase Date, and on such Purchase Date, the Tender Agent shall (i) return to the Holders all of such Variable Rate Series 2019C Subordinate Bonds that were tendered, (ii) return all moneys received by the Tender Agent for the purchase of such Variable Rate Series 2019C Subordinate Bonds to the respective Persons that provided such moneys (in the respective amounts in which such moneys were so provided), and (iii) notify the Trustee of the foregoing. If a Credit Facility is in effect with respect to such Variable Rate Series 2019C Subordinate Bonds, and if the Credit Facility Provider is not in default thereunder, then the failure to purchase the Variable Rate Series 2019C Subordinate Bonds shall cause the Variable Rate Series 2019C Subordinate Bonds to remain outstanding and to bear interest at the Penalty Rate from and after the Purchase Date and until the Purchase Price for all such Variable Rate Series 2019C Subordinate Bonds shall have been paid in full or until they otherwise cease to be Outstanding, but shall not constitute an Event of Default hereunder. Otherwise, (i) if such Variable Rate Series 2019C Subordinate Bonds shall have been designated Hard Tender Index Rate Bonds, then the failure to purchase the Variable Rate Series 2019C Subordinate Bonds shall constitute an Event of Default under Section 903(e), but (ii) if such Variable Rate Series 2019C Subordinate Bonds (a) shall have been designated Soft Tender Index Rate Bonds, or (b) bear interest at a Weekly Rate, Daily Rate or Short-Term Rate, then the failure to purchase the Variable Rate Series 2019C Subordinate Bonds shall not constitute an Event of Default under Section 903(e), and the Variable Rate Series 2019C Subordinate Bonds shall bear interest at the Penalty Rate from and after the Purchase Date and until the Purchase Price for all such Variable Rate Series 2019C Subordinate Bonds shall have been paid in full or until they otherwise cease to be Outstanding.

(f) Any moneys remaining in the Remarketing Proceeds Account, the Credit Facility Purchase Account or the Authority Purchase Account and representing (but not exceeding) the Purchase Price of the Variable Rate Series 2019C Subordinate Bonds subject to purchase on the Purchase Date but not tendered and delivered for purchase on the Purchase Date (following the payments described in subsection (d)) shall be transferred by the Tender Agent to the Undelivered Bond Payment Account not later than 3:30 p.m., New York City time, on the Purchase Date (and retained therein, subject to subsection (a), for application in accordance with subsection (f)). Any moneys remaining in the Remarketing Proceeds Account, the Credit Facility Purchase Account and the Authority Purchase Account on a Purchase Date (after the payments described in subsection (d) and the transfer described in the preceding sentence of this subsection (e)) shall be wire transferred by the Tender Agent, in immediately available funds, prior to the close of business on such Purchase Date, to the Credit Facility Provider, to the extent of any amounts owed to the Credit Facility Provider in respect of a Credit Facility Request, and then to the Authority.

(g) Moneys transferred to the Undelivered Bond Payment Account of the Purchase Fund on any Purchase Date shall be applied, on or after such Purchase Date, by the Tender

Agent to pay the Purchase Price of the Undelivered Bonds in respect of which they were so transferred, upon the surrender of such Variable Rate Series 2019C Subordinate Bonds to the Tender Agent for such purpose.

(h) Notwithstanding the foregoing, in the event that the Variable Rate Series 2019C Subordinate Bonds are converted to a Fixed Rate and remarketed at a premium over par, remarketing proceeds received by the Tender Agent in excess of the amount required to pay the Purchase Price of the Variable Rate Series 2019C Subordinate Bonds tendered for purchase shall be delivered by the Tender Agent to the Trustee for deposit in a separate account in the custody of the Trustee. Such excess remarketing proceeds shall be disbursed by the Trustee in accordance with the written directions of an Authorized Official to pay fees and expenses relating to the conversion and remarketing, including any fees and expenses relating to any Credit Facility, to make any required deposit to the Debt Service Reserve Fund, to pay any amount owed upon early termination of any Hedge Agreement and otherwise to apply consistently with the Indenture.

Section 408. Mandatory Tender and Purchase of Variable Rate Series 2019C Subordinate Bonds.

(a) All the Variable Rate Series 2019C Subordinate Bonds shall be subject to mandatory tender for purchase by the Tender Agent at the Purchase Price, as follows:

(i) Short-Term and Long-Term Rate Bonds. Each Short-Term Rate Bond shall be subject to mandatory tender for purchase by the Tender Agent on the first day following the last day of each Short-Term Interest Period applicable to such Short-Term Rate Bond, and each Long-Term Rate Bond shall be subject to mandatory tender for purchase on the first day following the last day of each Long-Term Interest Period; provided that either in the Certificate of Award or in any applicable Notice of Conversion, Long-Term Rate Bonds shall be designated as either Hard Tender Long-Term Rate Bonds or Soft Tender Long-Term Rate Bonds.

(ii) Conversion of Modes. Each subseries of the Variable Rate Series 2019C Subordinate Bonds shall be subject to mandatory tender for purchase by the Tender Agent on each Conversion Date for such subseries.

(iii) Expiration of a Credit Facility, Voluntary Termination of a Credit Facility or Replacement of a Credit Facility With a Substitute Credit Facility. Variable Rate Series 2019C Subordinate Bonds requiring the maintenance of a Credit Facility are subject to mandatory tender for purchase by the Tender Agent (1) on a Business Day selected by the Trustee which shall be at least five days prior to the Expiration Date of the Credit Facility; (2) on a Business Day selected by the Trustee which shall be at least five days prior to the Voluntary Termination Date of the Credit Facility and (3) on each Substitution Date, which shall be at least five days prior to the Expiration Date of the Credit Facility being replaced. Payment of the Purchase Price shall be made from proceeds of remarketing or a draw of moneys upon the Credit Facility that is expiring or being replaced.

(iv) Notice by the Credit Facility Provider. While a Credit Facility is in effect, the Variable Rate Series 2019C Subordinate Bonds are subject to mandatory tender for purchase by the Tender Agent (a) on a Business Day selected by the Trustee that is not more than one Business Day after the Trustee's receipt of notification from that Credit Facility Provider of that Credit Facility Provider's decision to exercise its right of mandatory tender as a result of the occurrence of certain events of default or termination under the Reimbursement Agreement, and (b) on the date designated by the Trustee following receipt by the Trustee of notice from the Credit Facility Provider that the Credit Facility Provider is not reinstating the Credit Facility following a draw, which date shall be a Business Day and shall be not more than one Business Day after the Trustee receives notice of non-reinstatement from the Credit Facility Provider.

(v) Index Rate Bonds Purchase Dates. Variable Rate Series 2019C Subordinate Bonds that are converted to Index Rate Bonds (regardless of whether they are then currently Index Rate Bonds) for any Index Rate Period shall be subject to mandatory tender (A) on the Index Rate Bonds Purchase Date specified in the applicable Notice of Conversion, which shall also specify if such Variable Rate Series 2019C Subordinate Bonds shall be Hard Tender Index Rate Bonds or Soft Tender Index Rate Bonds, and (B) at the option of the Authority on any Business Day on or after a date specified in the applicable Notice of Conversion.

(b) Variable Rate Series 2019C Subordinate Bonds to be purchased pursuant to subsection (a) shall be delivered by the Holders thereof to the Tender Agent (together with necessary assignments and endorsements) at or prior to 1:00 p.m., New York City time, on the applicable Purchase Date.

(c) Any Variable Rate Series 2019C Subordinate Bonds to be purchased by the Tender Agent pursuant to this Section that are not delivered for purchase on or prior to the Purchase Date, for which there has been irrevocably deposited in trust with the Tender Agent an amount sufficient to pay the Purchase Price of such Variable Rate Series 2019C Subordinate Bonds, shall be deemed to have been delivered to the Tender Agent for purchase, and the Holders of such Variable Rate Series 2019C Subordinate Bonds shall not be entitled to any payment (including any interest to accrue on or after the Purchase Date) other than the respective Purchase Prices of such Variable Rate Series 2019C Subordinate Bonds, and such Variable Rate Series 2019C Subordinate Bonds shall not be entitled to any benefits of the Indenture, except for payment of such Purchase Price out of the moneys deposited for such payment as aforesaid.

(d) In addition to any other requirements set forth in this Twenty-Fifth Supplemental Indenture, notices of mandatory tender shall be mailed to Holders and shall:

(i) specify the proposed Purchase Date and the event which gives rise to the proposed Purchase Date;

(ii) state that such Variable Rate Series 2019C Subordinate Bonds shall be subject to mandatory tender for purchase on such Purchase Date;

(iii) state that Holders may not elect to retain the Variable Rate Series 2019C Subordinate Bonds subject to mandatory tender;

(iv) state that all of the Variable Rate Series 2019C Subordinate Bonds subject to mandatory tender shall be required to be delivered to the Designated Office of the Tender Agent at or before 1:00 p.m., New York City time, on the Purchase Date;

(v) state that if the Holder of any Variable Rate Series 2019C Subordinate Bonds subject to mandatory tender fails to deliver such Variable Rate Series 2019C Subordinate Bonds to the Tender Agent for purchase on the Purchase Date, and if the Tender Agent is in receipt of funds sufficient to pay the Purchase Price thereof, such Variable Rate Series 2019C Subordinate Bonds shall nevertheless be deemed purchased on the Purchase Date and ownership of such Variable Rate Series 2019C Subordinate Bonds shall be transferred to the purchaser thereof;

(vi) state that any Holder that fails to deliver such Variable Rate Series 2019C Subordinate Bonds for purchase shall have no further rights thereunder or under the Indenture except the right to receive the Purchase Price thereof upon presentation and surrender of such Variable Rate Series 2019C Subordinate Bonds to the Tender Agent and that the Trustee will place a stop transfer against the Variable Rate Series 2019C Subordinate Bonds subject to mandatory tender registered in the name of such Holder(s) on the registration books;

(vii) in the case of mandatory tender upon any proposed conversion of Variable Rate Series 2019C Subordinate Bonds, state that such conversion and such mandatory tender will not occur if certain events and conditions specified in Section 404(b) do not occur or are not satisfied and summarize those events and conditions; and

(viii) in the case of mandatory tender on a Substitution Date, state the information required by Section 412(d).

(e) Notice of mandatory tender of Variable Rate Series 2019C Subordinate Bonds shall be given by the Trustee via Electronic Means or by first-class mail, to the Holders of the Variable Rate Series 2019C Subordinate Bonds (at their addresses as they appear on the Register as of the date of such notice), and to the Authority, any Remarketing Agent, the Tender Agent and any Credit Facility Provider, as follows. If the mandatory tender is by reason of the events described in clauses (ii) or (iii) of subsection (a), that notice shall be given no fewer than 10 days prior to the Purchase Date. If the mandatory tender is by reason of the events described in clause (iv) of subsection (a), that notice shall be given immediately. No notice of mandatory tender is required to be given when the tender is by reason of clause (i) of subsection (a).

(f) Failure to mail such notice or any defect therein shall not affect the rights or obligations of Holders and the Trustee shall not be liable to any Holder by reason of its failure to mail such notice or any defect therein.

(g) If, following the giving of notice of mandatory tender of Variable Rate Series 2019C Subordinate Bonds, an event occurs which, in accordance with the terms of this Twenty-Fifth Supplemental Indenture, causes such mandatory tender not to occur, then (i) the Trustee

shall so notify the Holders of the Variable Rate Series 2019C Subordinate Bonds (at their addresses as they appear on the Bond Register on the date of such notice), via Electronic Means or by first-class mail, as soon as may be practicable after the Purchase Date, and (ii) the Tender Agent shall return to their Holders any of the Variable Rate Series 2019C Subordinate Bonds tendered to the Tender Agent in connection with such mandatory tender of the Variable Rate Series 2019C Subordinate Bonds.

Section 409. The Remarketing Agent.

(a) Each Remarketing Agent shall perform the duties of the Remarketing Agent pursuant to the Remarketing Agreement and this Twenty-Fifth Supplemental Indenture. Successor Remarketing Agents may be appointed from time to time by the Authority with the prior written consent of the Credit Facility Provider (which consent shall not be unreasonably withheld). The Remarketing Agents shall be corporations or other legal entities organized and doing business under the laws of the United States of America or of any state thereof, authorized under such laws to perform all duties imposed upon the Remarketing Agents by this Twenty-Fifth Supplemental Indenture, and shall be either (a) a member of the National Association of Securities Dealers, Inc. and registered as a Municipal Securities Dealer under the Securities Exchange Act of 1934, as amended, or (b) a national banking association, commercial bank or trust company. So long as the Variable Rate Series 2019C Subordinate Bonds are held in book-entry form at the Depository, each Remarketing Agent must be a Participant in the Depository with respect to the Variable Rate Series 2019C Subordinate Bonds.

(b) Each Remarketing Agent appointed in accordance with this Twenty-Fifth Supplemental Indenture shall designate its Designated Office and signify its acceptance of the duties and obligations imposed upon it as described herein by a written instrument of acceptance delivered to the Authority, the Trustee, the Tender Agent and any Credit Facility Provider, or by executing and delivering a Remarketing Agreement, in either case under which the Remarketing Agent will agree, particularly:

(i) to hold all moneys delivered to it hereunder for the purchase of the Variable Rate Series 2019C Subordinate Bonds in trust for the exclusive benefit of the Person or Persons that shall have so delivered such moneys until the Variable Rate Series 2019C Subordinate Bonds purchased with such moneys shall have been delivered to or for the account of such Person or Persons;

(ii) to keep such books and records as shall be consistent with prudent industry practice and to make such books and records available for inspection by the Authority, the Trustee, the Tender Agent and the Authority at all reasonable times;

(iii) to determine (A) the Daily Rates, Weekly Rates, Short-Term Rates and Long-Term Rates, and, pursuant to Section 403(j), during any Subsequent Index Rate Period, the Applicable Spread that will be used in determining the Index Rate for each Subsequent Index Interest Period, (B) if engaged as Remarketing Agent in connection with the conversion to Fixed Rate Bonds, the Fixed Rate(s), and give notice of such rates in accordance with Article IV;

(iv) to remarket Daily Rate Bonds, Weekly Rate Bonds, Short-Term Rate Bonds and Long-Term Rate Bonds at rates no higher than the rate of interest available under the Credit Facility, if a Credit Facility secures the Variable Rate Series 2019C Subordinate Bonds, and to remarket Short-Term Rate Bonds and Long-Term Rate Bonds for Short-Term Periods or Long-Term Rate Periods, as appropriate, no longer than interest is available under the Credit Facility if a Credit Facility secures the Variable Rate Series 2019C Subordinate Bonds all in accordance with Section 413;

(v) to offer for sale and use its best efforts to find purchasers for the Variable Rate Series 2019C Subordinate Bonds tendered for purchase, any such sale to be made in accordance with the terms of this Twenty-Fifth Supplemental Indenture;

(vi) to deliver to the Tender Agent all of the Variable Rate Series 2019C Subordinate Bonds held by it in accordance with the terms of this Twenty-Fifth Supplemental Indenture and the Remarketing Agreement; and

(vii) to perform such other duties and responsibilities (including with respect to Credit Facility Bonds) as are provided in this Twenty-Fifth Supplemental Indenture to be performed by a Remarketing Agent.

Notwithstanding the foregoing, a Remarketing Agent may be engaged for only certain types of Rate Periods, and in that event the Remarketing Agent shall not be required to perform the duties of the Remarketing Agent for any other type of Rate Period.

(c) A Remarketing Agent may at any time resign and be discharged of the duties and obligations described in this Twenty-Fifth Supplemental Indenture by giving at least 60 days' notice to the Authority, the Trustee, the Tender Agent, any Credit Facility Provider and each Rating Agency. A Remarketing Agent may be removed at any time upon the Written Request of the Authority and upon written notice to the Remarketing Agent, the Tender Agent, the Trustee and any Credit Facility Provider; provided, however, that no such resignation or removal shall be or become effective unless and until a successor Remarketing Agent shall have been appointed and accepted such appointment in accordance with subsection (a).

(d) If and so long as no successor Remarketing Agent is appointed by the Authority after the office of a Remarketing Agent becomes vacant, the Tender Agent or Trustee, at the expense of the Authority, may petition a court to appoint a successor Remarketing Agent.

(e) A Remarketing Agent may in good faith hold the Variable Rate Series 2019C Subordinate Bonds or any other form of indebtedness issued by the Authority; own, accept or negotiate any drafts, bills of exchange, acceptances or obligations thereof, and make disbursements therefor and enter into any commercial or business arrangement therewith; all without any liability on the part of the Remarketing Agent for any real or apparent conflict of interest by reason of any such actions.

Section 410. Sale of Variable Rate Series 2019C Subordinate Bonds by Remarketing Agent.

(a) Upon the receipt by a Remarketing Agent of (i) notice of tender of Daily Rate Bonds or Weekly Rate Bonds pursuant to Section 406, or (ii) notice of mandatory tender of the Variable Rate Series 2019C Subordinate Bonds pursuant to Section 408, the Remarketing Agent shall offer for sale and use its best efforts to solicit purchases of Variable Rate Series 2019C Subordinate Bonds subject to purchase on the Purchase Date at a price equal to the applicable purchase price.

