### TWENTY-THIRD SUPPLEMENTAL INDENTURE OF TRUST

### between

# DISTRICT OF COLUMBIA WATER AND SEWER AUTHORITY

and

WELLS FARGO BANK, NATIONAL ASSOCIATION AS TRUSTEE

**Dated April 30, 2018** 

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THIS TWENTY-THIRD SUPPLEMENTAL INDENTURE OF TRUST dated the 30<sup>th</sup> day of April, 2018 (as defined in more detail below, the "Twenty-Third 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 Columbia, Maryland, as trustee (in such capacity, together with any successor in such capacity, herein called the "Trustee"), provides:

WHEREAS, the Authority and the Trustee (its predecessor in that capacity having been Norwest Bank, N.A.) entered into the Master Indenture of Trust, dated as of April 1, 1998 (the "Master Indenture" and, as previously supplemented and amended by the First Supplemental Indenture, the Second Supplemental Indenture, the Third Supplemental Indenture, the Fourth Supplemental Indenture, the Fifth Supplemental Indenture, the Sixth Supplemental Indenture, the Seventh Supplemental Indenture, the Eighth Supplemental Indenture, the Ninth Supplemental Indenture, the Tenth Supplemental Indenture, the Eleventh Supplemental Indenture, the Twelfth Supplemental Indenture, the Thirteenth Supplemental Indenture, the Fourteenth Supplemental Indenture, the Fifteenth Supplemental Indenture, the Sixteenth Supplemental Indenture, the Seventeenth Supplemental Indenture, the Eighteenth Supplemental Indenture, the Nineteenth Supplemental Indenture, the Twentieth Supplemental Indenture, the Twenty-First Supplemental Indenture and the Twenty-Second Supplemental Indenture, all as hereinafter defined, and as it may further be supplemented and amended in accordance with its terms, the "Indenture"), to provide for financing or refinancing the acquisition, construction, operation, maintenance and extension of the System (as defined in the Master Indenture) by the issuance of bonds, notes and other obligations payable solely from Net Revenues (as defined in the Master Indenture); and

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

WHEREAS, pursuant to the Seventeenth Supplemental Indenture of Trust, dated November 20, 2014 (the "Seventeenth Supplemental Indenture"), between the Authority and the Trustee, the Authority: (i) issued its Public Utility Subordinate Lien Revenue Refunding Bonds, Series 2014C, in the aggregate principal amount of \$377,700,000 (the "Series 2014C Subordinate Bonds") to (a) advance refund all 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 the Series 2004 Subordinated Bonds, the Series 2007A Subordinated Bonds, the Series 2008A Subordinated Bonds, the Series 2010 Notes, the Series 2010A Subordinated Bonds, the Series 2012A Subordinate Bonds, the Series 2012B Subordinate Bonds, the Series 2012C Subordinate Bonds, the Series 2013A Subordinate Bonds, Series 2014B Subordinate Bonds, and other Subordinate Debt, including, without limitation, other Subordinate Debt that the Authority may issue from time to time in the future; and

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

**Subordinate Bonds**" and, together with the Series 2015A Subordinate Bonds, the "**Series 2015A/B Subordinate Bonds**") to (a) finance certain Costs of the System, and (b) pay issuance costs of the Series 2015B Subordinate Bonds, (v) designated the Series 2015B Subordinate Bonds as Subordinate Debt for purposes of the Indenture, and (vi) secured the Series 2015B Subordinate Bonds by a pledge of Net Revenues subordinate to the pledge of Net Revenues that secures Senior Debt and on a parity with the pledge of Net Revenues that secures the Series 2004 Subordinated Bonds, the Series 2007A Subordinated Bonds, the Series 2008A Subordinated Bonds, the Series 2010 Notes, the Series 2010A Subordinated Bonds, the Series 2012A Subordinate Bonds, the Series 2012B Subordinate Bonds, the Series 2012C Subordinate Bonds, the Series 2013A Subordinate Bonds, Series 2014B Subordinate Bonds, Series 2015A Subordinate Bonds, and other Subordinate Debt, including, without limitation, other Subordinate Debt that the Authority may issue from time to time in the future; and

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

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

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

WHEREAS, 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 Subordinate 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 the Series 1998 Senior Lien Bonds, the Series 2009A Senior Lien Bonds, the Series 2014A Senior Lien Bonds, the Series 2017B Senior Lien Bonds, and other Senior Debt, including, without limitation, other Senior Debt that the Authority may issue from time to time in the future, (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 the Series 1998 Senior Lien Bonds, the Series 2009A Senior Lien Bonds, the Series 2014A Senior Lien Bonds, the Series 2017A Senior Lien Bonds, and other Senior Debt, including, without limitation, other Senior Debt that the Authority may issue from time to time in the future; and

WHEREAS, the Authority now intends to: (i)(a) issue Public Utility Senior Lien Revenue Bonds, Series 2018A in the aggregate principal amount of \$100,000,000 (the "Series 2018A Senior Lien Bonds") to (1) finance certain Costs of the System (specifically, a portion of the costs of the Authority's DC Clean Rivers Project), and (2) pay issuance costs of the Series 2018A Senior Lien Bonds, (b) designate the Series 2018A Senior Lien Bonds as Senior Debt for purposes of the Indenture, and (iii) secure the Series 2018A Senior Lien Bonds by a pledge of

Net Revenues on a parity with the pledge of Net Revenues that secures the Series 1998 Senior Lien Bonds, the Series 2009A Senior Lien Bonds, the Series 2014A Senior Lien Bonds, the Series 2017A/B Senior Lien Bonds, and other Senior Debt, including, without limitation, other Senior Debt that the Authority may issue from time to time in the future, and (ii)(a) issue the Public Utility Senior Lien Revenue Bonds, Series 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 (1) finance certain Costs of the System, (2) pay issuance costs of the Series 2018B Senior Lien Bonds, and (3) refund all of the Authority's outstanding Commercial Paper Notes, Series B, presently outstanding in the aggregate principal amount of \$85,000,0000 (collectively, the "Series 2018 CP Notes"), (b) designate the Series 2018B Senior Lien Bonds as Senior Debt for purposes of the Indenture, and (iii) secure the Series 2018B Senior Lien Bonds by a pledge of Net Revenues on a parity with the pledge of Net Revenues that secures the Series 1998 Senior Lien Bonds, the Series 2009A Senior Lien Bonds, the Series 2014A Senior Lien Bonds, the Series 2017A/B Senior Lien Bonds, and other Senior Debt, including, without limitation, other Senior Debt that the Authority may issue from time to time in the future; and

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

## ARTICLE I TWENTY-THIRD SUPPLEMENTAL INDENTURE

### Section 101. Authorization of Twenty-Third Supplemental Indenture.

This Twenty-Third 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 2018A/B Senior Lien Bonds as Senior Debt and to the Holders thereof as Holders of Senior Debt, except as otherwise provided in this Twenty-Third Supplemental Indenture.

#### Section 102. Definitions.

Except as otherwise defined in this Twenty-Third 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 Eleventh Supplemental Indenture, the Twelfth Supplemental Indenture, the Thirteenth Supplemental Indenture, the Fourteenth Supplemental Indenture, the Seventeenth Supplemental Indenture, the Seventeenth Supplemental Indenture, the Sixteenth Supplemental Indenture, the Nineteenth Supplemental Indenture, the Twenty-First Supplemental Indenture and the Twenty-Second Supplemental Indenture are used in this Twenty-Third Supplemental Indenture with the meanings assigned to them therein. In addition, the following

words as used in this Twenty-Third 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 2018A/B Senior Lien Bond certificates in fully registered form are issued only to a Depository or its nominee as Holder, with the certificated Series 2018A/B Senior Lien Bonds held by and "immobilized" in the custody of the Depository, and the book-entry system, maintained by and the responsibility of the Depository and not maintained by or the responsibility of the Authority or the Trustee, is the record that identifies, and records the transfer of the interests of, the owners of beneficial, book-entry interests in the Series 2018A/B Senior Lien Bonds.

"Depository" means any securities depository that is a clearing agency under federal law operating and maintaining, with its participants or otherwise, a book-entry system to record ownership of book-entry interests in Series 2018A/B Senior Lien Bonds, and to effect transfers of book-entry interests in Series 2018A/B Senior Lien 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 2018A/B Senior Lien Bonds means each April 1 and October 1 commencing October 1, 2018, and thereafter during the time the Series 2018A/B Senior Lien Bonds are outstanding.

"Series 2018A Construction Account" means the Series 2018A Construction Account established by this Twenty-Third Supplemental Indenture in the Construction Fund.

"Series 2018A Costs of Issuance Subaccount" means the Series 2018A Costs of Issuance Subaccount established by this Twenty-Third Supplemental Indenture in the Series 2018A Construction Account of the Construction Fund.

"Series 2018B Construction Account" means the Series 2018B Construction Account established by this Twenty-Third Supplemental Indenture in the Construction Fund.

"Series 2018B Costs of Issuance Subaccount" means the Series 2018B Costs of Issuance Subaccount established by this Twenty-Third Supplemental Indenture in the Series 2018B Construction Account of the Construction Fund.

"Series 2018A/B Rebate Fund" means the Series 2018A/B Rebate Fund established by this Twenty-Third Supplemental Indenture.

"Series 2018A/B Resolution" means Resolution No. 18-32, adopted by the Authority's Board of Directors on April 5, 2018, authorizing the Series 2018A/B Senior Lien Bonds.

"Series 2018A/B Senior Lien Bond Event of Default" means any of the events defined as such in Section 901 of the Master Indenture.

"Series 2018A/B Senior Lien Bondholder" or "holder of Series 2018A/B Senior Lien Bonds" means the registered owner of a Series 2018A/B Senior Lien Bond.

"Series 2018A/B Senior Lien Bonds Interest Subaccount" means the Series 2018A/B Senior Lien Bonds Interest Subaccount established by this Twenty-Third Supplemental Indenture in the Interest Account in the Bond Fund.

"Series 2018A/B Senior Lien Bonds Principal Subaccount" means the Series 2018A/B Senior Lien Bonds Principal Subaccount established by this Twenty-Third Supplemental Indenture in the Principal Account in the Bond Fund.

"Twenty-Third Supplemental Indenture" means this Twenty-Third Supplemental Indenture of Trust, dated April 30, 2018, 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 Sixteenth Supplemental Indenture, the Sixteenth Supplemental Indenture, the Eighteenth Supplemental Indenture, the Nineteenth Supplemental Indenture, the Twentieth Supplemental Indenture, the Twentieth Supplemental Indenture, the Twentieth Supplemental Indenture, the Twenty-First Supplemental Indenture and the Twenty-Second 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-Third Supplemental Indenture.

## ARTICLE II AUTHORIZATION, DETAILS AND FORM OF SERIES 2018A/B SENIOR LIEN BONDS

## Section 201. Authorization of Series 2018A/B Senior Lien Bonds.

Pursuant to Article III of the Master Indenture and, specifically, Section 303 thereof, and the Series 2018A/B Resolution, the Authority is authorized to issue:

- (i) Series 2018A Senior Lien Bonds in the aggregate principal amount of \$100,000,000.00, 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 2018A Senior Lien Bonds. The Series 2018A Senior Lien Bonds shall be issued as Senior Lien Debt pursuant to the Indenture; and
- (ii) Series 2018B Senior Lien Bonds in the aggregate principal amount of \$200,000,000.00, for the purpose of (a) financing Costs of the System, (b) paying issuance costs of the Series 2018B Senior Lien Bonds, and (c) refunding the Series 2018 CP Notes. The Series 2018B Senior Lien Bonds shall be issued as Senior Lien Debt pursuant to the Indenture.

### Section 202. Details of Series 2018A/B Senior Lien Bonds.

The Series 2018A Senior Lien Bonds shall be designated "Public Utility Senior Lien Revenue Bonds, Series 2018A (Green Bonds)", shall be dated April 30, 2018, 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
2037	\$ 8,005,000.00	5.00%
2038	8,405,000.00	5.00
2039	8,260,000.00	5.00
2041	7,670,000.00	5.00
2042	2,660,000.00	5.00
2049	65,000,000.00	5.00

The Series 2018B Senior Lien Bonds shall be designated "Public Utility Senior Lien Revenue Bonds, Series 2018B", shall be dated April 30, 2018, 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
2019	\$ 3,325,000	5.00%
2020	3,490,000	5.00
2021	3,665,000	5.00
2022	3,850,000	5.00
2023	4,045,000	5.00
2024	4,245,000	5.00
2025	4,455,000	5.00
2026	4,680,000	5.00
2027	4,915,000	5.00
2028	5,160,000	5.00
2029	5,415,000	5.00
2030	5,690,000	5.00
2031	5,975,000	5.00
2032	6,270,000	5.00
2033	6,585,000	5.00
2034	6,915,000	5.00
2035	7,260,000	5.00
2036	7,625,000	5.00
2043	30,170,000	5.00
2049	76,265,000	5.00

Each Series 2018A/B Senior Lien Bond shall bear interest: (a) from its date, if such Series 2018A/B Senior Lien Bond is authenticated prior to the first Interest Payment Date, or (b) otherwise from the Interest Payment Date that is, or immediately precedes, the date on which such Series 2018A/B Senior Lien Bond is authenticated; provided, however, that if at the time of authentication of any Series 2018A/B Senior Lien Bond payment of interest is in default, such Series 2018A/B Senior Lien Bond shall bear interest from the date to which interest has been paid. The interest payable on the Series 2018A/B Senior Lien Bonds will be computed on the basis of a 360-day year of twelve 30-day months.

Principal of and premium, if any, on the Series 2018A/B Senior Lien Bonds shall be payable to the registered owners thereof upon the surrender of the applicable Series 2018A/B Senior Lien Bonds at the designated office of the Trustee. Interest on the Series 2018A/B Senior Lien Bonds shall be payable by check or draft mailed to the registered owners at their addresses as they appear on the fifteenth day of the month preceding the Interest Payment Date on the registration books kept by the Trustee; provided, however, if the Series 2018A/B Senior Lien Bonds are registered in the name of a Depository or its nominee as registered owner or at the option of a registered owner of at least \$1,000,000 of Series 2018A/B Senior Lien Bonds, payment shall be made by wire transfer to an account within the United States pursuant to the wire instructions received by the Trustee with respect to each such payment from such registered owner. Principal, premium, if any, and interest shall be payable in lawful money of the United States of America.

#### Section 203. Form of Bonds.

The Series 2018A/B Senior Lien Bonds shall be in substantially the forms set forth in **Exhibits A-1 and A-2**, with such appropriate variations, omissions and insertions as are permitted or required by the Indenture.

## Section 204. Depository Provisions.

The Series 2018A/B Senior Lien Bonds shall initially be issued to a Depository for holding in a book-entry system. Those Series 2018A/B Senior Lien Bonds shall be registered in the name of the Depository or its nominee, as registered owner, and immobilized in the custody of the Depository or the Trustee on behalf of the Depository; and shall not be transferable or exchangeable, except for transfer to another Depository or to another nominee of a Depository, without further action by the Authority.