(b) A Remarketing Agent shall direct that the proceeds of all purchases of the Variable Rate Series 2019C Subordinate Bonds solicited and arranged by the Remarketing Agent be paid to the Tender Agent (for deposit in the Remarketing Proceeds Account), at or prior to 12:00 p.m., New York City time, on the Purchase Date, in immediately available funds (and, promptly upon receipt thereof, the Tender Agent shall deposit such proceeds in the Remarketing Proceeds Account).

(c) [Reserved].

(d) A Remarketing Agent shall offer for sale and use its best efforts to arrange for the sale and remarketing of all Credit Facility Provider Bonds, prior to the sale and remarketing of any Variable Rate Series 2019C Subordinate Bonds, at a price equal to 100% of the principal amount thereof plus accrued and unpaid interest thereon (at the rate that would be borne by such Credit Facility Provider Bonds if such Credit Facility Provider Bonds were not Credit Facility Provider Bonds). In connection with each remarketing of Credit Facility Provider Bonds by the Remarketing Agent:

(i) The Remarketing Agent shall (A) provide to the Authority, the Credit Facility Provider, the Trustee and the Tender Agent not less than one Business Day's prior notice of such remarketing, and (B) pay, or cause to be paid to the Credit Facility Provider, by wire transfer of immediately available funds, the proceeds of such remarketing;

(ii) The Trustee shall (A) in consultation with the Credit Facility Provider, calculate the Credit Facility Provider Bonds Purchase Price, (B) in consultation with the Remarketing Agent, determine the amount of remarketing proceeds paid to the Credit Facility Provider by the Remarketing Agent, and (C) pay to the Credit Facility Provider, from moneys in the Debt Service Fund and by wire transfer of immediately available funds, the balance of the Credit Facility Provider Bonds Purchase Price owed to the Credit Facility Provider (representing the difference between the accrued interest on the Credit Facility Provider Bonds paid by the purchaser of the Credit Facility Provider Bonds and the accrued interest on those Credit Facility Provider Bonds at the Credit Facility Provider Rate);

(iii) The Trustee shall confirm with the Credit Facility Provider the receipt by that Credit Facility Provider of the Credit Facility Provider Bonds Purchase Price, the reinstatement of the Credit Facility in respect of such Credit Facility Provider Bonds and

the authorization of that Credit Facility Provider to release such Credit Facility Provider Bonds; and

(iv) After, and only after, receipt by the Trustee of confirmation by the Credit Facility Provider of the reinstatement of the Credit Facility to cover such Credit Facility Provider Bonds following remarketing thereof and authorization by that Credit Facility Provider of such transfer or such authentication and delivery, the Trustee shall (A) while a book-entry system is in effect with respect to the Variable Rate Series 2019C Subordinate Bonds, cause the ownership interest in such Credit Facility Provider Bonds to be transferred to or for the benefit of such purchaser or purchasers as are specified by the Remarketing Agent for such purpose, and (B) while a book-entry system is not in effect with the Depository with respect to the Variable Rate Series 2019C Subordinate Bonds, authenticate other Variable Rate Series 2019C Subordinate Bonds in lieu of such Credit Facility Provider Bonds and to deliver the same to or upon the instruction of the Remarketing Agent.

(e) A Remarketing Agent shall offer for sale and use its best efforts to arrange for the sale and remarketing of (i) all Variable Rate Series 2019C Subordinate Bonds subject to purchase on a Purchase Date that are purchased with moneys provided by the Authority to the Tender Agent for such purpose (as described in Section 407(c)(ii)), and (ii) all of the Variable Rate Series 2019C Subordinate Bonds that are purchased by the Authority pursuant to the Credit Facility and not surrendered by the Authority for cancellation.

Section 411. Delivery of Purchased Variable Rate Series 2019C Subordinate Bonds.

(a) Upon application of the moneys described in Section 407(d)(i) to the purchase of Variable Rate Series 2019C Subordinate Bonds on a Purchase Date pursuant to Section 407(d)(i) (and/or to the transfer thereof to the Undelivered Bond Payment Account on a Purchase Date pursuant to Section 407(e)), the Tender Agent shall cause the Trustee to register the transfer of Variable Rate Series 2019C Subordinate Bonds purchased therewith in the names of the purchasers thereof in accordance with information provided by the Remarketing Agent for such purpose and to have such transferred Variable Rate Series 2019C Subordinate Bonds available for delivery against payment therefor.

(b) Upon application of the moneys described in Section 407(d)(ii) to the purchase of Variable Rate Series 2019C Subordinate Bonds on a Purchase Date pursuant to Section 407(d)(ii) (and/or to the transfer thereof to the Undelivered Bond Payment Account on a Purchase Date pursuant to Section 407(e)), (i) the Variable Rate Series 2019C Subordinate Bonds purchased (or, in the case of such transfer, provided to be purchased) with such moneys shall constitute Credit Facility Provider Bonds (unless and until such Variable Rate Series 2019C Subordinate Bonds cease to be Credit Facility Provider Bonds as described in the definition thereof), and (ii) if a book-entry system is in effect with the Depository with respect to the Variable Rate Series 2019C Subordinate Bonds, the ownership interest in such Credit Facility Provider Bonds shall be transferred on the books of the Depository to or for the account of the Tender Agent or a Participant acting on behalf of the Tender Agent and the Tender Agent shall, and shall cause such Participant to, mark its own books and records to reflect the beneficial

ownership of such Credit Facility Provider Bonds by the Credit Facility Provider, and (iii) if a book-entry system is not in effect with the Depository with respect to the Variable Rate Series 2019C Subordinate Bonds, such Bonds shall be delivered by the Tender Agent to the Trustee for registration of transfer and shall be registered by the Trustee in the name of the Credit Facility Provider, or any nominee of the Credit Facility Provider, and delivered by the Trustee to the Tender Agent and held by the Tender Agent as the custodian of the Credit Facility Provider. The Tender Agent shall release and redeliver or transfer Credit Facility Provider Bonds (being remarketed by the Remarketing Agent) as provided in Section 410(d). Any other disposition of Credit Facility Provider Bonds shall be made only at the written direction or with the prior written consent of the Credit Facility Provider, subject to receipt by the Trustee of confirmation by the Credit Facility Provider of the reinstatement of the Credit Facility to cover such Credit Facility Provider Bonds.

(c) Upon the application of moneys described in Section 407(d)(iii) to the purchase of Variable Rate Series 2019C Subordinate Bonds on a Purchase Date pursuant to Section 407(d)(iii) (and/or to the transfer thereof to the Undelivered Bond Payment Account on a Purchase Date pursuant to Section 407(e)), the Variable Rate Series 2019C Subordinate Bonds purchased (or, in the case of such transfer, provided to be purchased) with such moneys shall be registered in the name of the Authority and shall, at the direction of the Authority, be delivered to the Trustee for cancellation (and canceled by the Trustee) or delivered to the Tender Agent for the account of the Authority and remarketed in accordance with Section 410(e).

(d) Any Variable Rate Series 2019C Subordinate Bonds canceled by the Trustee pursuant to this Section and any Variable Rate Series 2019C Subordinate Bonds surrendered by the Authority to the Trustee for cancellation shall be allocated to the next succeeding scheduled mandatory redemption obligation pursuant to Section 501(b) then as a credit against such future scheduled mandatory redemption obligation pursuant to Section 501(c) as the Authority may specify in a Written Request; provided, however, that there shall be first redeemed any Outstanding Credit Facility Provider Bonds. Prior to the Expiration Date, the Trustee shall notify the Credit Facility Provider of the aggregate principal amount of the Variable Rate Series 2019C Subordinate Bonds so canceled and shall submit to the Credit Facility Provider such documents, if any, as are required in accordance with the terms of the Credit Facility to cause the amounts available under the Credit Facility to be reduced in respect of such Variable Rate Series 2019C Subordinate Bonds so canceled.

Section 412. Credit Facility.

(a) The Trustee shall make Credit Facility Requests in accordance with Sections 407(c). The Trustee shall only draw upon a Credit Facility when that Credit Facility is in a stated amount not less than (i) the aggregate principal amount of the Variable Rate Series 2019C Subordinate Bonds, plus (ii) such number of days of interest as may accrue prior to any Interest Payment Date based on the Rate Period then in effect, and the Trustee shall not draw upon a Credit Facility that by its terms is not available during the Rate Period.

(b) The Trustee shall not terminate or reduce the amounts available under a Credit Facility except by reason of the redemption, cancellation and/or defeasance of the Variable Rate

Series 2019C Subordinate Bonds, or unless the Authority has properly furnished a Substitute Credit Facility, as provided in Section 413.

(c) The Authority shall maintain a Credit Facility for the Variable Rate Series 2019C Subordinate Bonds in effect in accordance with Section 413 herein at all times it is required to do so by this Section.

(d) The Authority may furnish a Substitute Credit Facility in substitution for any then existing Credit Facility for the Variable Rate Series 2019C Subordinate Bonds upon satisfaction of the conditions set forth in Section 413. The Trustee shall give notice to the Holders of the Variable Rate Series 2019C Subordinate Bonds (at their addresses as they appear on the registration books of the Trustee as of the date of such notice), via Electronic Means or by first-class mail, of the proposed substitution of a Substitute Credit Facility for the Credit Facility then in effect for the Variable Rate Series 2019C Subordinate Bonds and the related Substitution Date (stating the issuer or issuers and the term of such Substitute Credit Facility) at least 10 days prior to such Substitution Date. Such notice shall also constitute the notice of mandatory tender of the Variable Rate Series 2019C Subordinate Bonds on the related Substitution Date; provided, however, that, if the Substitution Date is more than 15 days prior to the Expiration Date of the Credit Facility being replaced, in addition to the information required by Section 408(d), such notice may state that such mandatory tender of the Variable Rate Series 2019C Subordinate Bonds will not occur if, on or prior to the proposed Substitution Date, the Trustee does not receive such Substitute Credit Facility, together with the supporting substitution documents. If, by reason of the conditions to such mandatory tender of the Variable Rate Series 2019C Subordinate Bonds (as stated in such notice), there is no mandatory tender of the Variable Rate Series 2019C Subordinate Bonds on the proposed Substitution Date, (i) the Tender Agent shall so notify the Trustee, (ii) the Trustee shall so notify the Holders of the Variable Rate Series 2019C Subordinate Bonds (at their addresses as they appear on the registration books of the Trustee as of the date of such notice) via Electronic Means or by first-class mail, and (iii) the Tender Agent shall return to their Holders any of the Variable Rate Series 2019C Subordinate Bonds tendered to the Tender Agent in connection with such mandatory tender of the Variable Rate Series 2019C Subordinate Bonds.

(e) No Credit Facility is required if the requirements of Section 413 are met for the expiration of any Credit Facility without substitution of a Substitute Credit Facility.

Section 413. Substitute Credit Facility.

(a) During any time that Variable Rate Series 2019C Subordinate Bonds are Daily Rate Bonds or Weekly Rate Bonds, the Authority shall maintain a Credit Facility for the Variable Rate Series 2019C Subordinate Bonds under which the Credit Facility Provider is required to purchase or provide funds for the purchase of the Variable Rate Series 2019C Subordinate Bonds tendered for purchase in accordance with this Twenty-Fifth Supplemental Indenture. The Credit Facility shall be issued by a bank, trust company, national banking association, insurance company or other financial services company or entity or the Authority, in an amount not less than (i) the aggregate principal amount of all Outstanding Variable Rate Series 2019C Subordinate Bonds, plus (ii) an amount equal to at least 34 days' interest on all Outstanding Variable Rate Series 2019C Subordinate Bonds at the Maximum Rate, plus (iii) in

the case of a Credit Facility that does not automatically reinstate coverage for interest following a drawing to pay interest on the Variable Rate Series 2019C Subordinate Bonds, the number of days during which the Variable Rate Series 2019C Subordinate Bonds may continue to bear interest until purchased upon mandatory tender under Section 408(a)(iv) following a drawing in which the Credit Facility Provider may notify the Trustee that interest coverage has not reinstated. The Authority will not voluntarily terminate a Credit Facility while Variable Rate Series 2019C Subordinate Bonds are Daily Rate Bonds or Weekly Rate Bonds without at least 30 days' prior written notice to the Trustee and without providing for a Substitute Credit Facility (including the Authority providing its own Credit Facility) prior to the effective date of such termination.

(b) At any time the Authority may furnish a Substitute Credit Facility subject to the following limitations and the other limitations set forth in this Section:

(i) The principal amount of the Substitute Credit Facility must be not less than that required by Section 413(a).

(ii) The term of the Substitute Credit Facility must be at least 90 days.

(iii) On or prior to the effective date of a Substitute Credit Facility, the Authority shall furnish to the Trustee (i) an Opinion or Opinions of Counsel acceptable to the Trustee to the effect that the Credit Facility has been duly authorized, executed and delivered by the Credit Facility Provider and is a valid and binding obligation of the Credit Facility Provider enforceable in accordance with its terms (subject as to enforceability to standard exceptions respecting bankruptcy, insolvency and similar laws and principles of equity) and that the exemption of the Variable Rate Series 2019C Subordinate Bonds (or any securities evidenced thereby) from the registration requirements of the Securities Act of 1933, as amended, and the exemption of the Indenture from qualification under the Trust Indenture Act of 1939, as amended, shall not be impaired by such Substitute Credit Facility or that the registration or qualification requirements of such acts have been satisfied, and (ii) if such Bonds are then rated, notice from the Rating Agency to the effect that such Rating Agency has reviewed the proposed Substitute Credit Facility and the provision of such Substitute Credit Facility will not, by itself, result in (A) a permanent withdrawal of the rating on the Bonds or (B) a reduction in the then current rating on the Series 2019C Subordinate Bonds.

(iv) The Authority shall give written notice to the Trustee, the Tender Agent, the Credit Facility Provider, the Remarketing Agent and each Rating Agency, not less than 30 days prior to the Substitution Date and not less than 30 days prior to the Expiration Date of a Credit Facility then in effect, specifying that the Authority intends to replace the Credit Facility with a Substitute Credit Facility on or before the Expiration Date of the Credit Facility then in effect.

(v) The Authority shall cause to be delivered to the Trustee not less than 30 days prior to the Expiration Date of an existing Credit Facility a commitment by the Credit Facility Provider that will issue the Substitute Credit Facility. If the Substitution Date for that Substitute Credit Facility is less than 15 days prior to the Expiration Date

for the existing Credit Facility, the Authority shall provide the Substitute Credit Facility or an irrevocable commitment therefor together with the opinion described in Section 413(b)(iii) not later than 15 days prior to the Expiration Date.

(vi) If there are outstanding any Credit Facility Provider Bonds, the Substitute Credit Facility must provide for the purchase of those Bonds.

(c) The Authority may provide its own Credit Facility for the Variable Rate Series 2019C Subordinate Bonds if the Authority has agreed to pay the Purchase Price of any tendered Variable Rate Series 2019C Subordinate Bonds itself. As a result, any references herein to the Credit Facility Provider of the Variable Rate Series 2019C Subordinate Bonds or to the Credit Facility of the Variable Rate Series 2019C Subordinate Bonds shall be ignored or shall be construed as referencing the Authority for as long as the Authority has agreed to pay the Purchase Price of any tendered Variable Rate Series 2019C Subordinate Bonds itself. References to a Credit Facility Request or a “draw” or “drawing” (or a similar term) on the Credit Facility, for example, shall be construed in the absence of a Credit Facility to be a notice to the Authority of the need to provide funds for the purchase of the Variable Rate Series 2019C Subordinate Bonds. If the Authority provides its own Credit Facility, then the Variable Rate Series 2019C Subordinate Bonds are subject to mandatory tender under the same terms as that of providing a Substitute Credit Facility herein.

(d) In the case of mandatory tender because of the delivery of a Substitute Credit Facility in substitution for the existing Credit Facility, the Trustee shall submit any necessary Credit Facility Request to the existing Credit Facility Provider on and prior to the Substitution Date and shall not draw upon the Substitute Credit Facility that will become effective on or after such Substitution Date, and the Trustee shall not surrender the existing Credit Facility until the Purchase Price of the Variable Rate Series 2019C Subordinate Bonds has been paid in full.

Section 414. Subrogation Rights of Credit Facility Provider; Credit Facility Provider Bonds; Fees.