If any Depository determines not to continue to act as a Depository for the Series 2018A/B Senior Lien Bonds for holding in a book-entry system or the Authority determines to remove the Series 2018A/B Senior Lien Bonds from a Depository, the Authority may attempt to have established a securities depository/book-entry system relationship with another qualified Depository. If the Authority does not or is unable to do so, the Authority, after making provision for notification of the owners of book-entry interests by appropriate notice to the then Depository and any other arrangements it deems necessary, shall permit withdrawal of the Series 2018A/B Senior Lien Bonds from the Depository, and shall execute and direct the Trustee to authenticate and deliver Series 2018A/B Senior Lien Bond certificates, in fully registered form, to the assigns of the Depository or its nominee (if such Series 2018A/B Senior Lien Bonds were held by a

nominee), all at the cost and expense (including costs of printing or otherwise preparing and delivering replacement Series 2018A/B Senior Lien Bonds), if the event is not the result of Authority action or inaction, of those persons requesting that authentication and delivery. Series 2018A/B Senior Lien Bond certificates authenticated and delivered pursuant to this paragraph shall be in authorized denominations. In the event that Series 2018A/B Senior Lien Bonds shall cease to be in book-entry form, then the Authority or the Depository shall provide to the Trustee the name, address of record and taxpayer identification number of each registered holder thereof. The Trustee may rely on such information without any investigation.

If the Series 2018A/B Senior Lien Bonds are withdrawn from a Depository and printed bond certificates in fully registered form are or are to be authenticated and delivered pursuant to this Section, and if, in the opinion of Bond Counsel addressed to the Trustee, the delivery of coupon bonds payable to bearer would not result in the interest on any of the Series 2018A/B Senior Lien Bonds then outstanding becoming includable in gross income for federal income tax purposes, the Authority, without the consent of or notice to any of the holders of the Series 2018A/B Senior Lien Bonds, may authorize the exchange of Series 2018A/B Senior Lien Bond certificates in fully registered form or Series 2018A/B Senior Lien Bonds under a book-entry system for coupon bonds payable to bearer, in an aggregate principal amount not exceeding the then unmatured and unredeemed principal amount of the Series 2018A/B Senior Lien Bonds, bearing interest at the same rate and maturing on the same date, with coupons attached representing all unpaid interest due or to become due thereon. Such certificated Series 2018A/B Senior Lien Bonds will be registrable, transferable and exchangeable as set forth in Section 204 and Section 205 of the Master Indenture.

So long as a Depository holds the Series 2018A/B Senior Lien Bonds in a book-entry system (i) it or its nominee shall be the registered owner of the Series 2018A/B Senior Lien Bonds, (ii) notwithstanding anything to the contrary in this Twenty-Third 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-Third Supplemental Indenture to registered owners of the Series 2018A/B Senior Lien Bonds shall mean such Depository or its nominee and shall not mean the beneficial owners of the Series 2018A/B Senior Lien Bonds.

## Section 205. Delivery of Series 2018A/B Senior Lien Bonds.

The Trustee shall authenticate and deliver the Series 2018A/B Senior Lien Bonds when there have been filed with or delivered to it the following items:

- (i) An original executed counterpart of this Twenty-Third 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-Third Supplemental Indenture, and (b) authorizing the issuance, sale, award, execution and delivery of the Series 2018A/B Senior Lien Bonds.

- (iii) A certificate signed by an Authorized Representative of the Authority and dated the date of such issuance, to the effect that:
- (a) Either: (1) upon and immediately following such issuance, no Event of Default has occurred which has not been cured or waived, and no event or condition exists which, with the giving of notice or lapse of time or both, would become an Event of Default, or (2) if any such event or condition is happening or existing, specifying such event or condition, stating that the Authority will act with due diligence to correct such event or condition after the issuance of the Series 2018A/B Senior Lien Bonds, and describing in reasonable detail the actions to be taken by the Authority toward such correction; and
- (b) All required approvals, limitations, conditions and provisions precedent to the issuance of the Series 2018A/B Senior Lien Bonds have been obtained, observed, met and satisfied.
- (iv) An Opinion or Opinions of Counsel, subject to customary exceptions and qualifications, substantially to the effect that this Twenty-Third 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 2018A/B Senior Lien Bonds has been duly authorized, that the Series 2018A/B Senior Lien Bonds are valid and binding limited obligations of the Authority, and that the interest on the Series 2018A/B Senior Lien Bonds is excludable from gross income for purposes of Federal income taxation.
- (vi) A certificate of an Authorized Representative of the Authority, stating that rates, fees and charges are in effect or scheduled to go into effect to meet the Rate Covenant immediately after the issuance of the Series 2018A/B Senior Lien Bonds.
- (vii) A request and authorization of the Authority, signed by an Authorized Representative of the Authority, to the Trustee to authenticate and deliver such Bonds to the purchaser upon payment to the Trustee in immediately available funds for the account of the Authority of a specified sum plus accrued interest to the date of delivery.

# ARTICLE III REDEMPTION OF SERIES 2018A/B SENIOR LIEN BONDS

## Section 301. Redemption Dates and Prices.

The Series 2018A/B Senior Lien Bonds may not be called for redemption by the Authority except as provided below:

(i) Optional Redemption. (a) The Series 2018A Senior Lien Bonds maturing on or after October 1, 2028, are subject to redemption prior to maturity at the option of the Authority

on or after April 1, 2028, 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 2018B Senior Lien Bonds maturing on or after October 1, 2028, are subject to redemption prior to maturity at the option of the Authority on and after April 1, 2028, from any source, in whole or in part on any date, in such order of maturities as shall be determined by the Authority (and by lot within a maturity), at a redemption price of 100% of the principal amount thereof, together with accrued interest, if any, to the redemption date
- (ii) <u>Mandatory Redemption</u>. (a) The Series 2018A Senior Lien Bonds bearing interest at a rate of 5.00%, and maturing on October 1, 2049 (the "2049 Term Series 2018A Senior Lien Bonds"), are required to be redeemed prior to maturity on October 1 in years and amounts upon payment of 100% of the principal amount thereof plus interest accrued to the redemption date, as follows:

Year	Amount
2046	\$15,080,000
2047	15,835,000
2048	16,625,000
$2049^{\dagger}$	17,460,000

<sup>†</sup> Final Maturity

(b) The Series 2018B Senior Lien Bonds each bearing interest at a rate of 5.00% and maturing on October 1, 2043 (the "2043 Term Series 2018B Senior Lien Bonds") and October 1, 2049 (the "2049 Term Series 2018B Senior Lien 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 2043 Term Series 2018B Senior Lien Bonds are subject to mandatory sinking fund redemption on each October 1 as set forth below:

Year	Amount	
2039	\$ 565,000	
2040	9,265,000	
2041	2,060,000	
2042	7,555,000	
2043†	10,725,000	

<sup>†</sup> Final Maturity

The 2049 Term Series 2018B Senior Lien Bonds are subject to mandatory sinking fund redemption on each October 1 as set forth below:

Year	Amount
2044	\$11,265,000
2045	23,525,000
2046	9,625,000
2047	10,105,000
2048	10,610,000
2049†	11,135,000

<sup>†</sup> Final Maturity

The Trustee shall provide for a mandatory redemption of the Term Series 2018A/B Senior Lien Bonds in accordance with the schedules set forth above; provided, however, that on or before the 70th day next preceding any such mandatory redemption date, the Authority may:

- (i) deliver to the Trustee for cancellation Term Series 2018A/B Senior Lien Bonds of the maturity required to be redeemed on such mandatory redemption date in any aggregate principal amount desired; or
- (ii) instruct the Trustee in writing to apply a credit against the Authority's next mandatory redemption obligation for any such Term Series 2018A/B Senior Lien Bonds that previously have been redeemed (other than through mandatory redemption) and canceled but not theretofore applied as a credit against any mandatory redemption obligation.

Upon the occurrence of any of the events described in clauses (i) or (ii) of the preceding sentence, the Trustee shall credit against the Authority's mandatory redemption obligation on the next mandatory redemption date the amount of such Term Series 2018A/B Senior Lien Bonds so delivered or previously redeemed. Any principal amount of such Term Series 2018A/B Senior Lien Bonds in excess of the principal amount required to be redeemed on such mandatory redemption date shall be similarly credited in an amount equal to the principal of such Term Series 2018A/B Senior Lien Bonds so purchased towards the sinking fund installments for the Term Series 2018A/B Senior Lien Bonds of such maturity on a pro rata basis in accordance with a certificate of an Authorized Representative of the Authority, which will direct the reduction of a ratable portion of each annual mandatory sinking fund installment requirement in accordance with the procedures set forth below. Within seven days of receipt of such Term Series 2018A/B Senior Lien Bonds or instructions to apply as a credit, any amounts remaining in the Sinking Fund Account in excess of the amount required to fulfill the remaining required mandatory redemption obligation on the next mandatory redemption date shall be used in such manner as determined at the written direction of the Authority.

The particular maturities of the Series 2018A/B Senior Lien Bonds to be redeemed at the option of the Authority will be determined by the Authority in its sole discretion.

If fewer than all of the Series 2018A/B Senior Lien Bonds are called for redemption, they shall be called in such order of maturity as the Authority may determine and direct the Trustee in writing. If less than all of the Series 2018A/B Senior Lien Bonds of any maturity date is called for redemption, the Series 2018A/B Senior Lien Bonds to be redeemed shall be selected by the Depository pursuant to its rules and procedures or, if the book-entry system is discontinued, shall be selected by the Trustee by lot in such manner as the Trustee in its discretion may determine. The portion of any Series 2018A/B Senior Lien Bond to be redeemed shall be in the principal amount of \$5,000 or some integral multiple thereof. In selecting Series 2018A/B Senior Lien Bonds for redemption, each Series 2018A/B Senior Lien Bond shall be considered as representing that number of Bonds which is obtained by dividing the principal amount of such Series 2018A/B Senior Lien Bond by \$5,000. If a portion of a Series 2018A/B Senior Lien Bond shall be called for redemption, a new Series 2018A/B Senior Lien Bond in principal amount equal to the unredeemed portion thereof shall be issued to the registered owner upon the surrender thereof.

## Section 302. Notice of Redemption.

Notice of redemption of Series 2018A/B Senior Lien Bonds shall be given in the manner set forth in Section 402 of the Master Indenture; provided, however, that notices of redemption of Series 2018A/B Senior Lien Bonds sent pursuant to Section 402 of the Master Indenture shall either (i) explicitly state that the proposed redemption is conditioned on there being on deposit in the applicable fund or account on the redemption date sufficient money to pay the full redemption price of the Series 2018A/B Senior Lien Bonds to be redeemed, or (ii) be sent only if sufficient money to pay the full redemption price of the Series 2018A/B Senior Lien Bonds to be redeemed is on deposit in the applicable fund or account. Notwithstanding the foregoing and the otherwise applicable requirement of Section 402 of the Master Indenture that the Trustee send notice of a call for redemption not fewer than 30 days prior to the redemption date, the Trustee may send any notice of redemption of Series 2018A/B Senior Lien Bonds not fewer than 20 days prior to the redemption date or such shorter period of time as may be acceptable to the Depository while the Series 2018A/B Senior Lien Bonds are in book-entry form and registered with a Depository, initially DTC.

# ARTICLE IV APPLICATION OF PROCEEDS OF SERIES 2018A/B SENIOR LIEN BONDS

# Section 401. Application of Proceeds of Series 2018A/B Senior Lien Bonds; Application of Related Amounts.

The net proceeds of the Series 2018A/B Senior Lien Bonds in the amount of \$347,384,032.72, which represents the par amount of the Series 2018A/B Senior Lien Bonds (\$300,000,000), minus the underwriters' discount (\$1,259,822.73), and plus original issue premium (\$48,643,855.45) by the Original Purchasers, at the request and direction of the Authority shall be applied as follows:

- (i) \$115,086,451.45 from the net proceeds of the Series 2018A Senior Lien Bonds shall be deposited in the Series 2018A Construction Account.
- (ii) \$146,585,581.27 from the net proceeds of the Series 2018B Senior Lien Bonds shall be deposited in the Series 2018B Construction Account.
- (iii) \$85,000,000.00 from the net proceeds of the Series 2018B Senior Lien Bonds shall be deposited in the Series B Subordinate Principal Subaccount of the Subordinate Principal Account in the Subordinate Bond Fund.
- (iv) \$280,666.66 from the net proceeds of the Series 2018A Senior Lien Bonds shall be deposited in the Series 2018A Costs of Issuance Subaccount of the Series 2018A Construction Account of the Construction Fund and used to pay costs of issuance of the Series 2018A Senior Lien Bonds.
- (v) \$431,333.34 from the net proceeds of the Series 2018B Senior Lien Bonds shall be deposited in the Series 2018B Costs of Issuance Subaccount of the Series 2018B Construction Account of the Construction Fund and used to pay costs of issuance of the Series 2018B Senior Lien Bonds.

## ARTICLE V FUNDS AND ACCOUNTS

# Section 501. Series 2018A Construction Account and Series 2018B Construction Account.

- (i) In the Construction Fund, there shall be established a Series 2018A Construction Account and, within that Account, a Series 2018A Costs of Issuance Subaccount. The portion of the proceeds of the Series 2018A Senior Lien Bonds specified in Section 401(iv) shall be deposited in the Series 2018A Costs of Issuance Subaccount and used to pay costs of issuance related to the Series 2018A Senior Lien Bonds. When all costs of issuance have been paid or moneys have been reserved to pay all remaining unpaid costs of issuance, the balance of any Series 2018A Senior Lien Bond proceeds remaining in excess of the amount to be reserved for payment of unpaid costs of issuance shall be deposited in the Bond Fund to be used solely to pay principal of and interest on the Series 2018A Senior Lien Bonds, in either case to the extent approved by Bond Counsel.
- (ii) In the Construction Fund, there shall be established a Series 2018B Construction Account and, within that Account, a Series 2018B Costs of Issuance Subaccount. The portion of the proceeds of the Series 2018B Senior Lien Bonds specified in Section 401(v) shall be deposited in the Series 2018B Costs of Issuance Subaccount and used to pay costs of issuance related to the Series 2018B Senior Lien Bonds. When all costs of issuance have been paid or moneys have been reserved to pay all remaining unpaid costs of issuance, the balance of any Series 2018B Senior Lien Bond proceeds remaining in excess of the amount to be reserved for payment of unpaid costs of issuance shall be deposited in the Bond Fund to be used solely to pay principal of and interest on the Series 2018B Senior Lien Bonds, in either case to the extent approved by Bond Counsel.

# Section 502. Series 2018A/B Senior Lien Bonds Subaccounts in the Interest Account and Principal Account.

- (i) Within the Interest Account there shall be established a "Series 2018A/B Senior Lien Bonds Interest Subaccount." Within the Principal Account there shall be established a "Series 2018A/B Senior Lien Bonds Principal Subaccount."
- (ii) In accordance with Section 604(a)(1) of the Master Indenture, Net Revenues shall be deposited in the Series 2018A/B Senior Lien Bond Interest Subaccount on or prior to the last Business Day of each of the six months prior to any month in which an Interest Payment Date occurs, in an amount equal to one-sixth (1/6) of the interest due and payable on the Series 2018A/B Senior Lien Bonds on such Interest Payment Date.
- (iii) In accordance with Section 604(a)(2) of the Master Indenture, Net Revenues shall be deposited in the Series 2018A/B Senior Lien Bonds Principal Subaccount on or prior to the last Business Day of each of the twelve months prior to any month in which principal of Series 2018A/B Senior Lien Bonds is payable on their stated maturity date or pursuant to mandatory redemption requirements, in an amount equal to one-twelfth (1/12) of the principal amount scheduled to be due and payable on the Series 2018A/B Senior Lien 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 April 30, 2018.