(a) To the extent that proceeds of a Credit Facility Request are used to pay principal of or interest on the Variable Rate Series 2019C Subordinate Bonds (“Debt Service Charges”), and the amount of such Credit Facility Request is not subsequently reimbursed to such Credit Facility Provider pursuant to the provisions of the Reimbursement Agreement, as long as the amount of such Credit Facility Request has not been reimbursed, the Credit Facility Provider shall be subrogated to and assigned the rights of and be deemed a subrogee and assignee of the rights of the Holders of those Variable Rate Series 2019C Subordinate Bonds to receive such Debt Service Charges. For purposes of the subrogation and assignment rights of a Credit Facility Provider hereunder, (a) any reference to the Holders of those Variable Rate Series 2019C Subordinate Bonds shall mean the Credit Facility Provider, (b) any Debt Service Charges on the Variable Rate Series 2019C Subordinate Bonds paid with proceeds of the Credit Facility shall be deemed to be unpaid Debt Service Charges payable under and secured as Subordinate Debt by the lien of the Indenture, and (c) the Credit Facility Provider may exercise any rights it would have as Holder of the Variable Rate Series 2019C Subordinate Bonds. The subrogation rights granted to such Credit Facility Provider in this Twenty-Fifth Supplemental Indenture are not intended to be exclusive of any other remedy or remedies available to a Credit Facility Provider,

and such subrogation rights shall be cumulative and in addition to every other remedy given under the Indenture, under the Reimbursement Agreement or under any other agreement or instrument with respect to the reimbursement of moneys paid by a Credit Facility Provider under a Credit Facility or with respect to security for the Reimbursement Obligations, and every other remedy now or hereafter existing at law or in equity. The Trustee, at the expense of the Authority, shall register in the name of the Credit Facility Provider the ownership of that portion of the Variable Rate Series 2019C Subordinate Bonds the principal of which was paid by such Credit Facility Provider from the proceeds of a Credit Facility Request that has not been reimbursed by the Authority in accordance with the Reimbursement Agreement. The Trustee also shall take such action, at the expense of the Authority, as is reasonably necessary to evidence the Credit Facility Provider as the subrogee and assignee of the Holders of the Variable Rate Series 2019C Subordinate Bonds for which interest payments have been made by the Credit Facility Provider from the proceeds of a Credit Facility Request that has not been reimbursed by the Authority in accordance with the Reimbursement Agreement.

(b) To the extent that proceeds of a Credit Facility Request are used to pay the Purchase Price of the Variable Rate Series 2019C Subordinate Bonds and the amount of such Credit Facility Request is not subsequently reimbursed to the Credit Facility Provider pursuant to the provisions of the Reimbursement Agreement, those Variable Rate Series 2019C Subordinate Bonds shall be Credit Facility Provider Bonds, and the transfer and assignment of property to the Trustee pursuant to the granting clauses hereof and in the Indenture, and all covenants, agreement and other obligations of the Trustee to the Holders shall continue to exist and shall run to the benefit of the Credit Facility Provider, and such Credit Facility Provider Bonds shall bear interest and be payable and secured as provided in this Twenty-Fifth Supplemental Indenture and in the Reimbursement Agreement.

(c) Except as provided in subsections (a) and (b) above, all fees, expenses and other amounts payable by the Authority to the Credit Facility Provider under the Reimbursement Agreement shall be treated as Operating Expenses under the Indenture payable from the Revenue Fund.

Section 415. Credit Facility Provider Deemed Holder of Variable Rate Series 2019C Subordinate Bonds.

Notwithstanding any provision to the contrary in this Twenty-Fifth Supplemental Indenture, and provided that (a) the Credit Facility Provider is and remains solvent and not a party to any proceeding for the rehabilitation, liquidation, conservation or dissolution of the Credit Facility Provider, (b) the Credit Facility is in full force and effect, and (c) the Credit Facility Provider shall have made and be continuing to make all payments pursuant to Credit Facility Requests, then the Credit Facility Provider shall be deemed to be the Holder of all the Variable Rate Series 2019C Subordinate Bonds and may act in the place of the Holders of the Variable Rate Series 2019C Subordinate Bonds for purposes of making requests and giving directions and consents to the Trustee and exercising any and all other rights which the holders of those Variable Rate Series 2019C Subordinate Bonds would have the power and authority to make, give, or exercise as Holders of Subordinate Debt under Article IX hereof as a result of the occurrence and continuation of an Event of Default, and making or giving any other consent,

direction, or approval permitted or required under the Indenture to be made or given by Holders of the Variable Rate Series 2019C Subordinate Bonds.

Section 416. Trustee Provisions.

(a) While any Credit Facility is in effect, the Trustee may seek indemnification pursuant to the Indenture before suffering, taking or omitting any action under the Indenture unless such action is directly related to (i) paying the Purchase Price of or Debt Service Charges on the Variable Rate Series 2019C Subordinate Bonds when due, (ii) submitting Credit Facility Requests, or (iii) exercising its obligations in connection with a mandatory tender of the Variable Rate Series 2019C Subordinate Bonds under Section 408, and (iv) exercising its obligations in connection with the redemption of Variable Rate Series 2019C Subordinate Bonds. The Trustee may not use the proceeds from a Credit Facility Request or remarketing proceeds to pay any fees or costs of the Trustee.

(b) Upon resignation by or removal of the Trustee in accordance with Sections 1106 or 1107 of the Master Indenture, the Trustee shall transfer any Credit Facility to the successor Trustee. Such resignation or removal shall not take effect until the appointment of a successor Trustee and acceptance by the successor Trustee of such trusts as required by Article XI of the Master Indenture and transfer to the successor Trustee of any Credit Facility then outstanding.

(c) While a Credit Facility is in effect with respect to the Variable Rate Series 2019C Subordinate Bonds, the Trustee shall act as Tender Agent for the Variable Rate Series 2019C Subordinate Bonds.

Section 417. Modification of Dates and Times.

Notwithstanding any other provision of this Twenty-Fifth Supplemental Indenture, and with respect to this Article IV, the dates and times by which notices are to be given and draws, transfers, disbursements and deposits are to be made may be modified upon written approval by the Trustee of a letter of instructions from the Authority, any Credit Facility Provider and the Remarketing Agent setting forth the preferred dates and times and written confirmation from each of the Rating Agencies that have rated the Variable Rate Series 2019C Subordinate Bonds that such changes will not affect the rating(s) on the Variable Rate Series 2019C Subordinate Bonds.

Section 418. Particular Defeasance Provisions.

(a) If the Variable Rate Series 2019C Subordinate Bonds are to be deemed paid or discharged pursuant to Article XII of the Master Indenture (“Defeased Variable Rate Series 2019C Subordinate Bonds”), and the Rate Period for the Variable Rate Series 2019C Subordinate Bonds ends prior to the maturity or redemption date to which provision for payment of Debt Services Charges is to be made, then for purposes of calculating those Debt Service Charges, interest on the Variable Rate Series 2019C Subordinate Bonds shall be calculated at the Maximum Rate for each day after the end of the Rate Period and prior to such maturity or redemption date. The Defeased Variable Rate Series 2019C Subordinate Bonds will continue to be subject to all payment provisions under this Twenty-Fifth Supplemental Indenture until and including the maturity or redemption date, as applicable. Debt Service Charges on Defeased

Variable Rate Series 2019C Subordinate Bonds subject to a remarketing shall not be paid with proceeds from a draw on a Credit Facility. At such time as the Debt Service Charges are paid on any Defeased Variable Rate Series 2019C Subordinate Bonds that were unsuccessfully remarketed, such Defeased Variable Rate Series 2019C Subordinate Bonds shall be cancelled.

(b) If and to the extent that payment of Debt Service Charges on Variable Rate Series 2019C Subordinate Bonds has been made from a draw on the Credit Facility then, so long as the Authority owes any amounts to the Credit Facility Provider pursuant to the Reimbursement Agreement (as certified in writing by the Credit Facility Provider to the Trustee): (a) the lien of the Indenture shall not be discharged; (b) the Credit Facility Provider shall be subrogated to the extent of such amounts owed by the Authority to that Credit Facility Provider to all rights of the Holders of the Variable Rate Series 2019C Subordinate Bonds to enforce the payment of the Variable Rate Series 2019C Subordinate Bonds from the Net Revenues and all other rights of the Holders under the Variable Rate Series 2019C Subordinate Bonds and the Indenture; (c) the Credit Facility Provider shall be entitled in its own right upon payment in full of Debt Service Charges on the Variable Rate Series 2019C Subordinate Bonds to exercise all rights of enforcement and remedies set forth in Article IX of this Twenty-Fifth Supplemental Indenture of the Master Indenture; (d) the Holders will be deemed paid to the extent of money drawn by the Trustee under the Credit Facility; and (e) the Trustee shall sign, execute and deliver all documents or instruments and do all things that may be reasonably required by the Credit Facility Provider to effect the Credit Facility Provider's subrogation of rights of enforcement and remedies set forth in Article IX of this Twenty-Fifth Supplemental Indenture in accordance with the intent of this Section.

ARTICLE V

REDEMPTION OF VARIABLE RATE SERIES 2019C SUBORDINATE BONDS

Section 501. Redemption of the Variable Rate Series 2019C Subordinate Bonds.

The Variable Rate Series 2019C Subordinate Bonds shall be subject to redemption in Authorized Denominations prior to maturity under the circumstances, in the manner and subject to the conditions provided in this Section and in the form of the Variable Rate Series 2019C Subordinate Bonds.

(a) Optional Redemption. The Variable Rate Series 2019C Subordinate Bonds are subject to redemption and payment prior to maturity, in whole or in part, at the option of the Authority, upon written direction from the Authorized Official to the Trustee, as follows:

(i) Daily Rate Bonds and Weekly Rate Bonds are subject to optional redemption on any date at the redemption price of 100% of the principal amount thereof, plus accrued interest to the redemption date.

(ii) Short-Term Rate Bonds are subject to optional redemption on any Interest Payment Date at the redemption price of 100% of the principal amount thereof, plus accrued interest to the redemption date.

(iii) Long-Term Rate Bonds are subject to optional redemption, on any date or dates specified in the applicable Notice of Conversion (or for the Initial Period, in the Certificate of Award), as an optional redemption date, at a redemption price equal to 100% of the principal amount redeemed, plus interest accrued to the redemption date.

(iv) Index Rate Bonds are subject to optional redemption, in whole or in part, at a redemption price equal to the principal amount of the Index Rate Bonds to be redeemed plus interest accrued to, but not including, the redemption date on any date or dates specified in the applicable Notice of Conversion as an optional redemption date.

(v) Fixed Rate Bonds are subject to optional redemption at any time on and after the no-call period shown below, at the respective redemption prices set out below, plus accrued interest thereon to the redemption date (unless an alternate optional redemption schedule is determined pursuant to this subparagraph (v)):

Period to Final Maturity	No Call Period	Redemption Price
Greater than or equal to 11 Years	8 years	100%
Greater than or equal to 8 years and less than 11 years	6 years	100%
Greater than or equal to 4 years and less than 8 years	3 years	100%
Less than 4 years	No optional redemption	N/A

Notwithstanding the foregoing, if before the first day of a Fixed Rate Period an alternate optional redemption schedule is delivered by the Authority to the Trustee setting forth redemption dates and redemption prices during that Fixed Rate Period together with a certificate of the Remarketing Agent certifying that the redemption terms set forth therein are advantageous for the Remarketing Agent to remarket those Bonds for that period and a Favorable Opinion of Bond Counsel, then the Variable Rate Series 2019C Subordinate Bonds shall be subject to redemption during that period in accordance with that optional redemption schedule rather than the schedule set forth above, provided that ten (10) years shall be the longest period that any Variable Rate Series 2019C Subordinate Bonds shall not be subject to optional redemption.

If a Credit Facility in the form of a direct pay bank letter of credit is in effect for the Variable Rate Series 2019C Subordinate Bonds, the Trustee shall call the Variable Rate Series 2019C Subordinate Bonds for optional redemption only if the Trustee, prior to the mailing of the notice of redemption as provided in Section 502, is entitled to draw on that Credit Facility in an aggregate amount sufficient to pay the redemption price of the Variable Rate Series 2019C Subordinate Bonds called for redemption, plus accrued and unpaid interest.

[(b) Mandatory Sinking Fund Redemption Requirements of Variable Rate Series 2019C Subordinate Bonds. The Variable Rate Series 2019C Subordinate Bonds shall be

redeemed by the Authority on October 1 (or, if the Variable Rate Series 2019C Subordinate Bonds are Daily Rate Bonds or Weekly Rate Bonds and that date is not an Interest Payment Date, on the Interest Payment Date immediately succeeding that date) in the years and the amounts set forth below (the Mandatory Sinking Fund Redemption Requirements) at a redemption price equal to the principal amount thereof plus accrued interest to the redemption date, without premium (subject to any adjustment in connection with a conversion of the interest rate to a Fixed Rate in accordance with this Twenty-Fifth Supplemental Indenture).]

**Mandatory Sinking Fund Redemption Requirements
for SubSeries 2019C Subordinate Bonds**

<u>Year</u>	<u>Amount</u>
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(c) Credits Against Scheduled Mandatory Sinking Fund Redemption Requirements. At the option of the Authority, to be exercised by delivery of a certificate of the Authorized Official to the Trustee on or before the 45th day next preceding any scheduled mandatory redemption date, the Authority may (1) deliver to the Trustee for cancellation Variable Rate Series 2019C Subordinate Bonds subject to scheduled mandatory redemption on that date or portions thereof in Authorized Denominations or (2) specify a principal amount of Variable Rate Series 2019C Subordinate Bonds or portions thereof in Authorized Denominations which prior to that date have been purchased or redeemed (otherwise than pursuant to this Section) and canceled by the Trustee at the request of the Authority and not theretofore applied as a credit against any scheduled mandatory redemption payment of Variable Rate Series 2019C Subordinate Bonds. Each Variable Rate Series 2019C Subordinate Bond or portion thereof so delivered or previously redeemed shall be credited by the Trustee at the principal amount thereof against the obligation of the Authority to redeem Variable Rate Series 2019C Subordinate Bonds on the scheduled mandatory redemption date or dates designated in writing to the Trustee by the Authorized Official occurring at least 45 days after delivery of such designation to the Trustee, provided that if no such designation is made, such credit shall not be credited against such obligation.

(d) Special Mandatory Redemption of Credit Facility Provider Bonds. Credit Facility Provider Bonds shall be subject to special mandatory redemption upon the written direction to the Trustee from the Credit Facility Provider on the date and in the amount set forth in the Reimbursement Agreement with respect to any required principal amortization of Credit Facility Provider Bonds or upon an event of default under the Reimbursement Agreement.

Section 502. Notice of Redemption.

The Trustee shall cause notice of any redemption of Variable Rate Series 2019C Subordinate Bonds to be (i) mailed to the Holders of all Variable Rate Series 2019C Subordinate Bonds to be redeemed at the registered addresses appearing in the Register, (ii) transmitted by Electronic Means to each Depository and to the Electronic Municipal Market Access system of the Municipal Securities Rulemaking Board; provided however, failure to deliver notice as described in (ii) shall not affect the validity of the redemption of any Variable Rate Series 2019C Subordinate Bond. Each such notice shall (i) be sent not more than 45 nor fewer than 15 calendar days (30 days for Long-Term Rate Bonds or Fixed Rate Bonds) prior to the date fixed for redemption, (ii) identify the Bonds to be redeemed (specifying the CUSIP numbers, if any, assigned to the Variable Rate Series 2019C Subordinate Bonds), (iii) specify the redemption date and the redemption price, (iv) set forth the name, address and telephone number of the person from whom information pertaining to the redemption may be obtained, and (v) state that on the redemption date the Variable Rate Series 2019C Subordinate Bonds called for redemption will be payable at the Designated Office of the Trustee, that from that date interest will cease to accrue, and that no representation is made as to the accuracy or correctness of the CUSIP numbers printed therein or on the Variable Rate Series 2019C Subordinate Bonds. No defect affecting any Variable Rate Series 2019C Subordinate Bond, whether in the notice of redemption or the delivery thereof (including any failure to mail such notice), shall affect the validity of the redemption proceedings for any other Variable Rate Series 2019C Subordinate Bonds.

If at the time of mailing of notice of an optional redemption of Variable Rate Series 2019C Subordinate Bonds there has not been deposited with the Trustee moneys sufficient to redeem all Variable Rate Series 2019C Subordinate Bonds called for such redemption, then such notice shall state that the redemption is conditional upon the deposit of moneys sufficient for the redemption with the Trustee and satisfaction of such requirements not later than the opening of business on the redemption date, and such notice will be of no effect and such Variable Rate Series 2019C Subordinate Bonds shall not be redeemed unless such moneys or such Direct Obligations are so deposited.

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.

Section 503. Partial Redemption.

If fewer than all of the Variable Rate Series 2019C Subordinate Bonds that are stated to mature on different dates are called for redemption at one time, those Variable Rate Series 2019C Subordinate Bonds that are called shall be designated by the Authority; provided, that there shall be first redeemed any Credit Facility Provider Bonds. If fewer than all of the Variable Rate Series 2019C Subordinate Bonds of a single maturity are to be redeemed, the selection of the Variable Rate Series 2019C Subordinate Bonds to be redeemed, or portions thereof in amounts of \$5,000 or any integral multiple thereof, so long as the Variable Rate Series 2019C Subordinate Bonds remain in book-entry form, shall be made by the Depository (or any successor Depository) in accordance with the Depository's procedures and otherwise will be made as specified by and selected at the sole discretion of the Authority. In the case of a partial

redemption of the Variable Rate Series 2019C Subordinate Bonds by lot when the Variable Rate Series 2019C Subordinate Bonds of Authorized Denominations greater than \$5,000 are then outstanding, each \$5,000 unit of principal thereof shall be treated as though it were a separate Variable Rate Series 2019C Subordinate Bond of the denomination of \$5,000.