## ARTICLE VI SECURITY FOR SERIES 2018A/B SENIOR LIEN BONDS

#### Section 601. Security for Series 2018A/B Senior Lien Bonds.

The Series 2018A/B Senior Lien Bonds shall be equally and ratably secured under the Master Indenture of Trust with any other Senior Debt issued pursuant to Article III of the Master Indenture of Trust, without preference, priority or distinction of any Senior Debt over any other Senior Debt, as provided in the Master Indenture of Trust, except with respect to any separate Account relating to a specific series of Senior Debt in the Debt Service Reserve Fund created pursuant to Section 606 of the Master Indenture.

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

#### ARTICLE VII

#### TAX COVENANTS

#### Section 701. Tax Covenants – General.

- (i) The Authority covenants that it will use, and will restrict the use and investment of, the proceeds of the Series 2018A/B Senior Lien Bonds in such manner and to such extent as may be necessary so that (a) the Series 2018A/B Senior Lien Bonds will not constitute private activity bonds, arbitrage bonds or hedge bonds under Sections 141, 148 or 149 of the Code, or be treated other than as bonds to which Section 103(a) of the Code applies, and (b) the interest on the Series 2018A/B Senior Lien Bonds will not be treated as an item of tax preference under Section 57 of the Code.
- (ii) The Authority further covenants that (a) it will take or cause to be taken such actions that may be required of it for the interest on the Series 2018A/B Senior Lien Bonds to be and remain excluded from gross income for federal income tax purposes, (b) it will not take or authorize to be taken any actions that would adversely affect that exclusion, and (c) it, or persons acting for it, will, among other acts of compliance, (1) apply the proceeds of the Series 2018A/B Senior Lien Bonds to the governmental purposes of the borrowing, (2) restrict the yield on investment property, (3) make timely and adequate payments to the federal government, including but not limited to the required payment of any Rebate Amounts under Section 148(f) of the Code, as further provided in Section 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.
- 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 2018A/B Senior Lien Bonds as the Authority is permitted to make or give under the federal income tax laws, including, without limitation, any of the elections provided for or available under Section 148 of the Code, for the purpose of assuring, enhancing or protecting favorable tax treatment or status of the Series 2018A/B Senior Lien Bonds or interest thereon or assisting compliance with requirements for that purpose, reducing the burden or expense of such compliance, reducing the rebate amount or payments of penalties, or making payments of special amounts in lieu of making computations to determine, or paying, excess earnings as rebate, or obviating those amounts or payments, as determined by the Authorized Representative of the Authority, which action shall be in writing and signed by the Authorized Representative of the Authority, (b) to take any and all other actions, make or obtain calculations, make payments, and make or give reports, covenants and certifications of and on behalf of the Authority, as may be appropriate to assure the exclusion of interest from gross income and the intended tax status of the Series 2018A/B Senior Lien Bonds, and (c) to give one or more appropriate certificates, for inclusion in the transcript of proceedings for the Series 2018A/B Senior Lien Bonds, setting forth the reasonable expectations of the Authority regarding the amount and use of all the proceeds of the Series 2018A/B Senior Lien Bonds, the facts, circumstances and estimates on which they are based, and other facts and circumstances relevant

to the tax treatment of the interest on and the tax status of the Series 2018A/B Senior Lien Bonds.

## Section 702. Calculation and Payment of Rebate.

#### (i) As used in this Section 702:

"Bond Year" means the annual period (or such shorter period from the date of issuance of the Series 2018A/B Senior Lien Bonds) provided for the computation of the Rebate Amount for the Series 2018A/B Senior Lien Bonds under Section 148(f) of the Code. The last day of a Bond Year shall be the close of business on the day preceding the anniversary of the issuance of the Series 2018A/B Senior Lien Bonds unless the Authority selects another date on which to end a Bond Year in the manner permitted by the Code, and notifies the Trustee in writing of such selection.

### "Computation Date" means:

- (i) (a) the last day of each fifth Bond Year while the Series 2018A/B Senior Lien Bonds are outstanding, and (b) the date on which the last Series 2018A/B Senior Lien Bonds are retired, or
- (ii) such other date or dates elected by the Authority as may be permitted under the Code for computation of the Rebate Amount.

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

- (ii) Promptly after each Computation Date, the Authority, or an independent public accounting firm or Bond Counsel engaged by or on behalf of the Authority, shall calculate the Rebate Amount, if any, as of that Computation Date.
- (iii) Within 60 days after each Computation Date, and at any other time directed by the Authorized Representative of the Authority, the Authority shall pay to the United States in accordance with Section 148(f), from any lawfully available funds, an amount equal to 90% (or such greater percentage not in excess of 100% as the Authorized Representative of the Authority may determine to pay) of the Rebate Amount determined from the Delivery Date to the end of such fifth Bond Year (but less any portion of the Rebate Amount previously paid to the United States pursuant to this Section). Within 60 days after the payment in full of all outstanding Series 2018A/B Senior Lien Bonds, the Authorized Representative of the Authority, on behalf of the Authority shall pay to the United States in accordance with Section 148(f), from any lawfully available funds, an amount equal to 100% of the Rebate Amount determined from the Delivery Date to the date of such payment in full of all outstanding Series 2018A/B Senior Lien Bonds (but less any portion of the Rebate Amount previously paid to the United States pursuant to this Section 702(iii).

- (iv) The Authority shall keep or provide for the keeping of records of the computations made pursuant to this Section 702, 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 2018A/B Senior Lien Bonds.
- (v) The Authority, in connection with investments of the proceeds of the Series 2018A/B Senior Lien Bonds in nonpurpose investments, will not pay or agree to pay to a party other than the United States any portion of the Rebate Amount with respect to the Series 2018A/B Senior Lien Bonds through a transaction or series of transactions that reduce the aggregate amount earned on all nonpurpose investments in which gross proceeds of the Series 2018A/B Senior Lien Bonds are invested or that result in a smaller profit or a larger loss than would have resulted in an arm's length transaction in which yield on the Series 2018A/B Senior Lien Bonds was not relevant to the Authority or the other party.
- (vi) If the Authority and the Trustee receive a written opinion of Bond Counsel that such action would not adversely affect the exclusion from gross income for federal income tax purposes of interest on the Series 2018A/B Senior Lien Bonds, the Authorized Representative of the Authority may, without the consent of or notice to any bondholders, adopt supplements to this Twenty-Third Supplemental Indenture to the extent necessary or desirable to modify, supplement or replace this Section 702 consistent with the other covenants of the Authority in this Twenty-Third Supplemental Indenture.
- (vii) If at any time the Authority receives a written opinion of Bond Counsel that failure to comply with this Section 702 or any part of this Section 702 would not adversely affect the exclusion of interest on the Series 2018A/B Senior Lien Bonds from gross income for federal income tax purposes, the Authority may discontinue compliance with this Section 702 or part of this Section 702 to the extent set forth in that opinion.

## ARTICLE VIII MISCELLANEOUS

#### Section 801. Limitation of Rights.

With the exception of rights herein expressly conferred, nothing expressed or mentioned in or to be implied from this Twenty-Third Supplemental Indenture or the Series 2018A/B Senior Lien Bonds is intended or shall be construed to give to any person other than the parties hereto and the Series 2018A/B Senior Lien Bondholders any legal or equitable right, remedy or claim under or in respect to this Twenty-Third Supplemental Indenture or any covenants, conditions and agreements herein contained since this Twenty-Third 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 2018A/B Senior Lien Bondholders as herein provided.

## Section 802. Severability.

If any provision of this Twenty-Third Supplemental Indenture shall be held invalid by any court of competent jurisdiction, such holding shall not invalidate any other provision hereof,

and this Twenty-Third Supplemental Indenture shall be construed and enforced as if such illegal provision had not been contained herein.

## Section 803. Successors and Assigns.

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

## Section 804. Limitations on Liability.

No covenant, agreement or obligation contained herein shall be deemed to be a covenant, agreement or obligation of any present or future member of the Board of Directors of the Authority or officer, employee or agent of the Authority in his or her individual capacity, and neither the members of the Board of Directors of the Authority nor any officer of the Authority executing the Series 2018A/B Senior Lien Bonds shall be liable personally on the Series 2018A/B Senior Lien Bonds or be subject to any personal liability or accountability by reason of the issuance thereof. No member of the Board of Directors of the Authority or officer, employee, agent or advisor of the Authority shall incur any personal liability with respect to any other action taken by him or her pursuant to this Twenty-Third Supplemental Indenture or the Indenture or any other document authorized by the Indenture, provided such member, officer, employee, agent or advisor acts in good faith.

## Section 805. Applicable Law.

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

### Section 806. Counterparts.

This Twenty-Third 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-Third Supplemental Indenture to be executed in their respective corporate names as of the date first above written.

AND SEW	ER AUTHO	RITY	
By Mar	clu 7 }	nem	
Chief Fina	ncial Officer		
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DISTRICT OF COLUMBIA WATER

#### **EXHIBIT A-1**

#### **SERIES 2018A 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.	REGISTERED
RA-1	\$

#### UNITED STATES OF AMERICA

## DISTRICT OF COLUMBIA

#### WATER AND SEWER AUTHORITY

PUBLIC UTILITY SENIOR LIEN REVENUE BOND, SERIES 2018A (Green Bonds)

INTEREST RATE %	MATURITY DATE October 1, []	<b>DATED DATE</b> April 30, 2018	CUSIP 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 October 1, 2018, 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 2018A Senior Lien Bond (unless payment of interest hereon is in default, in which case this Series 2018A Senior Lien Bond shall bear interest from the date to which interest has been paid). Interest is payable by check or draft mailed to the registered owner hereof at its address as it

appears on the fifteenth day of the month preceding each interest payment date on registration books kept by the Trustee; provided, however, that if the Series 2018A Senior Lien Bonds, as hereinafter defined, are registered in the name of a securities depository or its nominee as registered owner or at the option of a registered owner of at least \$1,000,000 of Series 2018A Senior Lien Bonds, payment will be made by wire transfer to an account within the United States pursuant to the most recent wire instructions received by the Trustee from such registered owner. Principal, premium, if any, and interest are payable in lawful money of the United States of America. Capitalized terms which are not defined herein shall have the meanings set forth in the Indenture.

Notwithstanding any other provision hereof, this Series 2018A Senior Lien Bond is subject to book-entry form maintained by The Depository Trust Company ("DTC"), and the payment of principal, premium, if any, and interest, the providing of notices and other matters shall be made as described in the Authority's Blanket Letter of Representations to DTC.

This Series 2018A Senior Lien Bond is one of an issue of \$100,000,000 Public Utility Senior Lien Revenue Bonds, Series 2018A (Green Bonds) (the "Series 2018A Senior Lien Bonds"), of like date and tenor, except as to number, denomination, rate of interest, privilege of redemption and maturity. The Series 2018A Senior Lien Bonds are being issued on the same day as the Authority's \$200,000,000 Public Utility Senior Lien Revenue Bonds, Series 2018B (the "Series 2018B Senior Lien Bonds" and, together with the Series 2018A Senior Lien Bonds, the "Series 2018A/B Senior Lien Bonds"). The Series 2018A Senior Lien Bonds are issued under a Master Indenture of Trust, dated as of April 1, 1998, between the Authority and the Trustee (f.k.a. Norwest Bank, N.A.) (the "Master Indenture"), as amended and supplemented by the Twenty-Third Supplemental Indenture of Trust, dated as of April 30, 2018, between the Authority and the Trustee (the "Twenty-Third 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 and the Twenty-Second Supplemental Indenture, all as defined in the Twenty-Third Supplemental Indenture (the "Indenture"). The Series 2018A Senior Lien Bonds are secured under the Indenture as Senior Debt by a pledge of Net Revenues on a parity with the pledge that secures other Senior Debt and senior to the pledge that secures any Subordinate Debt. Reference is hereby made to the Indenture for a description of the provisions, among others, with respect to the nature and extent of the security, the rights, duties and obligations of the Authority and the Trustee, the rights of the holders of the Series 2018A Senior Lien Bonds and the terms upon which the Series 2018A Senior Lien Bonds are issued and secured.

The Series 2018A Senior Lien Bonds and the premium, if any, and the interest thereon are limited obligations of the Authority payable from Net Revenues of the System. The Series 2018A Senior Lien Bonds shall be without recourse to the District of Columbia (the "District").

The Series 2018A Senior Lien Bonds shall not be general obligations of the District, shall not be a pledge of or involve the faith and credit or the taxing power of the District, shall not constitute a debt of the District, and shall not constitute lending of the public credit for private undertakings.

The Series 2018A Bonds maturing on or after October 1, 2028, are subject to redemption prior to maturity at the option of the Authority on or after April 1, 2028, 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 2018A Senior Lien Bonds maturing on October 1, 2049, and bearing interest at rates of 5.00%, 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
2046	\$15,080,000
2047	15,835,000
2048	16,625,000
$2049^{\dagger}$	17,460,000
†	

† Final Maturity

If fewer than all of the Series 2018A Senior Lien Bonds are called for redemption, they shall be called in such order of maturity as the Authority may determine and direct the Trustee in writing. If less than all of the Series 2018A Senior Lien Bonds of any maturity date are called for redemption, the Series 2018A Senior Lien Bonds to be redeemed shall be selected by DTC pursuant to its rules and procedures or, if the book-entry system is discontinued, shall be selected by the Trustee by lot in such manner as the Trustee in its discretion may determine. The portion of any Series 2018A Senior Lien Bond to be redeemed shall be in the principal amount of \$5,000 or some integral multiple thereof. In selecting Series 2018A Senior Lien Bonds for redemption, each Series 2018A Senior Lien Bond shall be considered as representing that number of Bonds which is obtained by dividing the principal amount of such Series 2018A Senior Lien Bond by \$5,000. If a portion of a Series 2018A Senior Lien Bond in principal amount equal to the unredeemed portion thereof shall be issued to the registered owner upon the surrender thereof.

If any of the Series 2018A Senior Lien Bonds or portions thereof are called for redemption, the Trustee shall send notice of the call for redemption, identifying the Series 2018A Senior Lien Bonds or portions thereof to be redeemed, not fewer than 30 nor more than 60 days prior to the redemption date, by facsimile, registered or certified mail or overnight express delivery, to the registered owner of each such Series 2018A Senior Lien Bond. Provided funds for their redemption are on deposit at the place of payment on the redemption date, all Series 2018A Senior Lien Bonds or portions thereof so called for redemption shall cease to bear interest on such date, shall no longer be secured by the Indenture and shall not be deemed to be Outstanding under the provisions of the Indenture. If a portion of the Series 2018A Senior Lien Bonds shall be called for redemption, a new Series 2018A Senior Lien Bond in principal amount

equal to the unredeemed portion hereof will be issued to DTC or its nominee upon the surrender hereof, or if the book-entry system is discontinued, to the registered owners of the Series 2018A Senior Lien Bonds.