If it is determined that one or more, but not all of the \$5,000 units of principal amount represented by a Variable Rate Series 2019C Subordinate Bond are to be called for redemption, then upon notice of redemption of a \$5,000 unit or units the Holder of that Variable Rate Series 2019C Subordinate Bond may, but is not required to surrender the Variable Rate Series 2019C Subordinate Bond to the Trustee (a) for payment of the redemption price of the \$5,000 unit or units called for redemption (including without limitation, the interest accrued to the date fixed for redemption and any premium), and (b) for issuance, without charge to the Holder thereof, of a new Variable Rate Series 2019C Subordinate Bond or Bonds, of any authorized denomination or denominations in an aggregate principal amount equal to the unmatured and unredeemed portion of, and bearing interest at the same rate and maturing on the same date or dates as, the Variable Rate Series 2019C Subordinate Bond surrendered.

Section 504. Payment of Redeemed Variable Rate Series 2019C Subordinate Bonds.

Notice having been mailed in the manner provided in Section 502, and moneys having been deposited with the Trustee sufficient to pay the redemption price, the Variable Rate Series 2019C Subordinate Bonds and portions thereof called for redemption shall become due and payable on the redemption date, and upon presentation and surrender thereof at the place or places specified in that notice, shall be paid at the redemption price, plus interest accrued to the redemption date.

If the moneys for the redemption of all of the Variable Rate Series 2019C Subordinate Bonds and portions thereof to be redeemed, together with interest accrued thereon to the redemption date, is held by the Trustee on the redemption date, so as to be available therefor on that date and if notice of redemption has been deposited in the mail as aforesaid, then from and after the redemption date those Variable Rate Series 2019C Subordinate Bonds and portions thereof called for redemption shall cease to bear interest and no longer shall be considered to be Outstanding under the Indenture. If those moneys shall not be so available on the redemption date, or that notice shall not have been deposited in the mail as aforesaid, those Variable Rate Series 2019C Subordinate Bonds and portions thereof shall continue to bear interest, until they are paid, at the same rate as they would have borne had they not been called for redemption.

All moneys held by the Trustee for the redemption of particular Variable Rate Series 2019C Subordinate Bonds shall be held in trust for the account of the Holders thereof and shall be paid to them, respectively, upon presentation and surrender of those Variable Rate Series 2019C Subordinate Bonds.

Section 505. Purchase in Lieu of Redemption.

By their acceptance of the Variable Rate Series 2019C Subordinate Bonds, the Holders irrevocably grant to the Authority the option to purchase any Variable Rate Series 2019C

Subordinate Bond which is redeemable by optional redemption on any date on which the Variable Rate Series 2019C Subordinate Bond is redeemable at a purchase price no less than the redemption price to be paid to Holders upon optional redemption. The Authority may exercise such option by delivering written direction to the Trustee in time for the Trustee thereupon to give the Holders of the Variable Rate Series 2019C Subordinate Bonds to be purchased notice of such purchase in the manner specified in the Indenture as though such purchase were a redemption, and the Trustee shall thereupon do so, and the purchase of such Variable Rate Series 2019C Subordinate Bonds shall be mandatory and enforceable against the Holders. On the date fixed for purchase pursuant to any exercise of such option, the Authority shall pay the purchase price of the Variable Rate Series 2019C Subordinate Bonds then being purchased to the Trustee in immediately available funds, and the Trustee shall pay the same to the Holders of such Variable Rate Series 2019C Subordinate Bonds against delivery. Following such purchase, the Trustee shall cause such Variable Rate Series 2019C Subordinate Bonds to be registered in the name of the Authority or its nominee and shall deliver them to the Authority or its nominee. In the case of the purchase of less than all of the Variable Rate Series 2019C Subordinate Bonds, the particular Variable Rate Series 2019C Subordinate Bonds to be purchased shall be selected in accordance with the provisions of the Master Indenture as though such purchase were a redemption; or in such other manner as the Authority shall direct, provided such selection method is described in the Written Request to the Trustee. No purchase of Variable Rate Series 2019C Subordinate Bonds pursuant to this paragraph shall operate to extinguish the indebtedness evidenced by the purchased Variable Rate Series 2019C Subordinate Bonds. Notwithstanding the foregoing, no purchase shall be made pursuant to the provisions of this paragraph unless the Authority shall have delivered to the Trustee concurrently therewith a Favorable Opinion of Bond Counsel with respect to such purchase.

ARTICLE VI

APPLICATION OF PROCEEDS OF SERIES 2019C SUBORDINATE BONDS

(a) The net proceeds of the Series 2019C Subordinate Bonds in the amount of \$ _____, which represents the par amount of the Series 2019C Subordinate Bonds less Underwriter's discount, at the request and direction of the Authority shall be applied as follows:

(1) \$ _____ shall be deposited in the Series 2019C Construction Account of the Construction Fund and used to pay Costs of the System.

(2) \$ _____ shall be deposited in the Series 2019C Costs of Issuance Subaccount of the Series 2019C Construction Account of the Construction Fund and used to pay costs of issuance.

[ADD DEPOSITS AS NECESSARY]

ARTICLE VII

FUNDS AND ACCOUNTS

Section 701. Series 2019C Construction Account.

In the Construction Fund, there shall be established a Series 2019C Construction Account and, within that Account, a Series 2019C Costs of Issuance Subaccount. The portions of the proceeds of the Series 2019C Subordinate Bonds specified in Section 601(a)(2) shall be deposited in the Series 2019C Costs of Issuance Subaccount and used to pay costs of issuance related to the Series 2019C Subordinate 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 2019C Subordinate Bond proceeds remaining in excess of the amount to be reserved for payment of unpaid costs of issuance shall, as directed by the Authority, either (i) be deposited in the Series 2019C Construction Account of the Construction Fund and used to pay Costs of the System, or (ii) be deposited in the Subordinate Bond Fund to be used solely to pay principal of and interest on the Series 2019C Subordinate Bonds, in either case subject to the condition of a Favorable Opinion of Bond Counsel.

In connection with the Authority's causing a Credit Facility to be delivered to the Trustee, the Trustee shall establish a Credit Facility Account for the purpose of receiving and disbursing such funds as are required to be paid to the Credit Facility Provider other than from the Series 2019C Subordinate Bonds Interest Subaccount.

Section 702. Series 2019C Subordinate Bonds Subaccounts in the Subordinate Interest Account and Subordinate Principal Account.

(a) Within the Subordinate Interest Account there shall be established a "Series 2019C Subordinate Bonds Interest Subaccount." Within the Subordinate Principal Account there shall be established a "Series 2019C Subordinate Bonds Principal Subaccount."

(b) In accordance with Section 604(e) of the Master Indenture, Net Revenues shall be deposited in the Series 2019C Subordinate Bond Interest Subaccount (i) 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 for any Series 2019C Subordinate Bond that bears interest payable semi-annually, in an amount equal to one-sixth (1/6) of the interest due and payable on such Series 2019C Subordinate Bonds on such Interest Payment Date; and (ii) 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 for any Series 2019C Subordinate Bond that bears interest more frequently than semi-annually, in an amount equal to the interest due and payable on such Series 2019C Subordinate Bonds on such Interest Payment Date.

(c) In accordance with Section 604(e) of the Master Indenture, Net Revenues shall be deposited in the Series 2019C Subordinate Bonds Principal Subaccount (i) on or prior to the last Business Day of each of the twelve months prior to any month in which principal of Series 2019C Subordinate 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 2019C Subordinate Bonds in such month; and (ii) on or prior to the last Business Day of each month prior to any month in which principal of Series 2019C Subordinate Bonds is payable on their stated maturity date or pursuant to mandatory redemption requirements, any amount that may be required to supplement the amounts deposited therein pursuant to the preceding clause (i) to cause the balance in the Series 2019C Subordinate Bonds Principal Subaccount to suffice for the payment of the principal due on that maturity or mandatory redemption date.

ARTICLE VIII

SECURITY FOR SERIES 2019C SUBORDINATE BONDS

Section 801. Security for Series 2019C Subordinate Bonds.

The Series 2019C Subordinate Bonds shall be secured as Subordinate Debt under the Indenture, including, without limitation, by a pledge of: (i) 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 Subordinate Debt, including, without limitation, any other Subordinate Debt that the Authority may issue in the future, without preference, priority or distinction of any Series 2019C Subordinate Bond over any other Series 2019C Subordinate Bond or of any Subordinate Debt over any other Subordinate Debt, as provided in the Indenture; and (ii) the moneys and Permitted Investments in the Subordinate Bond Fund on a parity with the pledge of Net Revenues that secures other Subordinate Debt, including, without limitation, any other Subordinate Debt that the Authority may issue in the future, without preference, priority or distinction of any Series 2019C Subordinate Bond over any other Series 2019C Subordinate Bond or of any Subordinate Debt over any other Subordinate Debt, as provided in the Indenture.

ARTICLE IX

DEFAULTS AND REMEDIES

Section 901. Application of Article IX and Other Remedies Provisions of the Master Indenture.

The Series 2019C Subordinate Bonds do not constitute “Bonds” under the Master Indenture. Accordingly, the provision of Article IX of the Master Indenture that confer certain rights upon the Holders of Bonds or a specified percentage thereof do not apply to the Series 2019C Subordinate Bonds or to the Series 2019C Subordinate Bondholders. Pursuant to Section 305 of the Master Indenture, the Series 2019C Subordinate Bonds, as Subordinate Debt, may not be accelerated if any Senior Debt is outstanding.

Section 902. Rights of Series 2019C Subordinate Bondholders Upon Occurrence of Events of Default.

In addition to and in furtherance and implementation of the rights that Series 2019C Subordinate Bondholders have under the penultimate paragraph of Section 906 of the Master

Indenture, Sections 903 through 911, inclusive, of this Twenty-Fifth Supplemental Indenture shall apply to the Series 2019C Subordinate Bonds.

Section 903. Events of Default.

Each of the following events shall be a Series 2019C Subordinate Bond Event of Default:

(a) Default in the due and punctual payment of the principal of or premium, if any, on any Series 2019C Subordinate Bond (whether at maturity or call for redemption);

(b) Default in the due and punctual payment of the interest on any Series 2019C Subordinate Bond;

(c) Failure of the Authority to make the deposits required by subsection (e) or subsection (f) of Section 604 of the Master Indenture at the time and in the amount required from Net Revenues available for such deposit under the Indenture; or

(d) Failure of the Trustee to apply moneys in accordance with the penultimate paragraph of Section 906 of the Master Indenture.

(e) If the Series 2019C Subordinate Bonds are Index Rate Bonds and have been designated Hard Tender Index Rate Bonds, default in the due and punctual payment of the Purchase Price of any Series 2019C Subordinate Bond.

(f) If the Series 2019C Subordinate Bonds are Long-Term Rate Bonds and have been designated Hard Tender Long-Term Rate Bonds, default in the due and punctual payment of the Purchase Price of any such Series 2019C Subordinate Bonds.

Section 904. Remedies of Series 2019C Subordinate Bondholders.

Upon the occurrence and continuation of a Series 2019C Subordinate Bond Event of Default, the Trustee may, and if requested by the holders of not less than 25% in aggregate principal amount of outstanding Series 2019C Subordinate Bonds and if indemnified to its reasonable satisfaction, shall proceed to protect and enforce their rights by mandamus or other suit, action or proceeding at law or in equity, including an action for specific performance.

No remedy conferred by this Indenture upon or reserved to the Trustee and Series 2019C Subordinate Bondholders is intended to be exclusive of any other remedy, but each such remedy shall be cumulative and shall be in addition to any other remedy given to the Trustee and Series 2019C Subordinate Bondholders hereunder or now or hereafter existing at law, in equity or by statute.

No delay or omission to exercise any right or power accruing upon any default or Series 2019C Subordinate Bond Event of Default shall impair any such right or power or shall be construed to be a waiver of any such default or Series 2019C Subordinate Bond Event of Default or acquiescence therein, and every such right and power may be exercised from time to time and as often as may be deemed expedient.

No waiver of any default or Series 2019C Subordinate Bond Event of Default hereunder by the Trustee or Series 2019C Subordinate Bondholders shall extend to or shall affect any subsequent Series 2019C Subordinate Bond Event of Default or shall impair any rights or remedies consequent thereon.

The Authority agrees that the Trustee in its name or in the name of the Authority may, in the manner and to the extent provided herein, enforce all rights of the Trustee and of the Authority and all obligations of the Credit Facility Provider (including the obligation of the Credit Facility Provider to honor drafts duly presented in accordance with the terms and conditions of the Credit Facility) under and pursuant to the Credit Facility, for the benefit of the Series 2019C Subordinate Bondholders. The Trustee agrees to assume and perform the duties and obligations contemplated under the Credit Facility to be assumed and performed by the Trustee.

If a Credit Facility is in effect, and if the provider thereof has failed to honor its payment obligations under the Credit Facility, twenty five percent (25%) of the Series 2019C Subordinate Bondholders enhanced by such Credit Facility (excluding Series 2019C Subordinate Bonds owned by the Authority and Bank Bonds), shall have the right at any time, by an instrument or instruments in writing executed and delivered to the Trustee, 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 Credit Facility, or any other proceedings thereunder; provided that such direction shall be in accordance with applicable law.

In the event the Credit Facility Provider wrongfully dishonors a conforming drawing for any payment with respect to the Series 2019C Subordinate Bonds or the Credit Facility Provider repudiates such obligation, the Trustee agrees to take all reasonable steps to enforce the obligation of the Credit Facility Provider to honor drafts duly presented in accordance with the terms and conditions of the Credit Facility for the benefit of the Series 2019C Subordinate Bondholders.

Section 905. Right of Series 2019C Subordinate Bondholders to Direct Proceedings.

The holders of a majority in aggregate principal amount of Series 2019C Subordinate Bonds then outstanding shall have the right, at any time, by an instrument or instruments in writing executed and delivered to the Trustee, to direct the method and place of conducting all proceedings to be taken in connection with the enforcement of the terms and conditions of this Twenty-Fifth Supplemental Indenture or any other proceedings hereunder, provided, however, that such direction shall not be otherwise than in accordance with the provisions of law and of the Indenture.

Section 906. Application of Moneys.

All moneys received by the Trustee pursuant to any right given or action taken under the provisions of this Article shall, after payment of the cost and expenses of the proceedings resulting in the collection of such moneys, the expenses, liabilities and advances incurred or

reasonably anticipated to be made by the Trustee, and its fees and the expenses of the Authority in carrying out this Twenty-Fifth Supplemental Indenture, be deposited in the Series 2019C Subordinate Bonds Interest Subaccount or the Series 2019C Subordinate Bonds Principal Subaccount, as the case may be, and applied as follows and for no other purpose:

- (a) All such moneys shall be applied:

First - To the payment to the persons entitled thereto of all installments of interest then due on the Series 2019C Subordinate Bonds, in the order of the maturity of the installments of such interest and, if the amount available shall not be sufficient to pay in full any particular installment, then to the payment ratably, according to the amounts due on such installment, to the persons entitled thereto, without any discrimination or preference except as to any difference in the respective rates of interest specified in the Series 2019C Subordinate Bonds; and

Second - To the payment to the persons entitled thereto of the unpaid principal of and premium, if any, on any of the Series 2019C Subordinate Bonds which shall have become due (other than Series 2019C Subordinate Bonds called for redemption for the payment of which moneys are held pursuant to the provisions of the Indenture), in the order of their due dates, and, if the amount available shall not be sufficient to pay in full Series 2019C Subordinate Bonds due on any particular date, then to the payment of such principal and premium, if any, ratably, according to the amount of such principal due on such date, to the persons entitled thereto, without any discrimination or preference.

For purposes of paragraphs First and Second above, the interest component of any Purchase Price payable by the Authority shall be treated as interest, and the principal component of any Purchase Price payable by the Authority shall be treated as principal.

(b) Whenever moneys are to be applied pursuant to the provisions of this Section, such moneys shall be applied at such times and from time to time as the Trustee shall determine, having due regard to the amount of such moneys available for application and the likelihood of additional moneys becoming available for such application in the future. Whenever the Trustee shall apply such moneys, it shall fix the date (which shall be an Interest Payment Date unless it shall deem another date more suitable) on which such application is to be made and on such date interest shall cease to accrue on the amounts of principal to be paid. The Trustee shall give such notice as it may deem appropriate of the deposit with it of any such moneys and of the fixing of any such date.

Section 907. Remedies Vested in Trustee.

All rights of action (including the right to file proof of claims) under this Twenty-Fifth Supplemental Indenture or under any of the Series 2019C Subordinate Bonds may be enforced by the Trustee without the possession of any of the Series 2019C Subordinate Bonds or the production thereof in any trial or other proceeding relating thereto and any such suit or proceeding instituted by the Trustee may be brought in its name as Trustee without the necessity of joining as plaintiffs or defendants any Series 2019C Subordinate Bondholders, and any

recovery of judgment shall be for the equal benefit of the Series 2019C Subordinate Bondholders.