The registered owner of this Series 2018A Senior Lien Bond shall have no right to enforce the provisions of the Indenture or to institute action to enforce the covenants therein or to take any action with respect to any Event of Default under the Indenture or to institute, appear in or defend any suit or other proceedings with respect thereto, except as provided in the Indenture. Modifications or alterations of the Indenture, or of any supplement thereto, may be made only to the extent and in the circumstances permitted by the Indenture.

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 2018A Senior Lien Bonds shall be liable personally on the Series 2018A Senior Lien Bonds or be subject to any personal liability or accountability by reason of the issuance thereof. No member of the Board of Directors of the Authority or officer, employee, agent or advisor of the Authority shall incur any personal liability with respect to any other action taken by him or her pursuant to this Series 2018A Senior Lien Bond, the Twenty-Third 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 2018A Senior Lien Bonds are issuable as registered bonds in denominations of \$5,000 and integral multiples thereof. Upon surrender for transfer or exchange of this Series 2018A Senior Lien Bond at the principal corporate trust office of the Trustee, together with an assignment duly executed by the registered owner or its duly authorized attorney or legal representative in such form as shall be satisfactory to the Trustee, the Authority shall execute, and the Trustee shall authenticate and deliver in exchange, a new Series 2018A Senior Lien Bond or Series 2018A Senior Lien Bonds in the manner and subject to the limitations and conditions provided in the Indenture, having an equal aggregate principal amount, in authorized denominations, of the same series, form and maturity, bearing interest at the same rate and registered in the name or names as requested by the then registered owner hereof or its duly authorized attorney or legal representative. Any such exchange shall be at the expense of the Authority, except that the Trustee may charge the person requesting such exchange the amount of any tax or other governmental charge required to be paid with respect thereto.

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

All acts, conditions and things required to happen, exist or be performed precedent to and in the issuance of this Series 2018A Senior Lien Bond have happened, exist and have been performed.

This Series 2018A Senior Lien Bond shall not become obligatory for any purpose or be entitled to any security or benefit under the Indenture or be valid until the Trustee shall have executed the Certificate of Authentication appearing hereon and inserted the date of authentication hereon.

IN WITNESS WHEREOF, the DISTRICT OF COLUMBIA WATER AND SEWER AUTHORITY has caused this Series 2018A Senior Lien Bond to be executed by the manual or facsimile signatures of the Chairman of the Board of Directors, its seal to be affixed hereto or a facsimile to be printed hereon and attested by the manual or facsimile signature of the Secretary to the Authority, and this Series 2018A Senior Lien Bond to be dated April 30, 2018.

ATTEST:

Secretary to the Authority

Tommy Wells Chairman

[SEAL]

## CERTIFICATE OF AUTHENTICATION

Date Authenticated:	<del></del>
This Series 2018A Senior Lien B described in the within mentioned Indent	ond is one of the Series 2018A Senior Lien Bonds ture.
	Wells Fargo Bank, National Association, Trustee
	Ву
	Authorized Officer or Employee

## ASSIGNMENT

FOR VALUE RECEIVED the undersigned	ed hereby sell(s), assign(s) and transfer(s) unto
(please print or typewrite name and address, incl	uding zip code, of Transferee)
PLEASE INSERT SOCIAI IDENTIFYING NUMB	
: :	:
the within Series 2018A Senior Lien Bond constituting	and all rights thereunder, hereby irrevocably appointing
2018A Senior Lien Bond on the books kept f substitution in the premises.  Dated: Signature Guaranteed	, Attorney, to transfer said Series for the registration thereof, with full power of
NOTICE: Signature(s) must be guaranteed by an Eligible Guarantor Institution such as a Commercial Institution such as a Commercial Bank, Trust Company,	NOTICE: The signature above must correspond with the name of the registered owner as it appears on the front of this Series 2018A Senior Lien Bond in every particular, without alteration or collegement or any

Savings Association who is a member of a medallion program approved by The Securities Transfer Association, Inc.

without alteration or enlargement or any change whatsoever.

#### EXHIBIT A-2

#### **SERIES 2018B 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.	REGISTERED
RB-1	\$

#### UNITED STATES OF AMERICA

### DISTRICT OF COLUMBIA

#### WATER AND SEWER AUTHORITY

# PUBLIC UTILITY SENIOR LIEN REVENUE BOND, SERIES 2018B

INTEREST RATE%	MATURITY DATE October 1, []	<b>DATED DATE</b> April 30, 2018	<b>CUSIP</b> 254845[]
REGISTERED OWNER:	CEDE & CO.		
PRINCIPAL AMOUNT:	ר	THOUSAND DOLLARS	$\mathbf{S}$

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 October 1, 2018, 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 2018B Senior Lien Bond (unless payment of interest hereon is in default, in which case this Series 2018B Senior Lien Bond shall bear interest from the date to which interest has been paid). Interest is payable by check or draft mailed to the registered owner hereof at its address as it

appears on the fifteenth day of the month preceding each interest payment date on registration books kept by the Trustee; provided, however, that if the Series 2018B Senior Lien Bonds, as hereinafter defined, are registered in the name of a securities depository or its nominee as registered owner or at the option of a registered owner of at least \$1,000,000 of Series 2018B Senior Lien Bonds, payment will be made by wire transfer to an account within the United States pursuant to the most recent wire instructions received by the Trustee from such registered owner. Principal, premium, if any, and interest are payable in lawful money of the United States of America. Capitalized terms which are not defined herein shall have the meanings set forth in the Indenture.

Notwithstanding any other provision hereof, this Series 2018B Senior Lien Bond is subject to book-entry form maintained by The Depository Trust Company ("DTC"), and the payment of principal, premium, if any, and interest, the providing of notices and other matters shall be made as described in the Authority's Blanket Letter of Representations to DTC.

This Series 2018B Senior Lien Bond is one of an issue of \$200,000,000 Public Utility Senior Lien Revenue Bonds, Series 2018B (the "Series 2018B Senior Lien Bonds"), of like date and tenor, except as to number, denomination, rate of interest, privilege of redemption and maturity. The Series 2018B Senior Lien Bonds are being issued on the same day as the Authority's \$100,000,000 Public Utility Senior Lien Revenue Bonds, Series 2018A (Green Bonds) (the "Series 2018A Senior Lien Bonds" and, together with the Series 2018B Senior Lien Bonds, the "Series 2018A/B Senior Lien Bonds"). The Series 2018B Senior Lien Bonds are issued under a Master Indenture of Trust, dated as of April 1, 1998, between the Authority and the Trustee (f.k.a. Norwest Bank, N.A.) (the "Master Indenture"), as amended and supplemented by the Twenty-Third Supplemental Indenture of Trust, dated as of February 23, 2017, between the Authority and the Trustee (the "Twenty-Third 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 and the Twenty-Second Supplemental Indenture, all as defined in the Twenty-Third Supplemental Indenture (the "Indenture"). The Series 2018B Senior Lien Bonds are secured under the Indenture as Senior Debt by a pledge of Net Revenues on a parity with the pledge that secures other Senior Debt and senior to the pledge that secures any Subordinate Debt. Reference is hereby made to the Indenture for a description of the provisions, among others, with respect to the nature and extent of the security, the rights, duties and obligations of the Authority and the Trustee, the rights of the holders of the Series 2018B Senior Lien Bonds and the terms upon which the Series 2018B Senior Lien Bonds are issued and secured.