Section 908. Limitation on Suits.

Except to enforce the rights given under Sections 904 and 905 of this Twenty-Fifth Supplemental Indenture, no Series 2019C Subordinate Bondholder shall have any right to institute any action, suit or proceeding at law or in equity for the enforcement of the Indenture or for the execution of any trust thereof or any other remedy hereunder, unless: (a) a Series 2019C Subordinate Bond Event of Default has occurred and is continuing and the Holders of 25% in aggregate principal amount of Series 2019C Subordinate Bonds then outstanding have made written request to the Trustee and offered it reasonable opportunity either to proceed to exercise the powers hereinbefore granted or to institute such action, suit or proceeding in its own name, (b) such requesting Series 2019C Subordinate Bondholders have offered to the Trustee indemnity as provided in Section 1101(1) of the Master Indenture, (c) the Trustee has thereafter failed or refused to exercise the powers hereinbefore granted, or to institute such action, suit or proceeding in its own name, (d) no direction inconsistent with such written request has been given to the Trustee by the holders of a majority in aggregate principal amount of Series 2019C Subordinate Bonds then outstanding, and (e) notice of such action, suit or proceeding is given to the Trustee; it being understood and intended that no one or more Series 2019C Subordinate Bondholders shall have any right in any manner whatsoever to affect, disturb or prejudice the Indenture by its or their action or to enforce any rights hereunder except in the manner herein provided, and that all proceedings at law or in equity shall be instituted and maintained in the manner herein provided and for the equal benefit of all Series 2019C Subordinate Bondholders then outstanding. The notification, request and offer of indemnity set forth above, at the option of the Trustee, shall be conditions precedent to the execution of the powers and trusts of this Twenty-Fifth Supplemental Indenture and to any action or cause of action for the enforcement of this Twenty-Fifth Supplemental Indenture or for any other remedy hereunder.

Section 909. Termination of Proceedings.

In case the Trustee shall have proceeded to enforce any right under this Twenty-Fifth Supplemental Indenture and such proceedings shall have been discontinued or abandoned for any reason or shall have been determined adversely to the Trustee, then and in every such case the Authority and the Trustee shall be restored to their former positions and rights hereunder, and all rights, remedies and powers of the Trustee shall continue as if no such proceedings had been taken.

Section 910. Waivers of Events of Default.

Subject to the Indenture (including, without limitation, Section 1101 of the Master Indenture), the Trustee may in its discretion waive any Series 2019C Subordinate Bond Event of Default hereunder or any action taken pursuant to any Series 2019C Subordinate Bond Event of Default, and shall do so at the written request of the holders of: (a) a majority in aggregate principal amount of Series 2019C Subordinate Bonds then outstanding in respect of which default in the payment of principal and/or premium, if any, and/or interest exists, or (b) a majority in aggregate principal amount of Series 2019C Subordinate Bonds then outstanding in

the case of any other Series 2019C Subordinate Bond Event of Default; provided, however, that there shall not be waived without the written consent of all then Outstanding Series 2019C Subordinate Bondholders (A) any Series 2019C Subordinate Bond Event of Default in the payment of the principal of any Outstanding Series 2019C Subordinate Bonds (whether at maturity or by mandatory redemption or as part of the Purchase Price payable upon mandatory tender), or (B) any default in the payment when due of the interest on any such Series 2019C Subordinate Bonds unless, prior to such waiver or rescission,

(i) there shall have been paid or provided for all arrears of interest with interest, to the extent permitted by law, at the rate borne by the Series 2019C Subordinate Bonds on overdue installments of interest, all arrears of principal and premium, if any, and all expenses of the Trustee in connection with such default, and

(ii) in case of any such waiver or rescission or in the case of any discontinuance, abandonment or adverse determination of any proceeding taken by the Trustee on account of any such default, the Authority, the Trustee, and the Series 2019C Subordinate Bondholders shall be restored to their former positions and rights hereunder respectively.

No such waiver or rescission relating to the Series 2019C Subordinate Bonds shall extend to any subsequent or other default or impair any right consequent thereon.

Section 911. Non-Impairment of Authority's Obligation to Pay Principal, Premium and Interest.

Nothing in this Twenty-Fifth Supplemental Indenture shall, however, affect or impair the obligation of the Authority to pay the principal of, premium, if any, and interest on each of the Series 2019C Subordinate Bonds to the respective Holders thereof at the time and place, from the source and in the manner specified in the Indenture.

**ARTICLE X
TAX COVENANTS**

Section 1001. Tax Covenants – General.

(i) The Authority covenants that it will use, and will restrict the use and investment of, the proceeds of the Series 2019C Subordinate Bonds in such manner and to such extent as may be necessary so that (a) the Series 2019C Subordinate 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 2019C Subordinate 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 2019C Subordinate 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 2019C Subordinate 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 902 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.

(iii) 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 2019C Subordinate 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 2019C Subordinate 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 2019C Subordinate Bonds, and (c) to give one or more appropriate certificates, for inclusion in the transcript of proceedings for the Series 2019C Subordinate Bonds, setting forth the reasonable expectations of the Authority regarding the amount and use of all the proceeds of the Series 2019C Subordinate 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 2019C Subordinate Bonds.

Section 1002. Calculation and Payment of Rebate.

(i) As used in this Section 1002:

“Bond Year” means the annual period (or such shorter period from the date of issuance of the Series 2019C Subordinate Bonds) provided for the computation of the Rebate Amount for the Series 2019C Subordinate 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 2019C Subordinate 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 2019C Subordinate Bonds are outstanding, and (b) the date on which the last Series 2019C Subordinate 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 2019C Subordinate 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 2019C Subordinate Bonds (but less any portion of the Rebate Amount previously paid to the United States pursuant to this Section 802(iii)).

(iv) The Authority shall keep or provide for the keeping of records of the computations made pursuant to this Section 1002, 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 2019C Subordinate Bonds.

(v) The Authority, in connection with investments of the proceeds of the Series 2019C Subordinate 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 2019C Subordinate 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 2019C Subordinate 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 2019C Subordinate 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 2019C Subordinate Bonds, the Authorized Representative of the Authority may, without the consent of or notice to any bondholders, adopt supplements to this Twenty-Fifth Supplemental Indenture to the extent necessary or desirable to modify, supplement or replace this Section 1002 consistent with the other covenants of the Authority in this Twenty-Fifth Supplemental Indenture.

(vii) If at any time the Authority receives a written opinion of Bond Counsel that failure to comply with this Section 1002 or any part of this Section 1002 would not adversely affect the exclusion of interest on the Series 2019C Subordinate Bonds from gross income for federal income tax purposes, the Authority may discontinue compliance with this Section 802 or part of this Section 1002 to the extent set forth in that opinion.

ARTICLE XI

MISCELLANEOUS

Section 1101. Limitation of Rights.

With the exception of rights herein expressly conferred, nothing expressed or mentioned in or to be implied from this Twenty-Fifth Supplemental Indenture or the Series 2019C Subordinate Bonds is intended or shall be construed to give to any person other than the parties hereto, the Series 2019C Subordinate Bondholders any legal or equitable right, remedy or claim under or in respect to this Twenty-Fifth Supplemental Indenture or any covenants, conditions and agreements herein contained since this Twenty-Fifth 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 2019C Subordinate Bondholders as herein provided.

Section 1102. Severability.

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

Section 1103. Successors and Assigns.

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

Section 1104. 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 2019C Subordinate Bonds shall be liable personally on the Series 2019C Subordinate 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-Fifth 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 1105. Applicable Law.

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

Section 1106. Notice of Change.

The Trustee shall give notice to the Rating Agency, at the address or addresses set forth in Article I hereof, of any of the following events:

- (i) a change in the Trustee;
- (ii) a change in the Remarketing Agent;
- (iii) a change in the Tender Agent;
- (iv) the expiration, cancellation, renewal or substitution of the term of the Credit Facility;
- (v) the delivery of an Substitute Credit Facility;
- (vi) an amendment or supplement to the Indenture, a Remarketing Agreement, a Reimbursement Agreement, or the Credit Facility at least fifteen (15) days in advance of the execution thereof;
- (vii) any declaration of acceleration of the Series 2019C Subordinate Bonds pursuant to Section 901;
- (viii) payment or provision therefor of all the Bonds;
- (ix) any conversion of the Interest Period applicable to the Series 2019C Subordinate Bonds; and
- (x) any other event notice of which a Rating Agency may reasonably request.

The Trustee shall have no liability to the Rating Agency or any liability or obligation to any other Person if it shall fail to give such notice.

Section 1107. Counterparts.

This Twenty-Fifth 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-Fifth 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 and Executive Vice
President, Finance and Procurement

**WELLS FARGO BANK, N.A.,
AS TRUSTEE**

By _____

Its _____

EXHIBIT A
[FORM OF BONDS]

A-1

M&A draft 7/18/19

BOND PURCHASE AGREEMENT

\$125,000,000*

DISTRICT OF COLUMBIA WATER AND SEWER AUTHORITY
Public Utility Subordinate Lien Revenue Bonds, Series 2019A (Green Bonds)

\$75,000,000*

DISTRICT OF COLUMBIA WATER AND SEWER AUTHORITY
Public Utility Subordinate Lien Revenue Bonds, Series 2019B

_____, 2019

District of Columbia Water and Sewer Authority
1385 Canal Street S.E.
Washington, DC 20003

Ladies and Gentlemen:

Siebert Cisneros Shank & Co., L.L.C., as representative of the underwriters (the “Representative”) on behalf of itself and on behalf of FTN Financial, Jefferies LLC, Morgan Stanley & Co., Raymond James and Stern Brothers & Co. (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 representations, warranties, covenants and agreements set forth herein, the Representative, on behalf of the Underwriters, hereby agrees to purchase from the Authority for offering to the public, and the Authority hereby agrees to sell and deliver to the Underwriters for such purpose, all (but not less than all) of its Public Utility Subordinate Lien Revenue Bonds, Series 2019A (Green Bonds), in the original principal amount of \$125,000,000* (the “Series 2019A Bonds”) and its Public Utility Subordinate Lien Revenue Bonds, Series 2019B, in the original principal amount of \$75,000,000* (the “Series 2019B Bonds” and collectively with the Series 2019A Bonds, the “Bonds”). The proceeds of the Series 2019A Bonds will be used to pay (i) a portion

* Preliminary, subject to change.

of the costs of the Authority's DC Clean Rivers Project, and (ii) pay costs of issuing the Series 2019A Bonds. The proceeds of the Series 2019B Bonds will be used to (i) pay the costs of certain capital improvements to the System, and (ii) pay the costs of issuing the Series 2019B Bonds. The purchase price of the Series 2019A Bonds will be \$ _____ (the par amount of the Series 2019A Bonds less the Underwriters' discount of \$ _____ plus original issue premium of \$ _____). The purchase price of the Series 2019B Bonds will be \$ _____ (the par amount of the Series 2019B Bonds less the Underwriters' discount of \$ _____ plus original issue premium of \$ _____). The Bonds will mature on the dates and in the amounts and will bear interest and will be subject to redemption prior to maturity as set forth on Exhibit A hereto.

2. **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.19- adopted by the Board of Directors of the Authority, on July , 2019 (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-Fourth Supplemental Indenture of Trust, dated as of the Closing Date (as defined below) (the "Twenty-Fourth 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.

3. **Closing.** At 11:00 a.m. Eastern Standard Time on _____, 2019, 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. **Public Offering of the Bonds.** 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 _____, 2019, 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 Rule 15c2-12 (“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 _____, 2019, 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:

a. 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 Official Statement and the proceeds of the sale of the Bonds will be applied as described in 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.

l. 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, 2018 and September 30, 2017, 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, 2018, 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 has been presented on a basis consistent with that of the

Authority's audited financial statements included or incorporated by reference 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.

p. 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 Representative, 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, other than its Public Utility Subordinate Lien Multimodal Revenue Bonds Series 2019C, dated the date of Closing.

w. The Bonds and the Twenty-Fourth Supplemental Indenture conform to the descriptions thereof contained in the Preliminary Official Statement and the Official Statement under the caption "THE SERIES 2019A/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.

8. **Rights to Cancellation by Underwriters.** The Underwriters will have the right 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 (l) 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. **Conditions to Obligations of Underwriters at Closing.** 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 Interim Executive Vice President Legal Affairs, of the Authority, substantially in the form of Exhibit B hereto;

vi. An opinion, dated the Closing Date, of Orrick, Herrington & Sutcliffe 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 Parker Poe Adams & Bernstein LLP, 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 ____, 2019, 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”) [and Fitch Ratings] 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. **Obligations Upon Cancellation.** 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. **Certain Information Provided by Underwriters.** 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. **Establishment of Issue Price.**

a. The Representative on behalf of the Underwriters agrees to assist the Authority in establishing the issue price of the Bonds and shall execute and deliver to the Authority at Closing an “issue price” or similar certificate, together with the supporting pricing wires or equivalent communications, substantially in the form attached hereto as **Exhibit D**, with such modifications as may be appropriate or necessary, in the reasonable judgment of the Representative, the Authority and Bond Counsel, to accurately reflect, as applicable, the sales price or prices or the initial offering price or prices to the public of the Bonds. All actions to be taken by the Authority under this Section to establish the issue price of the Bonds may be taken on behalf of the Authority by PFM Financial Advisors LLC (the “Municipal Advisor”) and any notice or report to be provided to the Authority may be provided to the Municipal Advisor.

b. The Authority will treat the first price at which at least 10% of each maturity of the Bonds (the “10% test”) is sold to the public as the issue price of that maturity (if different interest rates apply within a maturity, each separate CUSIP number within that maturity will be subject to the 10% test). At or promptly after the execution of this Bond Purchase Agreement, the Representative shall report to the Authority the price or prices at which the Underwriters have sold to the public each maturity of Bonds. If at that time the 10% test has not been satisfied as to any maturity of the Bonds, the Representative agrees to promptly report to the Authority the prices at which Bonds of that maturity have been sold to the public. That reporting obligation shall continue, whether or not the Closing Date has occurred, until the 10% test has been satisfied as to the Bonds of that maturity or until all Bonds of that maturity have been sold to the public, [provided that, the Underwriters’ reporting obligation after the Closing Date may be reasonable periodic intervals or otherwise upon request of the Authority].

c. The Authority acknowledges that, in making the representation set forth in this subsection, the Representative will rely on (i) the agreement of each Underwriter to comply with the hold-the-offering price rule, if applicable, as set forth in an agreement among underwriters and the related pricing wires, (ii) in the event a selling group has been created in connection with the initial sale of the Bonds to the public, the agreement of each dealer who is a member of the selling group to comply with the hold-the-offering-price rule, if applicable, as set forth in a selling group agreement and the related pricing wires, and (iii) in the event that an Underwriter is a party to a

retail distribution agreement that was employed in connection with the initial sale of the Bonds to the public, the agreement of each broker-dealer that is a party to such agreement to comply with the hold-the-offering-price rule, if applicable, as set forth in the retail distribution agreement and the related pricing wires. The Authority further acknowledges that each Underwriter shall solely be liable for its failure to comply with its agreement regarding the hold-the-offering-price rule and no Underwriter shall be liable for the failure of any other Underwriter, or of any dealer who is a member of a selling group, or of any broker-dealer that is a party to a retail distribution agreement, to comply with its corresponding agreement regarding the hold-the-offering-price rule as applicable to the Bonds.

d. The Representative confirms that:

(i) any agreement among underwriters, any selling group agreement and each retail distribution agreement (to which the Representative is a party) relating to the initial sale of the Bonds to the public, together with the related pricing wires, contains or will contain language obligating each Underwriter, each dealer who is a member of the selling group and each broker-dealer that is a party to such retail distribution agreement, as applicable, to (A) report the prices at which it sells to the public the unsold Bonds of each maturity allotted to it until it is notified by the Representative that either the 10% test has been satisfied as to the Bonds of that maturity or all of the Bonds of that maturity have been sold to the public and (B) comply with the hold-the-offering-price rule, if applicable, in each case if and for so long as directed by the Representative and as set forth in the related pricing wires, and

(ii) any agreement among underwriters relating to the initial sale of the Bonds to the public, together with any related pricing wires, contains or will contain language obligating each Underwriter that is a party to a retail distribution agreement to be employed in connection with the initial sale of the Bonds to the public to require each broker-dealer that is a party to such retail distribution agreement to (A) report the prices at which it sells to the public the unsold Bonds of each maturity allotted to it until it is notified by the Representative or the Underwriter that either the 10% test has been satisfied as to the Bonds of that maturity or all Bonds of that maturity have been sold to the public and (B) comply with the hold-the-offering-price rule, if applicable, in each case if and for so long as directed by the Representative or the Underwriter and as set forth in the related pricing wires.

e. The Underwriters acknowledge that sales of any Bonds to any person that is a related party to an Underwriter shall not constitute sales to the public for purposes of this section. Further, for purposes of this section:

i. “public” means any person other than an underwriter or a related party,

ii. “underwriter” means (A) any person that agrees pursuant to a written contract with the Authority (or with the lead underwriter to form an underwriting syndicate) to participate in the initial sale of the Bonds to the public and (B) any person that agrees pursuant to a written contract directly or indirectly with a person described in clause (A) to participate in the initial sale of the Bonds to the public (including a member of a selling group or a party to a retail distribution agreement participating in the initial sale of the Bonds to the public),

iii. a purchaser of any of the Bonds is a “related party” to an underwriter if the underwriter and the purchaser are subject, directly or indirectly, to (A) at least 50% common ownership of the voting power or the total value of their stock, if both entities are corporations (including direct ownership by one corporation of another), (B) more than 50% common ownership of their capital interests or profits interests, if both entities are partnerships (including direct ownership by one partnership of another), or (C) more than 50% common ownership of the value of the outstanding stock of the corporation or the capital interests or profit interests of the partnership, as applicable, if one entity is a corporation and the other entity is a partnership (including direct ownership of the applicable stock or interests by one entity of the other), and

iv. “sale date” means the date of execution of this Bond Purchase Agreement by all parties.

14. **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.

15. **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-of-pocket 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).

16. **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 Siebert Cisneros & Shank & Co., L.L.C., 100 Wall Street, 18th floor, New York, NY10005, Attention: _____, Managing Director.

17. **Parties in Interest; Survival of Representations and Warranties**. This 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.

18. **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.

19. **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.

20. **Finder**. 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.

21. **Governing Law.** This Agreement shall be governed by and construed in accordance with the laws of the District of Columbia.

SIEBERT CISNEROS SHANK & CO., L.L.C.
FTN FINANCIAL
JEFFERIES LLC
MORGAN STANLEY & CO.
RAYMOND JAMES
STERN BROTHERS & CO.

By: SIEBERT CISNEROS SHANK & CO., L.L.C.,
as Representative of the Underwriters

By: _____
Authorized Representative

[SIGNATURE PAGE TO SERIES 2019A/B BOND PURCHASE AGREEMENT]

Accepted: _____, 2019

DISTRICT OF COLUMBIA WATER AND SEWER AUTHORITY

By _____

Name: Matthew Brown

Title: Chief Financial Officer and Executive Vice
President Finance and Procurement

[SIGNATURE PAGE TO SERIES 2019A/B BOND PURCHASE AGREEMENT]

\$75,000,000*
DISTRICT OF COLUMBIA WATER AND SEWER AUTHORITY
Public Utility Subordinate Lien Revenue Bonds
Series 2019B
Serial Bonds

Year (Oct. 1)	Principal Amount	Interest Rate	Yield
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2019B Term Bonds

\$____,000 ____% Term Bonds, due October 1, 20____, Yield ____%*

\$____,000 ____% Term Bonds, due October 1, 20____, Yield ____%*

*Priced to the par call date.

* Preliminary, subject to change.

TERMS OF REDEMPTION

Optional Redemption

The Series 2019A Bonds are subject to optional redemption prior to maturity on or after April 1, 202_ 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 2019B Bonds are subject to optional redemption prior to maturity on or after April 1, 202_ 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 \$00,000,000 Series 2019A 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__	\$
20__	
20__	
20__	

*Final maturity.

The \$__0,000 Series 2019B 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.

The \$__,000 Series 2019B 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 INTERIM EXECUTIVE VICE PRESIDENT, LEGAL AFFAIRS
OPINION

_____, 2019

District of Columbia Water and Sewer Authority
1385 Canal Street S.E.
Washington, DC 20003

\$125,000,000*
DISTRICT OF COLUMBIA WATER AND SEWER AUTHORITY
Public Utility Subordinate Lien Revenue Bonds, Series 2019A (Green Bonds)

\$75,000,000*
DISTRICT OF COLUMBIA WATER AND SEWER AUTHORITY
Public Utility Subordinate Lien Revenue Bonds, Series 2019B

Ladies and Gentlemen:

I am the Interim Executive Vice President, Legal Affairs to the District of Columbia Water and Sewer Authority (the "Authority") and in connection with the issuance by the Authority of its Public Utility Subordinate Lien Revenue Bonds, Series 2019A (Green Bonds), in the original principal amount of \$125,000,000* (the "Series 2019A Bonds") and its Public Utility Subordinate Lien Revenue Bonds, Series 2019B, in the original principal amount of \$75,000,000* (the "Series 2019B Bonds" and collectively with the Series 2019A Bonds, the "Bonds"). I have reviewed an executed copy of the Bond Purchase Agreement, dated _____, 2019, between the Authority and Siebert Cisneros Shank & Co., L.L.C., as Representative on behalf of the Underwriters, with respect to the Bonds (the "Bond Purchase Agreement") and the Preliminary Official Statement, dated _____, 2019 (the "Preliminary Official Statement") and the Official Statement, dated _____, 2019, 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

* Preliminary, subject to change.

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.

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,

Interim Executive Vice President Legal Affairs

EXHIBIT C

FORM OF OPINION OF UNDERWRITERS' COUNSEL

_____, 2019

\$125,000,000*

DISTRICT OF COLUMBIA WATER AND SEWER AUTHORITY
Public Utility Subordinate Lien Revenue Bonds, Series 2019A (Green Bonds)

\$75,000,000*

DISTRICT OF COLUMBIA WATER AND SEWER AUTHORITY
Public Utility Subordinate Lien Revenue Bonds, Series 2019B

Siebert Cisneros Shank & Co., L.L.C., as Representative
100 Wall Street, 18th floor
New York, NY 10005

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 Subordinate Lien Revenue Bonds, Series 2019A (Green Bonds), in the original principal amount of \$125,000,000* (the "Series 2019A Bonds") and its Public Utility Subordinate Lien Revenue Bonds, Series 2019B, in the original principal amount of \$75,000,000* (the "Series 2019B Bonds" and collectively with the Series 2019A Bonds, the "Bonds"), pursuant to the Bond Purchase Agreement, dated _____, 2019 (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-Fourth Supplemental Indenture of Trust, to be dated the date of issuance and delivery of the Bonds (the "Twenty-Fourth 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 _____, 2019 (the "Preliminary Official Statement") and the Official Statement of the Authority, dated _____, 2019, with respect to the Bonds (the "Official Statement"), the Continuing Disclosure Agreement, dated _____, 2019 (the "Continuing Disclosure Agreement"), the Purchase Agreement, certificates of the Authority, the Trustee and

* 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.

2. 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 Parker Poe Adams & Bernstein LLP, 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 UNDERWRITERS' CERTIFICATE

\$125,000,000*

DISTRICT OF COLUMBIA WATER AND SEWER AUTHORITY
Public Utility Subordinate Lien Revenue Bonds, Series 2019A (Green Bonds)

\$75,000,000*

DISTRICT OF COLUMBIA WATER AND SEWER AUTHORITY
Public Utility Subordinate Lien Revenue Bonds, Series 2019B

UNDERWRITERS' CERTIFICATE

_____, 2019

Siebert Cisneros Shank & Co., L.L.C. ("Siebert Cisneros Shank"), 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.

[If the issue price is determined using only the general rule (actual sales of at least 10%) in Regulations § 1.148-1(f)(2)(i) and at least 10% of each maturity has been sold as of the Closing Date:

1.1 As of the date of this certificate, for each Maturity of the Issue, the first price at which at least 10% of such Maturity of the Issue was sold to the Public is the respective price listed in the final Official Statement, dated _____, 2019 for the Issue (the "Sale Price" as applicable to respective Maturities). The aggregate of the Sale Prices of each Maturity is \$_____ (the "Issue Price").]

[If the issue price is determined using only the general rule (actual sales of at least 10%) in Regulations § 1.148-1(f)(2)(i) and at least 10% of each maturity has not been sold as of the Closing Date:

1.1 As of the date of this Certificate, for each [Maturity] [of the _____ Maturities] of the Issue, the first price at which at least 10% of [each] such Maturity of the Issue was sold to the Public (the "10% Test") are the respective prices listed in **Schedule A** attached hereto.

* Preliminary, subject to change.

1.2 With respect to each of the _____ Maturities of the Issue:

(i) As of the date of this Certificate, the Underwriters have not sold at least 10% of these Maturities of the Issue at any single price.

(ii) As of the date of this Certificate, the Siebert Cisneros Shank reasonably expects that the price at which at least 10% of each of these Maturities of the Issue will be sold to the Public will be the respective price or prices listed on the attached **Schedule A** as the “Reasonably Expected Sale Prices for Undersold Maturities.”

(iii) Siebert Cisneros Shank will provide actual sales information (substantially similar to the information contained on **Schedule B**) as to the price at which at least 10% of each such Maturity (i.e., the Undersold Maturity or Maturities) of the Issue is sold to the Public.

(iv) On the date the 10% Test is satisfied with respect to all Maturities of the Issue, Siebert Cisneros Shank will execute a supplemental certificate substantially in the form attached hereto as **Schedule C** with respect to any Maturities for which the 10% Test has not been satisfied as of the Closing Date.**]

[If the issue price is determined using a combination of actual sales (Regulations § 1.148-1(f)(2)(i)) and hold-the-offering-price (Regulations § 1.148-1(f)(2)(ii)):

1.1 As of the date of this certificate, for each Maturity of the Issue listed on Schedule A as the “General Rule Maturities,” the first price at which at least 10% of such Maturity was sold to the Public is the respective price listed in Schedule A (the “Sale Price” as applicable to each Maturity of the General Rule Maturities).

1.2 The Underwriters offered the Maturities listed on Schedule A as the “Hold-the-Offering-Price Maturities” to the Public for purchase at the respective initial offering prices listed in Schedule A (the “Initial Offering Prices” as applicable to each Maturity of the Hold-the-Offering-Price Maturities) on or before the Sale Date. A copy of the pricing wire or equivalent communication for the Issue is attached to this certificate as Schedule B.

1.3 As set forth in the Bond Purchase Agreement dated _____, 2019, between the Authority and Underwriters, the Underwriters agreed in writing that, (i) for each Maturity of the Hold-the-Offering-Price Maturities, it would neither offer nor sell any of the Issue of such Maturity to any person at a price that is higher than the Initial Offering Price for such Maturity during the Holding Period for such Maturity (the “hold-the-offering-price rule”), and (ii) any selling group agreement contains the agreement of each dealer who is a member of the selling group, and any retail distribution agreement contains the agreement of each broker-dealer who is a party to the retail distribution agreement, to comply with the hold-the-offering-price rule. The Underwriters have not offered or sold any Maturity of the Hold-the-Offering-Price Maturities at

a price that is higher than the respective Initial Offering Price for that Maturity of the Issue during the Holding Period.

The aggregate of the Sale Prices of the General Rule Maturities and the Initial Offering Prices of the Hold-the-Offering-Price Maturities is \$[_____] (the “Issue Price”).]

[If the issue price is determined using only the hold-the-offering-price rule in Regulations § 1.148-1(f)(2)(ii):

1.1 As set forth in the Bond Purchase Agreement dated _____, 2019, between the Authority and the Underwriters, the Underwriters agreed in writing that, (i) for each Maturity of the Issue, it would neither offer nor sell any of such Maturity of the Issue to any person at a price that is higher than the Initial Offering Price for such Maturity during the Holding Period for such Maturity (the “hold-the-offering-price rule”), and (ii) any selling group agreement contains the agreement of each dealer who is a member of the selling group, and any retail distribution agreement contains the agreement of each broker-dealer who is a party to the retail distribution agreement, to comply with the hold-the-offering-price rule. The Underwriters have not offered or sold any Maturity of the Issue at a price that is higher than the respective Initial Offering Price for that Maturity of the Issue during the Holding Period.]

[1.2, 1.3, 1.4, 1.2] Definitions. [NOTE: If issue price is determined using only the general rule (actual sales of 10%), delete the definitions of “Holding Period” and “Sale Date.”]

["Holding Period" means, for each Hold-the-Offering-Price Maturity of the Issue, the period starting on the Sale Date and ending on the earlier of (i) the close of the fifth business day after the Sale Date (_____, 2019), or (ii) the date on which the Underwriters sold at least 10% of such Maturity of the Issue to the Public at prices that are no higher than the Initial Offering Price for such Maturity.]

“Maturity” means bonds of the Issue with the same credit and payment terms. Bonds of the Issue with different maturity dates, or bonds of the Issue with the same maturity date but different stated interest rates, are treated as separate Maturities.

“Public” means any person (including an individual, trust, estate, partnership, association, company, or corporation) other than an Underwriter or a related party to an Underwriter. The term “related party” for purposes of this certificate generally means any two or more persons who have greater than 50 percent common ownership, directly or indirectly.

["Sale Date" means the first day on which there is a binding contract in writing for the sale of a Maturity of the Issue. The Sale Date of the Issue is _____, 2019.]

“Underwriter” means (i) any person that agrees pursuant to a written contract with the Authority (or with the lead underwriter to form an underwriting syndicate) to participate in the initial sale of the Issue to the Public, and (ii) any person that agrees pursuant to a written contract directly or indirectly with a person described in clause (i) of this paragraph to participate

in the initial sale of the Issue to the Public (including a member of a selling group or a party to a retail distribution agreement participating in the initial sale of the Issue to the Public).

All capitalized terms not defined in this Certificate have the meaning set forth in the Authority's Tax Compliance Certificate or in Attachment A to it.

[2. Reserve Fund.

The funding of the Reserve Fund as provided in the Trust Agreement securing the Issue is reasonably required, was a vital factor in marketing the Issue, facilitated the marketing of the Issue at an interest rate comparable to that of bonds and other obligations of a similar type and is not in excess of the amount necessary for such purpose.]

[3. Yield.

3.1 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 1.1 [and computed with the adjustments stated in paragraphs 3.2 and 4.3].

3.2 Discount Bonds Subject to Mandatory Early Redemption. [No bond of the Issue 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.] **[Or]** [The stated redemption price at maturity of the bonds of the Issue maturing in the year[s] 20__, which are the only bonds of the Issue that are subject to mandatory early redemption, exceeds the Initial Offering Price of such bonds by more than one-fourth of 1% multiplied by the product of the stated redemption price at maturity and the number of years to the weighted average maturity date of such bonds. Accordingly, in computing the Yield on the Issue stated in paragraph 3.1, those bonds were treated as redeemed on each mandatory early redemption date at their present value rather than at their stated principal amount.]

3.3 Premium Bonds Subject to Optional Redemption. No bond of the Issue:

- Is subject to optional redemption within five years of the Issuance Date of the Issue.
- That is subject to optional redemption has an Initial Offering Price that exceeds its stated redemption price at maturity by more than one-fourth of 1% multiplied by the product of its stated redemption price at maturity and the number of complete years to its first optional redemption date.]]

[4. Weighted Average Maturity.

The weighted average maturity (defined below) of the Issue is _____ years [**For refunding issues:** and the remaining weighted average maturity of the Refunded Bonds is _____ years. The weighted average maturity of an issue is equal to the sum of the products of the Initial Offering Price of each maturity of the issue and the number of years to the maturity date of the respective maturity (taking into account mandatory but not optional redemptions), divided by the Initial Offering Price of the entire Issue.]

5. Underwriter's Discount. The Underwriter's discount is \$ _____, being the amount by which the aggregate Issue Price (as set forth in paragraph 1.1) exceeds the price paid by Siebert Cisneros Shank to the Authority for the Issue.

The signer is an officer of Siebert Cisneros Shank and duly authorized to execute and deliver this Certificate of the Underwriters for itself and as representative of the other Underwriters. Siebert Cisneros Shank understands that the certifications contained in this Certificate will be relied on by the Issuer in making certain of its representations in its Tax Compliance Certificate and in completing and filing the Information Return for the Issue, and by Squire Patton Boggs (US) LLP and Parker Poe Adams & Bernstein LLP, as co-bond counsel ("Bond Counsel"), in rendering certain of their legal opinions in connection with the issuance of the Issue.

Siebert Cisneros Shank has performed these calculations with the express understanding and agreement of Bond Counsel and the Issuer that, notwithstanding the performance of these calculations and the delivery of this certificate: (i) in doing so we are not acting as Municipal Advisor (as defined in Section 15 of the Securities Exchange Act), (ii) we do not have a fiduciary duty to the Issuer, and (iii) we are not to be construed as a "paid preparer" of any tax returns of the Issuer, including specifically (but not limited to) Form 8038-G.

Notwithstanding the foregoing, Siebert Cisneros Shank reminds you that we are not accountants or actuaries, nor are we engaged in the practice of law. Accordingly, while we believe the calculations described above to be correct, we do not warrant them to be so, nor do we warrant their validity for purposes of Sections 103 and 141 through 150 of the Code.

The representations set forth in this certificate are limited to factual matters only. Nothing in this certificate represents Siebert Cisneros Shank's interpretation of any laws, including specifically Sections 103 and 148 of the Code and the Treasury Regulations thereunder.