The Series 2018B Senior Lien Bonds and the premium, if any, and the interest thereon are limited obligations of the Authority payable from Net Revenues of the System. The Series 2018A Senior Lien Bonds shall be without recourse to the District of Columbia (the "District").

The Series 2018A Senior Lien Bonds shall not be general obligations of the District, shall not be a pledge of or involve the faith and credit or the taxing power of the District, shall not constitute a debt of the District, and shall not constitute lending of the public credit for private undertakings.

The Series 2018B Bonds maturing on or after October 1, 2028, are subject to redemption prior to maturity at the option of the Authority on and after April 1, 2028, 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 2018B Senior Lien Bonds maturing on October 1, 2043 and October 1, 2049, and bearing interest at the rates of 5.00%, 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 2018B Senior Lien Bonds maturing October 1, 2043, and bearing interest at a rate of 5.00%, are subject to mandatory sinking fund redemption on each October 1 as set forth below:

Year	Amount
2039	\$ 565,000
2040	9,265,000
2041	2,060,000
2042	7,555,000
2043⁺	10,725,000

† Final Maturity

The Term Series 2018B Senior Lien Bonds maturing October 1, 2049, and bearing interest at a rate of 5.00%, are subject to mandatory sinking fund redemption on each October 1 as set forth below:

Year	Amount
2044	\$11,265,000
2045	23,525,000
2046	9,625,000
2047	10,105,000
2048	10,610,000
2049⁺	11,135,000

† Final Maturity

If fewer than all of the Series 2018B Senior Lien Bonds are called for redemption, they shall be called in such order of maturity as the Authority may determine and direct the Trustee in writing. If less than all of the Series 2018B Senior Lien Bonds of any maturity date are called for redemption, the Series 2018B Senior Lien Bonds to be redeemed shall be selected by DTC

pursuant to its rules and procedures or, if the book-entry system is discontinued, shall be selected by the Trustee by lot in such manner as the Trustee in its discretion may determine. The portion of any Series 2018B Senior Lien Bond to be redeemed shall be in the principal amount of \$5,000 or some integral multiple thereof. In selecting Series 2018B Senior Lien Bonds for redemption, each Series 2018B Senior Lien Bond shall be considered as representing that number of Bonds which is obtained by dividing the principal amount of such Series 2018B Senior Lien Bond by \$5,000. If a portion of a Series 2018B Senior Lien Bond shall be called for redemption, a new Series 2018B Senior Lien Bond in principal amount equal to the unredeemed portion thereof shall be issued to the registered owner upon the surrender thereof.

If any of the Series 2018B Senior Lien Bonds or portions thereof are called for redemption, the Trustee shall send notice of the call for redemption, identifying the Series 2018B Senior Lien Bonds or portions thereof to be redeemed, not fewer than 30 nor more than 60 days prior to the redemption date, by facsimile, registered or certified mail or overnight express delivery, to the registered owner of each such Series 2018B Senior Lien Bond. Provided funds for their redemption are on deposit at the place of payment on the redemption date, all Series 2018B Senior Lien Bonds or portions thereof so called for redemption shall cease to bear interest on such date, shall no longer be secured by the Indenture and shall not be deemed to be Outstanding under the provisions of the Indenture. If a portion of the Series 2018B Senior Lien Bonds shall be called for redemption, a new Series 2018B Senior Lien Bond in principal amount equal to the unredeemed portion hereof will be issued to DTC or its nominee upon the surrender hereof, or if the book-entry system is discontinued, to the registered owners of the Series 2018B Senior Lien Bonds.

The registered owner of this Series 2018B Senior Lien Bond shall have no right to enforce the provisions of the Indenture or to institute action to enforce the covenants therein or to take any action with respect to any Event of Default or Series 2018B Senior Lien Bond Event of Default under the Indenture or to institute, appear in or defend any suit or other proceedings with respect thereto, except as provided in the Indenture. Specifically, and without limiting the generality of the foregoing, the Series 2018B Senior Lien Bonds, as Subordinate Debt, may not be accelerated if any Senior Debt is outstanding. Modifications or alterations of the Indenture, or of any supplement thereto, may be made only to the extent and in the circumstances permitted by the Indenture.

No covenant, agreement or obligation contained herein shall be deemed to be a covenant, agreement or obligation of any present or future member of the Board of Directors of the Authority or officer, employee or agent of the Authority in his or her individual capacity, and neither the members of the Board of Directors of the Authority nor any officer of the Authority executing the Series 2018B Senior Lien Bonds shall be liable personally on the Series 2018B Senior Lien Bonds or be subject to any personal liability or accountability by reason of the issuance thereof. No member of the Board of Directors of the Authority or officer, employee, agent or advisor of the Authority shall incur any personal liability with respect to any other action taken by him or her pursuant to this Series 2018B Senior Lien Bond, the Twenty-Third 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 2018B Senior Lien Bonds are issuable as registered bonds in denominations of \$5,000 and integral multiples thereof. Upon surrender for transfer or exchange of this Series 2018B Senior Lien Bond at the principal corporate trust office of the Trustee, together with an assignment duly executed by the registered owner or its duly authorized attorney or legal representative in such form as shall be satisfactory to the Trustee, the Authority shall execute, and the Trustee shall authenticate and deliver in exchange, a new Series 2018B Senior Lien Bond or Series 2018B Senior Lien Bonds in the manner and subject to the limitations and conditions provided in the Indenture, having an equal aggregate principal amount, in authorized denominations, of the same series, form and maturity, bearing interest at the same rate and registered in the name or names as requested by the then registered owner hereof or its duly authorized attorney or legal representative. Any such exchange shall be at the expense of the Authority, except that the Trustee may charge the person requesting such exchange the amount of any tax or other governmental charge required to be paid with respect thereto.

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

All acts, conditions and things required to happen, exist or be performed precedent to and in the issuance of this Series 2018B Senior Lien Bond have happened, exist and have been performed.

This Series 2018B Senior Lien Bond shall not become obligatory for any purpose or be entitled to any security or benefit under the Indenture or be valid until the Trustee shall have executed the Certificate of Authentication appearing hereon and inserted the date of authentication hereon.

IN WITNESS WHEREOF, the DISTRICT OF COLUMBIA WATER AND SEWER AUTHORITY has caused this Series 2018B Senior Lien Bond to be executed by the manual or facsimile signatures of the Chairman of the Board of Directors, its seal to be affixed hereto or a facsimile to be printed hereon and attested by the manual or facsimile signature of the Secretary to the Authority, and this Series 2018B Senior Lien Bond to be dated April 30, 2018.

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Secretary to the Authority

Tommy Wells Chairman

[SEAL]

## CERTIFICATE OF AUTHENTICATION

Date Authenticated:	
This Series 2018B Senior Lien Bodescribed in the within mentioned Indentional	ond is one of the Series 2018B Senior Lien Bonds ure.
	Wells Fargo Bank, National Association, Trustee
	Ву
	Authorized Officer or Employee

## **ASSIGNMENT**

FOR VALUE RECEIVED the undersigne	d hereby sell(s), assign(s) and transfer(s) unto
(please print or typewrite name and address, inclu	ding zip code, of Transferee)
PLEASE INSERT SOCIAL IDENTIFYING NUMBI	SECURITY OR OTHER
: : :	; ; ;
the within Series 2018B Senior Lien Bond a constituting an	-
2018B Senior Lien Bond on the books kept for substitution in the premises.	, Attorney, to transfer said Series or the registration thereof, with full power of
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 2018B Senior Lien Bond in every particular, without alteration or enlargement or any change whatsoever.