Dated: _____, 2019

SIEBERT CISNEROS SHANK & CO., L.L.C.
FTN FINANCIAL
JEFFERIES LLC
MORGAN STANLEY
RAYMOND JAMES
STERN BROTHERS & CO.

By: SIEBERT CISNEROS SHANK & CO., L.L.C.,
as Representative of the Underwriters

[NOTE: If the general rule is used for each Maturity (i.e., actual sales of at least 10% of each Maturity) and at least 10% of each Maturity has been sold as of the Closing, there is no schedule to attach if the initial offering prices set forth in the Official Statement for the Issue are the first prices at which at least 10% of each Maturity is sold. Otherwise, attach a schedule that shows the first price at which at least 10% of each Maturity was sold.]

[OR]

[If the issue price is determined using a combination of the general rule (actual sales) and hold-the-offering-price rule:

SCHEDULE A
SALE PRICES OF THE GENERAL RULE MATURITIES AND
INITIAL OFFERING PRICES OF THE HOLD-THE-OFFERING-PRICE MATURITIES
(Attached)

[NOTE: With respect to each Maturity of the Issue, Schedule A should include each Maturity's (i) maturity date, (ii) principal amount, (iii) coupon, (iv) yield, and (v) the sale prices/initial offering prices (as applicable).]

SCHEDULE B
PRICING WIRE OR EQUIVALENT COMMUNICATION
(Attached)

[OR]

[If the issue price is determined using only the hold-the-offering-price rule in Regulations § 1.148-1(f)(2)(ii):

SCHEDULE A
INITIAL OFFERING PRICES OF THE ISSUE
(Attached)

SCHEDULE B
PRICING WIRE OR EQUIVALENT COMMUNICATION
(Attached)

[OR]

If the issue price is determined using only the general rule (actual sales of at least 10%) in Regulations § 1.148-1(f)(2)(i) and at least 10% of each maturity has not been sold as of the Closing Date:

SCHEDULE A
TO
ISSUE PRICE CERTIFICATE

Actual Sales Information as of Closing Date

<u>Maturity/CUSIP</u>	<u>Coupon</u>	<u>Date Sold</u>	<u>Time Sold</u>	<u>Par Amount</u>	<u>Sale Price</u>
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]Reasonably Expected Sales Prices for Undersold Maturities as of Closing Date**

<u>Maturity/CUSIP</u>	<u>Coupon</u>	<u>Par Amount</u>	<u>Offering Prices</u>
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**]

[**SCHEDULE B
TO
ISSUE PRICE CERTIFICATE

Actual Sales for Undersold Maturities as of the Closing Date

<u>Maturity/CUSIP</u>	<u>Date Sold</u>	<u>Time Sold</u>	<u>Par Amount</u>	<u>Sale Price</u>
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**]

M&A draft 7/17/19

BOND PURCHASE AGREEMENT

\$ __,000,000*

DISTRICT OF COLUMBIA WATER AND SEWER AUTHORITY
Public Utility Subordinate Lien Multimodal Revenue Bonds, Series 2019C

_____, 2019

District of Columbia Water and Sewer Authority
1385 Canal Street S.E.
Washington, DC 20003

Ladies and Gentlemen:

JP Morgan Securities LLC as the underwriter (the “Underwriter”), offers 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 Underwriter, 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 Underwriter. 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 Underwriter. If this offer is not so accepted, it is subject to withdrawal by the Underwriter 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 representations, warranties, covenants and agreements set forth herein, the Underwriter, hereby agrees to purchase from the Authority for offering to the public, and the Authority hereby agrees to sell and deliver to the Underwriter for such purpose, all (but not less than all) of its Public Utility Subordinate Lien Multimodal Revenue Bonds, Series 2019C, in the original principal amount of \$ __,000,000* (the “Bonds”). The proceeds of the Series 2019C Bonds will be used to (i) pay the costs of certain capital improvements to the System, and (ii) pay the costs of issuing the Series 2019C Bonds. The purchase price of the Bonds will be \$ _____ (the par amount of the Bonds less the Underwriter’s discount of \$ _____ plus original issue premium of \$ _____). The Bonds will mature on the dates and in the amounts and will bear interest and will be subject to redemption prior to maturity as set forth on Exhibit A hereto.

2. **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,”

* Preliminary, subject to change.

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.19- adopted by the Board of Directors of the Authority, on July , 2019 (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-Fifth Supplemental Indenture of Trust, dated as of the Closing Date (as defined below) (the “Twenty-Fifth 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.

3. **Closing.** At 11:00 a.m. Eastern Standard Time on _____, 2019, or at such other time and date as may be mutually agreed upon by the Authority and the Underwriter (the “Closing Date”), the Authority will, subject to the terms and conditions hereof, deliver the Bonds to the Underwriter in definitive form, duly executed and authenticated, together with the other documents hereinafter required, and, subject to the terms and conditions hereof, the Underwriter 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 Underwriter.

4. **Public Offering of the Bonds.** It is a condition of the Authority’s obligation to sell and deliver the Bonds to the Underwriter, and of the obligation of the Underwriter 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 Underwriter at the Closing. The Underwriter 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 Underwriter 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 Underwriter, prior to the date hereof, of the Preliminary Official Statement, dated _____, 2019, 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 _____, 2019, 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 Underwriter. 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 Underwriter in connection with the public offering and sale of the Bonds.

The Authority agrees to provide to the Underwriter, at such addresses as the Underwriter specifies, as many copies of the Official Statement as the Underwriter reasonably requests 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 Underwriter 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 Underwriter.

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 Underwriter and counsel to the Underwriter 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 Underwriter and the Authority and will furnish to the Underwriter such supplement or amendment in sufficient quantity to permit the Underwriter 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 Underwriter 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 Underwriter notifies the Authority that the Underwriter, 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 Underwriter to comply with Rule 15c2-12, shall be extended for additional periods of 30 days each upon receipt of written notification from the Underwriter 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 Underwriter 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 Underwriter 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 Underwriter.

6. **Representations, Warranties and Covenants of the Authority.** The Authority hereby represents, warrants, covenants and agrees as follows:

a. 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 Underwriter 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 Underwriter, (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 Underwriter 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 Underwriter 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 Official Statement and the proceeds of the sale of the Bonds will be applied as described in 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 Underwriter 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.

l. 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 Underwriter as the Underwriter 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 Underwriter 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 Underwriter 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, 2018 and September 30, 2017, 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, 2018, 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 has been presented on a basis consistent with that of the Authority's audited financial statements included or incorporated by reference 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 Underwriter.

p. 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 Underwriter thereof, and if in the reasonable opinion of the Underwriter, 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 Underwriter, 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 Underwriter and ending on the 25th day following the end of the underwriting period, as defined in Section 5, it will apprise the Underwriter of all material developments, if any, occurring with respect to the Authority, and if requested by the Underwriter, 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 Underwriter 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 Underwriter, other than its Public Utility Subordinate Lien Revenue Bonds Series 2019A and its Public Utility Subordinate Lien Revenue Bonds Series 2019A, each dated the date of Closing.

w. The Bonds and the Twenty-Fifth Supplemental Indenture conform to the descriptions thereof contained in [the Preliminary Official Statement and] the Official Statement under the caption “THE SERIES 2019C BONDS” and in Appendix C “GLOSSARY AND SUMMARY OF THE INDENTURE.”

7. **Representations of Underwriter.** The Underwriter represents and warrants that they will offer the Bonds only pursuant to the Official Statement and the Underwriter agrees to make a public offering of the Bonds at the initial offering prices or yields set forth in the Official Statement as the Underwriter 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 Underwriter shall deliver to the Authority a certificate, acceptable to Co-Bond Counsel, substantially in the form of Exhibit D hereto. The Underwriter agrees to deliver a final Official Statement to all purchasers of the Bonds in accordance with all applicable legal requirements.

8. **Rights to Cancellation by Underwriter.** The Underwriter will have the right to cancel its 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 Underwriter to enforce contracts for the sale of the Bonds shall be materially adversely affected in the reasonable judgment of the Underwriter, 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 Underwriter 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 Underwriter would materially adversely affect the market for the Bonds or the sale, at the contemplated offering price, by the Underwriter 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, Underwriter) 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 Underwriter, 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 (l) 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, Underwriter) 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. **Conditions to Obligations of Underwriter at Closing.** The Underwriter has 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 Underwriter's 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 Underwriter and Orrick, Herrington & Sutcliffe LLP, and McKenzie & Associates, co-counsel to the Underwriter, 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 Underwriter, are not adverse to the interest of the Underwriter 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 Underwriter;

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 Underwriter;

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 Underwriter 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 Underwriter, 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 Interim Executive Vice President Legal Affairs of the Authority, substantially in the form of Exhibit B hereto;
- vi. An opinion, dated the Closing Date, of Orrick, Herrington & Sutcliffe LLP and McKenzie & Associates, co-counsel to the Underwriter, substantially in the form of Exhibit C hereto;
- vii. An opinion, dated the Closing Date, of Squire Patton Boggs (US) LLP and Parker Poe Adams & Bernstein LLP, in their capacity as co-disclosure counsel to the Authority, in form and substance satisfactory to the Underwriter and its co-counsel;
- viii. An opinion, dated the Closing Date, of counsel to the Trustee, in a form approved by the Underwriter and its co-counsel;
- ix. A manually signed Financial Feasibility Opinion Letter dated ____, 2019, 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 Underwriter;

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 Underwriter; (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") [and Fitch Ratings] have issued ratings on the Bonds of "___" and "___" respectively;

xiii. Such additional legal opinions, certificates, instruments and other documents as the Underwriter 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 Underwriter.

11. **Obligations Upon Cancellation.** If the Authority is unable to satisfy the conditions to the obligations of the Underwriter to purchase, to accept the delivery of and to pay for the Bonds contained in this Agreement, or if the obligations of the Underwriter 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 Underwriter nor the Authority will be under any further obligation hereunder, except that the Authority and the Underwriter shall pay their respective expenses as set forth in Section 14.

12. **Certain Information Provided by Underwriter.** The Underwriter confirms and the Authority acknowledges that the statements with respect to the public offering of the Bonds by the Underwriter 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 Underwriter furnished in writing to the Authority by or on behalf of the Underwriter for inclusion in the Official Statement.

13. **Establishment of Issue Price.**

a. The Underwriter agrees to assist the Authority in establishing the issue price of the Bonds and shall execute and deliver to the Authority at Closing an “issue price” or similar certificate, together with the supporting pricing wires or equivalent communications, substantially in the form attached hereto as **Exhibit D**, with such modifications as may be appropriate or necessary, in the reasonable judgment of the Underwriter, the Authority and Co-Bond Counsel, to accurately reflect, as applicable, the sales price or prices or the initial offering price or prices to the public of the Bonds. All actions to be taken by the Authority under this Section to establish the issue price of the Bonds may be taken on behalf of the Authority by PFM Financial Advisors LLC (the “Municipal Advisor”) and any notice or report to be provided to the Authority may be provided to the Municipal Advisor.

b. The Authority will treat the first price at which at least 10% of each maturity of the Bonds (the “10% test”) is sold to the public as the issue price of that maturity (if different interest rates apply within a maturity, each separate CUSIP number within that maturity will be subject to the 10% test). At or promptly after the execution of this Bond Purchase Agreement, the Underwriter shall report to the Authority the price or prices at which the Underwriter has sold to the public each maturity of Bonds. If at that time the 10% test has not been satisfied as to any maturity of the Bonds, the Underwriter agrees to promptly report to the Authority the prices at which Bonds of that maturity have been sold to the public. That reporting obligation shall continue, whether or not the Closing Date has occurred, until the 10% test has been satisfied as to the Bonds of that maturity or until all Bonds of that maturity have been sold to the public, [provided that, the Underwriters’ reporting obligation after the Closing Date may be reasonable periodic intervals or otherwise upon request of the Authority].

c. The Authority acknowledges that, in making the representation set forth in this subsection, the Underwriter will rely on (i) the agreement of the Underwriter to comply with the hold-the-offering price rule, if applicable, as set forth in an agreement among underwriters and the related pricing wires, (ii) in the event a selling group has been created in connection with the initial sale of the Bonds to the public, the agreement of each dealer who is a member of the selling group to comply with the hold-the-offering-price rule, if applicable, as set forth in a selling group agreement and the related pricing wires, and (iii) in the event that an Underwriter is a party to a retail distribution agreement that was employed in connection with the initial sale of the Bonds to the public, the agreement of each broker-dealer that is a party to such agreement to comply with the hold-the-offering-price rule, if applicable, as set forth in the retail distribution agreement and the related pricing wires. The Authority further acknowledges that the Underwriter shall solely be liable for its failure to comply with its agreement regarding the hold-the-offering-price rule and no Underwriter shall be liable for the failure of any other Underwriter, or of any dealer who is a member of a selling group, or of any broker-dealer that is a party to a retail distribution agreement, to comply with its corresponding agreement regarding the hold-the-offering-price rule as applicable to the Bonds.

d. The Underwriter confirms that:

(i) any agreement among underwriters, any selling group agreement and each retail distribution agreement (to which the Underwriter is a party) relating to the initial sale of the Bonds to the public, together with the related pricing wires, contains or will contain language obligating each Underwriter, each dealer who is a member of the selling group and each broker-

dealer that is a party to such retail distribution agreement, as applicable, to (A) report the prices at which it sells to the public the unsold Bonds of each maturity allotted to it until it is notified by the Underwriter that either the 10% test has been satisfied as to the Bonds of that maturity or all of the Bonds of that maturity have been sold to the public and (B) comply with the hold-the-offering-price rule, if applicable, in each case if and for so long as directed by the Underwriter and as set forth in the related pricing wires, and

(ii) any agreement among underwriters relating to the initial sale of the Bonds to the public, together with any related pricing wires, contains or will contain language obligating each Underwriter that is a party to a retail distribution agreement to be employed in connection with the initial sale of the Bonds to the public to require each broker-dealer that is a party to such retail distribution agreement to (A) report the prices at which it sells to the public the unsold Bonds of each maturity allotted to it until it is notified by the Underwriter that either the 10% test has been satisfied as to the Bonds of that maturity or all Bonds of that maturity have been sold to the public and (B) comply with the hold-the-offering-price rule, if applicable, in each case if and for so long as directed by the Underwriter and as set forth in the related pricing wires.

e. The Underwriter acknowledges that sales of any Bonds to any person that is a related party to an Underwriter shall not constitute sales to the public for purposes of this section. Further, for purposes of this section:

i. “public” means any person other than an underwriter or a related party,

ii. “underwriter” means (A) any person that agrees pursuant to a written contract with the Authority (or with the lead underwriter to form an underwriting syndicate) to participate in the initial sale of the Bonds to the public and (B) any person that agrees pursuant to a written contract directly or indirectly with a person described in clause (A) to participate in the initial sale of the Bonds to the public (including a member of a selling group or a party to a retail distribution agreement participating in the initial sale of the Bonds to the public),

iii. a purchaser of any of the Bonds is a “related party” to an underwriter if the underwriter and the purchaser are subject, directly or indirectly, to (A) at least 50% common ownership of the voting power or the total value of their stock, if both entities are corporations (including direct ownership by one corporation of another), (B) more than 50% common ownership of their capital interests or profits interests, if both entities are partnerships (including direct ownership by one partnership of another), or (C) more than 50% common ownership of the value of the outstanding stock of the corporation or the capital interests or profit interests of the partnership, as applicable, if one entity is a corporation and the other entity is a partnership (including direct ownership of the applicable stock or interests by one entity of the other), and

iv. “sale date” means the date of execution of this Bond Purchase Agreement by all parties.

14. **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 Underwriter in which the Underwriter is acting solely as a principal, and are not acting as an agent, a municipal advisor, financial advisor or fiduciary to the Authority; (ii) the Underwriter has 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 Underwriter or its affiliates have provided other services or are currently providing other services to the Authority on other matters); (iii) the only obligations the Underwriter has 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.

15. **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 Underwriter 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-of-pocket associated with the issuance of the Bonds. The Authority shall reimburse the Underwriter for the fees and expenses of Underwriter's counsel, any expense advanced or incurred by the Underwriter for which the Authority is responsible hereunder including (f) above and other reasonable expenses incurred in connection with the performance of Underwriter's obligations hereunder (reimbursement may be included in the expense component of the Underwriter's discount, which the Underwriter acknowledges includes their expenses as set forth in Section 1).

16. **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 Executive Vice President Finance and Procurement, and any notice or other communication to be given to the Underwriter under this Agreement may be given by delivering the same in writing to JP Morgan Securities LLC, _____, New York, NY100 __, Attention: _____, Managing Director.

17. **Parties in Interest; Survival of Representations and Warranties.** This Agreement, when accepted in accordance with the provisions hereof, shall constitute the entire agreement between the Authority and the Underwriter and is made solely for the benefit of the Authority and the Underwriter (including the successors or assigns of the Authority or the Underwriter) and no other person will acquire or have any right hereunder or by virtue hereof. All of the Authority's and Underwriter's 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 Underwriter; or (b) delivery of and payment for the Bonds pursuant to this Agreement.

18. **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.

19. **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.

20. **Finder.** 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.

21. **Governing Law.** This Agreement shall be governed by and construed in accordance with the laws of the District of Columbia.

By: JP MORGAN SECURITIES LLC,
as the Underwriter

By: _____
Authorized Representative

[SIGNATURE PAGE TO SERIES 2019C BOND PURCHASE AGREEMENT]

Accepted: _____, 2019

DISTRICT OF COLUMBIA WATER AND SEWER AUTHORITY

By _____

Name: Matthew Brown

Title: Chief Financial Officer and Executive Vice
President Finance and Procurement

[SIGNATURE PAGE TO SERIES 2019C BOND PURCHASE AGREEMENT]

EXHIBIT A

\$ __,000,000 *

DISTRICT OF COLUMBIA WATER AND SEWER AUTHORITY
Public Utility Subordinate Lien Multimodal Revenue Bonds
Series 2019C

2019C Term Bonds

\$ __,000,000 ____% Term Bonds, due October 1, 20__, Yield ____%*

*Priced to the par call date.

2019C Term Bonds

\$ __,000,000 ____% Term Bonds, due October 1, 20__, Yield ____%*

*Priced to the par call date.

* Preliminary, subject to change.

TERMS OF REDEMPTION

Optional Redemption

The Series 2019C Bonds are subject to optional redemption prior to maturity on or after April 1, 202_ 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 \$ __,000 Series 2019C 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.

The \$ __,000 Series 2019C 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 INTERIM EXECUTIVE VICE PRESIDENT, LEGAL AFFAIRS
OPINION

_____, 2019

District of Columbia Water and Sewer Authority
1385 Canal Street S.E.
Washington, DC 20003

\$ __,000,000*

DISTRICT OF COLUMBIA WATER AND SEWER AUTHORITY
Public Utility Subordinate Lien Multimodal Revenue Bonds, Series 2019C

Ladies and Gentlemen:

I am the Interim Executive Vice President, Legal Affairs to the District of Columbia Water and Sewer Authority (the "Authority") and in connection with the issuance by the Authority of its and its Public Utility Subordinate Lien Multimodal Revenue Bonds, Series 2019C, in the original principal amount of \$ __,000,000* (the "Bonds"). I have reviewed an executed copy of the Bond Purchase Agreement, dated _____, 2019, between the Authority and JP Morgan Securities LLC, as the Underwriter, with respect to the Bonds (the "Bond Purchase Agreement") [and the Preliminary Official Statement, dated _____, 2019 (the "Preliminary Official Statement")] and the Official Statement, dated _____, 2019, 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.

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

* Preliminary, subject to change.

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,

Interim Executive Vice President Legal Affairs

EXHIBIT C

FORM OF OPINION OF UNDERWRITER'S COUNSEL

_____, 2019

\$____,000,000*

DISTRICT OF COLUMBIA WATER AND SEWER AUTHORITY
Public Utility Subordinate Lien Multimodal Revenue Bonds, Series 2019C

JP Morgan Securities LLC, as Underwriter

New York, NY 100__

Ladies and Gentlemen:

We have acted as counsel for you as the underwriter (the "Underwriter") in connection with your purchase from the District of Columbia Water and Sewer Authority (the "Authority") of its Public Utility Subordinate Lien Multimodal Revenue Bonds, Series 2019C, in the original principal amount of \$____,000,000* (the "Bonds"), pursuant to the Bond Purchase Agreement, dated _____, 2019 (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-Fifth Supplemental Indenture of Trust, to be dated the date of issuance and delivery of the Bonds (the "Twenty-Fifth 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 _____, 2019 (the "Preliminary Official Statement") and] the Official Statement of the Authority, dated _____, 2019, with respect to the Bonds (the "Official Statement"), the Continuing Disclosure Agreement, dated _____, 2019 (the "Continuing Disclosure Agreement"), the Purchase Agreement, certificates of the Authority, the Trustee and 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.

* Preliminary, subject to change.

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.

2. 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 Parker Poe Adams & Bernstein LLP, 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 Underwriter. 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 UNDERWRITERS' CERTIFICATE

\$ __,000,000*

DISTRICT OF COLUMBIA WATER AND SEWER AUTHORITY
Public Utility Subordinate Lien Multimodal Revenue Bonds, Series 2019C

UNDERWRITERS' CERTIFICATE

_____, 2019

JP Morgan Securities LLC ("JP Morgan"), 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.

[If the issue price is determined using only the general rule (actual sales of at least 10%) in Regulations § 1.148-1(f)(2)(i) and at least 10% of each maturity has been sold as of the Closing Date:

1.1 As of the date of this certificate, for each Maturity of the Issue, the first price at which at least 10% of such Maturity of the Issue was sold to the Public is the respective price listed in the final Official Statement, dated _____, 2019 for the Issue (the "Sale Price" as applicable to respective Maturities). The aggregate of the Sale Prices of each Maturity is \$_____ (the "Issue Price").]

[If the issue price is determined using only the general rule (actual sales of at least 10%) in Regulations § 1.148-1(f)(2)(i) and at least 10% of each maturity has not been sold as of the Closing Date:

1.1 As of the date of this Certificate, for each [Maturity] [of the _____ Maturities] of the Issue, the first price at which at least 10% of [each] such Maturity of the Issue was sold to the Public (the "10% Test") are the respective prices listed in **Schedule A** attached hereto.

1.2 With respect to each of the _____ Maturities of the Issue:

* Preliminary, subject to change.

(i) As of the date of this Certificate, the Underwriter has not sold at least 10% of these Maturities of the Issue at any single price.

(ii) As of the date of this Certificate, the JP Morgan reasonably expects that the price at which at least 10% of each of these Maturities of the Issue will be sold to the Public will be the respective price or prices listed on the attached **Schedule A** as the “Reasonably Expected Sale Prices for Undersold Maturities.”

(iii) JP Morgan will provide actual sales information (substantially similar to the information contained on **Schedule B**) as to the price at which at least 10% of each such Maturity (i.e., the Undersold Maturity or Maturities) of the Issue is sold to the Public.

(iv) On the date the 10% Test is satisfied with respect to all Maturities of the Issue, JP Morgan will execute a supplemental certificate substantially in the form attached hereto as **Schedule C** with respect to any Maturities for which the 10% Test has not been satisfied as of the Closing Date.**]

[If the issue price is determined using a combination of actual sales (Regulations § 1.148-1(f)(2)(i)) and hold-the-offering-price (Regulations § 1.148-1(f)(2)(ii)):

1.1 As of the date of this certificate, for each Maturity of the Issue listed on Schedule A as the “General Rule Maturities,” the first price at which at least 10% of such Maturity was sold to the Public is the respective price listed in Schedule A (the “Sale Price” as applicable to each Maturity of the General Rule Maturities).

1.2 The Underwriter offered the Maturities listed on Schedule A as the “Hold-the-Offering-Price Maturities” to the Public for purchase at the respective initial offering prices listed in Schedule A (the “Initial Offering Prices” as applicable to each Maturity of the Hold-the-Offering-Price Maturities) on or before the Sale Date. A copy of the pricing wire or equivalent communication for the Issue is attached to this certificate as Schedule B.

1.3 As set forth in the Bond Purchase Agreement dated _____, 2019, between the Authority and Underwriter, the Underwriter agreed in writing that, (i) for each Maturity of the Hold-the-Offering-Price Maturities, it would neither offer nor sell any of the Issue of such Maturity to any person at a price that is higher than the Initial Offering Price for such Maturity during the Holding Period for such Maturity (the “hold-the-offering-price rule”), and (ii) any selling group agreement contains the agreement of each dealer who is a member of the selling group, and any retail distribution agreement contains the agreement of each broker-dealer who is a party to the retail distribution agreement, to comply with the hold-the-offering-price rule. The Underwriter has not offered or sold any Maturity of the Hold-the-Offering-Price Maturities at a price that is higher than the respective Initial Offering Price for that Maturity of the Issue during the Holding Period.

The aggregate of the Sale Prices of the General Rule Maturities and the Initial Offering Prices of the Hold-the-Offering-Price Maturities is \$[_____] (the “Issue Price”).]

[If the issue price is determined using only the hold-the-offering-price rule in Regulations § 1.148-1(f)(2)(ii):

1.1 As set forth in the Bond Purchase Agreement dated _____, 2019, between the Authority and the Underwriter, the Underwriter agreed in writing that, (i) for each Maturity of the Issue, it would neither offer nor sell any of such Maturity of the Issue to any person at a price that is higher than the Initial Offering Price for such Maturity during the Holding Period for such Maturity (the “hold-the-offering-price rule”), and (ii) any selling group agreement contains the agreement of each dealer who is a member of the selling group, and any retail distribution agreement contains the agreement of each broker-dealer who is a party to the retail distribution agreement, to comply with the hold-the-offering-price rule. The Underwriter has not offered or sold any Maturity of the Issue at a price that is higher than the respective Initial Offering Price for that Maturity of the Issue during the Holding Period.]

[1.2, 1.3, 1.4, 1.2] Definitions. [NOTE: If issue price is determined using only the general rule (actual sales of 10%), delete the definitions of “Holding Period” and “Sale Date.”]

[“Holding Period” means, for each Hold-the-Offering-Price Maturity of the Issue, the period starting on the Sale Date and ending on the earlier of (i) the close of the fifth business day after the Sale Date (_____, 2019), or (ii) the date on which the Underwriter sold at least 10% of such Maturity of the Issue to the Public at prices that are no higher than the Initial Offering Price for such Maturity.]

“Maturity” means bonds of the Issue with the same credit and payment terms. Bonds of the Issue with different maturity dates, or bonds of the Issue with the same maturity date but different stated interest rates, are treated as separate Maturities.

“Public” means any person (including an individual, trust, estate, partnership, association, company, or corporation) other than an Underwriter or a related party to an Underwriter. The term “related party” for purposes of this certificate generally means any two or more persons who have greater than 50 percent common ownership, directly or indirectly.

[“Sale Date” means the first day on which there is a binding contract in writing for the sale of a Maturity of the Issue. The Sale Date of the Issue is _____, 2019.]

“Underwriter” means (i) any person that agrees pursuant to a written contract with the Authority (or with the lead underwriter to form an underwriting syndicate) to participate in the initial sale of the Issue to the Public, and (ii) any person that agrees pursuant to a written contract directly or indirectly with a person described in clause (i) of this paragraph to participate in the initial sale of the Issue to the Public (including a member of a selling group or a party to a retail distribution agreement participating in the initial sale of the Issue to the Public).

All capitalized terms not defined in this Certificate have the meaning set forth in the Authority’s Tax Compliance Certificate or in Attachment A to it.

[2. Reserve Fund.

The funding of the Reserve Fund as provided in the Trust Agreement securing the Issue is reasonably required, was a vital factor in marketing the Issue, facilitated the marketing of the Issue at an interest rate comparable to that of bonds and other obligations of a similar type and is not in excess of the amount necessary for such purpose.]

[3. Yield.

3.1 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 1.1 [and computed with the adjustments stated in paragraphs 3.2 and 4.3].

3.2 Discount Bonds Subject to Mandatory Early Redemption. [No bond of the Issue 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.] [Or] [The stated redemption price at maturity of the bonds of the Issue maturing in the year[s] 20__, which are the only bonds of the Issue that are subject to mandatory early redemption, exceeds the Initial Offering Price of such bonds by more than one-fourth of 1% multiplied by the product of the stated redemption price at maturity and the number of years to the weighted average maturity date of such bonds. Accordingly, in computing the Yield on the Issue stated in paragraph 3.1, those bonds were treated as redeemed on each mandatory early redemption date at their present value rather than at their stated principal amount.]

3.3 Premium Bonds Subject to Optional Redemption. No bond of the Issue:

- Is subject to optional redemption within five years of the Issuance Date of the Issue.
- That is subject to optional redemption has an Initial Offering Price that exceeds its stated redemption price at maturity by more than one-fourth of 1% multiplied by the product of its stated redemption price at maturity and the number of complete years to its first optional redemption date.]]

[4. Weighted Average Maturity.

The weighted average maturity (defined below) of the Issue is _____ years [For refunding issues: and the remaining weighted average maturity of the Refunded Bonds is _____ years. The weighted average maturity of an issue is equal to the sum of the products of the Initial Offering Price of each maturity of the issue and the number of years to the maturity date of the respective maturity (taking into account mandatory but not optional redemptions), divided by the Initial Offering Price of the entire Issue.]

5. Underwriter's Discount. The Underwriter's discount is \$_____, being the amount by which the aggregate Issue Price (as set forth in paragraph 1.1) exceeds the price paid by JP Morgan to the Authority for the Issue.

The signer is an officer of JP Morgan and duly authorized to execute and deliver this Certificate of the Underwriter for itself. JP Morgan understands that the certifications contained in this Certificate will be relied on by the Issuer in making certain of its representations in its Tax Compliance Certificate and in completing and filing the Information Return for the Issue, and by Squire Patton Boggs (US) LLP and Parker Poe Adams & Bernstein LLP, as co-bond counsel ("Bond Counsel"), in rendering certain of their legal opinions in connection with the issuance of the Issue.

JP Morgan has performed these calculations with the express understanding and agreement of Bond Counsel and the Issuer that, notwithstanding the performance of these calculations and the delivery of this certificate: (i) in doing so we are not acting as Municipal Advisor (as defined in Section 15 of the Securities Exchange Act), (ii) we do not have a fiduciary duty to the Issuer, and (iii) we are not to be construed as a "paid preparer" of any tax returns of the Issuer, including specifically (but not limited to) Form 8038-G.

Notwithstanding the foregoing, JP Morgan reminds you that we are not accountants or actuaries, nor are we engaged in the practice of law. Accordingly, while we believe the calculations described above to be correct, we do not warrant them to be so, nor do we warrant their validity for purposes of Sections 103 and 141 through 150 of the Code.

The representations set forth in this certificate are limited to factual matters only. Nothing in this certificate represents JP Morgan's interpretation of any laws, including specifically Sections 103 and 148 of the Code and the Treasury Regulations thereunder.

Dated: _____, 2019

By: JP MORGAN SECURITIES LLC,
as the Underwriter

[NOTE: If the general rule is used for each Maturity (i.e., actual sales of at least 10% of each Maturity) and at least 10% of each Maturity has been sold as of the Closing, there is no schedule to attach if the initial offering prices set forth in the Official Statement for the Issue are the first prices at which at least 10% of each Maturity is sold. Otherwise, attach a schedule that shows the first price at which at least 10% of each Maturity was sold.]

[OR]

[If the issue price is determined using a combination of the general rule (actual sales) and hold-the-offering-price rule:

SCHEDULE A
SALE PRICES OF THE GENERAL RULE MATURITIES AND
INITIAL OFFERING PRICES OF THE HOLD-THE-OFFERING-PRICE MATURITIES
(Attached)

[NOTE: With respect to each Maturity of the Issue, Schedule A should include each Maturity's (i) maturity date, (ii) principal amount, (iii) coupon, (iv) yield, and (v) the sale prices/initial offering prices (as applicable).]

SCHEDULE B
PRICING WIRE OR EQUIVALENT COMMUNICATION
(Attached)

[OR]

[If the issue price is determined using only the hold-the-offering-price rule in Regulations § 1.148-1(f)(2)(ii):

SCHEDULE A
INITIAL OFFERING PRICES OF THE ISSUE
(Attached)

SCHEDULE B
PRICING WIRE OR EQUIVALENT COMMUNICATION
(Attached)

[OR]

If the issue price is determined using only the general rule (actual sales of at least 10%) in Regulations § 1.148-1(f)(2)(i) and at least 10% of each maturity has not been sold as of the Closing Date:

SCHEDULE A
TO
ISSUE PRICE CERTIFICATE

Actual Sales Information as of Closing Date

<u>Maturity/CUSIP</u>	<u>Coupon</u>	<u>Date Sold</u>	<u>Time Sold</u>	<u>Par Amount</u>	<u>Sale Price</u>
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]Reasonably Expected Sales Prices for Undersold Maturities as of Closing Date**

<u>Maturity/CUSIP</u>	<u>Coupon</u>	<u>Par Amount</u>	<u>Offering Prices</u>
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**]

[**SCHEDULE B
TO
ISSUE PRICE CERTIFICATE

Actual Sales for Undersold Maturities as of the Closing Date

<u>Maturity/CUSIP</u>	<u>Date Sold</u>	<u>Time Sold</u>	<u>Par Amount</u>	<u>Sale Price</u>
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**D.C. WATER AND SEWER AUTHORITY
BOARD OF DIRECTORS
FINANCE & BUDGET
SEPTEMBER COMMITTEE MEETING**

**Thursday, September 26, 2019; 11:00 a.m.
1385 Canal Street, SE, Boardroom
AGENDA**

Call to Order	Chairman
August 2019 Financial Report	Chief Financial Officer
Agenda for October Committee Meeting	Chairman
Adjournment	Chairman

*Detailed agenda can be found on DC Water's website at www.dewater.com/about/board_agendas.cfm